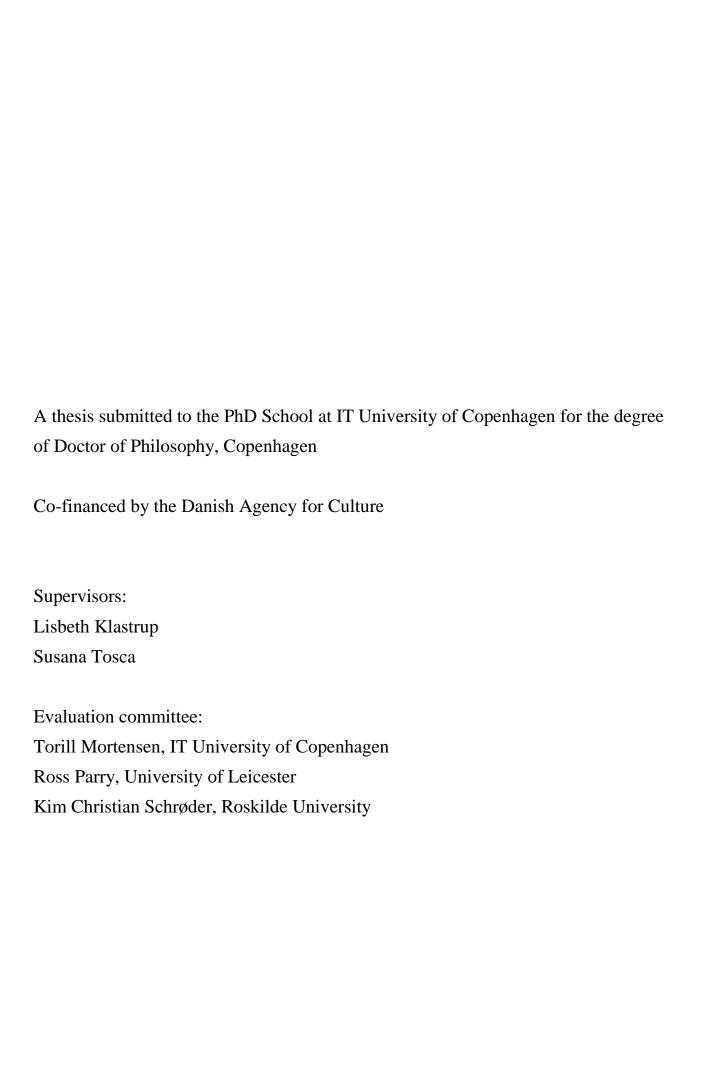
Online Museum Practices

A holistic analysis of Danish museums and their users

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Abstract

Since the emergence of the Internet, the use of online media by museums has grown steadily, yet from the context of the museum's long history, the use of online media and social media is still in its nascent stage. This thesis proposes 'online museum practices' as a framework for examining the relationship among the Danish museums, online media and users, to address who, why, how and what happens when online media is introduced in a Danish museum context for dissemination and communication purposes. The PhD project is not merely concerned with studying the current state of affairs, or a single museum case, but examines general tendencies of the total population of Danish state-owned and state-subsidised museums and a representative sample of the Danish users from 2010 to 2013 in relation to the museum's historical context and the current cultural policies.

The study begins with four main questions which relate to: 1) a discussion on the museum paradigm shift; 2) a conceptualisation of online museum practices as a holistic analytical framework, which integrates the museums and their users; 3) an examination of Danish museums' online media appropriation; and 4) an examination of Danish museum users' online museum visiting practices.

This PhD project integrates theories and concepts from museology, Internet and media studies, and audience and reception studies. The research design is based on mixed-methods that combines quantitative and qualitative methods, as well as online and offline methods, to address the museums' appropriation of online media and the users' online museum visiting practices.

The study challenges the notion of the museum paradigm shift that considers the transformation of museum institution from being an elitist temple to being an institution that focuses on accommodating visitors' views, and argues that it is hypothetical and overestimated rather than actual.

The results of the study further demonstrate a low level of interactive features on the museum websites across the entire Danish museum landscape, but at the same time shows an increase in the number of museums that has begun to use social media platforms. Despite the extensive expectations and hype created regarding the dialogic and participatory potentials of online media for museums, few users take an interest to socially interact or participate in an online museum environment, as the perception of the physical museums to a high degree defines and determines the users' online museum visiting practices.

Through the analysis, the study substantiates online practices as a useful framework to unfold and capture the complexity of the online museum space in which the Danish museums and their users navigate. So far, the practice approach is still very limited in the museological field, and more research is suggested to further explore and conceptualise the concept and develop the framework within the museum field.

In conclusion, this study contributes to an unexplored field by presenting and analysing an extensive set of data. In this way, this study establishes a solid foundation for further research to build on.

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1 Introduction

During the latest decade, countless voices have claimed a paradigm shift, a transformation of the museum institution from being object-centered to visitor-centered, from being about something to being for someone (Weil, 2002), from the authoritarian elitist voice to an open, compassionate dialogue with the users (G. Anderson, 2004). This paradigm shift has been articulated and reproduced in academic and political discourses (G. Anderson, 2004; Danish Ministry of Culture, 2008, 2009b; Løssing, 2009; Rudloff, 2013a; Weil, 2002) and has reinforced a focus on the institution's public responsibilities through dissemination and communication with the museum visitors. The previous notion of museum dissemination and communication was previously linked with a monologic, one-to-many form, rather than the dialogical communication form. Online media and in particular social media have been acclaimed to create a whole new world of communication characterised by user-led, two-way, many-tomany communication forms. The Internet is no longer considered a new medium or phenomenon anymore, yet in the context of the museum's long history, the use of online media and social media for dissemination and communication purposes, or even for collecting and exhibiting purposes, is still at its infancy. Since the emergence of the Internet, the use of online media by museums has grown steadily and is a subject widely discussed within the museum field among scholars and museum professionals. The first wave of museum websites began in the middle of the 1990s, when only a few pioneer museums had a website (Bearman & Trant, 2006; Parry, 2007, p. 93); however, many other museums followed suit shortly. In 2003, Pekarik urged all museums to have a website; however, in the same breath, he also declared that only a few museums understood the possible benefits of the media and warned the museums against waiting too long as he argued "[...] time is passing and opportunity is being lost. There is a real need for an aggressive combination of creative experimentation and solid research" (Pekarik, 2003, p. 276).

The need for museums to be online has been continuously reaffirmed since then, e.g., by the Danish researchers, Veirum and Christensen (2011). According to Veirum and Christensen, the users' expectations for what can be found on the Internet should be one of the guidelines for the museums to use online media, to a much larger extent. Further, they argued that the gap between online and offline museum activities are narrowing (2011, p. 3). This is partly related to the widespread use of social media and the ideas of 'participatory culture' (Jenkins, 2008), which in recent years have been heralded as a means to democratise museum institutions and cultural heritage. Social media is considered to enable museums to reach out to audiences other than the traditional museum audience,

and to engage users in interactive and participatory ways, thus ideally breaking down the elitist and authoritative museum by creating a multi-vocal and egalitarian space. Many of the earlier research studies have been case studies of best practice examples, and thus can be characterised as mainly retrospective and descriptive, focusing more on the nature of development of a single initiative (Bernstein, 2008; S. Black, Bowen, & Kelsey, 2010; Dawson, McDanald, & Trépanier, 2008; Dicker, 2010; Giaccardi, 2012; Russo, Watkins, Kelly, & Chan, 2007, 2008; Stuedahl, 2011). However, in recent years, large scale studies have been conducted to examine more than one museum (Fletcher & Lee, 2012; López, Margapoti, Maragliano, & Bove, 2010). Other studies have taken a critical and systematic approach while analysing the use of online media in general and social media in particular, reflecting upon implications and constraints (F. Cameron & Kenderdine, 2007; Drotner & Schrøder, 2013; Lund, Andersen, Christensen, Skouvig, & Johannsen, 2009).

Despite the growing interest of online media in museums, the need for solid, empirical and theoretical research has been emphasised numerous times (Løssing, 2008; Pekarik, 2003; Russo, Watkins, Kelly, & Chan, 2006). Many of the earlier studies examining the museums' adoption of online media were either based on non-representative small scale surveys (Bearman & Trant, 2006; Bowen, 1999; Dicker, 2010; Hertzum, 1998) or on specific projects at particular museums (e.g., see the conference papers from the Museums and the Web¹ or the International Conferences on Hypermedia and Interactivity in Museums (ICHIM)²). Whereas studies of the online museum users were mostly concerned with the development of user typologies based on demographics, behaviour, motivations, learning preferences, etc. (Chadwick & Boverie, 1999; Falk, 2009; Haley-Goldman & Schaller, 2004; Kobbernagel, Schrøder, & Drotner, 2011; Peacock & Brownbill, 2007).

To my knowledge, there is no large scale and longitudinal study that focuses on the significance of online media in museums from both a museum and a user perspective. Several studies have examined the Danish art museums' usage of online media (Damkjær & Schick, 2013; Løssing, 2008). The Heritage Agency of Denmark conducted a national survey of the Danish museums' website users in 2010 (Moos & Brændholt, 2010a). However, so far no studies have examined the relationship between the online media and the Danish museum institutions as well as the relationship between the museum (Rudloff, 2013a) and the online user. Therefore, in this thesis, I address the online museum practices of Danish museums, covering all the museums, across museum type (cultural heritage, art,

¹ Archives & Museum Informatics founded the Museums and the Web conference in 1997 but no longer manages it. For more information see: http://www.museumsandtheweb.com/ Museums and the Web conference is the largest international conference and community specifically devoted to discuss and exchange ideas between practitioners, scholars and businesses.

² The ICHIM conferences explored policy, legal, social, economic, technological, organisational and design concerns of digital culture and heritage from the perspectives of cultural policy makers, institutions and cultural participants. The last ICHIM conference was held in 2007. For more information: http://www.archimuse.com/conferences/ichim.html

natural history and special museums), as well as their users in Denmark. In this study, the museum perspective of the online media is gained from a study of Danish museums' appropriation of online media over a four-year period, i.e., from 2010 to 2013. It focuses on Danish museums' online practices including their involvement in social media and their attitude towards online media. The user perspective is represented by a study of the Danish museum users' online visiting practices that emphasises the users' perceptions and motivations and aims to broaden the understanding of Danish online museum users. In this PhD project, I do not isolate or differentiate the online museums from the physical museums because most museums consider their online presence as an extension of their offline existence. Further, the users' perceptions of the museum are combined with their earlier experiences at the museums as these impact their online museum experiences. Therefore, the physical museum dimension is also part of this study.

The idea for this project was developed at a time when the interest in online museum dissemination and communication was starting to take off, and social media's popularity among non-profit organisations was increasing. Many digital and online museum projects were created based on assumptions of a changed attitude of the museum institution along with optimism towards the participatory potentials of online media; thus, very little empirical research had been conducted to examine how and whether these assumptions were correct. Motivated by this gap, the research was established as a co-financed project with the Danish Agency for Culture, the former Heritage Agency of Denmark, in relation to the *National Museum Web User Survey* in 2010 (Moos & Brændholt, 2010a). Throughout the PhD project period, this collaboration has entailed a continuous contact with the Danish Agency for Culture, which (among others) has included my contribution to the design of their museum web user survey. Furthermore, the collaboration with the agency has also given me access to data (such as data from the web user survey and data from the annual reports *Danske Museer i tal* (Landert & Kjærside, 2011, 2013). Despite this close collaboration, the agency has by no means restricted my research field, aim or questions.

1.1 Research aim

The overall aim of this thesis is to examine online museum practices of the Danish public museums and their users. I have used a holistic approach (Deacon, 2003; Drotner & Schrøder, 2013, pp. 12–13; Hooper-Greenhill, 2004, p. 40; Schrøder, Drotner, Kline, & Murray, 2003, pp. 48–49) while studying the contexts of both museums and online users. Danish museums refer to 195 state-owned and state-subsidised museums subjected to the Danish Museum Act, whereas online museum users are individuals who are exposed to the museums' online content through museum websites or social media. My aim is to examine the relationship between the Danish museums, online media and users and

address who, why, how and what happens when online media is introduced in a museum context for dissemination and communication purposes. In this project, I am not merely concerned with studying the current state of affairs, or a single museum case, as many others before me had done. Often these case studies involve specific large museums that have particularly prescient and experimenting approaches to digital museum dissemination and communication; and these case studies are not necessarily representative of practices and approaches in the museum field as such. This project, as the first of its kind (at least in a Danish context), examines general tendencies towards the whole Danish museum sector over a four-year period.

The concept and outline of online museum practices constitute the analytical framework of the thesis and address a range of elements that do not solely relate to actual usages, but in my understanding also includes online media competences, motivations and attitudes. Consequently, I have two perceptions of the concept of user practices. Practices concern both the institutional online practices of Danish museums, as well as individual online practices of the museum users. Therefore, my focus is not merely on the very literal interpretation of online museum practices (i.e., what the museums do online and what the users do online), but I am equally concerned with the variety of intentions behind the practices (that is how and why the museums and users do as they do). I focus on online media (and not, e.g., digital media) which include museum websites and social media platforms. Social media are often associated with blogs, wikis and social network sites, and sometimes used interchangeably with Web 2.0 technologies, social software, social web, user-generated content, etc. (P. Anderson, 2007, p. 2; Bruns & Bahnisch, 2009; Ellison & boyd, 2013; Kaplan & Haenlein, 2010). Recently, researchers have pointed out that the definition and theoretical foundation of social media is inadequate, since it often refers to different online technologies and platforms, and certain online behaviours. In this thesis, I do, however, apply the expression 'social media' because this is the expression most commonly used among Danish museums and Danish users where it most often relates to social network sites, such as Facebook, Flickr and YouTube.

1.2 Research questions

This study examines the Danish museums and their users' actual online use practices and consists of four research questions:

- 1. How is the museum paradigm shift related to the Danish museum context, how has it historically been translated and how is it currently understood?
- 2. How can online museum practices as a holistic analytical framework that consider both Danish museums and their users be conceptualised?
- 3. How do Danish museums appropriate online media?

4. How do Danish museum users visit the online museums' websites and follow their social media profiles?

The first research question concerns the alleged paradigm shift as well as the impact and role of online media, and in particular social media, in the transformation of the museum institution. I have addressed and discussed this question through a historical overview of the establishment of the public museum as well as the emergence of online media in the present day museum. The second research question addresses the development of the analytical framework of the thesis. The third research question is divided into four sub-questions concerning the museums' online practices. Figure 2 illustrates the third research question and the relationship between the question and its sub-questions.

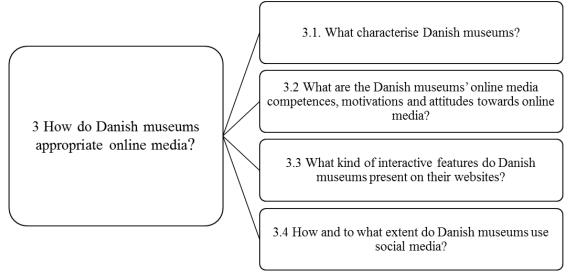


Figure 1: The third research question

The fourth research question is divided into three sub-questions concerning the user perspective as illustrated in Figure 2.

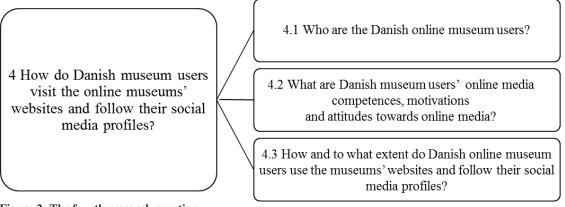


Figure 2: The fourth research question

To address these research questions, I have thematically integrated related theories, concepts and methods from various fields of studies to the overall topic of the thesis, and this PhD project is thus, an interdisciplinary project. The main fields which I draw upon are museology, Internet and media studies

and audience and reception studies. The museological perspective provides the context for understanding the public museum, its history and its obligations as this affects the museums' appropriation of online media, as well as the users' perceptions of the museum institution. The Internet and media dimension covers the characteristics of online media and social media and how these media have renewed the discussions of the traditional sender-receiver and media-text relations (Brügger, 2009, 2010; Bruns & Bahnisch, 2009; Bruns, 2008; Cover, 2006; Jenkins, 2008), as well as (online) participation (Jenkins & Carpentier, 2013). The latter dimension, audience and reception studies support my thesis with discussions of audience in the online environments (Bruns, 2008), as well as media reception (Schrøder, 2000, 2003).

This PhD project uses a mixed-methods research design and follows no single traditional approach with a strict set of methods (Creswell & Plano Clark, 2011; Greene, 2007; R. B. Johnson, Onwuegbuzie, & Turner, 2007; R. Burke Johnson & Onwuegbuzie, 2004). Instead, I combine different methods according to the principle of complementarity in which different theories and methods are employed at different levels of the analysis in compliance with the overall objective (Greene, Caracelli, & Graham, 1989; Hammersley, 2008). The methods include not only quantitative and qualitative methods, but also online and offline methods. The methods relating to the museum perspective include participant observations, statistics from the Danish Agency of Culture, and a 'content study' of all state-owned and state-subsidised Danish museum websites and social media presence (museums, n = 195). Whereas, the methods examining the users include a web questionnaire (respondents, n = 766) and four focus group interviews (participants, n = 34)³, Facebook Insight data from 63 Danish museums (museum Facebook users, n = 96.116) and semi-structured interviews with six users.

From an empirical perspective, the thesis maps the general tendencies of the Danish online museum landscape from 2010 to 2013 and is thus, not just a snapshot of the current state of the field. Theoretically, this thesis contributes to the emerging field of 'digital cultural heritage' and to the discussion of a rethinking of sender-receiver relation and the media-text by suggesting a practice approach in the online museum context. I have not approached media as objects, texts, production or perception tools, but have addressed media-related practices from an open and holistic perspective that includes and integrates both media production and media reception. Methodologically, the study integrates and combines a set of methods that sheds new light and new understanding of a relatively unexplored area.

³ The web questionnaire and the focus group interviews were part of the national museum web user survey conducted by TNS Gallup for the Danish Agency of Culture.

1.3 Outline of the thesis

The thesis consists of eight chapters in which the first five chapters form the foundation for the two following analytical chapters.

Chapter 2: From Renaissance Kunstkammer to Online Network: This chapter addresses the first research question "How is the museum paradigm shift related to the Danish museum context, how has it historically been translated and how is it currently understood?" It presents and discusses the transformative processes the public, modern Danish museums have undergone since its establishment. The historical context sets the stage for the obligations and demands Danish state-owned and state-subsidised museums must manage as public institutions.

Chapter 3: Framing the Project: This chapter integrates theories and concepts from museology, Internet and media studies, and audience and reception studies. The objective of this chapter is to analyse the major theoretical discussions surrounding the online museum practices from each field.

Chapter 4: Online Museum Practices: This chapter discusses the online museum practices as the overall analytical framework that structures this study. By developing a framework comprising of four dimensions, the chapter answers the second research question, "How can online museum practices as a holistic analytical framework that consider both Danish museums and their users be conceptualised?"

Chapter 5: Methods: This chapter presents the methodological approach, research design and the individual methods used in this study. The chapter addresses each method separately including sampling strategies, data analysis and issues relating to reliability and validity.

Chapter 6: Online Practices of Danish Museums⁴: This chapter addresses the third research question "How do Danish museums appropriate online media?" The analytical framework is used to analyse the empirical data relating to the Danish museums' appropriation of online media. This chapter examines how Danish museums use interactive features and whether they are present on the social media platforms.

⁴ Parts of this chapter have been published in the conference paper "The Use of Social Media in the Danish Museum Landscape" for Museums and the Web (Holdgaard, 2011). As the paper builds it results on data from 2010, this chapter has been revised to include data from 2010 to 2013. Additionally the number of museums has also increased in the study. The chapter also draws on selected findings from the article, "Attitudes towards and conceptions of digital technologies and media in Danish museums" (Holdgaard & Simonsen, 2011). This article builds on data collected in the period 2009-2010.

Chapter 7: Online Museum Users and Their Visiting Practices⁵: This chapter addresses the fourth research question "How do Danish museum users visit the online museums' websites and follow their social media profiles?" The first part of the chapter presents a demographic overview of the online users of Danish museums. This overview includes characteristics of gender, age, education, and geographical residency. The second part of the chapter examines the online practices of Danish online users along the four use elements from the analytical framework.

Chapter 8: Conclusion: This chapter recollects the findings and concludes the thesis. It discusses the limitations as well as suggests directions for future research.

⁵ The parts of this chapter that concern the Danish museums' Facebook users have been published in the conference paper "Museum Facebook Users... Who are they?" (Holdgaard,2012).

2 From Renaissance Wunderkammer to Online Network

In this chapter, I present and discuss the transformative processes the public, modern Danish museums have undergone since its establishment. The historical context sets the stage for the obligations and demands Danish state-owned and state-subsidised museums must manage as public institutions. This is related to the influence of online media on the museum institution, as the Danish museal reality – the complexity, conditions, and demands – occurs in the online museum practices. This is both in relation to how the Danish museums appropriate the online media as part of their dissemination and communication activities, and how and why the museum users perceive and access the museums' online content, but also how they act and interact with the museums online. This chapter addresses the first research question: "How is the museum paradigm shift related to the Danish museum context, how has it historically been translated and how is it currently understood?"

Section 2.1 is a historical account of the conceptual and ideological establishment of the public museum, followed by the second section that describes the formation of the Danish museum. Section 2.3 clarifies the official museum definition of International Council of Museums (ICOM) and the Danish Museum Act, and Section 2.4 introduces and discusses the notion of the paradigm shift. Section 2.5 presents the history of the museums on the web and the final section summarises the perspectives from the chapter.

2.1 The establishment of the public museum

The etymological origin of the term museum (*mouseion*) is derived from the ancient Greek where it was a site to worship the nine muses, the goddesses of the inspiration of literature, science and the arts. Originally, mouseion was an institution in Alexandria that housed both scholars and a library. Very little is known about mouseion and no physical remains of the edifice exist after its demolishment (Lee, 1997, p. 385). However, the ancient mouseion laid the foundation for future ideas of the museum. Although mouseion was not a collection of objects as such, the institution that existed in Alexandria and its myths about accumulating and mastering scientific and literary knowledge became an inspiration for the public museum that was established during the Age of Enlightenment. The eighteenth-century ideals of achieving universal knowledge and edifying the unenlightened public corresponded with the original mouseion's scholarly ideals. However, before the Age of Enlightenment

and throughout the Renaissance, a collection most often comprised of exotic and peculiar objects from foreign expeditions brought back to Europe. Here the rarities were studied and displayed in cabinets, drawers, etc., in private homes and houses of wealthy collectors and scholars, most often aristocrats, merchants and kings. These collections and displays, precursor of the public museum, were known as wunderkammer, Kunstkammer, cabinet of curiosity, studiolo, etc. and were a mix of both *naturalia* (objects of nature, e.g., fossils, conches, plants, etc.) and *artificialia* (man-made objects, e.g., coins, art works, etc.) (Abt, 2011, pp. 115–120; Marstine, 2006, pp. 21–22). Thus, records from the Danish Royal Kunstkammer in the 17th century included artefacts and naturalia such as stuffed animals, fossils, paintings, crafts, foreign weapons, books on exotic objects and peculiarities, such as "*snout of a swordfish*, *rump of an elephant*, *Indian coconut*, *egg born by a woman*, etc." (Gundestrup, 2005, p. 16; Himmelstrup, 2004, p. 131).

Cabinets of curiosities were microcosms or theatres of the world in miniature form and conveyed the collector's power and wealth to the invited spectators; thus the intended audiences were not the ordinary and general public, but rather special guests whom the collector wished to impress, entertain and intimidate. Therefore, dissemination as such was not integrated as a significant factor in these collections.

The modern, public museum was established in the mid-nineteenth century, concurrent with the dissolution of the absolute monarchy in Europe, birth of industrialisation, and growth of large-scale world exhibitions. It became an institution, as well as a government instrument, for the enlightenment, education, and recreation of the public. A contrast to the cabinets of curiosities, where the collections served to thrill and excite, but also to separate the privileged upper class from the general public.

One of the first collections that opened for the public was the Ashmolean Museum in England. Elias Ashmoles donated his collections to Oxford University, where it became accessible for the public in 1683. The opening of the Ashmolean Museum motivated the gradual opening of royal collections in Europe during the 19th century. The British Museum was established in 1752, the Louvre in 1793, the Rijksmuseum in 1808 and the Museo del Prado in 1819 (Abt, 2011, pp. 124–129; Himmelstrup, 2004, p. 131).

2.2 The Danish museum

The first Danish museum, Museum Wormianum, was established by collector and scientist Ole Worm in 1621. As a professor in medicine at Copenhagen University, Worm collected and categorised mainly natural specimens, in addition to ethnographic materials, art objects, and other curiosities and rarities parallel with European kunstkammers or cabinets of curiosities (Gundestrup, 2005, pp. 18–20;

Mordhorst, 2003, p. 24; Rasmussen, 1979, p. 31). Museum Wormianum was well-known and recognised beyond the Danish borders (Mordhorst, 2003, pp. 19–20), and after the death of Worm in 1654, his collection was included into the Danish Royal Kunstkammer⁶. With the addition of Museum Wormianum, the Danish Royal Kunstkammer changed from being a potpourri of rarities and curiosities into an encyclopaedic museum in line with ideals of the time (Bencard, 1993, p. 9; Gundestrup, 2005, p. 20).

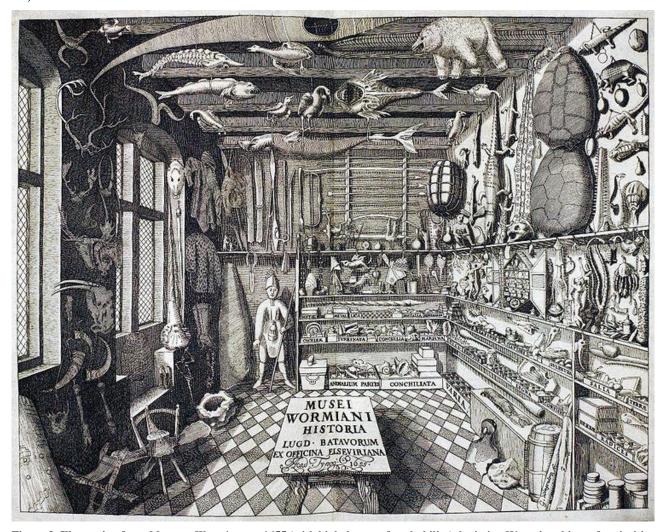


Figure 3: Illustration from *Museum Wormianum*, 1655 (with high degree of probability) depicting Worm's cabinet of curiosities (Mordhorst, 2003, p. 50)

In the 1660s, the Kunstkammer collection grew steadily, and a new building of three storeys high was erected next to Copenhagen Castle to house the growing collection. By the end of the eighteenth century, the building became too small to house the collections; consequently, the collection was divided into several sub-collections. The lack of space, the ideas of the Enlightenment Age and new

⁶ The Danish Royal Kunstkammer was initiated by King Frederik II (1559-1588) but was fully established under his grandson Frederik III (1648-1670), who was an ardent and systematic collector (Gundestrup, 2005, p. 18; Rasmussen, 1979, pp. 28–33).

scientific and political ideals emphasising specialised, systematised, public collections all contributed to the total dissolution of the Royal Kunstkammer in 1825. Today, the objects from the Kunstkammer constitute the foundation of the collections of all three Danish national museums: the National Gallery of Denmark, the National Museum of Denmark, and the Natural History Museum of Denmark (Bencard, 1993, pp. 13–14; Gundestrup, 2005, p. 31f). From 1850 to 1900, 30 new museums were established, only four were located in Copenhagen, the rest were spread out all over the country. In accordance with the democratisation principles of the time, the elite of the larger boroughs initiated the establishments of the new museums by donating their private collections in order to promote their history and wealth.

Although the origin of the public museum can be traced back to ancient Greece, 95% of the museums in the world is reported to have been established after the Second World War (S. Macdonald, 2011, p. 4). From the beginning of the 20th century until the German occupation in 1940, many museums (cultural heritage), approximately two to five new museums per year, were founded in Denmark. After the Second World War had ended in 1945, many art museums and museums with a particular focus, such as the Women's Museum, were established thus increasing the number of museums (Floris & Vasström, 1999, p. 51–52). However, the last decade has witnessed a decrease in the number of state-subsidised major museums due to museum mergers as a result of increased competition and political reforms, such as the municipality reform in 2007 (Danish Ministry of Culture, 2011, p. 13). Even during this research period (2010-2014), the number of state-subsidised major museums has further decreased. For example, the cultural heritage museum, Nordjyllands Kystmuseum comprises many museum branches: Skagen By- og Egnsmuseum, Bangsbo Museum Bangsbo Fort, Sæby Museum and the manor museum Sæbygård. Many of these museum 'branches' (small museums structurally subsumed under a larger museum) are very small with lean staff and few physical visitors (see Section 6.1, Chapter 6 for a presentation of the Danish museum landscape). The classification of museums used throughout this thesis is based on a count carried out in January 2012. The museums are listed as either major museums or museum branches, of the 195 museums in the thesis (see Appendix 1), 119 are major museums and 76 museums are museum branches (Table 1).

Museum	State-owned	State-subsidised	Total
Major museum	7% (8)	93% (111)	100% (119)
Museum branches	8% (6)	92% (70)	100% (76)
Total	7% (14)	93% (181)	100% (195)

Table 1: State-owned and state-subsidised museums in Denmark (Table 1, Appendix 17)

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⁷ The 2007 Municipality Reform (kommunalreform in Danish) reduced the number of municipalities from 271 to 98.

2.3 Definitions of the International Council of Museums

The previous section addressed the historical dimension of the establishment of the Danish public museums. This section focuses on the present day museum definitions. The internationally recognised definition of a museum is according to the International Council of Museums (ICOM)⁸

A museum is a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment. (ICOM, 2013, p. 15)

This museum definition takes it point of departure in the obligations and activities that ensue from the institution. In 1946, when ICOM was established, a museum was not defined with specific public obligations or purposes but was defined through their collections to include

All collections open to the public, of artistic, technical, scientific, historical or archaeological material, including zoos and botanical gardens, but excluding libraries, except in so far as they maintain permanent exhibition rooms. (ICOM, 2007)

In 1974, ICOM presented the following revised definition, which is almost identical with the present day definition

A museum is a non-profit making, permanent institution in the service of the society and its development, and open to the public, which acquires, conserves, researches, communicates, and exhibits, for purposes of study, education and enjoyment, material evidence of man and his environment. (ICOM, 2007)

In this definition, the notion of 'non-profit' is included to state that a museum's overall mission is not to create revenue — and is not a business as such — but a museum is an institution that serves society. Since 1974, the definition has been revised several times, but the overall definition has remained more or less the same. In 2007, ICOM specified the inclusion and exhibition of both the "tangible and intangible heritage of humanity and its environment" in the museum collections (ICOM, 2007). A museum is, thus, a (physical) locality open or accessible for the public and is obliged to acquire, conserve, research, communicate and exhibit the cultural heritage. The first three obligations are directly related to the museum collection, which is defined as a set of acquired, classified, selected and preserved objects assembled to constitute a coherent and meaningful narrative (Desvallées & Mairesse, 2010, p. 26). These objects may be either tangible (produced or naturally available) or intangible (rituals, myths, songs, ephemeral gestures and performances in the contemporary art).

⁸ ICOM is a section under UNESCO established in 1946 that represents a network of museums and museum professionals.

While the first three obligations of the museum are centred on the museum collection, the two last, 'communication' and 'exhibition' are outward-oriented towards the public. The ICOM definition indicates a reciprocal approach by stating both communication and exhibition as core functions of the museum. Communication⁹ has gradually become a major driving force of all museum operations in Denmark and internationally. As Eilean Hooper-Greenhill stresses

For too long, museums have defended the values of scholarship, research and collection at the expense of the needs of visitors. The challenge today is to preserve these traditional museum concerns, but to combine them with the educational values that focus on how the objects cared for in museums can add to the quality of life for all. (Hooper-Greenhill, 1994, p. 1)

Hooper-Greenhill advocates that museums should be considered as a medium for communication, and that this approach should be combined with the understanding of museums as repository for collections, and research on these collections should involve knowledge about the users of the museum (1994, p. 2-3).

2.3.1 The Danish Museum Act

Denmark has a long tradition of public endorsement for cultural institutions including museums supported by public subsidies and funding. As early as 1887, larger museums in the provinces received annual subsidies from the Danish government, and in exchange these museums were obligated to submit to state inspections (Lundback, 1985, p. 21). However, the first Danish museum law for cultural heritage museums was enacted in 1958 and for art museums in 1964; while the first act covering cultural heritage, art and natural history museums were passed in 1976. Since then, the law has been revised several times. The present Museum Act became effective in 2001 (*Consolidated Act on Museums*, 2006). ¹⁰ The first Museum Act in 1958 enabled the increase in the subsidies to the museums, and at the same time, the museums were subjected to greater demands from the Danish government. This act recognised museums as enlightening and educating institutions for the public. Throughout the years, the overall purpose of Danish museums has not changed dramatically. All state-owned and state-subsidised museums are governed according to the Danish Consolidated Act of Museums and must comply with requirements stated in the act and *collect*, *register*, *preserve*, *research*, and *disseminate knowledge* in order to

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⁹ In Denmark, there has been a clear-cut organisational distinction between dissemination of knowledge and communication practices. Dissemination of knowledge often refers to a one-way transmission and distribution (of knowledge) relating to education and learning, whereas, communication has been related to specific sets of practices, such as marketing, press, web, graphic design and sponsor and fundraising positions (Holdgaard & Simonsen, 2011).

¹⁰ Since 2001, several amendments have been made (in 2006, 2009, 2010, 2012 and 2014) (Consolidated Act on Museums, 2006).

- i. safeguard Denmark's cultural and natural heritage
- ii. elucidate cultural, natural and art history
- iii. augment the collections and documentation within their respective areas of responsibility
- iv. make the collections and documentations accessible to the general public
- v. make the collections and documentations accessible for research and communication (Consolidated Act on Museums, 2006, sec. 2)

The definition of a museum in the Danish Museum Act is similar to the museum definition of ICOM. However, the obligations of the Danish museum (also referred to as the five museum pillars in the Danish literature) are more concentrated on the first four pillars, namely, *collect*, *register*, *preserve and research*, which are focused on the museum collection itself, i.e., all activities relate to collection specific practices, whereas *disseminate knowledge* relates to activities directed at the museums' users. In ICOMs definition, which also includes five museum obligations, the last two obligations – *communication* and *exhibition* – are concerned with activities that involve museum users. In ICOMs definition, museums exist for the "*purposes of education, study and enjoyment*." I consider 'enjoyment' as striking considering its roots in the Enlightenment ideals, as this implies that museums' subsistence, beyond research and education, relies on amusement. Based on this principle, ICOM manifests that a museum is positioned within the field of tension between the traditional cultural heritage institution with focus on knowledge, collections and tourist attractions that provides entertaining experiences and needs to consider revenue as one of the main goals. Interestingly, as the museums must then relate to the enlightenment-entertainment dichotomy (see Section 2.4.1 for a further discussion).

The Danish museums are divided into three official categories of museums: 1) Cultural heritage museums (e.g., the National Museum of Denmark or Holbæk Museum), 2) Art museums (e.g., Fuglsang Art Museum, Ordrupgaard or Skagens Museum), and 3) Natural history museums (e.g., the Natural History Museum of Denmark or Naturama). There is another category that does not reflect the official classification, i.e., the special museum (e.g., Odense City Museer or Museum Sønderjylland). A special museum is a museum, which is a combination of two or three of the above categories.

As a recompense for protecting the cultural and natural heritage of Denmark, Danish museums receive a seal of approval as *state-recognised* museum, as well as financial subsidies that form a substantial part of the museums' operating budget. Therefore being approved as a state-subsidised museum by the Danish Agency for Culture is beneficial from a financial point of view, as state-subsidised museums are guaranteed an annual operational grant. At the same time, being state-recognised is also a mark of quality because the museums will have to fulfil a number of obligations

(the five museum pillars) of the museum act¹¹ and is also, what distinguishes state-recognised museums from other types of museums, for instance, the Guinness World Records Museum.

The Ministry of Culture is responsible for the policy of museums, protection and preservation of buildings and monuments, archaeological activities and higher education and training in the areas of art and culture. While the Ministry of Culture is responsible for the realisation of cultural policy of the Danish government within the framework of the Danish legislation, the Danish Agency of Culture has the regulatory responsibility of the cultural policy, as well as the Danish Museum Consolidated Act of Museum. The state owns eight museums¹², including the three principal museums of Denmark dedicated respectively to art history, cultural heritage, and natural heritage. The three principal museums have a particular status among the other museums with special obligations. These obligations include offering professional assistance and carrying out special preservation tasks for the other state-owned and state-subsidised museums (*Consolidated Act on Museums*, 2006, sec. 12). From that perspective, one could assume that the three Danish national museums could act as front-runners in relation to online communication practices.

2.4 Paradigms shift in the museum

Unless a radical re-examination of the rôle of museums within society – by which I do not mean measuring their 'success' merely in terms of criteria such as more money and more visitors – takes place, museums in this country, and possibly elsewhere, may likewise find themselves dubbed 'living fossils'. (Vergo, 1989, pp. 3–4)

Despite the idea of the public museum being for the public, the museum institution has been a sacred temple for the elite (D. Cameron, 1971). Numerous visitor studies and surveys of Denmark (and abroad) museums have shown that the visitors are often older and well-educated with a high economic living standard in comparison with the average population (Andersen, Jensen, & Brændholt, 2012; Bruun, Jensen, & Brændholt, 2013; Epinion & Pluss Leadership, 2012; Moos & Brændholt, 2010b, 2011).

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¹¹ A state-subsidised museum is a museum owned by one or more local authorities (approximately 20%), associations (approximately 5%) or an independent institution (approximately 75%). Even though, all kinds of museums can apply for state subsidies, these applications are rarely approved, because Denmark already has a well-established network of museums.

¹² The state-owned major museums include: The Danish Agricultural Museum, Danish Museum of Hunting and Forestry, The Hirschsprung Collection, Ordrupgaard, the National Museum of Military History Denmark, the National Gallery of Denmark, the National Museum of Denmark, and the Natural History Museum of Denmark. In January 2014, the National Museum of Military History Denmark became part of the National Museum of Denmark; however, in this present thesis it will appear as an independent museum.

The critique of the public museum for being exclusive and restricted is not a recent phenomenon. Already around the 1900s, the museums were criticised for being elitist and irrelevant for the general public. In 1887, John George Wood, British natural history writer, expressed his opinions about museums as

Oh! the dullness of museums!

I speak on behalf of the General Public. Full of interest to the expert, there is no concealing the fact that to the general public a museum, of whatever nature, is most intolerably dull, as I know by personal experience. To me, for example, a collection of blue china is dullness itself. I do not understand blue china, and its peculiar beauties are lost on me, while the experts cannot sufficiently feast their eyes on it, and are longing to nurse every teapot and stroke every plate in the collection. (Wood, 1887, p. 217)

In the quote, Wood conveys that museums are not for the general public, including himself. The museum exhibitions are not relevant for the common man and are not put into context or communicated in such a way that they become relevant. Thirty years later, John Cotton Dana, founder and director of the Newark Museum, proclaimed that museums should change their practice to make it relevant to the daily lives of the citizens instead of solely serving the elite. In his article, "The Gloom of the Museum", Dana argues that (American art) museums are like

[...] remote palaces and temples - filled with objects not closely associated with the life of the people who are asked to get pleasure and profit from them, and so arranged and administered to make them seem more remote. (Dana, 1917, p. 20)

Duncan Cameron and others have endorsed the arguments of both Wood and Dana. He stated that the public museum from the beginning had and still has (in 1971 when the article was written) two principal problems, which still resonate in most present day museums. First, the ones responsible for the public museums, their collections, and the display and dissemination of these collections, belonged to a small elite. Despite the good intentions to make the private collections publicly accessible, it was still the elitist minority (with their understanding of the world) who created the public museums in such a way that it could only be of meaning to those who were alike, i.e., belonging to the same minority. Secondly, the acquisitions of new objects and artefacts to expand the present collections, the selections of displays, as well as the disseminations of the displayed objects and artefacts, were grounded in the value systems of the elite and not the general public. As Cameron puts it,

One might almost say that the private collectors had been replaced by an exclusive, private club of curators. The public was still being offered private collections but with a new name over the door. (D.Cameron 1971, p.66)

In that sense, the public museum did not become the inclusive and democratising institution for the general public, as imagined by the Enlightenment ideals; instead, it became a temple – beholder of the sacred, significant and valuable.

Vergo (1989) conceived the 'new museology' movement in the 1990s; according to which (see Section 3.1, Chapter 3), the role of the public museum and its legitimacy was up for debate. The ambiguity resulted in reconceptualisation of the museum as a public institution with its societal obligations and responsibilities, and reframed the museal collection, exhibition, research, educational and communication practices. Today, the list of labels describing the modern public museum is long, and new descriptors are constantly added. These include responsive, connected, engaged, medialised, participatory and exploded, to name a few (G. Black, 2005; Drotner & Schrøder, 2013; Lang, Reeve, & Woollard, 2006; Rudloff, 2013a; Samis, 2008; Simon, 2010). All these new attributes imply a change of perspective in the museum institution's self-identification, as well as new views on the museum's societal role in relation to its visitors. This has been described in the paradigm shift discourse where the main assumption relates to the fundamental change in its relationship with the public, and vice versa.

Overall, the general perspective within museology is that the museum institution has moved from being collection or artefact-centric to being an institution that includes and focuses on the requirements of the visitors to the museums. The (alleged) 'paradigm shift' or reinvention of the museum denote a transformation of the institution. I have inserted 'alleged' to question how the paradigm shift is presented in the museological literature, and the governmental reports as factual or even historical occurrence (see among others, G. Anderson, 2004; Danish Ministry of Culture, 2006; Løssing, 2009). For instance, the former Danish Minister of Culture, Uffe Elbæk, recently acknowledged the paradigm shift in user participation and user-driven innovation in cultural institutions. He stated that cultural institutions including museums have changed from being education strongholds for the elite to being meeting places or fora for the entire public (Center for Cultural and Experience Economy & Danish Ministry of Culture, 2012, p. 4). Likewise, in the introduction to the first edition of the anthology, *Reinventing the Museum* (2004), editor Gail Andersen claims that there has been a

[...] general movement of dismantling the museum as an ivory tower of exclusivity and toward the construction of a more socially responsive cultural institution in service to the public. This examination of fundamental assumptions about museum operations has facilitated a dramatic paradigm shift in the way museum professionals, and some members of the public, regard museums. (G. Anderson, 2004, p. 1)

Whereas in the second edition, Anderson has modified this assertion to stress that the paradigm shift is an ongoing and evolving process and not least a discussion both in theory and practice. Accordingly, the subtitle of the second edition of *Reinventing the Museum* was changed from *Historical and*

Contemporary Perspectives on the Paradigm Shift (2004) to The Evolving Conversation on the Paradigm Shift (2012). As the new subtitle indicates, "reinventing the museum" is as much a discussion and process on a theoretical level as it is a practical and mental transformation of the museum organisation in terms of "institutional values, governance, management strategies, and communication ideologies" (G. Anderson, 2012, pp. 3–4). Museum scholar, George Hein, argued that the popular view of the paradigm shift in museums is not accurate, if the paradigm shift should be understood in accordance with Kuhn's approach to paradigm shifts as this, among other things, would entail a universal support for the new paradigm to succeed the old (Hein, 2012). Thus, it can be argued that the paradigm shift and transformation processes within the museum have been overestimated by museum scholars, cultural politicians and museum professionals. Hence, I consider it advantageous to distinguish and differentiate between ideals and theoretical discussions about the paradigm shift and transformation processes and actual structural changes.

2.4.1 Projectification of the cultural heritage

Today museums are tourist attractions and leisure pursuits in line with cinemas, theatres, theme parks, etc. Thus, museums compete against these institutions for the same audience that seek recreational and leisure-time activities. As a response, one approach has been to disregard recreational and leisure attractions as pure entertainment, hence not a serious competitor for museums. This approach has been rooted in the concern of 'disneyfication' of the museum, which gives preference to amusement for the masses rather than enlightenment and education for cultured audiences (Henning, 2006, p. 60). In this sense, serving entertainment interest has been considered inappropriate by the museum institutions as there is a clear-cut boundary between entertainment (at theme and amusement parks) and enlightenment or education (at museums). However, entertainment and enlightenment in the museum are not mutually exclusive spheres. Franz Boas specified as early as 1907 that

The value of the museum as a resort for popular entertainment must not be underrated, particularly in a large city, where every opportunity that is given to the people to employ their leisure time in healthy and stimulating surroundings should be developed, where every attraction that counteracts the influence of the saloon and of the race-track is of great social importance. (Boas, 1907, pp. 921–922)

Franz Boas' argument is interesting as there has been a distinction between enlightenment and entertainment from a museum context. In recent years, with the inclusion of enjoyment in the ICOM museum definition, this of course has been further softened. Other researchers have likewise stressed that the gap between entertainment and enlightenment in museums can be bridged, and that amusement parks and museums share many similarities (see, f.i., Bennett, 1995; G. F. Macdonald & Alsford, 1995;

Mintz, 1994). MacDonald and Alsford have even emphasised in their article, "Museums and Theme Parks: Worlds in Collision?" (1995), that museums need to adopt certain strategies of the entertainment industry to attract more and new visitors. According to these museum scholars, museums have traditionally not relied on revenues from visitors but have largely been dependent on financial government support. Consequently, museums did not realise early enough the competition with other leisure pursuits

This has retarded the development of an audience-orientation and encouraged the somewhat arrogant, although not altogether unsupportable, attitude that, rather than museums offering what the public wants, the public should learn to want what the museums offer. (G. F. Macdonald & Alsford, 1995, p. 131)

MacDonald and Alsfeld examine and discuss the relationship between the stereotypical museum (high culture) vs. theme park (popular culture) perception and how these two apparently very different domains share similarities and how especially museums can benefit by integrating aspects from the theme park. A few years after the article was published, Pine and Gilmore presented the concept of 'experience economy' in which experiences were defined as a source of value creation for businesses, and a supplement to various products and services. Thus, museums are obliged to provide memorable and engaging experiences (Pine & Gilmore, 1999, p. Chapter 1). In Danish culture policy development, the paradigm shift in the museum is often related to the introduction of the notion of the experience economy, and few scholars even consider Pine and Gilmore's concept as a specific 'experience economy turn' (Bille, 2012; Skot-Hansen, 2008). In Denmark, the ideas of the experience economy have been associated with the creative industry¹³ as their primary product is experiences. Experience economy has been on the political agenda since 2003 as part of the development of the cultural sector where it has been expected that cooperation between the creative industry and other industries would increase the overall value creation. This viewpoint has resulted in several government reports (Center for Cultural and Experience Economy & Danish Ministry of Culture, 2012; Danish Ministry of Culture, 2008) and has had implications on the development of the cultural policies in Denmark (Bille, 2012).

The conditions presented by the experience economy might have had an impact on the increased focus on creating new projects within the museum, particularly on projects involving digital media technologies. This 'projectification of the cultural heritage' (Holdgaard & Klastrup, 2014) has forced the museums (or other cultural institutions) to establish collaborations with partners, and to propose (most often digital) projects that they can apply for external funding. These digital projects are often created to meet the increased expectations, particularly in dissemination and communication

¹³ Creative industry in this context is defined as (among others) broadcasting, media, cultural institutions, events, music, film/video, publishing, performing and visual arts (Bille, 2012, p. 96).

activities. As an example, in 2002, KulturNet Danmark, a specific digital pool under the former Heritage Agency of Denmark, was established. From this pool, cultural institutions could apply for funding for digital communication projects. The objective of Kulturnet Danmark was to develop new and innovative Internet based cultural communication projects in the cultural heritage sector (Løssing 2008, p, 84). Since then, other digital pools have been established under the auspices of the state.

Despite the development, many Danish museums are not equipped for designing large-scale digital dissemination or communication projects (Holdgaard & Simonsen, 2011), and as a consequence, many museums frequently hire project employees, such as concept developers, web developers, IT consultants, animators, etc., from outside the museum. On completion of the project, the accumulated knowledge of the project is lost along with those involved in the project. Therefore, 'the digital' in museums is often seen as an add-on to the museum organisations, but not as part of the actual educational and communication activities (Holdgaard & Simonsen, 2011, p. 110).

2.4.2 The Danish National Educational Plan

The history of dissemination and communication in the Danish museums is rather short. With the appearance of the voices of new museology; and due to the new public management demands in the 1990s, we have witnessed an increasing attention, both nationally and internationally, on the museums' obligation to communicate and disseminate their knowledge to the wider public. Until then, putting museum objects on display and publishing exhibition catalogues and research articles were considered dissemination (Hooper-Greenhill, 1994, 2000).

The National Educational Plan [Udredning om museernes formidling] is another example of how the (presumed) paradigm shift and experience economy affected the Danish cultural policies. This plan is important in relation to understanding the context of the Danish museums' educational and communication responsibilities. The purpose of the plan that was launched in 2006 was to develop the museums' educational role in society and create equal access to culture for all citizens by strengthening the museum dissemination and educational activities (Danish Ministry of Culture, 2006; J. T. Jensen, 2013). The plan consisted of seven action areas through which the individual museums could apply for funding from five different pools. The seven action areas include development in the following fields:

- Educational role of museums
- Research into education
- Training and competences
- International experience exchange
- Museums and education
- User surveys
- Experience exchange and knowledge sharing

(J. T. Jensen, 2013, p. 28)

The increased focus on dissemination and educational activities in the Danish museums than any of the four pillars of the Danish Museum Act (collection, registration, preservation or research) has been disputed and questioned by researchers such as Christensen (2007). In the conference paper, "Hvad er et museum? Den danske museumslov mellem teori og praksis" [What is a museum? The Danish Museum Act between theory and practice], Christensen discusses whether or not the present day museum practice can be accommodated in the current Danish Museum Act and raises questions about the validity of the current Museum Act to embrace the understanding of museums as experience centres and the dissemination activities related to creating lasting experiences to appeal to a larger number of visitor groups (Christensen, 2007). Christensen argues that the act reflects an archaic understanding of the museum as merely a collection of objects that does not take dissemination and educational activities into consideration. He further asserts that much of the dissemination and educational activities that take place at the Danish museums are not grounded in the museum collections (Christensen refers to this as 'disneyfication of the cultural heritage institutions'). Therefore, the act requires a progression from collecting objects, registering, preserving and doing research around the objects, and finally disseminating knowledge about the objects.

On the contrary, other researchers consider the renewed (political) interests in dissemination as a natural development. After the enactment of the Museum Act in 1976, the immediate focus was on the collection and preservation practices. Currently, it has progressed to other elements of the act that relates to dissemination activities (Skot-Hansen, 2008, p. 29). In that sense, the revaluation of dissemination is part of a logical development of the museum institutions within the Museum Act. Therefore, this argument is based on the fundamental premise that museums – despite the name – not only should be unchangeable conservation sites for dead objects, but living and responsive sites that meet the changing expectations and disseminate and communicate the cultural heritage in the relevant manner to the different groups of visitors (Danish Ministry of Culture, 2006).

Whether the Danish Museum Act is up-to-date is not the focus of this thesis; nevertheless, the controversy is still important as it relates to how museum dissemination and communication is understood and prioritised in the research literature and from a policy perspective.

2.4.3 Digitalisation as culture politics

In 2006, a committee of digitalisation of the cultural heritage was appointed. The committee consisted of representatives from the larger Danish cultural heritage institutions (The State Archives, The Danish Royal Library, The National Gallery of Denmark, The National Museum of Denmark), The Danish

Agency for Culture¹⁴, The Danish Film Institute, DR¹⁵, Samrådet for Ophavsret¹⁶, research councils, The Danish IT Industry Association, The Ministry of Finance, The Ministry of Culture and the Ministry of Science. In the report *Digitalisering af kulturarven – endelig rapport fra digitaliseringsudvalget* [Digitalisation of the Cultural Heritage – final report from the digitalisation committee] (Danish Ministry of Culture, 2009a), the committee formulated a series of digitalisation recommendations for prioritised parts of the Danish cultural heritage. According to the committee digitalisation of the cultural heritage, online media offers new possibilities for all types of users because the heritage becomes available and accessible across time and space. Everyone can become more knowledgeable upon the cultural and historical heritage of Denmark. Thus, the main purposes of digitalising the cultural heritage are conservation, protection and accessibility (2009a, pp. 7–8).

Concordant with the digitalisation report, former director Steen Hvass of the former Heritage Agency of Denmark in the Preface to the museum web user report (Moos & Brændholt, 2010a) asserted the online museum visit to be of equal importance as physical museum, which is also one of the six recommendations in the museum web user report (Moos & Brændholt, 2010a, p. 16). 17 This forward thinking comment has far-reaching consequences given the short history of online media. Hvass also emphasised 'accessibility' as one of the main positive qualities of online media. In this argument is embedded a notion of online media that through digital platforms, the museums can appeal to new and other user groups that do not generally visit the physical museums: "This is why it is important that the physical museum is accessible on various platforms. In other words, diversity and accessibility go hand in hand. The museums' websites are an equal part of the museum's professional work" (Moos & Brændholt, 2010a, p. 3). Recently, one of the main objectives of the Danish cultural policies has been to engage those who rarely or never visit a museum. Of these, children and young people belong to this group. The common assumption has been that children and young people widely use online media, and; therefore, museums should take steps to implement online media to a larger extent to attract more children and young people to the museums. In the strategic report *Kultur for alle* [Culture for Everyone] (Danish Ministry of Culture, 2009b) it is stated that

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¹⁴ The Danish Agency for Libraries and Media and the Heritage Agency of Denmark have been merged into the Danish Agency for Culture.

¹⁵ DR (Danmarks Radio) is Denmark's national broadcasting corporation.

¹⁶ Samrådet for Ophavsret [The Council of Copyright] is an informal cooperation of all organisations which represent authors, creators, performing artists, etc.

¹⁷ The six recommendations of the Heritage Agency of Denmark are 1) The museum is the sum total of the platforms where the museum is present; 2) The museums' websites are an equal part of the museum's professional work; 3) The museums should focus on developing real content for their websites; 4) The museums' websites should be relevant to a wide selection of the population; 5) Citizens should encounter the museum on both digital and analogue platforms; 6) The museums should work strategically to develop the museums' digital communication and dissemination on the Internet (Moos & Brændholt, 2010a, p. 16).

The Internet is a natural part of children and young people's everyday lives, and we should seize every opportunity to use it to attract and engage young people's interest in art, culture and cultural heritage. (Danish Ministry of Culture, 2009b, p. 16)

The idea that museums become more compelling to children and young people by using online media in their educational outreach has among others resulted in the publication *Digital kulturformidling-børn og forskere har ordet* [Digital Dissemination of Culture. Children and Researchers Have the Word]¹⁸ (J. Hansen & Hansen, 2007) as well as the 'e-museum' initiative. The Danish government has encouraged museums (and science centres) to develop online teaching and educational resources and has established e-museum as a pool specifically for the development of such resources. E-museum is managed by the Danish Ministry of Education and the Danish Ministry of Culture.

2.5 Trajectory of museums on the web

The first museum went online when the graphical browsers emerged in the beginning of the 1990s. However, even before the development of the World Wide Web, an interest in hypermedia and interactivity was observed from the museums. In the 1960s, a quest for information handling systems emerged in the museum sector due to the development of the computer technology. The main focus was to automate and share information between museum institutions using computer technology (Jones-Garmil, 1997a, pp. 36–37; Parry, 2007, pp. 16–17). The Museum Computer Network (MCN) association was formed in 1967 in New Work City to support the museum institutions in developing, implementing and disseminating technologies. Everett Ellin, director of the MCN, stated that

[a]s the museum audience everywhere continues to grow, we are coming to recognise that the textual and visual data descriptive of our public collections of art and of scientific and historical material must be made more accessible and employed in far more imaginative ways than are possible by conventional means. (Ellin, 1968, p. 65)

In his article, Ellin presents a vision of increased accessibility to the public brought about by computers. Interestingly, the vision of Ellin is very similar to the expectations proposed by the Ministry of Culture and the digitalisation committee in Denmark 40 years later:

The digitalisation opens a new and hitherto completely unknown perspective of how many people can access and use the cultural heritage. When the cultural heritage is digitised with a mouse-click it suddenly becomes available and accessible to anyone at anytime, anywhere. (Danish Ministry of Culture, 2009a, p. 7)

¹⁸ My translation.

Beginning of the 1990s witnessed an increased focus on the information society as an ideal society. Therefore, from a government perspective, education and access was given additional emphasis, concurrently the expectations to what a museum is and should be in relation to the public changed. A need arose for theorising and discussing the practical implications of introducing new media and technology into the museums not only to support the museums' existing work practices, but also to develop new means for interactive audience communication. In this decade, two major conferences were held, the International Conferences on Hypermedia and Interactivity in Museums (ICHIM) in 1991 and the Museums and the Web conference in 1997.

Websites was first introduced to the museum in the 1990s as the ideal knowledge base and communication system. The entry of the museums into the World Wide Web virtually relocated the museums to the visitors' own home, which raised critical voices on the threat of physical museums being extinct. Addressing these MacDonald and Alsford state that

The opportunities of digital technologies for dissemination of knowledge on a scale never before possible, and the pressures to conform to audience expectations, will be key factors in transforming museums. That transformation won't mean that we lose what museums are, and have to offer, today as physical sites conveying knowledge of heritage through the medium of material objects. It means that we will construct another dimension to the museum world – a digital dimension. (MacDonald & Alsford, 1997, pp. 267–268)

In line with MacDonald and Alsford, Bowen argued for museum on the web

[...] it should be recalled that online facilities are complementary to traditional museum services; virtual museums will not replace real museums, but instead should be used as a tool which encourages actual visits to actual museums. (Bowen, 2000, p. 7)

Thus, Bowen emphasises that online museum communication cannot replace the real, physical museum experiences, but it should rather be considered as a supplement to the onsite museum visit. Previously (prior to the Internet), museum visiting was centralised to the physical museum. In order to come in contact with the museum the visitor had to leave his/her home and physically visit the museum, whereas the online museum visit is by no means restricted to the physical location. According to Parry, an online visit facilitates the museum entering the homes of the visitors:

The museum would no longer be a centralised venue, with a threshold distinguishing its special liminal space from the outside world, but would instead be a broadcaster and publisher distributing packages of content to myriad localised and varied contexts. It would, in other words, be the museum that was doing the visiting. (Parry, 2007, p. 94)

Thus, the museum online visit is localised at the individual user, creating a museum distributed and dispersed in time and space. This conceptualisation of the online museum has led to many new descriptions for the museums: 24-hour museum, the museum-without-walls, the virtual museum, etc. (Battro, 2010; Parry, 2007, p. 98; Schweibenz, 2004). Media scholar Werner Schweibenz categorised museum websites into four: 1) brochure museum, 2) content museum, 3) learning museum and 4) virtual museum (Schweibenz, 2004). 19 The brochure museum is defined as a museum website that contains the basic information about the museum, such as types of collection, contact details, etc. Its goal is to inform potential visitors about the museum. The content museum is a museum website which presents the museum's collections and invites the users to explore them online. The purpose of this type of museum websites is to present a detailed picture of the collections of the museum, typically for the expert more than for the lay-user; thus the content is displayed as a database focusing on the object without much contextualisation or dissemination. The learning museum is a website offering didactically targeted content in accordance with the various backgrounds of the users (age, level of knowledge, etc.). The overall purpose of the learning museum is to establish a relationship between the user and the museum and make the user return to the website, as well as the physical museum. The last category, the virtual museum, is a museum website that not only provides information about the specific museum and its collection, but also links to collections and information sources outside the museum and forms a rhizomatic network. Schweibenz' notion of the virtual museum builds on the Malraux's vision of the 'museum-without-walls', thus the virtual museum has no counterpart to the physical museum (Schweibenz, 2004). Despite the fact that Schweibenz' categories are more than 10 years old, the categories have been found to be relevant and continuously used by numerous scholars and practitioners (see, f.i., Løssing, 2008; Nørskov & Larsen, 2009 for Danish examples).

In the 1990s, both practitioners and scholars attempted to theorise the impact of digital media technologies on the museums. And several anthologies such as *The Wired Museum* (Jones-Garmil, 1997b) and *The Virtual and the Real* (S. Thomas & Mintz, 1998), which optimistically address issues relating to new media, were published. In the 2000s, as a result of the development of media technologies, the pervasive use of computers increased among the museums and users. In the public discourse, it was no longer a question of whether museums should have an online presence.

As early as 2003, Pekarik argued

Nowadays any museum that considers itself worthy of the name needs to have a Web presence. It is no more an option than having a phone number. But few museums seem to have worked out precisely what role a Web site

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¹⁹ Another influential categorisation is of Steve Dietz, former Director of New Media Initiatives at Walker Art Center, who in 1998 presented different art museum approaches to online museum interfaces. These five approaches included 1) brochure; 2) virtual tour and augmented museum exhibition; 3) immersive interface; 4) extended exhibition; and 5) online exhibitions (Dietz, 1998).

should play in the overall life of a museum. The uncertainty is understandable, because this is a new medium, often not well understood, which seems to be a wonderful opportunity for many things. But while most museums are waiting for the potential of Web sites somehow to become clearer, time is passing and opportunity is being lost. There is a real need for an aggressive combination of creative experimentation and solid research. (Pekarik, 2003, p. 276)

Pekarik stated that all museums should have a website, as having a website is in line with having a phone number, but continued by declaring that few museums understand the media and the possibilities the media offer. In 2011, the scholars Veirum and Christensen substantiated Pekarik's argument and propounded, using the Danish museum context as an exemplary, "[i]f it's not on the Net it doesn't exist" (2011). They continued to emphasise the importance for museums to have an online presence. As they pointed out: "[...] in our society today, visibility is inextricably linked to the Internet. We have arrived at the saturation point where we expect to find things there, and only hesitantly look for it the 'old' way by looking in papers, books, etc." (2011, p. 4).

2.5.1 Optimistic voices and the social media era

In the 2000s, the Web 2.0 offered new possibilities through digital technology, service, and platforms. Wikis, social tagging, folksonomies, crowdsourcing, blogging, etc. became popular themes among the (international) museum community (Chan, 2007; Giaccardi, 2012; Grabill, Pigg, & Wittenauer, 2009; Russo et al., 2008; Russo, 2011; Stuedahl, 2011). The development of hand-held, location-based, smart devices resulted in creating new opportunities to engage and involve museum experiences (D. W. Hansen, Alapetite, Holdgaard, Simonsen, & Vilsholm, 2009; Katz, LaBar, & Lynch, 2011; Tallon & Walker, 2008). Many of the optimistic voices are very technology-centred focusing mostly on the technological breakthroughs that enable new interaction forms and disregard the use context in case of both museums and its users. For example, in the development of the project Naturl-IT, we were preoccupied with the technical possibilities of using location-based services in an experience centre²⁰ and very little with the use context, the integration with the other dissemination activities at experience centre, maintenance, etc. (D. W. Hansen et al., 2009).

My literature review has revealed two general juxapositioned notions of the diffusion and appropriation of new media among museums. This identification of two oppositional perspectives on

²⁰ I acknowledge that experience centres in Denmark do not fall under the Danish Museum Act. Experience centres in Denmark receive subsidies from the Ministry of Education, and they are obliged to provide knowledge and education about nature, history and science through educative, praxis-oriented activities for all senses. All though the centres are not museums, they share many similarities with the state-subsidised museums, and I am not certain, if the average visitor can distinguish between an experience centre and a museum.

digital media and technologies is not a novel finding. The first notion is related to the general understanding that museums to a large degree have adopted and comfortably used online media and social media (Henning, 2006, p. 303; Stuedahl, 2011; Veirum & Christensen, 2011). Stuedahl (2011) refers to how other studies have shown the use of social media platforms, thus her assumptions are highly are based on past literature (among others Stuedahl refers to Bernstein, 2008; Dicker, 2010). Dicker (2010) and Bernstein (2008) both report on prior museum projects involving the usage of external social media platforms for communication and dissemination purposes at Powerhouse Museums (Australia) and Brooklyn Museum (USA). However, these two museums are also well-known in the museum field for experimenting with new media and do not represent the general museum landscape. And to draw the conclusion indicated below might be an overstatement: "[m]any studies show how museums are comfortable using social networking technologies, such as Flickr, Facebook, YouTube, Twitter and blogging, and are welcoming the possibilities these provide to invite communities and participants into dialogues and sharing" (Stuedahl, 2011, p. 4). It is interesting to note the generalisation to the entire field of museums based on one atypical case study that involves a museum highly equipped to enter a new media terrain and experiment with different engaging and participatory formats and genres.

Although, there are many optimistic views, the critical voices address the unreflective approach to Web 2.0 and social media in the cultural heritage sector and to appraise participation and participatory culture in the arts (Holdgaard & Klastrup, 2014; Valtysson, 2010; Waterton, 2010). As Waterton state, we might not be as far as we think we are

Yet, despite the seemingly omnipresent nature of the Internet in contemporary society, its adoption and reflection within heritage and museological methodologies remain partial and limited. Nor is it something that seems to be winning any ground. (Waterton, 2010, p. 5)

Waterton's opinion is still relevant so as not to let oneself be lulled by the idea of the omnipresent Internet and the users' technological abilities, when addressing digital cultural heritage usage, at least from a Danish context. A similar notion has been intended by Holdgaard and Simonsen (2011).

However, we might need to reconsider this gap between the two contrasting views between the notion of fundamental incompatibility between museums and online media, which has made the pace of the technological adoption slow or even non-existent, and the compatibility narrative in which the museums have embraced and eagerly experimented with new technologies throughout the history (Parry, 2007, pp. 137–140).

2.5.2 Authenticity and authorship

One of the central discussions concerning museums on the web have been related to the dichotomies of artificial vs. authentic and the real vs. the replica that were raised in the wake of the museums' entrance on the WWW. However, the discussions centred on these dichotomies were not initiated by WWW but started decades earlier. Walter Benjamin and his essay, "The Work of Art in the Age of Mechanical Reproduction" (1936) is usually quoted when discussing authenticity (see, f.i., F. Cameron, 2007; Henning, 2006; Parry, 2007; Schweibenz, 2004). In Benjamin's essay, "The Work of Art in the Age of Mechanical Reproduction" (1936), he examines the development of mechanical and visual reproduction (photography and film) of art works and discusses the concept of authenticity by introducing the concept of 'aura' of the art work. He argues that authenticity could not be confounded to technical medium; hence, the original artwork is independent of the copy. Yet, through reproduction of the art work, the aspects of the original are changed by changing its medium. Referring to Benjamin (among others), museum scholar Fiona Cameron has argued that digital museum objects to a large extent have been positioned and characterised as terrorists in the discourses on digitalisation of cultural heritage. Cameron compares the digital object to a terrorist, who poses a threat to the 'real' object, because it becomes impossible to distinguish between 'real' objects and digital replica. This dystopian perspective on what digital media and technologies have to offer museums is, according to Cameron, grounded in the assumption that "viewers will be unable to perceptually distinguish the replica from the real. Collections could then become obsolete, thus undermining museum culture and practice. Here the digital is posed as a terrorist" (F. Cameron, 2007, p. 51). However, Parry argues that Benjamin is often wrongly quoted or misinterpreted as the Marxist agenda of Benjamin against the German Fascism (Parry, 2007, p. 63). Nevertheless, Benjamin's essay, correctly or incorrectly interpreted, has been a sounding board for a spurred discussion about the authenticity of museum objects in general and digital objects in particular (F. Cameron, 2007; L. Floris & Vasström, 1999; Skouvig, 2009). Instead, Parry argues that the authenticity discussion and notion of the authentic museum experience should be reconsidered, as museums have employed fictive elements in their curatorial practices long before the age of the Internet, e.g., using artifices, illustrations, dioramas, etc. Thus, inviting the museums to embrace online media and "reconnect with the playful, illustrative, fictive and theatrical qualities that have become to define a museum" (Parry, 2013, p. 30).

The notion of authorship is likewise changed in relation to online media and in particular social media, because it is now possible in (some) online museum environments to create, curate and comment on the same grounds as the curators (Cairns, 2013; Chan, 2007; Stuedahl, 2011). This challenges the institutions authoritative voice, which Walsh has characterised as the 'unassailable voice' that has "[...] been an essential part of the museum experience. It is an institutional tone and

attitude that pervades museum labels, brochures, exhibitions, catalogues, audio-visual presentations, and now Web sites" (Walsh, 1997). Although museums are considered as power-wielding institution, its authority and 'unassailable voice' has been challenged by online media, as online discussions are not started by them. The discussion and questioning began with the post-modern critique and crisis of representation (see Section 3.1, Chapter 3). However, online media and in particular social media have amplified this discussion, as well as the discussion of inviting the users, to become active co-creators of knowledge. This shift of transferring power from the curators as producers of knowledge to the users challenges the traditional definition of the museum. Instead of being in total control of the content and interpretations of the content, now the museum has to share this area with the users.

2.6 Summary: What is a museum in the present day?

Danish museums do not as in the 1950s guard themselves from the public. Back then, museum directors such as Jørn Rubow, past director of the National Gallery of Denmark did not consider exhibitions as relevant for museums, leave alone the issues related to dissemination. Museums were considered for the educated and the civilised, and not for the ignorant masses (Stensgaard, 2008, p. 28). From that perspective, a paradigm shift has taken place in terms of the institution's function and responsibilities in the Danish society. Thus, a museum is according to the Danish Museum Act, a knowledge institution which produces, preserves, develops and disseminates the cultural and natural heritage; therefore, museums contribute to cultural identity, awareness and reflection both on a national level and to the education of the individual Danish citizen level. However, when it comes to the notions of the paradigm shift, many of the new museum labels imply that the paradigm shift appears more on imagination than in reality.

The multitude of new museum descriptors, through which the museum institution has been redefined and reconceptualised, has redirected the focus outwards to experiences and the inclusion of the users, instead of solely defining museums as storehouses of material collections and objects. The new museum descriptors imply a change of perspective in the museum institution's self-identification and as well as new views on the museum's societal role in relation to its visitors, and most often include digital media technologies as a determining factor of change, e.g., 'virtual' (Bowen, 2000; Schweibenz, 2004), 'digital' (Din & Hecht, 2007), 'wired' (Jones-Garmil, 1997b), 'mediatic' (Henning, 2006), 'media' (Russo, 2012), 'medialized' (Rudloff, 2013a) 'recoded' (Parry, 2007). All these descriptors suggest digital media and technologies as main catalysts that changed the museum institution. However the descriptors 'participatory' (Simon, 2010), 'engaging' (G. Black, 2005), 'interactive' (Drotner, Weber, Larsen, & Løssing, 2011) and 'responsive' (Lang et al., 2006) do not suggest a change due to

new media technologies but emphasise a general change in the museum institution's societal role and obligations, especially in relation to its dissemination and communication responsibilities.

Despite the question of whether the paradigm shift has taken place, the re-articulation of the museum institution has led to an interest and discussion of the actual visitors (and non-visitors) and on the digital media and new interactive, i.e., inclusive and participatory forms of communication that include the users.

3 Framing the Project

In this thesis I have an interdisciplinary approach²¹, which entails linking and integrating theories and concepts from museology, Internet and media studies, and audience and reception studies. The main objective of this chapter is to analyse the discussions surrounding online museum practices. Each concept addresses different aspects of the overall research framework of this thesis. Although the three disciplines presented in Figure 4 appear to carry equal weightage, museology is the main focus of this research; the museum's history and its role in the Danish society are given importance in this study to understand online practices of the Danish museum institutions and the online museum users. In addition, this study is influenced by other research fields, such as organisation and information studies, and their different approaches to technology appropriation, as well as interaction design and its focus on the user.

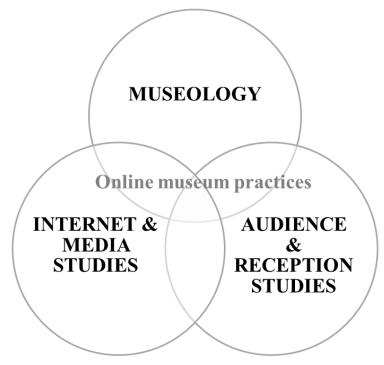


Figure 4: Bridging disciplines

Each of the disciplines can be characterised as interdisciplinary, as their theoretical and methodological approaches and practices are confluent with each other. In the following sections, an attempt has been

²¹ Interdisciplinary research is distinguished line of research that integrates and links two or more (distinct) disciplines, their theoretical framework and methodologies (Aboelela et al., 2007; Repko, 2011). Other approaches that involve several disciplines include multidisciplinarity and transdisciplinarity. Multidisciplinary research juxtaposes disciplines without any integration of the disciplines whereas transdisciplinary research transgress and transform disciplines (Klein, 2010, p. 16).

made to expand and relate the three different main fields of study. Although each dimension has been addressed separately in this thesis, many of the theories within these dimensions overlap, and that distinctions between them are artificially drawn; however, each dimension is treated distinctly for dissemination purpose.

Section 3.1 addresses the museological field and the rise of digital cultural heritage theory and examines Danish research projects that are related to this research. Section 3.2 discusses online media, appropriation of the online media, social media and the concept of participation. As user participation and the benefits of user participation have been a central theme in the academic and more practical-oriented discourses related to online media and museums, a detailed discussion of participation has been included in this chapter. Thus, these discussions highlight the context for studying online museum practices from both a museum and user perspective.

Section 3.3 discusses audience and reception studies, as well as media reception and how reception is related to online museum practices from a user perspective. Further, the concept of online museum users is unravelled and defined. Finally, the chapter concludes with a summary.

3.1 Museology: old, new and post

The museological dimension of this thesis focuses on the museum as a specific place and space that was established with a particular set of Enlightenment ideas (see Chapter 2). In this sense, I regard the museum as a knowledge and educational institution that serves the public and society, and has responsibilities beyond providing amusement or entertainment as an attraction. This, in particular, is relevant to understand the context of online museum practices of both the Danish museums and their users.

In the field of museology, I position this thesis in what the authors Dewdney, Dibosa and Walsh refer to as 'post-critical museology' (2013). By post-critical museology Dewdney et al. argue that we are in a period where we are concerned with the interrelation between theories and practices, and this marks a shift from the critical approach in 'new museology' (Vergo, 1989) and to a more pragmatic research (Dewdney et al., 2013, p. 16). They insist that

[...] research relating to the problems of contemporary museum practices in museums, whether conceptualized analytically or met operationally, takes place in and with museums and their extended collaborators in a reflexive methodological mode. This leads to a working method that involves processes of translation between different registers of knowledge and dialogic interaction in which theory and practice are equally questionable. (Dewdney et al., 2013, p. 224)

Dewdney et al. was inspired by Macdonald and her outline of the present day museology (see further down in this section). According to Macdonald, there is a growing interest and recognition of the complexity of museums, that involves the 'old' museology and its concern with museum practices and the 'new' theories and empirical studies (S. Macdonald, 2011, p. 6).

Museology is the interdisciplinary study of museums that spans across many disciplines such as archaeology, history, culture studies, and audience and reception studies, to name a few. According to ICOM, there are different interpretations and definitions of museology (Desvallées & Mairesse, 2010, pp. 54–56; International Council of Museums, 2010, pp. 54–56). The preferred Anglo-Saxon perspective was proposed by Peter Vergo in the anthology, *The New Museology* (1989), whose definition of new museology has not only gained wide acceptance as a theoretical approach within museum studies but has also spread out and contributed to a wider change in the museum world creating a new reflexivity among museum workers (Ross, 2004). Much of the newer Danish museological literature and empirical studies are confined within this approach (L. Floris & Vasström, 1999; Kjeldsen, 2012, p. 11; A. H. Larsen & Ingemann, 2005; Løssing, 2008, p. 119; Svabo, 2010, p. 30). In these contributions, new museology and the citation of Vergo, "what is wrong with the 'old' museology is that it is too much about museum methods, and too little about the purposes of museums" (1989, p. 3) are to have a user-centred perspective instead of the museum collections and objects. Vergo defines new museology contradicting it to 'old' museology. He claims that the 'old' is too much about museum methods, that is predominantly concerned with practice and 'how to' matters, such as conservation, collection, administration etc., and too little with the actual purpose of the museum. Thus, new museology is highly related to the paradigm shift concerning the transformation of the museum institution discussed in Chapter 2. On the other hand, new museology has a more theoretical approach dealing with issues such as museum history and its underlying philosophy, and how the educative, political and social role of museums has developed over time. In his definition, Vergo expands the boundaries of museology to include audiences, as well as policies, legal obligations and responsibilities, and ethics (Vergo, 1989, pp. 1–3).²²

A new approach to understand the museum institution was proposed in concurrence with both the 'crisis of representation' and the introduction of new media technologies. In the museums, the crisis of representation and its dismissal of the grand narratives and objective truth incited arguments on how, by whom and for whom knowledge and meaning are produced and ascribed in the

²² Scholars, such as Friedrich Waidacher, introduce the history of museology (1996).

²³ The phrase, 'crisis of representation', was coined by George Marcus and Michael Fischer in their book, *Anthropology as Cultural Critique* (1986). Here Marcus and Fischer problematised the anthropological way of 'exotifying the other' and maintained an asymmetrical distinction between the subject and object, us and them. In the wake of this influential publication, a wave of other writings followed for instance, *Writing Culture* (Clifford and Marcus, 1986) and the *Predicament of Culture* (James Clifford, 1988).

museum. The core practices (such as collecting, registering, exhibiting and communication) of the museum institution were critiqued in relation to concepts, such as power, representation, repatriation, etc. (S. Macdonald, 2011, p. 3). New museology is, thus, referred to as critical museology or critical museum theory (Dewdney et al., 2013, pp. 15–16; S. Macdonald, 2011, pp. 5–6; Marstine, 2006, pp. 5–6). Following this debate on representation, the development of the digital media technologies supported the inclusion of the museums in discussions on participatory forms of communication and new perspectives on audiences, social inclusion and outreach.

As stated in the beginning of this section, I relate my research to post-critical museology (Dewdney et al., 2013) or what MacDonald calls as the third period of museum studies (2011, p. 6). By post-critical museology, Dewdney et al. propose a framework of how to study and bring together the practices and theories of the museum. It locates its critique in a constructive relationship rather than using critique to tear apart the field of museology and museological practices. Macdonald characterises the present period of museology as the third period and states

Also characteristic is a renewed commitment to trying to bring together insights from academic studies with the practical work of museums – to return to some of the 'how to' concerns of the 'old museology' from a new, more theoretically and empirically informed basis. (S. Macdonald, 2011, p. 6)

Therefore, I have positioned my project in this third period of museology, and focus not only on the empirical research but in combination with theories and concepts.

3.1.1 Museum visitor studies

A branch within museology is visitor studies²⁴. In the 1920s, visitor studies were mostly isolated studies conducted at individual museums (Bitgood & Shettel, 1996, p. 66). Benjamin Gilman influential in audience research wrote in 1918

To fulfil its complete purpose as a show, a museum must do the needful in both ways. It must arrange its contents so that they can be looked at; but also help its average visitors to know what they mean. It must at once install its contents and see to their interpretation. (quoted in G. Black, 2005, p. 121)

²⁴ Some scholars (mostly media scholars) claim that museum visitor studies is a subfield of media studies, as museum visits can be considered as communicative interactions (K. B. Jensen, 2012b, p. 177). Others (usually within the museological field) uphold it as a distinct field of study. Either way, museum visitor studies or museum audience research has been conducted since the late nineteenth century. It was not until the 1920s that museum visitor studies was established as a separate field.

However, it was not before the 1960s that a more permanent interest in the behaviour of visitors in museum exhibitions emerged. Since then, museum visitor studies have grown into a separate discipline within museology, in particular, in the United Kingdom and North America (Bitgood & Shettel, 1996, p. 6; Hooper-Greenhill, 1994, p. 69ff). Museum visitor research is a discipline that provides information about visitors and non-visitors to museums and other cultural institutions, which influences the action of museums to meet the needs of their audiences and stakeholders. Thus, it also acts a strategic management tool (Kelly, 2007, p. 23).

According to one of the leading museum audience scholars, Hooper-Greenhill, most museums do not have strategic approaches for museum audience research (Hooper-Greenhill, 1994, p. 70). From her experiences, little or no studies of museum visitors were conducted in many museums. Followed by her criticism in 1994, a great interest was ignited to study, evaluate and research the visitors and non-visitors of museums. Nowadays some of the larger museums have departments or employees that solely focus on studies and evaluations of their visitors and users, primarily in the English-speaking world. For example, the Australian Museum in Sydney has a unit that studies the visitor experiences and learning activities. Its purpose is to aid the development and planning of programs, policies and strategies. This change in the museums has occurred simultaneously with the discourses about museums and their public responsibilities among others as a result of an increased market-orientation and the implementation of new public management strategies as presented in the previous chapter.

3.1.2 Museology in Denmark²⁶

In Denmark, the new museology movement is popular in both academic circles and among museum professionals. The popularity has been captured in in the anthology, *Ny dansk museology* [New Danish Museology] (A. H. Larsen & Ingemann, 2005) or the publication, *På museum – mellem oplevelse og oplysning* [At the museum – between experience and enlightenment] (L. Floris & Vasström, 1999). The anthology by Larsen and Ingemann presents an array of different approaches concerning the museum institution departing from a dialectic understanding of the relationship between cultural heritage, society and the people. In the second publication, Floris and Vasström examine the role of museums in the Danish society. They present the historic background of the establishment of the public museum, and analyse the museum practices of collecting and exhibiting through discussion of concepts, such as authenticity, common heritage and memory.

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²⁵ For more information, see the museum website http://australianmuseum.net.au/Audience-Research.

²⁶ For a detailed list of Danish museum-related research projects, see the report *Dansk museums forskning: status og tendenser* (Villadsen & Drotner, 2012).

Other Danish research contributions made to the body of knowledge relation to Danish museums, include *Museer – hvorfor og hvordan?* [Museums – How and Why?] (Lyck, 2010) and *Museerne i den danske oplevelsesøkonomi* [Museums in the Danish Experience Ecomomy] (Skot-Hansen, 2008). Both publications do not specifically restrict themselves within the field of museology but address museums from a business perspective (Lyck, 2010) and through the lens of the experience economy (Skot-Hansen, 2008).

Hooper-Greenhill argued that few museums had strategies to conduct museum visitor studies and evaluations (1994, p. 70), this has also been the case for the individual Danish museums. However, on a more general level, there has, in fact, been a long tradition of studying museum visitors in Denmark. Since 1960, Statistics Denmark²⁷ has annually surveyed the number of visitors to the Danish museums, and every four to ten years the Ministry of Culture commissioned a large study of the Danes' cultural activities and consumption patterns, with the latest conducted in 2012 (Epinion & Pluss Leadership, 2012). The national surveys of museum visitors are a part of the museum dissemination plan based on the report, *The National Educational Plan* [Udredning om museernes formidling] from 2006. As a supplement to the large-scale survey of all cultural activities and consumption patterns, the Danish Agency of Culture together with TNS Gallup have been conducting several national surveys on the Danish museums' visitors since 2009 (Andersen et al., 2012; Bruun et al., 2013; Moos & Brændholt, 2010b, 2011). These national surveys of museum visitors representing the sample of all the visitors at all the Danish museums are conducted at all state-owned and state-subsidised museums in Denmark over a year.

3.1.3 The rise of digital cultural heritage theory²⁸

The application of digital media and technologies in the museums led to the realisation of the need for theories about how this affected the museum institution, its work, exhibition and communication practices. Cybermuseology, presented in 1999 by Steve Dietz, traced museal activities on the Internet, and it is considered as a field of study that conceptualised a move of interest within parts of the existing

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²⁷ Statistics Denmark (in Danish Danmarks Statistik) is a state institution under Ministry of Economic Affairs and the Interior. Statistics Denmark is responsible for collecting, compiling and publishing statistics on the Danish society, e.g., employment statistics, trade balance and demographics. For more information, see www.dst.dk

²⁸ There do, of course, exist other books, papers and guides published in the same period besides the publications mentioned in this section. Many of these take on a more practical approach targeting museum practitioners and professionals. Among these are *The Digital Museum*. A *Think Guide* (Din & Hecht, 2007); *Digital Technologies and the Museum Experience*. *Handheld Guides and Other Media* (Tallon & Walker, 2008); *Unbound by Place or Time*. *Museums and Online Learning* (Crow & Din, 2009); and the collection of books by the publisher MuseumEtc. e.g., *Twitter for Museums: Strategies and Tactics for Success* (ed. MuseumsEtc., 2010) or *Creativity and Technology: Social Media, Mobiles and Museums* (Katz, LaBar, & Lynch, 2011).

museological field towards a focus on digital objects, virtual collections and exhibitions.²⁹ Though cybermuseology appeared to be predominant in the 2000s, its success and popularity reduced recently due to the general tendency of avoiding the usage of prefixes such as 'cyber' and 'virtual', as they are often related to services, products, phenomena, etc. in the 1980s and 1990s.

Today most of the present literature regards digital media and technologies as an integral part of the museum practices. Drotner and Schrøder argue in a recent publication that

[...] the book follows a trend in recent museum studies where we see a move from treating the use of (digital) technologies as an "add on" to existing problematics and practices, on to more integrative approaches that see technologies as means of communication, interaction and exchange. (Drotner & Schrøder, 2013, p. 1)

However, I would like to question whether this integration of 'the digital' into the museums' existing practices has actually taken place, at least from the Danish context. In 2011, two years prior to the Drotner and Schrøder's anthology, we completed a study of the Danish museum organisations to understand their dissemination and communication activities (by traversing all Danish state-owned and state-subsidised museums' websites and interviewing four museum professionals from the museum management) (Holdgaard & Simonsen, 2011). From this study, we found that Danish museums considered digital technologies and media for dissemination and communication purposes as supernumerary with adding value to the existing activities of the organisation (Holdgaard & Simonsen, 2011, p. 110ff).

The digital cultural heritage (or museology) literature generally regards the museum as a communicative institution, having communication, education and exhibition practices as the key focus areas. Since the late 1990s, a number of anthologies within the field of digital museum (heritage) studies have been published. The first anthologies were utopian in their approaches and expectations to the impact of digital technologies and media in the museums. For instance, the anthology, *The Wired Museum* (Jones-Garmil, 1997b), is one of the first influential theoretical contributions in this field. ³⁰ It is a collection of essays written by both museum practitioners and communication scholars where different aspects of digitalising the cultural heritage are discussed. Other similar publications include *The Virtual and the Real – Media in the Museum* (S. Thomas & Mintz, 1998). Most of the early

²⁹ Cybermuseology was widely referenced from 1999 and the following year in many conference papers (for example at the Museums and the Web), reports (for example the report *National Educational Plan* from 2006), or research (for example in Løssing's thesis *Danish Art Museums on the Net* (2008) where it is introduced and analysed as a new field within the existing museological literature). However, within recent years the popularity has decreased and cybermuseology appears to

be on the brink of extinction.

Much of the later literature acclaim this collection of essays as a ground-breaking publication (F. Cameron & Kenderdine, 2007, p. 2; Parry, 2005, p. 338).

literature focus on the possibilities and opportunities digital technology and media could bring to the museum.

Ten years after the publication of *The Wired Museum*, another seminal anthology was published. Cameron and Kenderdine position *Theorizing Digital Cultural Heritage – A Critical Discourse* (2007) within critical cultural theory and take on a discursive approach to digital technologies as a way to overcome technological determinism. Although the title of the anthology promise a theoretical approach to digital cultural heritage, the editors still emphasise the value of praxis examples in combination with theoretical discussions, and argue "this collection of essays arose as the result of a perceived need for a sustained interchange between digital cultural theory and heritage practices" (F. Cameron & Kenderdine, 2007, p. 3).

Several other works with a critical perspective on the implication of introducing digital media technologies into the museums were published. For instance, Ross Parry's book *Recoding the Museum* (2007), which has the point of departure in Lev Manovich's *Language of New Media* (2002), examines the history of the museum from the 1960s to the present day. One of main objectives of Parry's work was to examine whether there exists an "essential incompatibility between the idea of the museum and the idea of the computer" and if this incompatibility has blocked and still blocks the integration of new technologies and media in the museums. Parry concludes by stating that museums have always been using new technologies (Internet, photography, computer, etc.). However, the introduction of a new technology in the museum has challenged the notion of what a museum is, i.e., a recoding of the museum. However, digital technologies have challenged the museum institution and its notions of an object, exhibition place and space.³¹

More recently, a number of works have been published to correlate the effects of social media on the museums, e.g., *Heritage and Social Media. Understanding Heritage in a Participatory Culture* (Giaccardi, 2012) and *Museum Communication and Social Media: The Connected Museum* (Drotner & Schrøder, 2013). In the anthology, *Heritage and Social Media*, editor Giaccardi states

Social media create infrastructures of communication and interaction that act as places of cultural production and lasting values at the service of what could be viewed as a new generation of 'living' heritage practices. (Giaccardi, 2012, p. 5)

The study examines the impact of social media on heritage cultures as an example of 'participatory culture' (Jenkins et al., (2006). The study addresses new ways (presumed) of understanding and

technology in museums" (Marty & Jones, 2008, p. 3).

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³¹ Other concurrent anthologies are *Museums in a Digital Age* (Parry, 2008), a compilation of essays and texts that focus on different aspects of museums and their visitors in the digital age; and *Museum Informatics*. *People, Information, and Technology in Museums* (Marty and Jones, 2008) in which Marty and Jones introduce the interdisciplinary field of 'museum informatics' as "the study of the sociotechnical interactions that takes place at the intersection of people, information, and

experiencing the cultural heritage enabled by social media, the formation of new public in the participatory culture supported and promoted by social media and the sense of place that changed and re-articulated as a result of social media.

The aim of the anthology, *Museum Communication and Social Media* (Drotner & Schrøder, 2013), was to examine the relationship between social media and museums without addressing the actual use of social media by museums, but it emphasises the particular modes of communication and social connections offered by social media.

Presently to my knowledge, there exist two large-scale studies that investigated the use of social media (or Web 2.0 technologies) in museums on a general level. In the article, "The presence of Web 2.0 tools on museum websites: a comparative study between England, France, Spain, Italy, and the USA", the authors demonstrated the extent to which Web 2.0 tools were employed by museums on their websites (López et al., 2010). The scholars surveyed 240 websites of museums from five different countries. The study revealed a low overall presence of Web 2.0 tools on museum websites, as well as a very low usage of external social media platforms, such as Flickr and YouTube. The second study investigated how American museums use social media by employing an online survey with 315 respondents, as well as in-depth interviews with nine museum professionals. The results of the study revealed that American museums, on one hand, consider the usage of social media as highly important. On the other hand, the museums mostly employ a one-way communication strategy on the social media platforms (Fletcher & Lee, 2012). In both cases, the results were related to the popular discourses on social media, cultural heritage and participation. López et al.'s study explored the actual usages of Web 2.0 tools on British, French, Spanish, Italian and North American museum websites, whereas Fletcher and Lee considered a different perspective to examine the museum professionals' perceived social media usage. This research also examines and maps the online presence of Danish museums and their users elaborately.

3.1.4 Danish research on digital museum projects

The Danish research projects mainly focus on museums as learning institutions that provide digital-based experiences for children and young people. The focus on museums and science centres as learning institutions is central to DREAM (Danish Research Centre on Education and Advanced Media

Materials)³². Similar PhD projects on digital museum are Anne Sophies Warberg Løssing's project, *Danske kunstmuseer på nettet* [Danish Art Museums on the Net] (2008), and Mette Skov's thesis, *The Reinvented Museum: Exploring Information Seeking Behaviour in a Digital Museum Context* (2009). Løssing discusses the exhibition and communication potentials offered by the Internet, and she maps the Danish art museums' dissemination and exhibition practices online. On the other hand, Skov addresses information seeking behaviour of the users on the website of the National Museum of Military History. The museum perspective and the user perspective are addressed in her thesis. Unlike these two projects, this thesis examines the entire population of Danish museums and a selected population of users instead of focusing on a specific type of museum (as Løssing) or a single case (as Skov).³³

Several Danish anthologies have been published in the past few years on digital cultural heritage communication. Among these are *Digital kulturformidling-børn og forskere har ordet*³⁴ (J. Hansen & Hansen, 2007); *Digital museumsformidling – i brugerperspektiv* [Digital Museum Dissemination. From a User Perspective]³⁵ (Løssing, 2009); *Sharing is Caring* (2014); *Digital formidling af kulturarv. fra samling to sampling* [Digital Dissemination of the Cultural Heritage – From Collection to Sampling]³⁶ (Lund et al., 2009); and *Det interaktive museum* [The Interactive Museum] (Drotner et al., 2011). The first three examples are anthologies published or supported by the Danish Agency for Culture (or the former Heritage Agency of Denmark) and include contributions from both researchers and practitioners. These anthologies highlight and address the digital dissemination and

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³² DREAM is a national research consortium that comprises of two Danish universities (University of Southern Denmark and Roskilde University), a research library, three Danish museums and galleries and one science centre. DREAM facilitates transformative interaction and learning by developing new learning resources and services across formal, semi-formal and informal learning sites (Danish Research Centre on Education and Advanced Media Materials, n.d.). Presently there are three completed PhD projects that have museums or science centres as empirical departure points (Kahr-Højland, 2009; Kobbernagel, 2013; Vestergaard, 2012). Anne Kahr-Højland's thesis, "Læring er da ingen leg?" [Learning Is Not a Joke] (2009) examines a didactic design experiment at the science centre, Experimentarium, what and how to organise science dissemination in a semi-formal learning setting. In Vitus Vestergaard's thesis, "Det hybride museum" [The Hybrid Museum] (Vestergaard, 2012), Vestergaard examines how young users make use of museum spaces that allow participation through production and sharing of the content in a case study of the museum installation Media Mixer at the Media Museum, where the users are able to produce and edit audio and video content. Later the content is shared with the museum in the physical space or online. Finally Christian Kobbernagel's thesis, "Students' Learning Experiences in Digital Workshops" (2013), explored learning experiences in digital workshops in two Danish art museums. The insights gained through these experiences were used to develop q-methodology.

A few of the PhD projects that have been completed on digital technologies and media and museums are as follows: (Nana Quistgaard's thesis, *1.g-elever på et science center: Engageres de? – Påvirkes de?* [First year high school student at a science centre: Do they get engaged? Do they get influenced?], focused on high school students' learning experiences in science centres (2006). Connie Svabo's thesis, *Portable Objects at the Museum* (2010), examined how portable objects, visitors and the exhibition were associated at Naturama, a natural history museum. Maja Rudloff's thesis, *Formidling i forandring. Et casestudie af VÆGGEN* [Dissemination in Change. A Case Study of the Wall] (2013b), examined how digital media transform the museum dissemination using a case study on digital museum installation. There are a number of ongoing Danish PhD projects and other research projects on Danish research institutions.

³⁴ See Section 2.4.3, Chapter 2.

³⁵ My translation.

³⁶ My translation.

communication from theoretical, political and contextual perspectives. The remaining two anthologies examine and discuss the possibilities of employing digital and online media in cultural heritage institutions and how these new media to some degree function as a catalyst for transformations of the heritage institutions. These anthologies discuss digital media in terms of transforming the institutions' core areas and internal working procedures, as well as changing the visitors' perceptions, experiences and expectations to the cultural heritage institutions. *Digital formidling af kulturary – fra samling to sampling* is the only work that take a critical approach to the challenges and dilemmas, which new technologies and media pose for the cultural heritage institutions. At the same time, several conference papers and journal articles also critically assess the impact of introducing new technologies and media in the cultural heritage institutions.

In this thesis, I aim to examine the online practices of both museums and users of the entire Danish museum sector instead of focusing on any one museum as the past Danish PhD projects have indicated (e.g., Kahr-Højland, 2009; Rudloff, 2013b; Skov, 2009; Svabo, 2010; Vestergaard, 2012). (Post-critical) museology provides the context for understanding the online Danish museum environment in which the online practices take place. It offers cultural policy perspective, as well as a historical perspective on the development of the Danish museum institution.

3.2 Internet and media studies

Firstly, this thesis focuses on the online media and how these media forms relate to the renewed discussions and notions of (online) participation and the political focus on participation. An overview of the present understanding of participation of users and the participatory culture reflected in popular academic and political discourses supports the analysis of the Danish museums' appropriation practices of online media as they partly provide the arguments of the Danish museums' motives and motivations for their usages of online media.

Secondly, the Internet and media studies dimension relates to the user perspective, as online media and social media has become an important factor in most Danish users' everyday life. One of the aspects I wish to address in this thesis is the role of social media in the users' relation to Danish museums. Hence, the users in this context refer to (1) the museums as users of social media and (2) the 'actual' users who use museums' online content through their websites or social media presences.

And lastly, from the Internet and media studies, I too draw on the concept of media practices with inspiration from Bräuchler and Postill's, *Theorising Media and Practice* (2010). I do acknowledge that practice theory is not delimited to the Internet and media studies; therefore, I employ practice definitions and discussions from the practice theory fields as well (Reckwitz, 2002; Shove,

Pantzar, & Watson, 2012). Media practices and online museum practice are further explained in detail in the following chapter.

3.2.1 What is Internet and media studies?

In handbooks of media and communication (see for instance *Handbook of Media and Communication Research* (K. B. Jensen, 2012a) or *Medie- og Kommunikationsleksikon* (Kolstrup, Agger, Jauert, & Schrøder, 2011), media studies or medium theory has traditionally been concerned with the 'mass media' used for communicative purposes (K. B. Jensen, 2012a, p. 23ff.). Some media studies are interested in the dynamics between society and media technology (medium theory), some with the role played by media in the relation to individuals and groups (media sociology), and some with the media content (content analysis), etc. Media studies are frequently combined with communication studies or assigned as a subfield to communication theories. The Internet studies or research is typically described as research on the structure, development, diffusion, usage, forms of communicative expressions, etc. on the Internet. At the same time, the Internet is defined as a social phenomenon, a medium, a tool, etc. (see, f.i., Finnemann's text in Internet Research in Kolstrup et al., 2011, pp. 216–217 or; Markham & Buchanan, 2012), and, therefore, demarcations become highly vague between the different (sub)fields and (sub)areas of communication, media, and Internet studies. In this thesis, Internet and media studies are considered as one of the main fields of studies.

The Internet came into existence in the late 1980s; hence, the Internet studies are a young field that spans across many disciplines from computer science to social science and to humanities, and it is not defined as a distinct classical discipline. Thus, it is an interdisciplinary field comprising studies on social, psychological, political, technical and cultural aspects of the Internet. Unlike the early studies on the Internet that focused on dichotomies between the online and the offline world, such as 'real' and 'virtual' identities and communities, the present Internet research has developed and dispersed into various areas. Therefore, the Internet is now considered as part of everyday life and not perceived and studied in a vacuum. A decade ago, Barry Wellman summed up the history of Internet studies as

At first no data were needed, just eloquent euphoria. The second age was low-hanging fruit with analysts using standard social scientific methods – and some concepts – to document the nature of the Internet. Now, the real analysis begins with more focused, theoretically-driven projects. (Wellman, 2004, p. 127)

Therefore, the need to integrate online activities with theories exists. Whether it is because both museology and Internet studies are young fields of studies or it is because we have moved into a period where realism appears to be the dominant meta-theory and mixed-methods inquiries have become

popular, is uncertain. However, it appears as if there are several similar characteristics of the third period of museology and Internet studies. This PhD research relates to the Internet and media studies that pertains to online practices, media and users, and is also related to how to conduct research in and around online environments.

3.2.2 What is online media? Moving towards a conjunction of medium and text

This study focuses on 'online media' and not 'new media' or 'digital media'. Thus, museum applications on mobile devices or the usage of other digital media and technologies are not part of this project. However, the delimitation of online media does not exclude in any way mobile media usage, though it is not the centre of attention here. Furthermore, the designation of online media is likewise convenient as it includes social media. New media is most often associated with digital information and communication technologies (ICT) and perceived as change and transformations as opposed to old media (Silverstone, 1999, p. 12). Thus, from my perspective, online media is the most precise term in this PhD project.

Common definitions of a 'medium' are either a channel or system of information (or entertainment), or material or technical means of artistic expression. The first definition falls under the transmissive understanding of communication; whereas, the second definition leans towards a semiotic understanding. However, in both cases, a medium is an object that passes on messages (of significant value) to the receiver. These messages can either be considered as a 'text' which needs to be interpreted or as 'content' which needs to be counted, i.e. using quantitative analysis methods (K. B. Jensen, 2012a, p. 68). The two different understandings also indicate two different research fields – humanities and social sciences – and two different methodological perspectives – qualitative and quantitative. In this research, both understandings of media messages using both qualitative and quantitative approaches. In the same way, it is considered beneficial to treat media texts as being both 'texts', which are 'written' (or produced) by an 'author' with certain intentions, and have to be 'read' (interpreted); or as 'content' with a material substratum (e.g., graphics, such as images, photos, drawings, or textual elements including headlines or phrases) that can be counted.

The discussions relating to the medium-text divide within Internet and media studies is presented in the following subsections. These discussions are relevant for understanding not only the possibilities and challenges offered by online media in their own rights, but also the wider context in which online museum practices occur. I argue that there is no clear-cut boundary between medium and text in relation to online media and online texts, particularly in relation to social media. The point made

here is not "medium *is* the message",³⁷ where it is the medium itself that shapes and control perceptions and actions and the message is of less importance. From this perspective, unlike the medium the message does not have any shaping characteristics and does not determine how the message is perceived by its recipients. Thus, the point made here is to move towards a conjunction of medium and text.

The blurring boundaries between medium and text are, among others, caused by the new interactive possibilities of online media. Traditionally, in printed texts, there is typically a significant difference between a sender and receiver (the author and the reader) of a text, where the authoring act is clearly distinguishable from the act of reading. The author produces the text, which the reader (usually) reads from the beginning to the end. Online texts, on the other hand, are most often multimodal and have hyperlinks with references to other texts with no defined beginning and end. Some online texts have a distinct author (it is not difficult to identify the author of an official museum website), whereas, in other online texts, the authorship can be difficult or impossible to determine, especially if readers have the option of adding to the text or even producing the text. Another aspect of online media text compared with printed text is interactivity. In online texts, mostly the act of reading and reading experience is the possibility of physically interacting with the text. As an online reader, it is necessary to click, touch, swipe, etc. in order to enter the text, continue reading the text or finish the text. One could argue that interaction is also part of a reading experience, e.g., in printed books, readers would have to open the book, turn the pages, etc. But, when it comes to online media, the medium also constitutes (part of) the text, as well as the text is part of the medium, thus, can arguably be defined as both object of inquiry, as well as the site of inquiry. Online texts are dependent on readers to actualise and interact with them in order to create a coherent narrative. The linking structure of an online text is reliant on a reader to connect the links and form the textual coherence. In comparison, a printed text would still be a text even without the interaction. Other perspectives and definitions of online texts are hypertexts, metatexts, cybertexts, etc.³⁸ Media scholars have been preoccupied with the medium; and others, e.g., Aarseth, have been focused on the media text and the textual functions (Aarseth, 1997). From my perspective, the focus should rather be on crossing the traditional boundaries of either media productions or media texts.

In his media analysis of websites, Brügger also argues that digital media can be defined as both medium and text. According to his argument, the significant difference between medium and text in digital media is to be found in the researcher's analytical approach and not as something inherently

³⁷ The phrase "medium is the message" was introduced by Marshall McLuhan in the first chapter of the book *Understanding Media: The Extensions of Man* (1964).

³⁸ The latter, cybertext, is coined by Espen Aarseth who defined 'cybertext' as organisation of text in which the medium is an integral part of the dynamic. It is further defined as a subtype of ergodic literature.

embedded. Digital data is expressed in binary codes (0s and 1s), which according to Brügger (2009, 2010) is why digital texts can be defined as both medium and text at the same time. Because the symbols 0 and 1 can be interpreted as an alphabet with syntax, and they can be read as text (maybe not by the end-user), but the 0s and 1s also represent and store digital data, hence make digital media possible (Brügger, 2009, p. 118f, 2010, pp. 10–12). I will not argue against the fact that digital texts are expressed by 0s and 1s; however, I do take a stand that there are other ways to argue for a medium and text amalgamation. For instance, in his paper "Audience inter/active: interactive media, narrative control and reconceiving audience history" (2006), Cover claims that

The interactive and digital nature of computer-mediated communication results in several new tensions in the author-text-audience relationship, predominantly through blurring the line between author and audience, and eroding older technological, policy and conventional models for the 'control' of the texts, its narrative sequencing and its distribution. (Cover, 2006, p. 140)

Cover's focus is not the blurring of boundaries between medium and text but between the 'author' and the 'audience'. This is a struggle over the authorial control of the text as online media make it possible for the audience to change, alter, distribute and manipulate the text. Accordingly, the online text is no longer considered as final (not in all instances) as it can be revised and rewritten. In many examples, the purpose of the online text is to be transformed and/or updated by the authors, or by the users.

I argue here that the rationale behind the blurring boundaries between online media and online media texts, such as museum websites and social media platforms, is to be found in the interactive reception/reading experience. Social media, to an even higher degree, challenges the traditional distinction between medium and text, and questions the classic communication models. Most theories of social media suggest a collapse between producer and audience as users are able to create content and publish it, and at the same time media professionals can incorporate user-generated content from the users as part of their own media products (Bruns & Bahnisch, 2009; Bruns, 2008; Jenkins et al., 2006; Jenkins, 2008). As Cover argued, the traditional control over the text, the sequential narratives, distribution and production are challenged and changed in online environments, especially in social media where the content is made by the users. According to Axel Bruns, the chain of production of content on social media should be reconsidered. Bruns contends that the production value chain should be transformed for social media due to the seemingly absence of producers or consumers, as users act as producers and vice versa. This results in hybrid term 'produsage' that refers to a type of user-led content creation that blurs the boundaries between passive consumption and active production (Bruns, 2008, p. 21ff).

In this project, online media is one of the key components but not the main subject of inquiry as such, as the aim is not to examine the material qualities, e.g., affordances of online media,

but to understand online practices of Danish museums and online practices of museum users. 'Affordances' has become an important concept in Internet and media studies and is most often used to describe media usage and the relationship between media and users. Even though I do not conduct an analysis of the affordances of online media as such, I do acknowledge that the affordances of online media play an important role in relation to online museum practices as these practices depend upon the media's affordances.

3.2.3 Appropriation of online media

I relate the concept of appropriation to online competences, attitudes and actual usages in my online museum practice framework which will be introduced in the following chapter. My understanding of appropriation leans towards current, actual practices and actual use linked with the users' motivations and competences rather than emphasising how technologies are socially negotiated, altered and constructed. This understanding is mainly inspired by Carroll, Howard, Peck and Murphy (2001, 2002, 2003), as well as DeSanctis and Poole's elements of 'adaptive structuration theory' (AST) (1994).

There are many concepts that describe the encounters between digital media and technologies and its users. Adoption, adaptation, and appropriation are among the most popular. The concepts appear to connote inherent positive and desirable processes. Adoption refers to a process where users decide to purchase or obtain a *fixed* technology and use it as designed and intended (technology-as-designed) (E. M. Rogers, 1995). According to Rogers, adoption exclusively refers to the implementation of technology-as-designed. The process in which the technology is integrated and implemented in the daily life and routines of the users including the actual usage or utilisation of the technology is both referred to as adaptation or appropriation of technology.

According to Carroll et al., individual users explore, evaluate and adopt (or reject) a technology and subsequently single out and adapt particular attributes and take possession of their capabilities in order to satisfy their needs in their everyday life (Carroll, Howard, Vetere, Peck, & Murphy, 2002, p. 5). Hence, "appropriation is the result of the interplay between the users' desire, the capabilities and implications of the technology, and the situation of use" (Carroll, Howard, Peck, 2002,

³⁹ The concept of affordance was initially introduced by the physiologist James J. Gibson in 1977 who described all action possibilities inherent in an environment, objectively measurable and independent of the individual's ability to recognise them, but always in relation to the actor and, therefore, dependent on their capabilities. It was later adopted by Donald Norman who used the affordances concept his book *Design of Everyday Things* (1988) as 'perceived action possibilities' to describe how the design of an object 'suggests' how it may be interacted with. Ian Hutchby has suggested affordances as a concept to describe the relation between media technologies and social actors, and to emphasise and argue against the constructivist stance of treating technologies as texts which can be read. By reintroducing affordances as "[...] functional and relational aspects which frame, while not determining, the possibilities for agentic action on relation to an object" (Hutchby, 2001, p. 444), Hutchby bridges the relativist position of social constructivism and the technological deterministic position.

p. 53). ⁴⁰ Further, they explain appropriation within a lifecycle approach at a larger emphasis on usage (Carroll, Howard, Peck, & Murphy, 2003; Carroll, Howard, Vetere, Peck, & Murphy, 2001; Carroll, Howard, Peck, & Murphy, 2002; Carroll, Howard, Vetere, Peck, & Murphy, 2002). Here appropriation of technology is defined as an evaluation of technology (as-designed) by users over time, where the technology is adopted, adapted and incorporated into current practices.

According to Carroll et al. there are three different outcomes of the technology evaluation: 'non-appropriation', 'disappropriation' and 'appropriation' (Carroll et al., 2003, p. 39, 2001, p. 4; Carroll, Howard, Peck, et al., 2002, p. 52ff; Carroll, Howard, Vetere, et al., 2002, p. 96). In this thesis, the focus is neither on 'non-appropriation' nor 'disappropriation' of online media; however, this does to mean that I conflate appropriation with use, but determine it as a recurrent activity that is repeated for a specific purpose (2001, p. 99).

The concept of appropriation by Carroll et al. is rooted in processes that take place at the micro-level, concentrating on individual users and their acceptance or rejection of media technologies. DeSanctis and Poole (1994) have defined appropriation of a technology within AST, which is a framework for examining organisational change caused by the introduction of a diffusion of advanced informational technologies. In their influential paper, the authors integrate the deterministic and the institutional approach to the role of technology from the perspective that "technology has structures in its own right but that social practices moderate their effects on behaviour" (1994, p. 125). DeSanctis and Poole make a distinction between social structures within technology and social structures within action, thus distinguishing them between the 'features' of a technology and the 'spirit'. ⁴¹ Further, they address four important aspects while analysing appropriation:

- Appropriation moves technology 'features' may be appropriated in different ways
- Faithfulness of appropriation appropriation may be faithful or unfaithful to the 'spirit' of the technology
- Instrumental uses technology 'features' may be used for different instrumental uses or intended purposes
- Attitudes sentiments towards the technology in the appropriation process (1994, pp. 129–130)

DeSanctis' and Poole's appropriation model is developed to analyse the adoption pattern of technologies in organisations. Not only do the authors theorise about the structures of technologies and

⁴⁰ Others have defined appropriation within adoption cycle models. Here appropriation is understood as a consumption process where a commodity crosses the commercial world and enters the private sphere, and become an object to which meaning is ascribed (Ling, 2004, p. 28; Silverstone, Hirsch, & Morley, 1992, p. 22). From that perspective, appropriation is very much a process of ownership, i.e., from buying to owning.

⁴¹ 'Spirit' is the general intent of a technology in relation to "[...] values and goals underlying a given set of structural features", whereas 'features', on the other hand, is defined as characteristics or technical functions of a technology (1994, p. 126).

their application in work practices but also use their theory as a strategic tool for the data collection of these structures.

3.2.4 Sorting out social media

Social media is another concept that has sprung up in the recent years. In the beginning, social media was mostly referred to in the business literature. However, now the concept has gained wide acceptance. The term social media is employed in this research, because it is commonly used in the Danish cultural industry, among Danish museums and Danish policy makers, and in the popular and academic discourses concerning museums.

Social media are often associated with blogs, wikis and SNSs, and sometimes used interchangeably with Web 2.0, social software and user-generated content. The definition and theoretical foundation is has been noted to be inadequate, since the term often refers to different online technologies and platforms, as well as certain online behaviours. Even in academic environments, the concept of social media is frequently applied without any further definition or introduction. Firstly, most media scholars would not define 'social media' as media, because this inherently implies that other media are not social, and secondly, social media share technologies that allows for social interaction, but are not a distinctive media (Lomborg, 2011). However, social media is commonly defined in a technology-grounded terms building on yet another concept namely Web 2.0. In these definitions, Web 2.0 technologies allow users to interact, establish communities, create, share and exchange content, as well as knowledge (e.g. Bruns & Bahnisch, 2009, p. 5; Kaplan & Haenlein, 2010, p. 61). What these definitions have in common, though, is the aspect of a distinct and embedded social purpose. User participation is one of the central concepts in the understandings of social media, as this is what characterises online media and social media and what sets them apart from previous, analogue media.

The social media umbrella covers a wide range of contemporary online media practices, not particular media or technologies, where the social element is the centre of attention. Media or not, social media is associated with certain practices and understandings related to content creation, sharing, distribution, participation, remix, etc. This thesis is not concerned whether social media should be defined as a distinct medium or not; however, the above-mentioned outline on social media is relevant to this thesis, in particular in relation to the following discussion about participation.

3.2.5 Participation inside and outside the museum

Recent advances in media technologies have prompted participation to become widely used and applied as a desirable ideal for online activity. From a utopian perspective, online media and, in particular, social media have been considered as a catalyst for participation due to the ability of the users to create actively content, thereby establishing sharing of information. In fact, in most social media environment, such as Facebook, YouTube, Flickr, etc., it is the users who produce and upload the content for platforms. In this context, it is relevant to mention the notion of participatory culture. This neologism refers to a practice where users are enabled and encouraged to take part in archiving, annotating, (re)creating, (re)mixing and (re)circulating media content at an individual level or in concordance with others. The most favoured understanding of 'participatory culture' is that proposed by Henry Jenkins et al., 2006, p. 7). The ideas of participatory culture have been heavily criticised, also by Jenkins who in a written conversation with Carpentier stated

[...] 'participatory culture' has become an empty signifier often used in very superficial ways by all kinds of groups that want to entice our participation but do not want to give up any real control. And I fear I have contributed to this phenomenon by moving between descriptive and normative definitions of participatory culture without always being as clear as I should be about the distinction between the two. (Jenkins & Carpentier, 2013, p. 2)

In the conversation, Jenkins argues that, in the beginning, his descriptive use of participation was to emphasise active actions in contrast to passive forms, such as viewing and reading, thus forgetting about the normative implications of the concept. In contrast, Carpentier's understanding of participation is firmly rooted in the political tradition in which participation is closely related to the distribution of power, while Jenkins has been occupied with describing users' practices as participation. Carpentier has been engaged in theoretically defining participation as a concept, and caution against using the concept of participation to convey any practice in which the users in some way or other are active. Despite the critique, participatory culture is still a well-accepted framework for understanding changing forms of communication and relationship (in museums) (Giaccardi, 2012; Runnel & Pruulmann-Vengerfeldt, 2014; Simon, 2010; Stein, 2012). This often results in an optimistic approach to digital technologies and media as participation apparatus. Advocates of this theory have been optimistic regarding the democratic potentials of social media, and to the rise and empowerment of other voices in an

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⁴² In this definition, participatory culture is related to amateur DYI-culture where the creation and the distribution, sharing, and social interaction around the creation are crucial. Jenkins et al. emphasise that participatory culture is one that focuses on the collective and collaborative process instead of a sole focus only on the individual expression. Although, the authors stress: "[n]ot every member must contribute, but all must believe they are free to contribute and that what they contribute will be appropriately valued" (Jenkins et al., 2006, p. 6). In this sense, participatory culture both allows and encourages participation but it is not necessarily a culture where everyone participates.

institutionalised environment, which these media are expected to accomplish. Angelina Russo has stated

Over the past few years we have witnessed a dramatic rise in the number of participatory media technologies that museums have employed to engage audiences. Institutional blogs, wikis, podcasts, photo and video sharing, virtual environments, tagging, annotation, and other authoring tools have offered new opportunities to engage with museum processes through cocreation and participatory cultural experiences. Arguably, these platforms and tools are creating new relationships between institutions and the public. (Russo, 2011, p. 327)

The number of museum projects and studies involving user-innovation and user-involvement have increased, and many of these projects make use of digital media technologies and social media, in particular (Cairns, 2013; Grabill et al., 2009; Russo & Peacock, 2009; Russo & Watkins, 2008; Russo, 2011, p. 2; Stuedahl & Smørdal, 2011; Stuedahl, 2011). In these approaches, participation is often related to access, interaction, contribution, etc.

However, museum participation in online environments has not been the only area of priority. In the last decade(s), there have been increased concerns about onsite museum participation. Especially, the public's disengagement and non-participation have been a concern in the public cultural policy debates. In these debates, specifically related to museums, participation has been defined as the desirable goal, and the effects of 'cultural participation' have been attempted, measured and evaluated. UNESCO Institute for Cultural Statistics published a report in 2012 on how to measure cultural participation. The report states that participation in the cultural sphere is a fundamental right that needs to be upheld and secured both on a national government level and on a higher transnational level. Thus, it becomes important to evaluate the impact of participation (UNESCO Institute for Statistics, 2012, pp. 7–9). In this report 'cultural participation' is defined as

- Information: to seek, collect and spread information on culture
- Communication and community: to interact with others on cultural issues and to participate in cultural networks
- Enjoyment and expression: to enjoy exhibitions, art performances and other forms of cultural expression, to practice the arts for leisure, and to create online content
- Transaction: to buy art and to buy or reserve tickets for shows

(UNESCO Institute for Statistics, 2012, p. 17)

This definition of cultural participation is exceedingly broad where the concept is almost conflated to mean 'come in contact with', 'access to', or 'taking part in', which is the term's etymological meaning. Measuring and evaluating cultural participation and more particularly museum participation are a way to justify and validate the role of the museum institution role in society. As a result, there is a certain

normativity implied in the notion museum participation. This is also the case from a Danish cultural policy perspective. As a former Danish Minister of Culture stated

Participation, dialogue, and sharing of experiences, thoughts and knowledge have become a matter of course for manage users. Culture is not only just for the citizen, but is also to a greater extent with and by the citizen. (Danish Ministry of Culture 2009b, p.13)

From a different perspective, participation is considered important, not as a measurement of institutional success in terms of attendance, but as a way to reconnect with the public and show their societal value and relevance (Simon, 2010, p. i). Simon's definition of museum participation is not restricted to the creation of user-generated content that is created on the web or social media platforms. Her take on 'museum participation' ranges from access, interaction, creation, sharing to distribution, and she frames participation as contributory, collaborative, co-creative and hosted.⁴³

The scholars Pruulmann-Vengerfeldt and Runnel have also been concerned with 'museum participation', but from an academic perspective. Pruulmann-Vengerfeldt and Runnel created a participation framework for the public museum institution (2011). In their contributions, the authors understand participation, "[...] as mutually beneficial, respectful and to a certain extent, aiming for balanced power relations, or at least acknowledging the worth of discussion partners" (Pruulmann-Vengerfeldt & Runnel, 2011, p. 161)⁴⁴. This definition is in line with Carpentier's definition of the maximalist form of participation. Carpentier positions 'participation' in a political-ideological struggle between minimalist and maximalist forms of participation. The minimalist model concerns the election process where the people exercise their democratic rights and participate by electing a political representative. In the maximalist form, participation is not confined to focus solely on macroparticipation, for instance, concerning election of representatives in large-scale settings of national elections. Carpentier is generally critical towards the conflation of the concept of participation, as he continuously emphasises in his work, participation is not the same as access or interaction as these two do not necessarily entail an element of power (Carpentier, 2011b, p. 27). However, Carpentier does not

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⁴³ When discussing museum participation, it is impossible to dismiss Nina Simon and her book, *The Participatory Museum* (2010). *The Participatory Museum* is partly a think-guide and toolbox for museum professionals who wish to enter more dialogical forms of communication in exhibitions; and partly a collection of case studies. Alongside with Simon's blog Museum 2.0, *The Participatory Museum*, has become very popular in the museum community, thus it is important to consider when unravelling museum participation.

⁴⁴ Pruulmann-Vengerfeldt and Runnel's main objective is not to present a fixed definition of museum participation, instead the authors address museum participation through the key domain or roles of the contemporary museum from a (new) museological perspective. In the key roles, the museum is considered as a 1) cultural institution, 2) economic institution and 3) public institution. These key roles of the museum are examined through the classical communication model (sender-message-receiver), which functions as three topical questions that structure the analysis: 1) "Who?" 2) Says what? and 3) To whom?" Each museum role is characterised by different conceptions of participation.

dismiss access and interaction, but regard them as important conditions or even prerequisites of participation.

Consequently, actions challenged by, for instance, a media platform's affordances, should not be considered as participation. Schäfer (2011) suggests 'implicit participation' as a subtle and subliminal form of participation that takes place without the users' knowledge due to the design of Web 2.0 applications and platforms (Schäfer, 2011, p. 51). This conflates the notion of participation with online attendance, presence, sharing, contributions etc. which Carpentier argue against. In a democracy understanding, the purpose of participation is to exercise one's right and have an influence, e.g., on society, decision-making processes, etc. Different democracy models have different definitions of participation (see for instance, Carpentier, 2011a, p. Chapter 1). This said, it should not be argued that participation could not occur in a social media environment.

Although the general expectations to the possibilities of digital media and, in particular, social media within the museum realm have been very optimistic, there are voices that attempt to nuance the perspectives on participation and social media. In a short commentary, "Perspectives on participation in social media" (Holdgaard & Valtysson, 2014), we questioned the museums' approach to and understanding of participation in relation to Facebook. As Facebook's design and interface provide the means for, or more bluntly put, persuading users into certain behaviour and actions, for instance, to like, view, comment or share content, can this then be considered as participation? Returning to the participation definitions rooted in participatory democratic understandings, we argued that it cannot be considered participation. However, if one uses Schäfer's definitions, Facebook *likings* might be defined as implicit participation. From my perspective, it is important to define what (museum) participation is or what it ideally should be and for what purpose the users are expected to participate. As we conclude in the commentary

It is advisable for cultural institutions like museums to reconsider what kind of participation they want to stage within media environments, such as Facebook and the participative depths which they expect of their users. (Holdgaard and Valtysson, 2014, p. 224)

Participation has been a buzzword in relation to online media and, in particular social media, and also in regards to cultural institutions were it has become relevant to discuss not only the content and quality of the collections and exhibitions, but also attendance rates, visitor satisfactions and experiences. In both the social media and museum literature, there has been a great tendency to uncritically adopt the concept of participation as something inherently good without reflecting upon the concept's history or many different connotations. As a result, I do not consider participation as an operable concept in this thesis, as it is, largely, both confounded and contested and would not necessarily encompass the actual usages and activities of the online museum users. The application of participation to the users' online

museum activities and understandings would entail that I would ascribe, even before I had examined the data, a particular set of behaviours, motivations, thoughts, etc. to the online museum users which possibly did not apply to the actual situation.

3.3 Audience and reception studies

From audience and reception studies, I mainly focus on media reception and conceptualising the online museum users. Audience research as we know it today emerged as a scholarly discipline with the development and distribution of moving pictures, where the concept of mass audience grew out from the movie theatres (McQuail, 1997, p. 1). It has been closely related to media and communication studies as audience research has traditionally focused on media audiences' usage and media experience. However, the concept of audience is no longer confined to viewers or readers of 'old' media channels but includes other types of audiences (McQuail, 1997, pp. 1-2; Schrøder et al., 2003, p. 25). Museum users (online museum users and physical visitors) have been conceptualised as an audience and have been the object of study in audience research. I employ user and not audience in this thesis, as a user can occupy both active and passive positions. Thus, it is natural to employ the work, knowledge and methodology from both media and Internet studies, as well as audience and reception studies, as part of this research. Whether reception studies are a distinct research field separated from audience research can be and has been debated. In their handbook Researching Audiences, Schrøder, et al. present audience research as a collective method that all approach and examine different audience groups as "users of different forms of mediated public communication taking place under conditions of 'non copresence'" (2003, p. 25).

The notion of the audience as a passive recipient now belongs to history. Instead, the audience is largely characterised as an increasingly (inter)active and co-producers of media. Discussions on the changing notion of the audience in the age of digital media have also been raised in relation to the changing author-text-reader relationship in online environment, as the audience at the same time can be producers and readers of texts, as presented previously. Scholars, such as Axel Bruns, have proclaimed that "the audience is dead" (Bruns, 2008). This is due to the changed relationship between producer and consumer, the media content and media distribution in online media that is addressed previously in this chapter. Although the author-text-audience relationship has changed due to online media, it is still only a small percentage of users who engage and participate as Bruns prescribe in his 'produser' concept. However, online media continuously present a challenge to audience researchers as 'audiencing' is dispersed across a range of configurations of media platforms at diverse

⁴⁵ John Fiske coined the concept 'audiencing' to convey the active role as participating audience (1992).

time and space locations. But media as such do not fundamentally change or are replaced by online media.

Another viewpoint in the audience and reception literature which seems to have emerged in the recent years is to completely leave the audience or user concept with the pertinent oppositional stands 'audience as produsers', as well as the idea of 'the death of audience'. Instead, theorists argue for a redirection of the attention to activities or doings (Couldry, 2011; Ridell, 2012). That said the user concept is still employed in this thesis because the online media doings is considered as sufficient, but I regard the individual user's perceptions as equally important for understanding their practices.

3.3.1 Media reception

Even if I stated above that it was important to leave the concept of audiencing behind, I still draw on existing reception models as parts of online museum practices from a user perspective as it is related to elements from media reception. Turning to reception is an attempt to bridge the active-passive discussion, which has clouded the discourses on the idea of participation. What I consider relevant and important in the intersection between media/text and receivers is both the actual usage of the users, as well as the implicit and individual perception and motivations.

Reception research has grown since the 1980s, and there are several different theoretical, methodological and topical approaches to the field of research – from literary, semiotic and cognitive approaches, to policy-oriented and commercial approaches, to name a few (for a detailed presentation of each distinctive approach see Schrøder et al. 2003, p. 121-142). In this sense, reception research can "be seen as a cross-fertilization project, attempting to borrow from both its predecessors" (Schrøder et al., 2003, p. 123; Schrøder, 1999, p. 51). However, to my knowledge there exists no consistent and acknowledged model that captures audience reception in a holistic framework and takes it beyond the passive viewing, listening and reading, and integrating with the users' (inter)actions in online and social media in such a way that it includes activities, such as sharing, liking, creating, remixing, etc.

Researchers, such as Schrøder (2000, 2003) and Michelle (2007), have attempted to conceptualise reception in multidimensional models that exceed Stuart Hall's understanding of reception as an ideological struggle. Both Schrøder and Michelle have developed their models grounded in existing reception literature and empirical findings from their own audience research. Schrøder's model includes six dimensions of reception, whereas Michelle's model presents four different modes of audience interpretation and response with various sub-categories within each mode.

Although Michelle argues that Schrøder's model diverges too far from the established body of reception literature to be widely accepted and useful (Michelle, 2007, p. 193), I find Schrøder's model the most appealing and useful for this research as it suggests a schematic approach to

understanding reception, which is both forthright and relevant in the analytical process. In comparison, Michelle's model is a complex typology of reception modes or reactions from an audience in relation to the media text. Schrøder is fully aware of his model's reductionistic and terminological inconsistent features. He states that the successfulness and applicability of the model is first and foremost determined by whether other reception researchers use the model (Schrøder, 2000, p. 254, 2003, p. 72). The six different dimensions are presented as the most significant dimensions of reception and each dimension except implementation is to be understood in a continuum between 'either' and 'or's (see Figure 5 below). For example, in the case of 'motivation', the continuum moves from strong to weak, and the reader occupies a position(s) between the degrees of motivation.

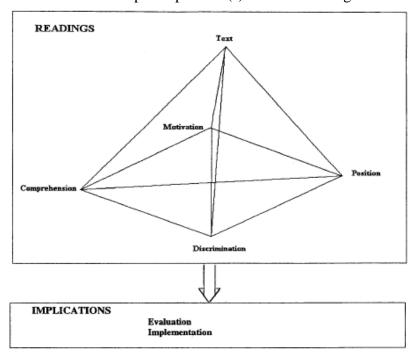


Figure 5: Model of media reception (Schrøder, 2000, p. 243)

The model does not explicitly illustrate the sociocultural contexts in which both media and audience are part of, because they are implied. The four dimensions in the top form a pyramid, which illustrates their interrelationship with each other and the text. These four dimensions comprehension, motivation, discrimination and position, are concerned with the 'interior' reading understood as the "subjectively experienced meaning" (Schrøder, 2000, p. 243). The dimension of 'comprehension' deals with whether

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⁴⁶ The different reception modes are 'transparent: text as life', referential: text as like life', 'mediated: text as production', and 'discursive: text as message'. Each mode has sub-categories (Michelle, 2007).

⁴⁷ The model has been revised from six dimensions (motivation, comprehension, discrimination, position, evaluation and implementation) in the paper, "Making sense of audience discourses. Towards a multidimensional model of mass media reception" (2000) to five dimensions in the paper, "Generelle aspekter ved mediereception – et bud på en multidimensional model" (2003). Schrøder suggests that the model may be further developed to include an interactive dimension as well (2003, p. 69).

the reader understands the text as it was intended by the sender (denotative or connotative) in the continuum between 'divergence from' to 'complete correspondence to' (Schrøder, 2000, pp. 245–247, 2003, p. 68). Motivation is understood as 'link of relevance' between the reader's personal universe and the universe perceived to be presented by the text, and the situational context in which the reading takes place. The motivation continuum moves between strong and weak involvement (Schrøder, 2000, p. 245). The discrimination dimension is concerned with whether the reader is aware of the 'constructedness' of the media text, and the continuum moves from immersion towards critical distance (Schrøder, 2000, p. 247–248, 2003, p. 68). 'Position' is understood as the reader's subjective attitude or position towards the media text in the continuum from full acceptance to rejection or from agreement to disagreement (Schrøder, 2000, pp. 248–249, 2003, p. 68). Under the pyramid, Schrøder has labelled two dimensions: 'evaluation' and 'implementation'. In the 'evaluation' domain, the reading experience is not characterised by the subjective agreeing or disagreeing, as it was in the dimension of 'position'. Here the reading experience is understood in a continuum of ideological positions from hegemonic to oppositional in the social discourse (Schrøder, 2000, pp. 250–251). 'Implementation' concerns whether readers use the actual content of the text in the daily life and act upon it (Schrøder, 2000, p. 252).

Schrøder disagrees with the presumption of, for instance, Hall that all texts have an ideology and that all texts hegemonically attempt to oppress the readers in order to keep the existing unequal social order. Instead, Schrøder argues for the need of defining reception within another framework than ideological evaluations of readings, because not all texts have an ideological and oppressive agenda and that there are many other aspects of reading. Schrøder suggests that the multidimensional reception model should include the two dimensions, 'position' and 'evaluation', as a way to overcome this.

From my perspective, the pyramid-shaped model with its 'objective' implication dimensions and 'subjective' reading dimension are neither apparent nor user-friendly. Furthermore, the strong emphasis on ideological power struggles, oppositional readings, etc. in the model makes it unfit for understanding other contexts in which these matters are not present. I will not argue that issues of power relations are not important or not present in a museum context, because all media texts have been produced by someone with a specific objective in mind; however in some instances I regard these issues as less important in the analysis of users' understanding of certain media content. In this respect, I neither claim nor attempt to present an understanding of reception that captures general aspects of the reception for all media and texts and all receivers or readers as both Schrøder and Michelle do in their models. It is not due to greater disagreements with Schrøder and Michelle's argument of a common understanding of reception, but by setting up a general framework for reception, I would argue that there is a greater risk of reducing complexity and disregarding distinctive features of different media text and different audiences, especially in relation to online or digital texts. The framework I present

draws on Schrøder's reception model but more simplified and adds to the reception model by including two new elements (online competences and actual usages) that to a much larger extent considers the interactive and participatory characteristics of online media and social media.

3.3.2 Tracking the online museum user

In this thesis, I refer to the online museum users as user. The definitions of users vary according to the museum setting, a user is one who visits the physical museum and hence termed as being active or passive. In other traditions, being a 'user' often is related to actively using a computer-system or program (In HCI), a service or product (as end-user), as co-designers (in Participatory Design), or a cultural institution (as visitor). This list is by no means exhaustive, and from that perspective, the user concept is almost effectively all-inclusive. In the social media research and participatory culture literature, the user has been redefined as people formerly known as the audience (Rosen, 2006), produsers (Bruns, 2008), prosumers (Toffler, 1980), likers or fans (Facebook), sporadics, lurkers, socialisers, debaters or actives (Brandtzaeg & Heim, 2011) among others, to convey new forms of communication and interaction in online environments that change the role of the user from being passive to active.

Also, from a museum context, there have been discussions on the appropriate reference to the people entering through the physical museum door, but also in relation to online visitors. Doering has studied the attitude of the museums towards their visitors (1999). She observed three major attitudes, namely strangers, guest, and client that characterise their relationship with the visitors. These attitudes towards visitors are the result of historical situations, collections and individuals. The 'stranger' approach signals that the museum's primary responsibility is towards their collection and not towards the public, who is regarded as strangers or intruders. Doering's own position and understanding of the museum's purpose is reflected in the way she names this approach to the museum-goers as 'strangers', and further elaborates in relation to 'intruders' which has strong negative connotations. Hence, in my view, Doering's idea of the museum as a collection is archaic and inappropriate. In 'guest' (or visitor) approach, the museum wants to 'do good' to visitors out of a sense of mission through educational activities and learning goals. From the client perspective, the museums attitudes towards the public are to be accountable, where the museum makes an effort to meet the client's needs and expectations (Doering, 1999, p. 74). Whether the client approach precedes or follows the ideas from the 'experience economy' (Pine & Gilmore, 1999) is uncertain; however, addressing museumgoers as clients is a way to revalue the museum-goers as being important for the museums. In this thesis, a museum user is not limited to one of the visitor-roles above. In this thesis, I have not attempted to pre-assign a certain role (stranger, guest or client) to the museum users, but rather use these museum attitudes towards the visitors as part of the understanding of how Danish museums disseminate and communicate online and examine how the users perceive themselves as museum users.

Other scholars have attempted to define the museum users by making typologies or categories based on the users' behaviour, learning preferences or motivation for visiting museums (Falk, 2009; Kobbernagel et al., 2011; Peacock & Brownbill, 2007). Falk uses five categories based on their identity-related visit motivations: 1) explorer, 2) facilitator, 3) experience seeker, 4) professional/hobbyist and 5) recharger (Falk, 2009, p. 158). ⁴⁸ Kobbernagel et al. have classified young Danish people into four categories in relation to their museum attitudes and media habits (Kobbernagel et al., 2011, p. 10). In their conference paper, Peacock and Brownbill (2007) have brought together concepts of audiences, users, visitors and customers from four different paradigms in an attempt to examine the different approaches of online museum users. Falk and Kobbernagel et al.'s typologies apply to onsite museum visitors whereas Peacock and Brownbill's user types are solely based on online behaviour without the users' user motivations. In this thesis, the users are referred to online users (although the majority of users are also onsite museum users), their online usages, their perceptions and online competences. The objective is not to develop a typology of Danish museum users; instead, it is to unfold the nuances of the online museum practices.

I propose to direct the overall attention from the user as an agent to the online practices of the user. This shift in perspective is necessary because online environments and, in particular, social media environment makes it very difficult to distinguish between users and non-users. I admit that people act as online museum users every time they come in contact with online museum content of Danish museums, i.e., see, interact, comment, read, upload, etc. Applying this approach to the user, I attempt to define user as a specific person with specific characteristics. My understanding of users bridges the passive-active paradigm. Users can enter a museum website or museum Facebook page without actively participating, e.g., to meet specific information needs. On the other hand, many may want to engage actively by participating in online conversations, creations, remix, tagging, etc. These passive and active strands have often been described as almost competing oppositions where passive activities have been regarded as less important than active participation in the perceived new paradigm of the museum. Similarly, the museum institutions can also be regarded as users as they make use of online media for communication and dissemination purposes. From that perspective, although a museum institution encompasses motley of users with different needs and knowledge, can be understood as users, because online the institution represents and acts as one unit.

⁴⁸ In relation to the Danish national museum visitor survey of the onsite visitors, Falk has added 'facilitator' as an extra category to match the Danish museum visitors motivation and learning behaviour (Bruun, Jensen, & Brændholt, 2013; J. T. Jensen, 2013, pp. 37–40).

3.4 Summary

In this chapter, I have positioned the PhD project in relation to museology, Internet and media studies, and audience and reception studies. This thesis is an interdisciplinary project, primarily grounded in museology, but also influenced by Internet and media studies and audience and reception studies. The museological perspective provides the context for analysing the Danish museums' actual usage and appropriation of online media in the museums. It offers the contextual background for understanding the different approaches to the museum institution and the museum users. This is important to understand the environment in which the online museum practices takes place. In regards to the users, the museological perspective analyses the users' online behaviour and their conceptions of what a museum is.

The Internet and media dimension of this thesis covers the characteristics of online media and social media and the appropriation of online media in museum with a focus on user perception. In this chapter, I address how online media and social media relate to the renewed discussions and notions of (online) participation. Discussion of the present understandings of participation and the 'participatory culture' reflected in popular, academic and political discourses contextualise the Danish museums' motives for their appropriation practices of online media. I define the online museum users as individuals who are exposed to the museums' online content through their websites or social media presences. However, the user also relates to the Danish museums as users.

The audience and reception studies dimension of this thesis involves the existing research and theories on audiences and their reception of media content. Largely, visitor studies and evaluations form the museological literature. These studies and theories of museum users and their behaviour likewise inform and contextualise parts of my analysis concerning the user perspective. From audience and reception studies, I was inspired by the media reception model of Schrøder (2000, 2003), which contributed to my 'online museum practice' framework.

4 Online Museum Practices

In this chapter, I present the analytical framework which comprises of four dimensions, namely online media competences, attitudes, motivations and actual usages, and answer the second research question: "How can online museum practices as a holistic analytical framework that consider both Danish museums and their users be conceptualised?" Section 4.1 introduces practice theory where the practice approaches are discusses (Reckwitz, 2002; Schatzki, 2001; Shove et al., 2012), followed by an overview on media practices (Bräuchler & Postill, 2010; Couldry, 2011). Section 4.2 presents the analytical framework and the four elements, and Section 4.3 summarises the chapter.

4.1 The (media) practice turn

Media scholar, Nick Couldry, has advocated for a practice turn as a new(er) approach within the Internet and media studies; this practice turn, however, is not confined to the Internet and media studies alone (Couldry, 2010).

Practice theory explains the societal structures or mechanisms, but it is not useful for analysing macro-processes (Hobart, 2010, p. 61). According to Schatzki, though there is a multitude of perceptions on practices, the basic definition is 'arrays of (human) activity' (Schatzki, 2001, p. 11). I have put human in a parenthesis because as Schatzki argues, in Science and Technology Studies (STS), practices can also include non-human agents, such as computers and technology. However, this study has disregarded the posthumanist perspective, and is solely concentred on human activities performed by users - either the Danish museums or their online users. These arrays of human activities have shared skills or understandings. According to Schatzki the social is "[...]a field of embodied, materially interwoven practices centrally organized around shared practical understandings" (Schatzki, 2001, p. 12), and it is through the shared understandings that practices are maintained and developed. I employ the concept of practices as a heuristic tool in accordance with Reckwitz' understanding, and examine the Danish museums' appropriation of online media and the museum users' online museum visits through practices as defined as a complex of body, knowledge, and things (Reckwitz, 2002, p.257-258). Practices are by no means a novel concept. Within social sciences, many scholars have had an interest in practice theory. According to Reckwitz, the interest in practices is related to the interest in the

⁴⁹ See, f.i., Bourdieu's Outline of a Theory of Practice (1977), de Certeau's The Practice of Everyday Life (1984), or Giddens' Central Problems in Social Theory (1979).

everyday life, and practice theory should be considered as the fourth form of cultural theories that explains actions through structures of meaning (Reckwitz, 2002, p. 244). By addressing the other three forms of cultural theories (mentalism, textualism and intersubjectivism) and their understanding of the social (in the mind, discourse and interaction) context, Reckwitz positions and clarifies practice theory through other forms of cultural theories. He distinguishes between 'praxis' and practices, where praxis is defined as an action (in contrast to theory or thinking) and 'practices' are defined as a set of actions that are routinised behaviours. It might appear as if practices are equated to habitual conducts of the individual; however, Reckwitz affirms that the routinised behaviours consist of interdependencies between a series of elements: "[...] forms of bodily activities, forms of mental activities, "things", and their use, a background knowledge in form of understanding, know-how, states and emotion and motivational knowledge" (Reckwitz, 2002, p. 249). Thus, practices consist of interrelated elements that include the body, mind, things, knowledge, discourses, structure/process and agents, but put in a different context (2002, p.250ff). Reckwitz mentioned cooking, consuming, working, investigating, etc. as examples of practices. Thus, "[...] a practice represents a pattern which can be filled out by a multitude of single and often unique actions reproducing the practice" (2002, p.250).

Shove, Pantzar and Watson have defined practices as "[...] interdependent relations between materials, competences and meanings" (2012, p. 24). In their practice approach, they focus on how social practices are generated, renewed and reproduced in the everyday life and distinguish between practices-as-entities and practices-as-performances. Practices-as-entities refer to a conjunction of elements (a pattern), which can be recognised as entities, whereas practices-as-performances refer to the actual doings (Shove et al., 2012, p. 8). I regard this distinction as closely related to Reckwitz' praxis and practices distinction; thus practices-as-entities in this thesis embrace two different types of practices, namely, the museums' practices of disseminating and communicating online and the museum users' practices of visiting the museums online.

Shove et al. suggested a practice model in which practices are represented by a linkage between three elements: material, competences and meaning. The model was inspired by Reckwitz's definition of practices, where Reckwitz' understanding of practices consist of a series of seven to eight different interdependent elements (mentioned above) which is not conceptualised as a practice model, but merely a list of constituting elements. Shove et al.'s model was much simpler that suggested by making links and breaking links between the three elements; practices emerge and transform over time.

- 'Materials' are "objects, infrastructures, tools, hardware, and the body itself"
- 'Competences' are "multiple forms of understanding and practical knowledgeability"
- 'Meaning' are "mental activities, emotion and motivational knowledge" (Shove et al., 2012, p. 23)

Using car-driving experiences in the USA in the beginning of the 20th century, the authors exemplified the three elements as carriage design (materials), mechanical expertise (competence) and exhibition of wealth, adventure, innovation (meaning) (Shove et al., 2012, p. 29 (Figure 2.2))). According to the authors, the elements of practices change over time as in the car driving example. The progress in the development and production of the car in the 20th century (material) changed the skills required to drive a car. Mechanical skills were no longer an issue while driving (competences), which changed the meaning ascribed to the car and the practices of driving. Thus, external forces change the elements and the linkages between the elements. Societal structures and systems, such as economy and politics, are determinants for change. However, it is not directly addressed as such by Shove et al. (2012).

The practice element model of Shove et al. is an engaging framework for understanding practices, yet meaning as a distinct element is, from my perspective, misleading as meaning appears to be what creates the practices. Thus, it is embedded or ascribed to both materials (car) and competences (skills). In addition, Shove et al. simplify the series of elements listed by Reckwitz, but in the process, they have reduced the analytical effectiveness of Reckwitz' approach. Shove et al. do not present their practice model in a (digital) media context. Couldry (2012), on the other hand, repeatedly uses various digital media cases to illustrate the power of practice for making inquiries about the media-saturated world. According to Couldry, applying a practice approach to study media should go beyond the narrow definitions of media, such as "[...] objects, texts, apparatuses of perception or production processes", and instead focus on actual media doings (2012, p. 35). This viewpoint resonates well with my argument for completely leaving the audience or user concepts along with their pertinent oppositional stands audience as produsers (Bruns, 2008), redirecting the attention to activities or doings (see Section 3.3.1, Chapter 3).

In media studies, conceptualisation and theorising of practices have been neglected (Bräuchler & Postill, 2010, p. xi). Although media practices are not a new term in media studies, according to Postill, the concept has been widely used without any further theorising or problematising, and have been conflated with activities, behaviour, formation and processes (Postill, 2010, pp. 5–6). Postill defines practices as an "[...] embodied sets of activities that humans perform with varying degrees of regularity, competences and flair" (Postill, 2010, p. 1). Couldry and Kjaerulff see media practices as "what people actually do with media" (Couldry, 2010; Kjaerulff, 2010), while Hobart regard media-related practices as "[...] recognised, complex forms of social activity and articulation through which agents set out to maintain or change themselves, others and the world about them under varying conditions" (Hobart, 2010, p. 63). There are disagreements between Couldry and Hobart's definitions of practices and approaches to practices in which Hobart accuses Couldry's approach of Eurocentrism and questions the relation between the researcher and objects of study and relates to

discussions of power, representation, othering, etc. found in anthropological literature (Hobart 2010, p.64).

Introducing the notion of practice in media studies entails the shifting of focus from structures, systems, interaction, etc. to actual doings or actions. Thus, the value of practices approach in media and audience studies is to ask these open questions that transgress the traditional approaches where, e.g., media behaviour is interpreted as media consumption instead of focusing on the media text and textual elements. In that approach, Couldry (2011, p. 218) decentres the production of the media text from media studies by decentring the text (Couldry, 2011, p. 218). Therefore, these actual, habitual doings are not only related to audiencing or user-consumption but also to content producers and content-production to which a certain meaning-ascription transpire. In addition, the value of practice is that it opens up for other discussions than limiting the behaviour to very particular and preconditioned understandings of audiencing (Couldry, 2010, p. 45, 2012, p. 43). In line with that argument, Hobart emphasises "[...] practice is not a natural object but a frame of reference that we use to interrogate a complex reality" (Hobart, 2010, p. 62). From that perspective, I employ the practice framework as an empirical lens which focus on both Danish museums and their users' online activities, motives and intentions, to conceptualise what Danish museums do online and why, as well as what Danish museum users do and why. Accordingly, my approach to practices refers to a collection of online activities and shared understanding of Danish museums and their users. In that perspective, it ascribes to both the practices-as-an-entity and practices-as-performances.

Although the practice approach has been applied in a museum context, it is still limited to a great degree. Therefore, what this thesis attempts is to further introduce the practice approach into the museum context.

4.2 Online museum practices

With inspiration from discussions in the previous chapter, as well as the discussions of practices, this section presents online museum practices as an analytical framework for this thesis. I approach online museum practices as actual online activities, motivations, competences, and attitudes of Danish museums and their users. I am not merely concerned with the literal interpretation of online museum practices of distinct usages, what the museums do online and what the users do online (praxis or practices-as-performances), but I am equally concerned with the variety of intentions or other conditions, such as personal impetus, notions and competences that relate to the actual online activities. This relates both to the newer understanding of reception I presented in Section 3.3.1, as well as the discussions on how online media is integrated into the users' own understandings and everyday practices that were introduced in Section 3.2.3. Additionally, the objective is also to enquire into the

museums and users' conceptions of what happens online, how these conceptions are manifested, articulated or expressed and why? Consequently, I have a double view of the concept of online museum practices. Practices concern the institutional online dissemination and communication practices of Danish museums, as well as individual online museum visiting practices of the museum users.

The online museum practice framework proposed in this study is not a process and planning guide, but supports the analyses of the thesis as a 'frame of reference' as suggested by Hobart. Therefore, it is neither a general model nor a prescriptive and predictive model. The framework consists of four elements: online media competences, attitudes, motivations and actual usages of the museums and their users. The political and historical contexts are implicit in this framework. Online museum practices, as any of the other understanding of practices presented in this chapter, are not commonly observable objects; instead it is a construct produced by a researcher (in this case me), by linking and interpreting a series of elements of museums and users in relation to their political and historical contexts at a particular place in time – a sort of online museum landscaping.

Although the elements are presented as distinct, they are interrelated and reflect one another. For example, there might be an overlap between the museums' attitudes towards online media and their motivations for appropriating them. Hence, the distinction between the elements is drawn for analytical purposes. Though online media appears to be in the epicentre of the framework, the framework does not include 'materials' (Shove et al. 2012) perceived as design and interfaces or the concept of affordances (Hutchby, 2001). I do acknowledge that different online media designs, formats and platforms, allow for different forms of practices, which the analyses will reflect.

The museum perspective leans towards their current, and actual usages of online media linked with how online media are perceived, altered and constructed and how online media transforms or changes, not the institutions themselves but their dissemination and communication practices. In this respect, online media practices are to a certain extent related to appropriation. As addressed in the previous chapter, appropriation is a process where users explore, evaluate and adopt a technology, and adapt and take possession of particular attributes in order to satisfy needs (Carroll, Howard, Vetere, Peck, & Murphy, 2002, p. 5).

The central concept of this thesis does not focus on the relation between the individual user and a technology and how the user implements and applies the technology, nor on the actual implementation and application of online media in the museum organisations. Instead, the focus is on relating the appropriation to online museum practices by the museums in order to understand the rationale behind the museums' online dissemination and communication activities and their ascription of meaning of online media in relation to museums' perceptions of the museum users and their own self-understanding as a public institution. Further, by most standards, the Internet is not a new medium or phenomenon anymore, yet in the context of the museums' perception, the use of online media and

social media for dissemination and communication purposes, or even collecting and exhibition purposes, is still at its beginning. From that viewpoint, it is considered relevant to link the concept of appropriation to the museums' online practices, but appropriation is not used exclusively as framework for the museums' online practices. That said appropriation of online media is also relevant in relation to the users as this has an impact on the users' online museum visiting behaviour.

The user perspective concerns the museum users' online practices, partly inspired by the reception models of Schrøder (2000, 2003). Schrøder attempted to create a multidimensional model for reception analyses because existing models proved to be insufficient. Although the model of Schrøder is multidimensional, it does not include dimensions that take (inter)active actions into consideration in the overall understanding of the reception. Thus, in my approach to the museum users' online practices, I include parts of Schrøder's reception model but relate it to the element of actual usages of the users that move online reception into a larger context and into an understanding of practices. Therefore, reception is regarded at the individual level grounded in intentional practices motivated by individual dispositions in the situational context of the online museum experience. Although reception is traditionally linked with the end-user, i.e., the individual museum user, in an online environment and not least a social media environment, it is relevant to include reception in the museum perspective because (at least in theory) the boundaries between produser (Bruns, 2008) and users become blurred. Thus in an online museum setting, e.g., on Facebook, the museums should understand or at least relate to the users' content, comments, or feedback, and then respond to or interact with the users. This is interesting as both museums and users (can) occupy multiple positions in the producer-user continuum as authors, contributors, lurkers, likers, viewers, etc.

In the exemplification of his reception model (2003), Schrøder has merged the dimensions. The remaining dimensions in Schrøder's model (comprehension, discrimination, position and evaluation) are not included in my model. These dimensions are not considered in this study because the scope of this project is not to examine whether online museum users perceive or experience online museum communication as "transparent representations of the social reality" (Schrøder, 2000, p. 247); understand that online museum communication as produced or edited; or understand if online museum users agree or disagree with the intended meaning of online museum communication

The remainder of the chapter presents the four elements of the framework with inspiration from the concepts of appropriation and reception. In my framework, I have merged several dimensions of Schrøder's reception model, renamed a dimension, and included three new dimensions online media competences, attitudes, actual usages deriving from DeSantis and Poole's 'AST' (1994).

4.2.1 Online media competences

Shove et al. defined competences as skills, know-how and different forms of understandings (2012). According to Reckwitz, knowledge in practices exceeds the superficial know-how or 'knowing that' of any process. Knowledge and understanding include emotions and feelings linked to the practices: "[...] the knowledge that is a constitutive element of a practice is not only a way of understanding; it is – in connection with that – also a know-how and a certain way of wanting and feeling" (2002, p. 254). In my framework, Reckwitz' skills and knowledge and Shove et al.'s competences are addressed as online media competences.

Online media competences is partly defined as abilities and past experiences. It is important to address how experienced users behave (both museums and their users) with online media when it comes to receptivity of online museum communication. The level of experience with online media will affect how users perceive online museum communication, e.g., is the user at a beginner's level or is the user an expert. Therefore, experiences with technology can be related to the concept of self-efficacy, which is a concept rooted in social cognitive theory and refers to the "[...]beliefs in one's capabilities to organize and execute the courses of action required, to produce given attainments" (Bandura, 1997, p. 3 in Straub, 2009, p. 629). Perceived self-efficacy is an individual's belief that he or she can complete a specific task given a set of circumstances. Researchers, such as Venkatesh and Davis (2000) and Straub (2009), have claimed that users' perception of their abilities to use technology and to assess if a technology has value for them are important when understanding technology adoption. Thus, when examining online museum practices, it is important to understand the museums' and the users' perceptions of their online media skills when they engage with online museum dissemination and communication.

I consider online media competences to include know-how and skills of how to communicate, behave and interact in online media environments, e.g., post comments on social media platforms, share and upload photos, write online articles and blog posts, etc. Online media competences also include software and hardware knowledge and skills related to how to use online media. These factors assist the users to decide on appropriating new technologies. Carroll et al. (2003; 2002) emphasise that, in the first appropriation phase, when users encounter a new technology for the first time, the initial decisions are not made upon an extended use or training; however in the second and third phase, evaluations and final appropriation decisions are based on competences and abilities to use the technology.

4.2.2 Attitudes

According to DeSanctis and Poole, attitudes are the sentiments that the users display in the appropriation process. Attitudes vary from comfort to respect and challenge. By comfort, DeSanctis and Poole refer to users' confidence and proficiency in the use of technology; whereas respect indicates whether the users perceive the technology as being valuable in their work. Challenge specifies the users' willingness to work with the technology (DeSanctis & Poole, 1994, p. 130).

Attitudes towards online media are relevant to discuss when addressing online practices of both museums and users. The museums' attitudes include (re)considerations, prejudices and presumptions towards online media and the museums' expectations to online media and the possibilities of appropriating online media for museum dissemination and communication assignments and projects. Likewise, museums' attitudes towards the public include them to be considered as users, produsers, strangers, etc.

The users' attitudes towards online media are relevant for the users' motivations and actual online museum usages; however, the users' attitudes towards the museums' websites and social media presence should be discussed. This implies addressing the users' expectations, prejudices and presumptions. The attitudes element from the user perspective should also include the users' attitudes towards museums as such. Are museums leisure institutions, knowledge institutions, archives, etc.? In this respect, it is relevant to include the results of Falk (2009), as well as Doering (1999), which have examined museum visitors' attitudes towards the museum and museum visit. Falk presents five categories, which were briefly mentioned in the previous chapter; while Doering presents four categories for the museum experiences: 1) social experiences; 2) object experiences that give prominence to the museum objects; 3) cognitive experiences, which emphasise the interpretative and intellectual aspects of the experience; and 4) introspective experiences that focus on the visitor's personal reflections. Despite Falk's and Doering's empirical findings are from 2009 and 1999, respectively, Falk's categories focus on the different types or roles of a visitor, and Doering's study illustrates different approaches to the experience. Falk's and Doering's findings are interesting as they help to contextualise the users' attitudes towards museums and the museums' attitudes towards the users. At the same time, one should bear in mind that users might have different approaches to different museums, or even different approaches to the same museum according to the purpose of visiting the museum (onsite or online).

4.2.3 Motivations

The concept of motivations addresses the museums and the users' interest and expectations to the content and usages. Schrøder makes a reference to Barker and Brooks' understanding of media users' investment as a way to describe and conceptualise the degree of interest or link of relevance in media experiences (Schrøder, 2000, pp. 244–245, 2003, p. 68). In relation to social media, several scholars have studied the motivational factors for the usage of social media (Brandtzaeg & Heim, 2009; Nadkarni & Hofmann, 2012; Nov, Naaman, & Ye, 2010). The findings of these studies include various motivations that have been categorised into four: 1) information, 2) entertainment, 3) social interaction/community and 4) personal identity/self-presentation. ⁵⁰

The fourth category, personal identity/self-presentation has been a central theme in the public debate and discourse about social media. Personal identity is often related to studies of how young people's use of social media (M. C. Larsen, 2009), whereas self-presentation is not limited to a particular user age group. Self-presentation is most often related to Goffmann's understanding in which he argues that in social interaction people tries to influence the perception of their image that others may have of them (Goffman, 1959, p. 6). In the social media literature, self-presentation has become an important concept because users need to create a personal profile – at least for social network sites – through which they present themselves via textual content, photos, videos etc., and act and interact with other users (boyd & Ellison, 2007; Ellison & boyd, 2013; Kaplan & Haenlein, 2010). In their study, Brandtzaeg and Heim do not as such find self-representation as an explicit motivation for user participation in social media, however, as the authors argue themselves, this might be due to the methods used in the study. Instead, they stress that other methods than questionnaires should be used to address issues relating to self-representation (2009, p. 150).

I consider it more fruitful to define motivations within the framework of relevance⁵² rather than Barker and Brooks' understanding of investment, as I would argue that investment bears connotations which are not relatable to this context. In this sense, relevance is defined as something serving as a tool to reach a goal where tool is understood in the widest possible sense, including ideas, meanings, theories and documents.

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⁵⁰ In their article, Brandzaeg and Heim also refer to these four categories of McQuail (Brandtzaeg & Heim, 2009, p. 150) as guiding for their findings of the social media users' motivational needs. Well aware that Nov, et al.(2010) have categorised their motivational factors into intrinsic and extrinsic motivations, thus differ from the four categories of McQuail, I still believe that Nov, et al.'s findings can be summarised into McQuail's categories.

⁵¹ It is not only in the research literature that impression management and social media have been linked together. Also in the mainstream Danish news media, impression management has been one of the central themes when covering social media in the news.

⁵² Relevance has in information science been defined as "*something (A) is relevant to a task (T) if it increases the likelihood of accomplishing the goal (G), which is implied by T.*" (Hjørland & Christensen, 2002, p. 964).

Motivations from the museum perspective can be related to the individual museum worker's interest for experimenting with new dissemination and communication forms and new media platforms. There are many examples in the museum literature, in particular from the praxis field, that digital and online projects in museums (internationally and nationally) are highly dependent on individual museum worker's vigour and interest (Boritz, Ramsing, Jensen, & Lund-Andersen, 2011; Hertzum, 1998). Conversely, for many museums, the motivation for entering into and creating new dissemination and communication projects are connected with political and financial incentives.

Motivations from the user perspective can also be considered in line with personal museum context. According to John Falk and Lynn Dierking, the individual museum visitor has a personal context, which includes previous experiences and knowledge of specific museum(s) or museum-related content. Interests, expectations and concerns, are all part of the personal context (Falk & Dierking, 1992, p. 2). Schrøder frames relevance within personal interest, reminiscence (relates the text to past experiences), innovation (the text will provide new insights), identification (with the text) and community (sense of belonging). I too, position motivation in the personal interest sphere.

4.2.4 Actual usages

The element actual usages can, to a certain degree, be related to Reckwitz' 'things and their use'. According to Reckwitz, "carrying out a practice very often means using particular things in a certain way". Reckwitz continues to elaborate on how things and the use of things mould practices, as well as enable and limit certain bodily and mental activities (Reckwitz, 2002, p. 253). Thus, online museum practices rely on access to the Internet, as well as a computer or other devices through which one can access the Internet, namely CMSs⁵³, websites and social media platforms.

Actual usages of online media are also related to the concrete online media usages. For the museums, I address the utilisation of interactive features (Ha & James, 1998) of museum websites and the museums' presence and practices on social media (see Section 5.4.3, Chapter 5). Thus, I define actual usages of online media within usage of interactive features including user-involvement and audio-visual features, as well as museum presences on different social media platforms and the museums' communicative practices on these platforms. Likewise for the users, actual usages refer to the museum users' concrete online experiences and interactions.

One of DeSantis and Poole's aspects of technology appropriation is 'faithfulness'. About faithfulness DeSanctis and Poole state that a given technology may be appropriated in accordance with

⁵³ CMS is a program that allows publishing, editing and modifying content as well as maintenance from a central interface. CMSs typically aim to avoid the need for hand coding but may support it for specific elements or entire pages. A CMS provides procedures to manage workflow in a collaborative environment.

or in opposition to the 'spirit' as well as the 'structural features' of the technology. Although this dimension of appropriation may denote normative judgement, it is not my intention to do so. Unfaithful appropriation is not to be considered as improper, but to signify that it is not in line with the spirit of the technology (DeSanctis & Poole, 1994, p. 126, 130). The relevance of faithfulness in this relation is to expound the complexity of actual online media usages. By integrating faithfulness to the analytical framework, one can address (not assess) the users' (museums and their users) attitudes, understandings and actual usage of online media in relation to the opportunities, space and action afforded by the media.

Further, from the user perspective, actual usage also addresses the users' interaction with the museums through websites and social media. Thus, actual usages can be understood as 1) a communicative act in which the exchange of messages takes place and 2) a property or attribute of a given technology or media (Richards, 2006, pp. 532–533; Stromer-Galley, 2004, p. 391). Both Richards and Stromer-Galley distinguish between 'interaction as an activity/process' and 'interaction as a product' and argue that most of the studies tend to either focus on one or the other or conflate the two different views.⁵⁴

Schrøder raises the question of whether to include interaction in the reception model in studies of interactive media (Schrøder, 2003, p. 69). However, he has not further expanded or explained this line of thought. Actual usages as a dimension of reception covers both views. I recognise the difference between human and media interaction, but when it comes to social media, the difference becomes less evident. For example, in a case where a user posts a comment to a museum on their Facebook page and gets a response from the museum, the user interaction would be related to the interaction as an activity. However what in the case where the user does not comment but instead 'like' an update from the museum on Facebook? As a like is an expression of acknowledgement in Facebook lingo, it could be considered as a communicative act. On the other hand, the act of liking is afforded by the interface of Facebook, and there is no direct interaction with the museum but only with the medium.

In conclusion, Schrøder's implementation dimension is concerned with how the reader implements or uses the content media text in its everyday life or social praxis (Schrøder, 2000, pp. 251–253, 2003, p. 68). Implementation relates to actual usages, but actual usages that take place after the online museum experience. Hence, implementation refers to the museum users' employment of online museum content in their daily life and how users act according to the content. The purpose of this

⁵⁴ 'Interaction as an activity' entails interaction between people in which the focus is on the communication: what are people discussing, with whom and why. This often relates to issues of power, identity, communities, shared beliefs, etc. (Stromer-Galley, 2004, p. 392). According to Stromer-Galley, 'interaction as a product' occurs between a user and a technology; therefore, the interest of inquiry is related to design or technological features and how the users engage with those features (ibid.)

⁵⁵ Implementation is replaced with action ('handling' in Danish) in Schrøder's revised version of reception model (2003).

dimension is not to dissolve medium/text as an entity into textual content but to emphasise the usage of the perceived meaning of online museum communication by the users in their social praxis. From that perspective, implementation also includes elements from Schrøder's comprehension dimension relating to how online museum users comprehend online museum communication.

It is important to understand that the online visiting practices of Danish museum users in relation to the communication practices of Danish museums when analysing the how the users implement and use their online museum visit in their everyday life. For most users, museums commonly do not play a significant role in their daily life - unless, of course, they work as a museum professional. Instead, museums and museum experiences are usually positioned in the leisure sphere and considered as social holiday activities one does with his/her children, grandchildren, friends, etc. However, when adding a museum to your list of Facebook likes, the museum's activities and updates blend with the status updates of your friends and family causing the museum to (possibly) be part of your daily life online activity. This addresses the issues that concern what people do and how they use the online content of Danish museums in their everyday life, leisure time, or other contexts.

4.3 Summary: Towards an analytical framework

In this chapter, I have presented online museum practices as analytical framework for this thesis. I have addressed the practice approach and argued for the usage of practices in an online museum context. Couldry (2012) has argued that the concept of practice is central to the development of digital media studies, because it can translate the hype about a digital revolution into concrete questions that focus on actual doings. For example, what do people do in relation to media? And what types of things do people say (think/believe) in relation to media? Couldry argues that by moving the focus away from media production or media reception and towards a broader set of media-related practices. A practice approach to online museum settings does not have media as objects, texts, production or perception tools as a starting point but addresses media-related practices from a more open and holistic perspective that includes and integrates the two perspectives, i.e., media production and media reception. In this chapter, I argue that online media practices provides the analytical lens for addressing what Danish museums and users do in online museum settings. This is done through four different elements: online media competences, motivations, attitudes towards museums and attitudes towards museum visitors, and actual usages. With these four elements, I analyse the online museum practices of both Danish museums and their users.

5 Methods

Empirical research results obtained with different methods are like the pieces of a jigsaw puzzle that provide a full image of a certain object if put together in the correct way.

(Erzberger & Kelle, 2003, p. 461)

This PhD project is based on a mixed-methods research design. Thus, it follows no single traditional approach with a strict set of methods (Creswell & Plano Clark, 2011; Greene, 2007; R. B. Johnson et al., 2007; R. Burke Johnson & Onwuegbuzie, 2004), but combines different methods to study the phenomena of online museum practices in a Danish context. The research design is directed by the two primary perspectives: the museum and museum user's perspectives.

The individual methods used are combined to answer the research questions. This requires a novel approach that takes various contexts of the museums, online media and users into account, thus the rethinking traditional research design and combinations of methods – not only quantitative and qualitative methods but also online and offline methods. The following sections present the methods used in this project and how they contribute answering the research questions. Sections 5.1 and 5.2 address the critical realism as meta-framework and the holistic perspective. Section 5.3 presents the mixed-methods approach, complementarity and the combination of online and offline methods. Section 5.4 introduces the research design of the project, including an outline of the different methods employed within the museum perspective and the user perspective. Each method is presented separately. Section 5.5 discusses the quantitative and qualitative methods. Finally, Section 5.6 discusses theories related to reliability and validity tests including limitations and research bias.

5.1 Critical realism

This research is positioned within the critical realism, which emerged in the 1970s as a critique of the positivist approach in the natural and social sciences. Critical realism is associated with the British philosopher, Roy Bhaskar, who developed the philosophical positions, transcendental realism and critical naturalism, and later coined the term critical realism (Buch-Hansen & Nielsen, 2005, p. 7). According to Bhaskar, there exists a reality which can be researched and understood (he dismisses

radical social constructivism⁵⁶), but at the same time, there exists a reality beyond the observable physical reality that needs to be interpreted and examined by critical reflection on how the world is perceived by the research object (he dismisses naïve empiricism⁵⁷). On the one hand, knowledge is not an independent object that the researcher alone can expose, and, on the other hand, knowledge is considered as a relational phenomenon that is socially determined (Clark, 2004; Danermark, Ekström, Jakobsen, & Karlsson, 2002, pp. 6–7). Critical realism can thus be described as a moderate form of constructivism in the sense that knowledge is understood as a social product produced by social interactions in which meaning, interpretations, discourses, etc., are ascribed value.

Bhaskar suggests a stratified and differentiated reality that consists of three distinct domains (Danermark et al., 2002, p. 20ff). The empirical domain consists of our perceived experiences and observations of phenomena and events. It is separated from the actual domain that includes phenomena and events which take place whether or not we experience them. As Danermark and his coworkers explain "[...]what happens in the world is not the same as that which is observed" (Danermark et al., 2002, p. 20). In relation to Facebook, phenomena and events from the actual domain could be exemplified by event invitations to a museum exhibition opening or museum curator discussions on Facebook. Phenomena and events in the actual domain should be instances in which particular social practices take place, but happen whether or not an individual observes or experiences these phenomena or events. Whereas, the perceived experiences and observation in the empirical domain in relation to Facebook could be exemplified with the individual user, who ascribes social meaning and value to the actual happening, such as comments, image uploads, likes, etc. Put in relation to online museum practices, these practices belong to the empirical domain as they consist of not only actual, online activities but also shared understandings, perceptions and expectations.

The third domain, the real domain, consists of sociocultural structures and mechanisms, and forms the basis of the phenomena and events from the actual domain (Bhaskar et al., 1998, pp. 5–6; Buch-Hansen & Nielsen, 2005, p. 24). In the example of Facebook usage by Danish museum institutions, the cultural policy, financial and staff resources, knowledge, digital communication strategy and curatorial conventions could be regarded as structures and mechanisms of the real domain, as these have an impact on Danish museum institutions' Facebook usage and practices.

Thus, the actual domain is a subset of the real domain, and the empirical domain is a subset of the actual domain. To sum up, critical realism is not a methodological framework or a method in itself, but represents a philosophy of science perspective (Buch-Hansen & Nielsen, 2005, p. 56f;

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⁵⁶ Critical realists dismiss radical forms of social constructivism in which all phenomena are considered to be social constructs. From a critical realist perspective, naturally occurring phenomena is not to be defined as constructs (Buch-Hansen & Nielsen, 2005, pp. 83–85).

⁵⁷ In the critical realism, (naïve) empirism is a doctrine that supports all knowledge is derived from the natural world based on sensory experiences: What cannot be observed does not exist (Buch-Hansen & Nielsen, 2005, pp. 13–15).

Danermark et al., 2002, p. 150). However, in critical realism it is still pointed out that "[...] it is primarily the nature of the object under study which determines what research methods one may use" (Danermark et al., 2002, p. 11). The critical realists do take a stand in relation to how to employ methods. Consequently, it is the ontological perspective that determines the methodology and methods. In this sense, critical realists (including me in this PhD project) are ontological realists but epistemological relativists (Buch-Hansen & Nielsen, 2005, p. 34). Hence, there is a real world, which exists independently of our perceptions and constructions, but at the same time our understanding of this world are inevitably a construction from our own perspectives. This can appear trivial; however, compared to other philosophy of science perspectives, this is not as banal as it might appear. Philosophical positions, such as constructivism and post-structuralism, are related to qualitative research, whereas positivism and post-positivism are usually connected to quantitative research (R. B. Johnson et al., 2007). In addition, the dispute between the two conflicting philosophical paradigms is longstanding. However, from the perspective of critical realism, it is not considered pertinent to discuss and unleash the qualitative-quantitative dispute because it is usually tied up with the philosophical paradigms, which critical realism questions (Danermark et al., 2002, p. 175). Rather it is considered important to reconsider the link between ontology and methodology.

As presented in Chapter 3, I have an interdisciplinary approach, applying and integrating theories and concepts from different fields of study. From a critical realist perspective interdisciplinarity entails

[...] to study a common phenomenon and how that phenomenon is manifested at different levels of reality. This is done by using specific theories and methods developed for each respective level. The results are then integrated in an attempt to reach a more holistic perspective on the phenomenon. (Danermark, 2001, p. 12)

Thus, the importance of interdisciplinarity is emphasised because of understanding reality as a complex and open system. Critical realism prompts interdisciplinarity across the natural sciences, humanities and social sciences, but also acknowledges the distinctive character of each perspective (Buch-Hansen & Nielsen, 2005, p. 58).

5.2 A holistic approach

Parallel with the growing interest in interdisciplinary research, the value of holism has likewise been emphasised to better grasp complexities and multiple contexts. From a holistic perspective (in media and communication studies as well as audience and reception studies), the communicative process is

now to a larger extent considered as a whole and includes larger societal structures (f.i., Deacon, 2003; Drotner & Schrøder, 2013; Schrøder et al., 2003, pp. 48–49; Sinha, 1989).

This PhD project takes a holistic perspective while studying the contexts in which museums and online users experience and perceive online dissemination and communication. Museums, online users or online media are not considered as isolated phenomena. For example, online museum communication does not take place in a vacuum but influenced by many external factors. From a user perspective, these factors could be previous experiences, expectations and notions of the museum, appropriation of online media in general, political debates, cultural policies, personal motivations, education, etc.

A holistic approach in museum studies is not a novel approach (Drotner & Schrøder, 2013; Falk & Dierking, 1992; Hooper-Greenhill, 2004). A great number of studies that have a holistic approach exists on non-museum-related topic as well as online and offline museum specific areas. Among the offline museum specific examples are the 'interactive museum experience model' (Falk & Dierking, 1992)⁵⁸ and the 'holistic approach to museum communication' (Hooper-Greenhill, 2004)⁵⁹. Both examples refer to the rethinking of the experiences or communication in a wider perspective that goes beyond actual experiences in the museum gallery or museum labels in order to include all museum activities inside as well as outside the galleries. A more recent approach is presented by Schrøder and Drotner in the anthology Museum Communication and Social Media (2013), where they suggest 'connected museum research' a holistic and interdisciplinary approach to in the museological field that integrates and bridge the gaps between the neighbouring fields of studies and through this synergy better explore the meaning-making processes that emerge in the relationship between cultural institutions, various media platforms, content and the users (Drotner & Schrøder, 2013, pp. 7–13). Building on these past arguments of holistic museum research, my main argument is that it is necessary to have both the museum perspective and the user perspective. The two perspectives will allow me to extract wider implications and contexts in which the production of online museum content and the reception of online content take place.

⁵⁸ The interactive museum experience model, developed by two museum scholars, John Falk and Lynn Dierking (Falk & Dierking, 1992), conceptualises a coherent physical museum experience as involving three contexts (personal, social and physical). The novelty of this model lies in its approach to the museum from the visitor's perspective through the notion of a whole context. It was one of the first publications that brought this perspective forward, and the model is often used by museum scholars and professionals to embrace and comprehend visitors' multi-faceted understanding of museums and their experience before, during and after the visit. In 2012 Falk and Dierking presented a revised version, 'The Contextual Model of Learning' in the book *The Museum Experience Revisited*.

⁵⁹ A holistic approach to museum communication is proposed by Hooper-Greenhill, who argues that museum communication is more than exhibitions and displays, but includes events, architecture, publications and brochures (Hooper-Greenhill, 2004, pp. 40–42). According to Hooper-Greenhill, the traditional and simple one-way communication model is neither sufficient, nor adequate as explanatory model as the process of communication has evolved into being something more complex. This critique of the traditional sender-message-receiver model is of course not exclusive to the field of museums.

5.3 Mixed-methods approach

The holistic and contextual perspective is central in my examination of online museum practices. One of the main purposes is to address different aspects of online museum practices. Presently, there is no definite methodology or specific methods to approach the challenges presented by digital media. ⁶⁰ Instead inter-, multi- and transdisciplinarity approaches appear to be the prevailing tendency (see for instance, Schrøder et al., 2003, p. 44ff).

I have employed mixed methods from a complementarity perspective. Mixed-methods research is considered as "[...] multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued and cherished" (Greene, 2007, p. 20). This definition of mixed-methods implies more than one method of enquiry and includes methodological assumptions that direct the actual methods. It involves combining or integrating qualitative and quantitative methods, mixing or merging the data at all levels and phases of the research process (Creswell & Plano Clark, 2011, pp. 5–6). According to Greene, such attempts tend to disguise potential, important differences (Greene 2007:16). Thus, mixed-method research is a dialogue between different perspectives, not focused on differentiated perspectives deriving from one epistemological lens. Greene states that the paradigmatic stance is important as this influences the research design, but it should not entirely determine the design (Greene, 2007, pp. 86–87).

Quantitative and qualitative methods have traditionally been considered to belong to two incompatible paradigms. Within the last decades, the number of studies that combine and mix qualitative and quantitative methods have increased, with a growing number of inter-, multi-, and transdisciplinary studies. Mixed-methods have been called the 'third research paradigm' (R. Burke Johnson & Onwuegbuzie, 2004, p. 15), and Tashakkori and Creswell have referred this as 'the new era of mixed methods' (2007). The aim of mixed-methods is to some degree to deconstruct the quantitative and qualitative dichotomy and "draw from the strengths and minimize the weaknesses of both single studies and across studies" (R. Burke Johnson & Onwuegbuzie, 2004, pp. 14–15). This is in line with the 'cross-fertilization' research approach of Schrøder which is not a new method but a combination and synthesis of the two approaches (Schrøder, 1999).

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⁶⁰ New methods have been developed to examine and explore specific and natively digital and online media phenomena, including the Digital Methods Initiative (R. Rogers, 2009, 2010) and the network analysis tool NodeXL (Smith et al., 2009). However, these methods have primarily quantitative objectives with less focus on qualitative aspects of usages and meaning ascription. An exception is q-methodology which is a method used in audience and reception studies that integrates quantitative and qualitative methods cohesively (Davis & Michelle, 2011; Kobbernagel, 2013; Schrøder, 2012).

⁶¹ Christine Hine collects a growing list of research and studies that employ mixed methods in order to address the Internet related phenomena. See the blog www.christinehine.wordpress.com/

Danermark et al. (2002) criticise mixed-methods approaches for exactly the same reason and argue that

We would like to emphasize the importance of paying attention to the ontological-methodological link. We too want to see more methods in use – when necessary. However, there is a great risk that some conclusions will be drawn that cannot be drawn from the application of a particular method unless you have made the ontological base clear. (2002, p. 152)

They accentuate that a separation between ontology and methods is an illusion as there in the research questions are ontological perceptions embedded (either implicit or explicit) because, without them, the research questions would not have been asked (2002, p. 153). Danermark et al. reaffirm that critical realism is not a methodology, but present critical methodological pluralism instead. This attitude refers to critical realism and opposes an unreflecting usage of methods. Critical methodological pluralism is not a new set of methods, but it regards research design as a combination of intensive and extensive approaches that complement each other.

Despite the disagreement between the two stances towards the ontological grounding of mixed-methods presented by Greene (2007) and Danermark et al. (2002), both stances attempt to bridge the traditional quantitative-qualitative divide. As Danermark et al., I position this project within critical realism agreeing with their argument of congruence between object of study, assumptions about society and the conceptions of how knowledge is possible, and the researcher's choice of design and method (2002, p. 150). As already discussed in the present chapter, research methods were used based on the objectives. This perspective aligns the quantitative and qualitative research paradigms, and from a critical realist perspective both quantitative and qualitative findings are interpretations of reality (K. B. Jensen, 2012b).

Although I have used Danermark et al. ontological stance, I have not adopted their intensive-extensive terminology as I find it unnecessary to invent new terms for existing approaches. Instead, I employ the mixed-methods terminology and approach of Greene (2007) and others.

5.3.1 Complementarity

In this thesis, I employ mixed-methods from a complementarity perspective, applying different theories and methods for different levels of the analysis in compliance with the overall holistic approach. The complementarity approach is vital since one of my research objectives is to address online museum practices from a holistic perspective. Generally, the qualities of qualitative methods are their ability to examine unexplored fields of studies and unfold and elaborate complex issues; hence its strengths lie in the depth of understanding, the interpretation of subtle nuances in attitudes, behaviours, and processes;

whereas, the strength of quantitative methods is their ability to generalise upon large populations. Quantitative methods provide a high level of measurement, precision, prediction and statistical power. Accordingly, quantitative methods are considered to give 'a little information about many' and are most often used to infer variation and tendencies, whereas, qualitative methods are often characterised by their exploratory nature. If I had employed quantitative methods exclusively, it would not have been possible to explore in-depth the Danish museums' attitudes towards online media. Hence, the Danish museums' attitudes and motivations for using online media in their dissemination and communication practices would possibly have been left underexposed if studied using a questionnaire. On the other hand, had I only had a qualitative approach, I would not have been able to examine and generalise the actual usage of online media by Danish museums. Instead, the focus had been solely on the museums' attitudes and motivations for appropriating online media for dissemination and communication purposes. In addition, the same goes for the Danish museum users.

The complementarity principle is often defined within the understandings of triangulation. In these cases, triangulation is often imprudently used as a synonym for combining several methods, be it mixed methods or multiple methods. I use mixed and multiple methods in order to examine different aspects of a project's main elements (Greene et al., 1989, p. 258; Hammersley, 2008, p. 27). The rationale behind a combination of methods is that different methods complement each other, having an overall purpose of examining different aspects of a phenomenon: "Complementarity seeks elaboration, enhancement, illustration, clarification of the results from one method with the results from the other method" (Greene et al., 1989, p. 259), and should be considered "[...] as an enlargement of perspectives that permit a fuller treatment, description and explanation of the subject area" (Kelle & Erzberger, 2004, p. 174). This complementarity approach is in contrast to employ mixed-methods as a form of validity-check that solely focuses on the comparison and confirmation of results by utilising different methods and data sources (Greene et al., 1989, p. 259; Hammersley, 2008, p. 22f). Such an approach is according to Schrøder useless as he states in relation to the triangulation method "to combine two wrongs does not produce one right" (1999b, p. 38).

5.3.2 Combining online and offline methods

Although the focus of this thesis is the online practices of Danish museums and users, this does not mean that offline and onsite museum environment is completely disregarded from the study. And as presented in the preceding chapter, earlier experiences at museums and with museums also inform the motivations of users, as they frame the preconceptions and reception of present experiences.

Several researchers have emphasised the importance of combining online and offline methods, especially when studying the online phenomena. Orgad suggests that offline methods put

online phenomena in a broader perspective (Orgad, 2005, p. 52). In addition, Orgad emphasises that an integration of online and offline methods helps to deconstruct the online-offline dichotomy (2005, p.64). In this project, I employ methods for collecting online data; where the Internet is both a tool for study and site of study, but I also employ offline methods. Kozinets distinguishes between doing research on 'online communities' and on 'communities online' (2010). Research on 'online communities' is related to online culture and phenomena while research into 'communities online' relates to offline culture and phenomena extended into the online space. I would posit that the online presence and practices of Danish museums and users belongs to the communities online category as Danish museums have extended their offline existence into the online space, and have never focused exclusively on the museums' and users' online presence.

Using offline methods to capture online phenomena is not extraordinary in any way. Audience and reception researchers, for instance, have not traditionally been preoccupied with discussions on whether to use specific media as tools to examine specific media experiences. Instead, they have been interested in identifying appropriate methods that suit their purpose (Orgad, 2005, p. 36). For example, if one studies the use and impact of mobile phones, one does not need to use a mobile phone to collect the data. In the Internet studies, this has been different, and the dichotomy between offline and online methods and data has been prevalent for many years. Many have focused on what differentiated the 'virtual' sociality from the 'real' social phenomena offline when doing studies of online communities (Silver, 2000; Wellman, 2004).

At present, most researchers agree (for instance, Markham & Buchanan, 2012) that online communities are not separated from any other interpersonal interaction or experience, but rather are a part of it, so they have turned their attention towards the research object and aim, rather than on the application of specific methods. This PhD project is positioned within this understanding, and I employ both offline and online methods. Although, my focus is on online museum practices, it is important to include perspectives on offline practices as well, since Danish museums' presence is not limited to the online space but are rather historically rooted in the offline physical realm. Subsequently, one of my assumptions is that, for the general museum user, the online visit is contingent upon the offline visit. For example, a user prepares the museum visit by checking the guided tours and read about the special exhibitions on the museum website; or a user likes the museum on Facebook after the offline visit.

5.4 Research design

An overview of the data collection is presented in Figure 6 below. Each method examines different aspects of online museum practices with point of departure in the research questions 3.1 and 3.2 which relates to two central perspectives: museum and user and their pertaining frameworks.

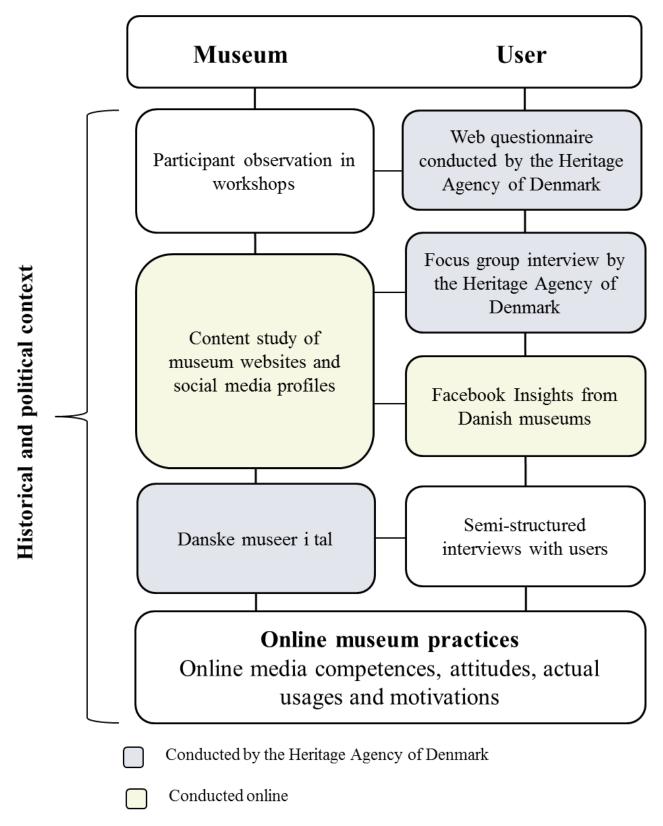


Figure 6: Research design

The lines between the methods indicate that the findings from each component both complement and contribute to other methods in the data collection process, in addition to the overall framework. Figure 6 does not indicate in what order the methods were conducted; a timeline of the data collection process is shown in Table 2 below. Data from 'Danske museer i tal'⁶², the web questionnaire and focus group interviews, were not specifically collected as part of this project but were obtained from the Danish Agency of Culture.

	Method	Time ⁶³	Spring 2010	Autumn 2010	Spring 2011	Autumn 2011	Spring 2012	Summer 2013
Online museum practices	Museum	Participant observation in two workshops		X				
		Danske museer i tal				X		X
		Content study of websites and social media profiles	X		X		X	X
	User	Web questionnaire	X					
		Focus group interviews	X					
		Facebook Insights from Danish museums				X		
		Semi-structured interviews with users					X	

Table 2: Data collection

5.4.1 Participant observation

Part of my investigation of the appropriation of online media by Danish museums is to examine the museums' online media competences, motivations and attitudes towards online media (see research

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 $^{^{62}}$ Danish museums in numbers (my translation) is the annual statistical report from the Danish Agency of Culture on Danish state-subsidised museums.

⁶³ I have been on maternity leave from November 2012 – August 2013.

question 3.2). In order to do so, I selected participant observations as a method. Participant observation is an ethnographic method traditionally used in the social sciences, but now employed in various disciplines and fields where a researcher spends time in the field for a shorter or longer period of time. In their definition of participant observation as 'being-in-the world', Atkinson and Hammersley (1994) proposed a scale ranging from passive observation to full participation in which the researcher could play different roles: complete observer, observer as participant, participant as observer and complete participant. Atkinson and Hammersley (1994, p. 248) suggest that most field work researchers adopt elements from all roles. In participant observations, the researchers continuously reflect, interpret and note observations and experiences, which allow them to access information, relations or conditions that would not have been exposed in an interview because the informant not necessarily would be aware of or remember them, or regard it as important matters. Hence, through participant observations, the researcher gets access to knowledge which is not easily accessed through other methods. The museums' motivations and attitudes towards online media were directly observed, through discussions and comments by the museums. The museums' online media competences were likewise discussed in the workshops in relation to the challenges and obstacles of using online media.

The data collection consisted of participant observations during the two workshops hosted by former Heritage Agency of Denmark in relation to the publication of the National Museum Web User Survey (2010). The two workshops were held in autumn 2010 for Danish museum professionals, one in Aarhus (ARoS museum) and one in Copenhagen (National Museum of Denmark). In Aarhus, 57 participants had signed up and in Copenhagen the number was 71. At the workshops, I took on several roles. I presented the results of the first round of the content study of the museums' online presence in both workshops, hence my roles and perspectives changed from being a speaker at the workshops presenting my PhD project to being an observer of the workshop group discussion, responses and comments on the results of the museum web user survey. During both workshops, I took field notes that included observations about the atmosphere, questions, responses, etc. (see Appendix 2). Because, I had already collected data for the first round of the content study; these preliminary findings formed the data I had, as they helped focus on the observations. My existing knowledge about Danish museums, the museum obligations, etc. also formed the observations. In theory, my presence in the workshops had the possibility of affecting the discussions and comments from the museums; however, it did have such effect on the participants. In the discussions, the museums did not refrain from making critical remarks and comments to the Heritage Agency, TNS Gallup, the survey or to my presentation.

Data from the participant observations was integrated to the understanding of Danish museums' appropriation and to the analysis of the Danish museums' online practices where it provides insights into the Danish museums' knowledge, perceptions and attitudes towards using online media for educational or communicative purposes. In addition to Danish state-owned and state-subsidised

museums there were other museums present in the workshops. All museums were invited by the Danish Agency for Culture, and each museum was requested to send one or more representatives (no-fee) to the workshop. It was not as such possible to distinguish between the individual museum professionals' opinions and the museums they represented in the workshops. Likewise, the opinions varied depending on representatives from the museums having hands-on experiences with online media or they approached online media from a management perspective. However, as all participants represented a museum and presented themselves with reference to their particular museum, I consider it valuable to have management perspectives, as well as the communication or education perspectives.

5.4.2 Danske museer i tal

The annual report published by the Danish Agency of Culture, Danske museer i tal presents key figures on Danish state-subsidised museums' work and organisation excluding the eight state-owned museums. The numbers were from 2009 and 2011, but were published in 2011 and 2013, respectively. I had access to selected parts of the raw data, as I had received right of access to the data from the Danish Agency of Culture. Among others, the data included statistics on the number of employees, opening hours, number of physical visitors, web users (number of unique users on the site), user-involving features on their websites (yes/no answers) and digital dissemination/education projects (number of projects). The data was self-reported by the Danish state-subsidised museums and can, therefore, be considered as a reflection of the museums' understanding of their work with online media for dissemination and communication purposes. Danske museer i tal was employed to emphasise and reflect the attitudes towards the understanding of web users, user-involvement and digital projects of Danish museums in relation to how Danish museums appropriate online media. The data from *Danske* museer i tal was included to contextualise the participant observations as well as the data of the actual usage of online media from the content study, and will be presented in Section 6.1, Chapter 6. As Danske Museer i tal only included state-subsidised museums, I collected supplementary data (the number of employees⁶⁴, opening hours, number of physical visitors, web users (unique users) from the state-owned museums from their annual reports on their websites from 2009 and 2011 (for links to the annual reports see Appendix 3). Although data from Danske museer i tal were not collected specifically for this PhD project, I still regard it as relevant. It is integrated into the analysis of the Danish museums' actual usages of online media where the data provides the means for addressing hypotheses, such as

⁶⁴ The size of museums is determined by the number of employees. An employee is counted as full-time employment per year. The categorisation of size has been made from the report *Strategisk museumskommunikation* (Bysted-Sandberg & Kjeldsen, 2008). I have spit the category 'large' museums from the report into two categories 'large' and 'very large' museums.

"larger museums with more employees use online media more than small museums with fewer employees".

5.4.3 Content study

The main purpose of the content study is to explore various elements of the Danish museums' online presence and actual online media usage including the museums' social media profiles (research questions 3.3 and 3.4). This includes investigating to what degree Danish museums employ user-involving and user-participatory features in their online communication (mainly on their websites), as well as determining the Danish museums' style of communication. This longitudinal study spans over a four-year period (2010–2013). The objective of the content study is to address general patterns of usage and mapping of the websites and social media platforms of all Danish state-owned and state-subsidised museums (119 main museums and 76 museum branches). The content study mainly addresses the actual usages element in the framework, but perspectives on the museums' online media competences can also be drawn.

5.4.3.1 A content analysis approach

I have chosen to name the method used in this PhD project as 'content study' to indicate that (qualitative) content analysis has been my main inspiration, but at the same time acknowledge the stringent criteria of Krippendorff's method, especially related to inter-rater reliability issues has not been fulfilled. Content analysis⁶⁵ has four identifiable characteristics: unobtrusive technique; handle unstructured matter as data; context sensitive and process texts that are significant, meaningful, informative and representational; and cope with large volumes of data (Krippendorff, 2012, pp. 45–48). These features have made the method attractive for researchers and have been widely used, for example, in Internet and media studies (see for example Bell, 2008; Herring, 2010; Kim & Kuljis, 2010;

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⁶⁵ Content analysis was first used as a scientific method in the 20th century (Herring, 2010, p. 234; Krippendorff, 2012, p. 11; Schreier, 2012, p. 9) where it has been defined as "[...] a basic systematic and reliable technique to infer generalizations of representations and meanings from texts to the context of their use" (Graneheim & Lundman, 2004, p. 105; Krippendorff, 2012, p. 24). Historically, there has been a clear-cut distinction between quantitative and qualitative content analysis, however within recent years this distinction has been questioned with the arguments that the line between quantitative and qualitative content analysis is artificial and all text reading is qualitative, even if the content is quantified (Krippendorff, 2012, p. 22; Schreier, 2012, p. 15).

Weare & Lin, 2000), but not always strictly adhering to Krippendorff's criteria (Herring, 2010; McMillan, 2000). ⁶⁶

The data was collected in four phases. The first phase (May–June 2010) was scheduled in order to gain information about the online museum landscape in preparation of the *National Museum Web User Survey*. The results of this study were not publicly published prior to the web user survey, but the results were presented and discussed informally at a preparation meeting for the user survey with representatives of the Danish Agency of Culture and TNS Gallup. ⁶⁷ In the first two phases, museum websites and social media presence were examined, whereas in the third and fourth phase, only the museums' social media presences were studied. Because the results from 2010 and 2011 did not reveal any major changes, the examination of museum websites in 2012 and 2013 was discontinued as it was time consuming. Retrospectively, it would have been advisable to examine the websites in 2010 and again in 2013, because one year is a very short period to demonstrate observable developments on a general level.

5.4.4 Data collection

The data was collected by traversing all Danish museum websites of Danish state-owned and state-subsidised museums by using a pre-selected set of interactive features (Ha & James, 1998). These features were selected in order to examine Danish museums' actual usage of online media. As previously addressed, interactivity is often perceived as one of the determining factors of digital media. McMillan has argued that functional approaches to interactivity often lead to descriptive content analysis geared towards finding specific features that can be identified and categorised as interactive (2002, p. 165). The underlying notion is that more interactive features equal higher levels of interactivity. One of the main objectives of this content study is to outline and describe the field of online museum practices.

Other studies of e.g., newspaper or company websites (Ha & James, 1998; Larsson, 2012) suggest that the utilisation of interactive features on organisational or company websites are influenced by several internal and external factors including ownership, geographical location (region), length of web presence, and age and number of staff (Larsson, 2012, p. 199). With regard to museum literature, the utilisation of communication strategies and online media including social media have been

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⁶⁶ McMillan (2002) analysed 19 online studies for its content analysis, especially in relation to reliability and validity issues and found that many content analysis studies of online texts fail to comply with Krippendorff's guidelines (McMillan, 2000, p. 88). But also in relation to sampling, code categorisation, inter-rater reliability etc. many online content analysis studies lack the rigor (Herring, 2010, pp. 236–237).

⁶⁷ The results from 2010 were published in the conference paper "The Use of Social Media in the Danish Museum Landscape" at the Museums and the Web conference, 6-9 April 2011 in Philadelphia.

examined through categories, such as country, type of museum, annual budget, ownership, education and number of staff and number of onsite visitors (Bysted-Sandberg & Kjeldsen, 2008; Fletcher & Lee, 2012; López et al., 2010). Type of museum, main museum or museum branches, museum size by numbers of employees, geographical region, and numbers of both onsite and online visitors as independent variables were included in this study. The interactive features through which the Danish museum websites have been examined include the following categories:

- Online exhibitions (curated content)
- Videos
- Games
- Blogs
- Online shops
- Language (usage of Danish language or other languages)

Microsoft Office Excel was utilised to sort data. All museums (main museum and museum branches) are registered in the first left column followed by social media platforms and website categories. The data is collected based on the presence/absence structure: 0 signifies absence and 1 presence.

5.4.4.1 Online exhibitions

Werner Schweibenz' categorisation of museum websites (brochure museum, content museum, learning museum and virtual museum) presented in Section 2.5 have been used by numerous scholars, including Nørskov and Larsen (2009), who used the categories in 2009 to discuss how Danish museums approach online media and present their collections online. I do not apply the categories of Schweibenz to the Danish museum websites, but use them as discussion points. As the collections are the foundations of all museums, it is relevant to examine the presence of online exhibitions on the Danish museum websites. Online exhibition is understood as curated assemblages of museum objects or content for online presentation. Thus, in order to define online museum content as an online exhibition, content must be curated specifically for online presentation; this is of course in some instances a qualitative assessment.

5.4.4.2 Videos, podcasts and games

Videos, podcasts and games, were selected as all three features are largely popular among the museums, for instance at the large annual Museum and the Web conference. These interactive features were selected to find whether the international museum trends of using these features were part of Danish

museums' online use practices. As an example, at the Museums and the Web conferences, several workshops and papers have focused on 'podcasts' as a new dissemination strategy, and a large number of primarily larger North American museums have experimented with the format (see, f.i., Dickson, 2006; T. Johnson & Svenonius, 2006; Samis & Pau, 2006). In 2008, 'podcast' was introduced as a category on request from the conference community in the Best of the Web contest⁶⁸ as this particular format was considered suitable to distribute museum content out of the institution, into the realm of the user. With regard to videos and games, the number of papers on designing and implementing videos and games for educational and communication purposes has likewise been increasing.

5.4.4.3 Blogs

The (web)blog is not argued as a specific interactive feature, but blogs are regarded as a feature that provide the opportunity to the users to personally 'interact' with the museum through comments and questions on their own website. In the literature, the broadest and recurrent definition of (web)blogs is "[...] frequently modified Web pages in which dated entries are listed in reverse chronological sequence" (Herring, Scheidt, Wright, & Bonus, 2005, p. 142; Rettberg, 2008, p. 19). Others have described blogs as a type of online communication or genre, typically personal, that enables self-expression and peer-to-peer interaction through comments and links (Lomborg, 2009; Mortensen & Walker, 2002; Nardi, Schiano, Gumbrecht, & Swartz, 2004). Businesses and organisations have quickly adopted blogs as a way of entering into dialogue with their customers. Blogs became known to the broader Danish public in 2004-2005 with the launch of the Blogger-application. It has taken Danish museums, on the other hand, a little longer to adopt the blog format.

Scholars argue that blogs are an early form of social media. However, Danish museums use blogs as an integrated interactive feature on their websites often using the same communication style and format of the website, but with the possibility of making comments to the blog posts. This study does not argue against considering blogs as social media, but it makes a distinction between online practices of both museums and their users on the museums' home turf (their websites) and external social media platforms, where the online practices are conditioned by the affordances of the platform.

⁶⁸ Best of the Web is an annual award given to digital museum initiatives and projects at the Museums and the Web conference

5.4.4.4 Language

Language is not considered as an interactive feature from an interactivity perspective; conversely, it has been selected as a feature in order to investigate, whom museums expect to reach through their online presence. Since Denmark is such a small country one might assume that it would be of interest to Danish museums to reach out to international users besides the Danish users through websites and social media. Therefore, another aim was to address who the intended users were (from the museums' perspective) through an examination of the language(s) used on their websites.

5.4.4.5 Social media

The social media profiles of Danish museums were examined by traversing five different social media platforms selected based on the popularity by both museums and users, and recording the presence or absence of each museum in them. The study of social media use in Danish museums includes external social media sites:

- Facebook
- YouTube
- Flickr
- Twitter
- Foursquare

Facebook and YouTube were selected due to their popularity in Denmark. Of all social network sites, Facebook's penetration is the highest. According to Denmark Statistics, Facebook is the most popular among social media in Denmark. In 2010, 51% of Danes (16-74 age groups) had a Facebook account. In comparison, 8% had a LinkedIn account; 4%, Myspace account; and 3%, Twitter account (Statistics Denmark, 2011b, p. 26). Flickr is selected to be part of the study as the site has been widely used by large museums, such as the Brooklyn Museums (Caruth & Bernstein, 2007) and the Flickr Commons project (Oates, 2008). From a Danish context, Twitter and Foursquare are still used by a marginal percentage of users compared to Facebook and YouTube; regardless, this study has examined the Danish museums adoption of these social media sites in their online communication, as this can be an indicative of the Danish museums' ability to notice emerging trends in online communication.

5.4.5 Web questionnaire (Heritage Agency of Denmark)

Data from the *National Museum Web User Survey* formed part of the analysis on the museum user perspective of the thesis addressing research question 4 and its relating sub-questions. The

questionnaire contained both demographic questions and questions related to the users' museum experiences (onsite), their online museum experiences, and their attitudes towards the Danish museums' online presence. The data contextualised the museum users and addressed all four elements of the framework of this study.

The national web museum user survey was conducted by TNS Gallup for the former Heritage Agency of Denmark. As part of the cooperation between the Heritage Agency of Denmark and the IT University of Copenhagen, I partly participated in the planning and execution of the survey which was completed and published in October 2010 (Moos & Brændholt, 2010a). The survey was the first wide-scale study of the museums' web users in Denmark. It was initiated by the Danish Heritage Agency of Denmark as part of the Ministry of Culture's *National Educational Plan* in order to improve the quality of the museums' online communication (Moos & Brændholt, 2010a, p. 7). I took part in the development and qualification of the questions and received all SPSS (Statistical Package for Social Sciences) files. The web questionnaire was sent out to a representative sample of the Danish population, and the overall aim was to collect knowledge about the Danish museums' web users, and their museum usage – online and offline. The questionnaire was sent out to 3.800 individuals between May 2010 and June 2010, 2.121 answered the questionnaire (response rate was 56%) (Moos & Brændholt, 2010a, pp. 7–8). The questionnaire consisted of 20 closed multiple-choice questions - categorical (e.g., educational level and geographical residency), numerical (e.g., number of times you visited a museum website) and ordinal (e.g., for which purposes the users use the Danish museum websites).

The statistical analysis that TNS Gallup carried out was solely descriptive, and their analysis was controlled or restrained by Gallup's segmentation model GallupKompas as well as four pre-defined user types: 1) offline museum-goers and online museum users, 2) offline museum-goers, 3) online museum users and 4) non-museum-goers or non-museum users. In addition, TNS Gallup discarded the third category of their analysis, 'online museum users', from the analysis, because this group only consisted of 3% (54) of the total population of 2.121^{69} . The overall purpose of revisiting the data of the questionnaire was to include the third category online museum users and analyse the data more thoroughly and get an understanding of online users that use the museums' websites in particular. Thus, only respondents who were museum website users 70 were selected for analysis in this particular study that excluded 64% of the respondents. Thus, the analysis was conducted for a subset of the entire data set and consisted of 36% (n = 766) of the respondents.

⁶⁹ In the report it is stated that the number of users in this group is 52, however in my data analysis the number of users who never visit a physical museum but notify they use the museum websites is 54. I have not been able to clarify the discrepancy. ⁷⁰ The question asked was "Have you visited a museum website for the past year (2010)?"

5.4.6 Focus group interviews (Heritage Agency of Denmark)

The qualitative part of the *National Museum Web User Survey* consisted of four focus group interviews (two in Copenhagen and two in Kolding, Jutland). The participants were sampled from GallupKompas, and there were 27 respondents between 24 and 79 years. 15 were male and 12 were female (see Appendix 4 for an overview of the respondents). The focus group interviews were conducted in July 2010 after the completion of the web questionnaire. As with the questionnaire, I participated in the development of the interview guide and observed the conduction of the four focus group interviews. The notes taken during the interviews were later added to the transcriptions of TNS Gallup.

Focus group interviews are regarded as a good way of producing data through social interaction on a groups interpretations, interactions, experiences and norms (of and with media) (Halkier, 2002, p. 15; K. B. Jensen, 2012c, p. 271; Schrøder et al., 2003, p. 154); hence, the objective was to qualitatively identify the users' attitudes and experiences towards the online museum communication (Moos & Brændholt, 2010a, p. 7). In the focus group interviews, the users not only discussed their experiences with museum websites and social media profiles, but also their experiences with onsite museum visits and what role museums play or do not play in their life. Through these focus group interviews, the users' perceptions of museums and online media were discussed and this has formed my perception on the museum users' reception in relation to the elements, such as motivations, online media competences and museum attitudes (addressing research question 4.2 and 4.3). Naturally, the users' opinions and meaning ascriptions in the focus group interviews do not appear as one collective voice; therefore, the similarities, ambiguities, and differences between the users are presented.

Because the focus group interviews were conducted by TNS Gallup, I did not partake in any of the considerations regarding sampling, number of participants and place for the interviews, which Bente Halkier emphasises as important factors in relation to focus group interviews (Halkier, 2002, Chapter 2). Although I participated in the development of the interview guide and was able to give comments and input between the interviews, I believe the point of departure for the discussions were focused too much on the physical museum visit which to a certain extent also frames the online museum practices in relation to the physical museum visit.

5.4.7 Facebook Insights study

Where the web questionnaire focused on the website users of Danish museums, the Facebook Insights study focused on the Facebook users of Danish museums. Due to the increasing number of Danish museums with social media profiles, it is relevant to examine specifically the museums' social media

users. Facebook as a platform was selected because of the high penetration of Facebook among the Danish population and due to Facebook Insights. Facebook Insights is a statistical application to Facebook pages with user demographics (gender, age, city, and country) and among others statistics of how users participate (share content) and engage (click on content).

The specific aims of this study were twofold. First, I wanted to examine the characteristics of Danish museums' social media users and compare them to museum website users. Secondly, I wanted to examine the Facebook activities and participation of the users. Thus, this method contributes mainly to the elements related to the museum users. The study comprised Facebook Insights data from 63 museums, which contained a Facebook fan page in December 2011 – January 2012. In order to collect this data, a request to all Danish museums with a Facebook page was sent out. Prior to that, selected museums were enquired to test the museums' attitudes towards sharing statistics. The selected museums were generally larger museums, either cultural heritage museums or art museums, and located in the larger cities of Denmark. All museums responded positively to the pilot request, and as a result, I went forward with a formal request.

Emails were sent out to 84 museums in December 2011 to all Danish state-owned and state-subsidised museums, main museums and its museum branches, with a Facebook page that had more than 30 fans.⁷¹ The emails were sent out individually to each museum⁷² and contained a short introduction to the study and the general PhD project. Attached to the emails was a longer description of both study and PhD project (see Appendix 5).

A reminder e-mail was sent out in December 2011 to the museums, which had responded positively but did not submit the data (see Appendix 6). In January 2012, emails were sent to the remaining 33 museums, which had not responded either to the first e-mail or to the remainder e-mail.⁷³

During the pilot phase, none of the museums had any comments with regard to online statistics in general or Facebook Insights in particular. However, after the first round of emails, it was evident that many museums had little to none experience with Facebook Insights. Consequently, a short guide in Danish about how to open Facebook Insights and export the statistics to excel was created. This guide was sent out with the second round of emails and to museums that responded positively and were willing to participate but did not know-how to.

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⁷¹ Around 81 emails were sent out since several main museums have more than one Facebook page.

⁷² To nine larger museums with several local museums sections only one email was sent out.

⁷³ Retrospectively, I should have posted the enquiry to networks of Danish museum professionals, for instance the formidlingsnet.dk (online forum for discussions and experience and knowledge exchange for museum dissemination and communication). However, due to time constraints, the option of having a personal communication and dialogue with each museum was preferred. Another method to increase the responses would have been to contact each museum personally by phone. Again it was considered and again the option was discarded due to scarcity of time.

5.4.7.1 63 museums and 96.116 users

In total, 62% (63) of the museums responded positively, 4% (4) of the museums gave a negative response, 25% (25) of the museums did not respond to the inquiries, and 9% (9) museums had Facebook pages with less than 30 friends. Thus, the response rate was 63%, which is considered acceptable considering that all correspondence was conducted via e-mail. The museums had to perform a task in order to be part of the study and that the Facebook statistics for some museums were considered as a business secret that should not be distributed beyond the organisation.

The majority of museums that responded positively to the enquiry were cultural heritage museums. This was to be expected, as there are many cultural heritage museums that are online on Facebook in Denmark. Around 62% (39) of the cultural heritage museums and 33% (21) of art museums and 3% (2) of natural history museums and 2% (1) of special museums were surveyed. Overall, the distribution of museum types and geographical location of museums in this study corresponds with the distribution of museum types and geographical location of museums of Danish museums with a Facebook fan page in general. Neither distributions of museum types nor distributions of geographical locations correspond completely with distributions of all Danish state-owned and state-subsidised museums (regardless of Facebook presence). The four museums that declined in the Facebook Insights study specified that they did not consider their Facebook page to reflect their actual users, because they had recently moved their Facebook group into a page or had recently created a Facebook fan page. The numbers of non-participating museums are very alike the numbers of participating museums: 62% (24) were cultural heritage museums; 30% (11), art museums; and 8% (3), natural history museums.

Data included 96.116 Facebook users and were analysed based on demographic categories, engagement and sharing metrics, and page consumption in the Facebook data (see Appendix 7). The demographic categories selected for data analysis in this particular study were gender, age and country⁷⁴. Facebook defines engagement as page click, whereas sharing in Facebook is defined as shared stories or talking about. Shared stories include the act of liking content on the page, wall postings, commenting, sharing page content, answering questions, responding to an event invitation, tagging or checking-in. Page consumption is categorised as users who clicked on Facebook content: link, video, photo, or other clicks (Facebook, n.d.).⁷⁵

In order to have a fixed reference point December 2011 was chosen for all metrics (demographic) in the data analysis, whereas user engagement, sharing and page consumption were an

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⁷⁴ Demographic data from Facebook Insights are information provided by the users in their Facebook profile.

⁷⁵ The definitions of engagement and participation made by Facebook are arguable as they conflate the concepts to merely interaction. For further discussion on participation see Chapter 2.

aggregation of 28 days. As many museums had relatively low user engagement, sharing and page consumption scores from day to day activities there could be large variations; thus I considered it more suitable to aggregate the numbers as the December 2011 was selected arbitrarily.

5.4.8 Semi-structured interviews

Six qualitative interviews with museum users in May-June 2012 were conducted. The main purpose of the qualitative interviews was to gain an in-depth understanding of museum users' usage, perception and consumption of Danish museum websites and social media museum profiles. The semi-structured interviews with online Danish museum users were considered to complement the questionnaire, focus group interviews and Facebook Insight study. All these elements focus on the users, their usages and perceptions, but from different perspectives. As all focus group interviews had the physical museum visit as its point of departure, the main concern of the semi-structured interviews was to explore the online museum practices (addressing research question 4.2). The interviews were conducted towards the end of project period, and the other data both qualitative and quantitative methods formed the construction of the interview guides in relation to themes and questions (see Appendix 9).

This part of the data collection was influenced by the reception research perspective, which takes its point of departure in the premise that neither semiotic and textual analysis, nor quantitative surveys are able to capture the complexity of the media experience. The prescribed method in this literature was qualitative interviews in which the respondents can verbalise his or her experience of the media content, and the researcher can explore the richness of the media experience in more detail (Schrøder et al., 2003, p. 122).

In the semi-structured interview, the interview was started by asking questions leading to a conversation and utilise the interview guide to achieve a more open and flexible interview. This type of interviews gives opportunity to a more open and free conversation. (Kaijser & Öhlander, 1999, p. 63)

The purpose of the interview guide is to keep focus in the interview and make sure that all relevant themes and problem and areas were discussed. According to Steinar Kvale, conversations are dialogues in which two equals explore, discuss and problematise questions and themes (Kvale, 1996, p. 20; 37). In this study, the semi-structured approach was chosen as interview method, as it allows for the exploration of perceptions and opinions of the respondents in a structured yet free conversation, which takes the situation in consideration.

5.4.8.1 Recruitment and sampling

In the recruitment phase, any researcher needs to ask two questions: "how many interview subjects are needed" or "how many interviews do I have to do?" In most sampling strategies of qualitative studies, it is recommended to operationalise distinct sampling procedures in which the overall aim of the interview study and resources are taken into consideration (K. B. Jensen, 2012b, p. 268; Kvale, 1996, pp. 103–104).

I have used a combination of different sampling strategies to recruit respondents, snowball sampling and maximum variation sampling. In snowball sampling, the respondents selected for inclusion in the sample were recruited via our own network; one contact recruits future participants from among their acquaintances. Thus, the sample group appears to grow like a rolling snowball. The maximum variation sampling aims to cover the widest range of prefixed criteria possible in order to ensure the diversity of respondents (K. B. Jensen, 2012b, pp. 269–270). The disadvantage of both snowball sampling and maximum variation sample was their inherent bias, as these sampling methods were not randomised, hence unlikely to be representative of the population under study. Thus, it is not possible to infer generalisations from either snowball sample or maximum variation sample. However, the purpose of these interviews was not to make generalisations based on these interviews, but rather to explore online museum users' perceptions, ideas and motivations.

Participants for the interviews were recruited in two ways: own network among their acquaintances and Facebook. An e-mail request was sent out via my own network asking to help recruiting participants for my PhD project among their acquaintances. From this request, eight possible respondents responded, out of which four were selected. The criteria for selection among the possible respondents were age and gender from the maximum variation principle (K. B. Jensen, 2012c, p. 269). On the Facebook, I searched through the Danish museums' pages and selected 30 users ranging from active museum Facebook users (who had written a posting on a museum Facebook wall or made a comment to a posting) to passive museum Facebook users (who had liked a museum). I sent out an e-email to the selected users through Facebook, and six users responded, from which I interviewed three. Table 3 presents six users, their occupation and city.

Respondent no.	Age	Gender	Occupation	City
1	49	Female	Music teacher	Copenhagen
2	70	Male	Retired journalist	Allerød
3	29	Male	Consultant	Copenhagen
4	38	Female	Student	Copenhagen
5	78	Female	Retired physiotherapist	Roskilde
6	34	Female	Personal assistant	Copenhagen

Table 3: Interview respondents

The interview guide provided a complete overview to help respondents (see Appendix 9). In order to obtain informed consent, participants agreed to take part in the study on the basis of information given to them by the researcher (Kvale, 1996, p. 112; Schrøder et al., 2003, p. 247). The interview started with a short introduction to the PhD project to give the respondents some background about the interview⁷⁶, followed by a briefing of the premises of the interview and interview situation, i.e., the interview will be a part of the data material of the thesis; all respondents will be anonymous, the interview will be recorded, etc. Furthermore, this introduction was presented to the respondents alongside the information about the interview, for instance there are no correct or in correct answers, which made the participants as comfortable as possible in the interview situation.

After the introduction, the respondents introduced themselves with name, age, occupation, work, etc. and next asked to describe their usage of Danish museum websites (introducing questions). The purpose was twofold. First, to frame the interview by starting out with a context and experience-based questions attempting to make the respondents feel as comfortable in the situation as possible. Secondly, the informants' initial descriptions of their usage of Danish museum websites functioned as an entry point for the remaining interview. The remainder of the interview focused on 1) social media and museums, 2) offline museum visits and 3) general Internet consumption using different questioning techniques to pursue, probe and specify (see Kvale, 1996, pp. 133–135). The different themes were not addressed in a sequential order but were approached in the order that felt most natural in each interview situation. Although online museum engagement, participation, perception, etc. were key concepts in the interviews, none of the questions was formulated specifically to approach these concepts; instead the respondents were asked to describe their usage, behaviour and experiences.

⁷⁶ A written presentation about the PhD project was sent out to each informant before the interview.

5.4.8.2 Reliability and validity

In most qualitative research methods, the understanding of reliability and validity are related to their process and contextual nature; thus it has been framed as "trustworthiness, credibility, dependability, transferability and conformability" (K. B. Jensen, 2012b, p. 295) which is very different from the quantitative understanding. In accordance with Kvale (1996), the reliability and validity of semi-structured interviews are considered as the "[...]quality of craftsmanship of research and on communicative and pragmatic forms of validation" (1996, p. 229), and as a result, considerations about reliability and validity should be present throughout all stages of the research process.

In order to address reliability and validity in the semi-structured interviews, the interview guide was tested and adjusted prior to the interviews. Each interview was digitally audio-recorded and later transcribed. In addition to the recordings, notes were taken during the interview to capture the situation and context of each interview as different circumstances – noise, room temperature, etc. can have an effect on the interview (Halkier, 2002, p. 41ff; Schrøder et al., 2003, p. 163). The notes were outlined at the beginning of each transcription. All transcripts were provided with details of the respondents, namely name (alias), age, occupation, date of interview, etc. (Appendix 10-15). All interviews were conducted in Danish and transcribed to English word-to-word. All quotes from the interviews included in this thesis have been translated from Danish into English after the data analysis.

5.4.9 Contextual framing

Contextual framing is not regarded as a data collection method; however, in addition to the various above-mentioned methods, the Danish museums were followed and observed on different social media platforms throughout the entire project period. I do not by any means consider this as participant observations; nonetheless I have liked all Danish state-owned and state-subsidised museums on Facebook and followed them on Twitter, YouTube, Flickr etc., i.e., a great variety of the museums' social media ventures for more than four years. This has provided me with knowledge about Danish museums' social media activities, which implicitly have informed the analysis and explicitly the sampling of the respondents for the semi-structured interviews. At the end of 2011, prior to conducting the Facebook Insights study, all Facebook interaction on all the Danish museums' Facebook walls was collected. Even though they have not been used explicitly as data material in the analyses, they do offer context for the Danish museums and their users' social interaction and communication on Facebook.

Additionally in this project, the Danish Museum Act, governmental reports from the Ministry of Culture and Danish Agency for Culture (Center for Cultural and Experience Economy & Danish Ministry of Culture, 2012; Danish Ministry of Culture, 2006, 2008, 2009a, 2009b, 2011),

national statistics on cultural attendances (Bille, Fridberg, Storgaard, & Wulff, 2005; Epinion & Pluss Leadership, 2012), and IT practices and competences (Statistics Denmark, 2010, 2011b, 2012a, 2012b, 2013) were included. The inclusion of the Danish Museum Act and governmental reports does not lead to a policy study of developments and changes in Danish cultural policies. However, these documents are important as they constitute and form the situational context of both museums and users. The cultural attendance and IT statistics contextualise the museum users' cultural habits and IT-adoption and usages.

5.5 Data analysis

According to Greene (2007), it is important to consider the processes of data coding and data analysis in mixed-methods research. Greene presents seven key principles that should guide the mixed-methods data analyses:

- 1. Decisions about analytical strategies and procedures in mixed-methods study are connected to, but not dictated by prior methodological decisions
- 2. Mixed-methods analysis for component designs proceeds more or less independently for each method or sets of methods, following the procedures of each methodological tradition
- 3. Interactive mixed-methods analyses are highly iterative and are best undertaken with a spirit of adventure
- 4. Not every creative idea for interactive analyses will generate sensible or meaningful results
- 5. Interactive analyses should include planned stopping points at which the inquirer intentionally looks for ways in which one analysis could inform another
- 6. Convergence, consistency, and corroboration are overrated in social inquiry
- 7. Challenges to data quality and integrity can arise (Greene, 2007, pp. 143–144)

From my perspective, all seven key points should also be addressed in non-mixed-methods enquiries, at least for qualitative research. However, there are challenges when conducting mixed-methods research that integrates qualitative and quantitative methods, which have very different ontological and epistemological grounds. Although a mixed-method approach is used, the coding of the data has not been mixed but each data set coded individually. Additionally, no attempt has been made to quantify the qualitative data; however, in the (qualitative) content study, the interactive features employed are selected qualitatively. On the other hand, what can be considered mixed are the different coding methods used for qualitative coding, as well as the actual data analysis in which the findings from each method are interpreted and integrated into the two analyses concerning the museum perspective and the user perspective.

5.5.1 Qualitative data coding

The qualitative data (participant observations, focus group interviews and semi-structured interviews) has been managed and coded as outlined by Saldaña (2009). Coding of the data material has been approached as a cyclical process of several cycles starting by approaching notes and transcripts for each method individually. All coding has been done manually using Microsoft Word. In the first coding process, the data material was categorised into categories (without using a list of codes). At this stage, the categories were not arranged into themes. This happened in the second cycle. Although the data was collected using three different methods, the data was coded impartially that included all notes and transcripts. I have used an amalgam of attribute⁷⁷, descriptive⁷⁸ and in vivo coding⁷⁹ (Saldaña, 2009).

Categories from the participant observations, and later themes that addressed the museums' expectations, aims and motivations behind using online media, were related to the categories and themes of the semi-structured interviews that related to the museum users' expectations from the museums and their motivations for approaching the museums online. This was done as part of addressing similarities and differences between the Danish museums and their users.

In the second coding cycle, the categories developed from the first cycle through the individual interviews were gathered and merged into themes. In this phase, some of the categories were omitted due to redundancy issues or because they were considered marginal for the overall research interest. At this stage, I employed focused coding⁸⁰ based on thematic or conceptual similarities (Saldaña, 2009).

5.5.2 Quantitative data analysis

In relation to the quantitative data analyses of the content study, web questionnaire, and Facebook Insights study, a range of predominantly descriptive statistical tests were conducted. The data from the content study and web questionnaire was analysed using SPSS, whereas the Facebook Insights data was handled in Microsoft Excel, as this particular analysis was entirely descriptive; counts, frequencies and cross-tabulations have been used as these techniques provide an overview of the data. According to Krippendorff, counting is the most common technique in content analysis (Krippendorff, 2012, p. 189). Since very little research has been done on the actual online media usages by Danish museums, the

⁷⁷ Attribute coding is generally used in the beginning, it implies noting basic descriptive information about the participants, their characteristics etc. (Saldaña, 2009, p. 55).

⁷⁸ In descriptive coding (or topic coding), the researcher summarises in a word (usually a noun) or short phrase the basic topic of a passage of qualitative data (Saldaña, 2009, p. 70).

⁷⁹ In in vivo coding, a code refers to a word or short phrase from the actual data material. Thus, in in vivo coding it is the participants' own voices that are reflected (Saldaña, 2009, p. 74).

The aim of 'focused coding' in the second cycle is to develop categories (Saldaña, 2009, p. 155).

results of counting and frequencies were considered relevant and a research contribution in itself. Likewise, in regards to the web questionnaire and the Facebook Insight study, descriptive statistics were used to present the demographic characteristics of the museum website users and the museum Facebook users.

Other statistical tests which have been performed are bivariate correlations using Spearman's correlation coefficient (r_s) and Fisher's exact test. Spearman's correlation and Fisher's exact test have only been performed on the content study in which I surveyed the entire Danish museum population. Fisher's exact test has been used to test statistical significance of the deviation from a null hypothesis, rather than relying on an approximation as with many other statistical tests, e.g., to test whether there was a significant relationship between the museum size and the use of blogs on the museum websites. Although, in practice, it is employed when sample sizes are small (2x2), it is valid for all sample sizes ($m \times n$) (Field, 2009, p. 690). Spearman's correlation coefficient is a non-parametric statistic for ordinal data (e.g. museum opening hours, number of visitors etc.) and thus, can be used for non-parametric variables (Field, 2009, pp. 179–180). Both Spearman's correlation coefficient and Fisher's exact test determine the significant correlations between two variables but cannot infer causation. A probability level of (p) less than 0.05 was considered statistically significant, and Cramer's V was used as measure of strength of the relationships (effect size) (Kotrlik & Williams, 2003, p. 5).

5.6 Reliability and validity

One of the (many) challenges of mixed-methods research has to do with reliability and validity. The understanding of reality and the knowledge in qualitative and quantitative research diverge, so do the understanding of reliability and validity. As discussed at the beginning of the chapter, combining methods has been praised within social science as a form of triangulation of methods to strengthen the validity.

In the usage of various methods for triangulation purposes, reliability and validity issues can be dealt with separately in accordance with the reliability and validity procedures of each individual method. However, in mixed-methods approach the mixing takes place in all the research phases and not just in the last stage as in the case of method-triangulation. Other researchers have addressed the concern of validity too (Onwuegbuzie & Johnson, 2006). In order to address validity issues of mixed-methods, Onwuegbuzie and Johnson had introduced legitimation as a replacement for validity, which they consider as a contentious concept. They present nine types of legitimation frameworks in mixed-methods research, but still emphasise that this needs to be a continuous discussion. One of the nine types is multiple validities legitimation. This type of legitimation "[...] refers to the extent to which all relevant research strategies are utilized and the research can be considered high on the multiple

relevant 'validities'" (Onwuegbuzie & Johnson, 2006, p. 59). According to Onwuegbuzie and Johnson, this type is pertinent to every mixed-methods study. In relation to the present project, the reliability and validity for each method have been addressed separately (as with the actual data coding and analysis).

I have had an overall understanding of reliability and validity as 'the quality of craftsmanship' for both participant observations and the semi-structured interviews. In relation to the focus group interviews, it was more problematic to address reliability and validity throughout the entire process, as I did not conduct them myself, but by TNS Gallup. However, as I was part of framing the questions, I observed all four interviews, and had the chance to talk to the interviewer before, during and after the interviews; I was able to access the reliability and validity of the interviews. The focus group interviews were conducted in 2010 and the semi-structured interviews in 2012. The two year interval impose a certain bias relating to comparability as the general online media development and the museums' appropriation of online media were not the same in 2012, as it was in 2010. However, this can also be used to illustrate exactly this development.

Regarding the content study; I have singlehandedly coded the text in this content study, I have not used inter-coder (also referred to as inter-rater) reliability measurements. Instead, I have attempted to make the research process as transparent as possible in order to secure reliability such that it can be replicated. The content study is a total study of all Danish state-owned and state-subsidise museums, thus in that regard there should be no problematic issues related to sampling and representativeness. The web questionnaire, on the other hand, is different. All respondents in the survey were sampled through TNS Gallup's Internet panel Gallup-Forum, thus not a representative sample of the entire Danish population.

As indicated in the introduction, the Danish Agency of Culture co-financed this PhD project. Thus, this project was done partly *for* the Danish Agency of Culture to help collect and produce new knowledge about Danish museum and users' online practices. This collaboration has in many ways contributed to the project and data collection, as I have got access to unofficial data (such as questionnaire data and transcripts). Conversely, the collaboration also implies an obvious bias towards the agency and its activities. To address this, the Danish Agency of Culture has not on any level been involved in any of the theoretical or methodological research decisions or discussions, and I have reflected upon this through all the stages of this research project.

All data, i.e., participant observation notes, content study, Facebook Insights, Facebook interactions, transcriptions of the semi-structured interviews on the attached disc were analysed. Data owned by the Danish Agency for Culture, *Danske museer i tal*, the web questionnaire and the focus group transcripts will not be made publicly available.

6 Online Practices of Danish Museums

In this chapter, I answer research question three: "How do Danish museums appropriate online media?" and its four relating sub-questions:

- 3.1 What characterise Danish museums?
- 3.2 What are the Danish museums' online media competences, motivations and attitudes towards online media?
- 3.3 What kind of interactive features do Danish museums present on their websites?
- 3.4 How and to what extent do Danish museums use social media?

Using the practice framework presented in Chapter 4, this study examines the empirical results from three sources: (1) participant observations, (2) the content study of museum websites and social media profiles', and (3) e-mail responses from the Danish museums in relation to collecting Facebook Insight data. This chapter contributes to the Danish field of museum studies by examining how Danish museums use interactive features and their presence on a variety of social media platforms (as presented in Section 5.4.4, Chapter 5).

Section 6.1 presents an overview of the Danish state-owned and state-subsidised museums including distributions of museum types, geographical location, museum size and number of physical and online (website) visitors. Data was extracted from *Danske museer i tal* (Landert & Kjærside, 2011, 2013) as well as the state-owned museums' annual reports (see Section 5.4.2, Chapter 5). This section forms the foundation for the following analysis in which I address the online practices of Danish museums.

Section 6.2 individually addresses each element of the online museum practice framework, beginning with online media competences. The subsection mainly draws on findings from the content study and the participant observations, which is discussed with statistics from the report *Danske museer i tal* as well as results from other Danish studies (Bysted-Sandberg & Kjeldsen, 2008; Holdgaard & Simonsen, 2011; Kjeldsen, 2013). The next subsection discusses the Danish museums' attitudes towards the dissemination obligations, as well as the museums' attitudes towards online media. The third subsection addresses the museums' online media motivations. The fourth subsection, discusses the element actual usages of online media based on the results of the content study.

Section 6.3 recollects the findings of the entire chapter and discusses Danish museums' appropriation of online media.

6.1 Characteristics of the Danish Museums

Of the 195 museums included in this research project (see Table 1, Section 2.2, Chapter 2 and Appendix 1 for a list of museums), 74% are cultural heritage museums; 20%, art museums; 3%, natural history museums; and 5%, special museums. Most of the museum branches are also cultural heritage museums (87%), whereas only 7% of the museum branches are natural history museums; art museums, 5% and special museums, 1% (Table 4). Of the major museums, 64% are cultural heritage museums; 29%, art museums; and 3% and 5%, natural history museums and special museums, respectively.

	Cultural heritage	Art	Natural history	Special	Total
Maior musaum	64%	29%	3%	5%	100%
Major museum	(76)	(34)	(3)	(6)	(119)
M 1 1.	87%	5%	7%	1%	100%
Museum branch	(66)	(4)	(5)	(1)	(76)
Total	740/ (142)	200/ (29)	4%	4%	100%
Total	74% (142)	20% (38)	(8)	(7)	(195)

Table 4: Danish museums categorised by type⁸¹ (n = 195) (Table 2, Appendix 17)

There are five regions in Denmark: Capital Region of Denmark, Central Denmark Region, North Denmark Region, Region Zealand, and Region of Southern Denmark (Figure 7).⁸²

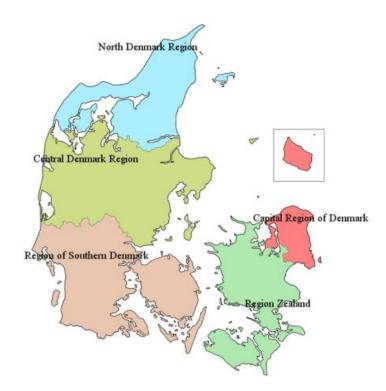


Figure 7: Regions in Denmark

⁸¹ The categorisation of Danish museums into four different museum types is aligned with the categorisation followed by the Danish Agency for Culture.

⁸² The regions were established as part of the 2007 Danish Municipal Reform. The five regions replace the former counties.

As shown in Table 5, the Region of Southern Denmark has the most museums (28%), whereas North Denmark Region the least. The majority of Danish art museums are located in the capital area (24%), and the regions with the least museums have the least art museums and cultural heritage museums. The North Denmark Region and Region Zealand have no natural history museums, and North Denmark Region has no special museums either. The region with the most museums (Region of Southern) also has the highest percentage of cultural heritage museums.

Museum type	Capital Region of Denmark	Central Denmark Region	North Denmark Region	Region Zealand	Region of Southern Denmark	Total (museum type)
Cultural heritage	21% (29)	24% (34)	13% (19)	14% (20)	28% (40)	100% (142)
Art	34% (13)	21% (8)	10% (4)	11% (4)	24% (9)	100% (38)
Natural heritage	50% (4)	12% (1)	0	0	38% (3)	100% (8)
Special	14% (1)	29% (2)	0	14% (1)	43% (3)	100% (7)
Total (region)	24% (47)	23% (45)	12% (23)	13% (25)	28% (55)	100% (195)

Table 5: Percentage of Danish museum types across region (n =195) (Table 4, Appendix 17)

Danish museums (major museums) are either small or middle size museums, that is, have between four and 20 permanent employees (Table 6). Thirty-four percent of the major museums are smaller museums with four to ten employees, and 29% are middle size museums with 11-20 employees. Natural heritage and special major museums are in general larger museums ranging from middle size to very large museums whereas art museums generally are smaller museums (47%). Nineteen percent of Danish major museums are very large, thus have more than 35 employees. As discussed in Chapter 2, there have been a number of museum mergers within the last decade causing the number of larger size museums to increase. In 2011, the Danish Ministry of Culture published a report on the future perspective of the Danish museum landscape based on recommendations from a working group appointed by the Ministry. The report has recommended the museum merger processes to produce sustainable museums that develop and professionalise museum functions and objectives (Danish Ministry of Culture, 2011, pp. 23–24). This development is expected to continue and have an effect on the museum organisations and their professionalisation of the dissemination and communication activities, hence also the museums' online practices in the future.

⁸³ The working group consisted of the museum directors of the National Gallery of Denmark, the National Museum of Denmark, director of the former Heritage Agency of Denmark, and head of department from the Danish Ministry of Culture.

Museum type	Very small (<3 employees)	Smaller 4-10 employees	Middle (11-20 employees)	Large (21-34 employees)	Very large (> 35 employees)	Total
Cultural heritage	7% (5)	32% (24)	29% (22)	15% (11)	18% (14)	100% (76)
Art	0	47% (16)	24% (8)	15% (5)	5% (6)	100% (34)
Natural heritage	0	0	33% (1)	33% (1)	33% (1)	100% (3)
Special	0	0	50% (3)	17% (1)	33% (2)	100% (6)
Major museum	4% (5)	34% (40)	29% (34)	14% (17)	19% (23)	100% (119)

Table 6: Danish major museums by size (n =119) (Table 3, Appendix 17)

Forty-four percent of the very large museums are located in the Capital Region, whereas only 4% of the very large museums are in the North Denmark Region. The latter region has the most very small museums (60%). Smaller museums are primarily located in the Capital Region (28%) or the Region of Southern Denmark (30%) and the middle size museums in the Central Denmark Region (35%) (Table 4, Appendix 17).

The opening hours of the museums range between 513 and 3.669 hours per year⁸⁴. Fourteen percent have opened less than 1.000 hours per year, 78% have 1.000–2.499 hours, and 5% have more than 2.500 hours (Table 5, Appendix 17). In general, the (major) museums with fewer employees have shorter opening hours (Table 6, Appendix 17)⁸⁵, which means that the more hours a museum has opened the more visitors it has.⁸⁶

In 2009, the number of onsite museum visitors ranged from 1.001 to 917.396 per museum per year. According to the report *Danske museer i tal* (2011), special museums have more physical visitors than any of the other museum types; this is presumably because this museum type usually includes museums that have merged, and therefore consist of several onsite locations. Although the percentage of natural history museums is limited compared with cultural heritage and art museums (Table 4), these museums had the most visitors in 2009 (Landert & Kjærside, 2011, p. 14). ⁸⁷ In *Danske museer i tal* (2011), the authors state there is a relation between the museums' revenue and the number of physical visitors: the larger the revenue, the more the visitors. It is not clear whether the museum visitors (by paying entrance fees) are a contributing factor to the revenue or not (Landert & Kjærside, 2011, p. 4,14). My analysis shows that cultural heritage museums have the most visitors followed by art

⁸⁴ Note that the data is from 2009 from *Danske museer i tal* (Landert & Kjærside, 2011).

As an exception, two of the museums with the most opening hours (3.500-3.999 per year) are small cultural heritage museums with four to ten employees located out of the capital area.

⁸⁶ Spearman's rho revealed a statistically significant relationship between the museum opening hours and physical visitors in 2009 (r_s = .632, p < .001) (Table 2, Appendix 20). Squaring the correlation coefficients indicated that 39,9% of the variance of either variable is shared with the other variable.

⁸⁷ This pattern has changed since then, and numbers from 2011 show that it is now art museums that have most visitors (Landert & Kjærside, 2013, p. 11). Although the number of visitors vary in each museum due to activities that attract visitors, the data from 2009 is still relevant as it is used as a relative parameter to describe the popularity of each museum.

museums (Table 7, Appendix 17). This information emerges from both *Danske museer i tal* (2011) and Statistics Denmark (Statistics Denmark, 2011a) as *Danske museer i tal* excludes state-owned museums (such as the National Gallery of Denmark, the National Museum of Denmark and the National History Museum of Denmark) but includes museums that do not pursue the Danish Museum Act. Very large museums with more than 35 employees have more visitors than any other museum size category (Table 8, Appendix 17). In addition, there appears to be a relationship between the number of opening hours and onsite visitors in 2009, which means that the more hours a museum has remained opened, the more visitors it has (Table 14, Appendix 17)⁸⁸. Likewise, there is a relationship between the number of onsite and online visitors⁸⁹ (Table 15, Appendix 17), which from the analysis can be regarded as statistical significant⁹⁰.

Table 7 illustrates the number of unique online visitors of the major museums for 2009. Cultural heritage museums have the most online visitors and natural history museums, the least. However, when examining the mean, natural history museums have more online visitors (website users) than any other museum types.

	Cultural heritage	Art	Natural history	Special
Unique web visitors 2009 in total	4.243.137	3.364.256	324.012	578.214
Median ⁹¹	30.905,5	41.876,5	106.246	52.464,5

Table 7: Online museum visitors of major museums in 2009 (Table 9, Appendix 17)

Table 8 presents the number of unique museum website visitors of the major museums across museum size. As indicated, very large museums with most employees have the most online visitors in 2009, whereas the small museums with few employees have the least online visitors.⁹²

	Small	Smaller	Middle	Large	Very large
Unique online visitors 2009 in total	172.101	810.888	1.380.208	1.410.390	4.714.736
Median	4.506	19.593,5	37.594	86.594	115.000

Table 8: Online museum visitors across museum size in 2009 (Table 10, Appendix 17)

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⁸⁸ This relationship is statistical significant. Spearman's rho revealed a statistically significant relationship between the number of employees and the opening hours in 2009 (r_s = .539, p < .001) (Table 1, Appendix 20). Squaring the correlation coefficients indicated that 29,1% of the variance of either variable is shared with the other variable.

⁸⁹ However, the number of online visitors reported in the in *Danske museer i tal* (Landert & Kjærside, 2011), should be interpreted with caution as 24 of the major museums did not report the number of online visitors (Table 9, Appendix 17). ⁹⁰ Spearman's rho revealed a statistically significant relationship between the number of physical visitors and their website users in 2009 (r_s = .434, p < .001) (Table 3, Appendix 20). Squaring the correlation coefficients indicated that 18.8% of the variance of either variable is shared with the other variable.

⁹¹ The median is the numeric value separating the higher half of a sample, a population, or a probability distribution, from the lower half. The median, and not the mean, is used in this table because it is better suited for skewed distributions to derive general tendencies.

⁹² Spearman's rho revealed a statistically significant relationship between the number of museum employees and their website users in 2009 (r_s = .427, p < .001) (Table 4, Appendix 20). Squaring the correlation coefficients indicated that 18.2% of the variance of either variable is shared with the other variable.

The above analysis describes the main characteristics of the Danish state-owned and state-subsidised museums from the data collected from *Danske museer i tal* in relation to the museum size, opening hours, geographical location, physical visitors and online users (Landert & Kjærside, 2011). From this analysis, it can be concluded that the size of the museums, opening hours and onsite visitors have an impact on the user activity online (number of visitors to online sites).

6.2 Online museum practices - appropriation of online media

According to this research, Løssing's study from 2008 is the last large-scale study of the Danish art museums' usage of the Internet for dissemination and exhibition purposes. Prior to that no studies have examined the extent of Danish museums' online media usage across museum types (cultural heritage, art, natural history and special museums). This section presents a detailed analysis of the Danish museums' online practices along the four elements from my analytical framework. I define online museum practices of Danish museums from appropriation perspective, i.e., the way in which the museum institutions have used online media and how museums perceive and articulate their usage of online media. This understanding is mainly inspired by Carroll, Howard, Peck and Murphy (2001, 2002, 2003), as well as DeSanctis and Poole's elements of 'AST' (1994) (See Section 3.2.3, Chapter 3).

6.2.1 Online media competences

In the analytical framework of this study, Danish museums' online media competences are understood as the museums' "know-how and skills of how to communicate, behave and interact in online media environments" (Section 4.2.1, Chapter 4). This also includes past experiences as well as the museums' perception of their own online media abilities. From that perspective, online media competences include both their online communication competences, e.g., the ability to communicate strategically, as well as competences to actually use online media. The following is primarily based on the participant observations (see Section 5.4.1, Chapter 5).

In the *Danish National Educational Plan* (Danish Ministry of Culture, 2006), the committee lists a series of possible reasons for the Danish museums not to make full use of the digital potentials and prioritise digital communication. The hindrances include

- Non-digitalised museum collections which means that most of the resources are being used to digitalise the collections
- Scare resources and employees at smaller museums
- Resource intensive digital content maintenance

- Complex digital communication project development as it involves many different disciplines
- Sceptic attitudes of museum staff towards the Internet at the museums (The Danish Ministry of Culture 2006, p.117)

Ever since the publication of the National Educational Plan in 2006, a series of state-supported initiatives have been set up including funding options for developing new museum dissemination projects⁹³ to address the hindrances (The Danish Ministry of Culture 2006, p.120). I regard this list of hindrances as relevant because it is formulated by a committee consisting of mainly museum directors of Danish museum who must have exhaustive and intensive knowledge about the everyday work life and conditions at the Danish museums. 94 And therefore, when one of the committee's concluding concerns is related to the Danish museums' inexperience and willingness to appropriate online media, it should not be dismissed; hence, the present analysis primarily focuses on the hindrances concerning competences and attitudes.

Considering that the governmental funding possibilities have been established with the sole purpose of qualifying the museums' digital abilities (see Section 2.4.1, Chapter 2), the economical resource issues should not be of importance in relation to the museums' appropriation of online media. Nevertheless, according to my study, the lack of resources was still considered by the Danish museums as one of the main limitations for not appropriating online media. As one museum in the workshop stated

> Without additional funding we cannot afford to develop anything new. It's simply impossible!" (Appendix 2)

Although the Danish government and private funds have made it possible for museums to apply for extra funding, develop online museum projects, form partnerships, design concepts and write project applications, it still precipitates to inadequate resources, knowledge and skills

> It is an education in itself to be able to figure out the funding system and write project applications. (Appendix 2)

⁹³ The funding options include the Danish Agency for Culture's four dissemination pools [formidlingspuljer] that support 1) development of new (innovative) dissemination projects, 2) development of new (innovative) educational projects, 3) research in dissemination and 4) user surveys. By 2014, these pools have been restructured, and the Agency of Culture now presently have six pools that do not solely involve dissemination activities (for more information see the website

www.kulturstyrelsen.dk/institutioner/museer/museumsdrift/oekonomi/puljer/)

94 Among the 11-member committee was the former directors of the National Museum of Denmark, the National Gallery of Denmark, and some of the larger Danish museums including Louisiana Museum of Modern Art, ARoS Aarhus, the Viking Ship Museum; and the museological scholar, Ane Heilskov Larsen, as well as representatives from the Ministry of Finance and the Ministry of Culture.

This claim has also been promoted by curator, Tine Seligmann, from the Museum of Contemporary Art, who in the article "Giv os nu arbejdsro!" [Let us work in peace, now!] (2006) stated that instead of establishing external funding pools specifically assigned for dissemination that each museum needs to apply for, the funds should be allocated directly to the museums. ⁹⁵ As she says

That would be a strategy to secure the development on all museums and not just the larger resourceful institutions for whom it is innate to create experience and knowledge centres and, for example, invite pastors and actors into the museum in order to reach a larger audience. (Seligmann, 2006, p. 22)⁹⁶

As a consequence, several museums have created positions specifically directed towards applying for external funding. Another issue that was raised as a hindrance for not disseminating or communicating online in the *National Educational Plan* was insufficient online communication skills. This is not a novel phenomenon particular to Danish museums. Several international studies have shown that the lack of competences and insufficient knowledge on online media including social media among the museum curators are one of the main reasons for not engaging with online media (Dicker, 2010; Hertzum, 1998; Marty, 2007b).

6.2.1.1 Online communication skills

The content study revealed large differences in online media competences. Some museums visibly demonstrated professional skills and competences in relation to their online appearance while others appeared to lack interests, resources and qualifications. One example is the museums' URLs. In most cases, the URL in one way or another matches the name of the museum. However, in some cases, the URL differed from the actual museum name. The Danish Agricultural Museum's URL is www.gl-estrup.dk where 'gl' is an abbreviation of the Danish word 'gammel' ('old' in English) and 'Estrup' refers to a place name. Another museum, the manor house Gammel Estrup, has the URL: www.gammelestrup.dk. The two museums are next door neighbours on the same old estate Gammel Estrup but are two different and separate museum institutions, however, the names of the two URLs appears as if it is one museum.

An earlier study (Holdgaard & Simonsen, 2011), in which I was involved, also indicated, that it is far from all Danish museums that prioritise communication or have employees with (online) communication competences. The study showed that only seven Danish major museums had specific

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⁹⁵ Seligmann's commentary was published as a response to the dissemination pools which were established as part of the *National Educational Plan* in 2006.

⁹⁶ In the quote, Seligmann specifically refers to the National Gallery of Art, which during a period of years each weekend had special events, such as services, concerts and talks. In the Danish museum community, this was considered as controversial.

communication departments, whereas 16 museums had a dissemination or educational department, and 18 museums had employees with specific communication competences⁹⁷ (2011, fig. 2–3). The data of the earlier study and this PhD project were collected at the same period; therefore, the results of this study are relevant to this specific PhD project as it further investigated subareas of attitudes towards digital technologies.

Contrary to the above-mentioned, there are indicators that point to ongoing changes in relation to strategic communication in the field of Danish museums. According to Kjeldsen (2013), more Danish museums are introducing communication as either a management or a marketing function in their organisation, which is indicative of a new development in the Danish museum context. However, Kjeldsen draws her conclusions from case studies of three middle, large and very large Danish art museums, which might suggest that these museums to a higher degree communicate more strategically than very small and smaller museums.

My findings suggested a limited extent of online media competences, especially in relation to evaluating the online performance. The lack of competences emerged as an indirect finding in relation to my collection of statistics on the museums' online users. Danish museums, as already presented in Chapter 3, have had a long tradition of studying (or at least counting) the physical museum visitors, but this practice has not been implemented to the online museum visitors. Most Danish museums had few to none competences with regard to the existence and harvesting of online statistics. One-fifth of the major museums was unaware of the possibility of obtaining data about the performance of their online users on their websites, or did not have knowledge or skills to get data on the users on their Facebook pages. This is interesting as the museums use resources and efforts in order to have and maintain a website or to have a Facebook presence but does not know the extent of the use, what type of information or communication-style the users prefer.

Part of the data of the annual report *Danske museer i tal* (2011) concerns the number of online visitors (unique users)⁹⁸ to the museums. In 2009, 14% (17) of the major museums had not reported the number of online visits and 6% (7) of the major museums had reported 0% online visits (Table 10, Appendix 17); some museums stated that they did not know this number or how to find it, while others again presumably have reported hits⁹⁹ and not number of online visitors. The major museums who had not reported the number of online visits (unique users) were primarily cultural

⁹⁷ As the results are based on a study of the Danish museums' organisation charts and information about their employees from their websites, there might be more museums than registered that have employees with communication expertise.

⁹⁸ Unique users are also often referred to as visits or sessions.

⁹⁹ A hit is a request for one file from a web server. For example, if a user requests a single web page which contains only text, the web server will send you that page as a file. This process is called a hit. In the early days of the Internet, hits were a reasonable way of tracking how many pages were viewed. Each page was one file, thus hits (more or less) equalled page views. However, in today's Internet, each page is typically made up of multiple files (photos, graphics, videos etc.), and one web page request counts as multiple hits. Thus, a single online visit to a website typically generates hundreds of hits.

heritage museums (75%) (Table 12, Appendix 17), and smaller museums (50%), middle size museums (29%) (Table 12-2, Appendix 17).

In the case of the Facebook Insights study, approximately half of the 63 museums that agreed to participate in the study did not know of Facebook Insights. The amount of museums that did not have any prior experiences with Facebook Insights was more than a third of the museums. These museums were smaller museums in general but some larger and very large museums were also in this group. Some of these large and very large museums had both communication departments and communication staff and these museums' Facebook pages were some of the most popular (according to the number of users) among the Danish museums. As a result of the lack of knowledge, a guide was formulated on how to locate Facebook Insights in Facebook and extract data (see Appendix 8). The guide was revised after multiple requests from the museums because some museums used the English version of Facebook while others used the Danish version. Some museums found this guide to be inadequate; hence not they were guided over the telephone. These conversations with the museums though revealed a genuine interest in Facebook, but at the same time a resignation was felt because in their daily work routine they did not have the resources or interest to learn and online media skills.

The pace with which Danish museums implement communication and dissemination as area of focus can be viewed in relation to the Danish museums' other obligations as stated in the Danish Museum Act. Thus, as presented in Chapter 2, the history of dissemination and communication in the Danish museums is relatively short. Despite the initiatives related specifically to digital museum communication and dissemination, such as reports and publications (J. Hansen & Hansen, 2007; Løssing, 2009), and funding possibilities from the Danish Ministry of Culture and Danish Agency of Culture, there appears to be a hesitation and insecurity related to what is expected of the museums' online communication and dissemination activities among a large group of Danish museum professionals. Although this group is aware of the governmental initiatives and incentives, they have difficulties relating these to their own everyday museum practice because working with digital and online media has not traditionally been part of its professional museum expertise. In the workshops concerning the presentation of the *National Museum Web User Survey* (2010), viewpoints that were articulated include

I would like some kind of consensus about what it is that we have to do online - at the museum and in the field of museums. (Appendix 2)

I interpret this statement as a sign of frustration directed at the expectations from both the museum management and the government. Because, from this point of view including many other museum professionals in the workshops, the list of expectations and obligations for a museum curator seem to grow and include areas beyond his or her university degree and competences.

In concordance with the above-mentioned statement, other museum professionals at the workshops expressed the need for a joint CMS¹⁰⁰ for all Danish museums because "then we don't have to think about development, design, etc." (Appendix 2). Another expressed a need for a comprehensive list of guidelines for the ideal museum website (preferably from the Danish Agency for Culture) as they did not have the competences or resources to investigate the area themselves. This again relates to the number of employees assigned to online dissemination and communication at the museums. In 1998, still in the early stages of the museum website history, Hertzum (1998) conducted a small-scale survey of 17 African, European and the US museums and their websites¹⁰¹. He concluded that development and maintenance of websites has been a "fringe activity" at most museums managed by enthusiastic individuals. Further, Hertzum argued that many museums did not have a clear vision of what the museum website should communicate and why. This still appears to be the case for many smaller Danish museums even now. One museum stated in the first museum workshop that

We [at the museum] don't have knowledge about online media, what to expect of online media but also how we shall utilise them. (Appendix 2)

Further, Hertzum concluded that museum websites are considered as appendices to the physical museums and not an integral part of the museum organisations (1998, p. 135). Although, Hertzum published his study in 1998, we (Holdgaard & Simonsen, 2011) found a similar tendency in our study. That digital museum dissemination and communication projects often are considered as an add-on to the existing onsite activities (for a brief discussion see Section 2.4.1, Chapter 2). This is substantiated by two other independent Danish studies (Bysted-Sandberg & Kjeldsen, 2008; Løssing, 2008, pp. 155–167). These two studies have examined the perspectives and prioritisation of online museum communication by Danish museums. Bysted-Sandberg and Kjeldsen's survey¹⁰² examined art, cultural heritage, natural history museums and special museums, whereas Løssing's PhD thesis was exclusively directed at art museums. The two studies concluded that the level of specific communication expertise among the Danish museums is relatively low so also their strategic approach to online museum communication.

Although I have stated that Danish museums in general do lack interests and competences, the reality is of course much more complex than that, and many museums did have online media competences. This was likewise expressed in the workshops where the *National Museum Web User*

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¹⁰⁰ See Section 4.2.4, Chapter 4.

The sample is not representative in any way, but the museums were sampled in the light of being either 'early adopters' (Rogers, 1995) or due to their efforts to utilise the potentials of the Internet in their online presentation (Hertzum, 1998, p. 128).

¹⁰² Bysted-Sandberg and Kjeldsen's report, which builds on a questionnaire answered by 122 Danish museums and attractions, focused on Danish museums' strategic communication but included a separate analysis of the priorities of online communication.

Survey was not enthusiastically accepted by some, because they already had the knowledge about their web users through their web statistics or existing user surveys. As one museum representative stated

I don't think that this report to a very high degree adds to knowledge about our online users that we don't already have at the museum. (Appendix 2)

Therefore, these museums had a critical approach and different expectations in relation to the *National Museum Web User Survey* (2010). This was reflected in the atmosphere, comments and discussions at the workshops, particularly by large and very large museums (Appendix 2).

6.2.2 Attitudes

Attitudes of Danish museums are partly related to the definition of DeSanctis and Poole in which the authors defined attitudes as sentiments which the users display in the appropriation process of a given technology (Section 4.2.3, Chapter 4). The museums' attitudes include not only (re)considerations, prejudices and presumptions towards online media but also the museums' expectations to online media and the possibilities of appropriating online media for dissemination and communication assignments and projects. Therefore, museum attitudes in my analytical framework involve the museums' self-understanding and their dissemination and communication obligations in relation to the public. This also includes the museums' perceptions of the public. In addition, attitudes also involve the extent to which Danish museums perceives online media to be of value to them.

6.2.2.1 Online media attitudes

According to the *National Educational Plan* (2006), one of the hindrances for not appropriating online media is the museums' sceptical attitudes towards online media. This might be due to a general understanding of the incompatibility of online media and museums in line with the entertainment-enlightenment dichotomy (see Chapter 2 for an introduction to the establishment of the museum institution). A museum representative from a smaller museum stated

I don't have time to research or do thorough studies if I constantly have to think about writing texts to our website. (Appendix 2)

This quote reflects a common perception among some museum curators that the outcome of their research is to produce research papers, books and exhibition catalogues to like-minded peers, whereas dissemination of research on websites, blogs, videos, and social media is considered less valuable. Curatorial scepticism towards new media formats is not a Danish museum phenomenon, but has also been documented in the English-speaking world (Dicker, 2010; Gates, 2007; Parry, 2013). According to Dicker, museum curators have traditionally been regarded by others and have had a self-understanding

as researchers and experts of knowledge connected to objects, artefacts, collections and material culture, which by many curators is in contradiction to online media and especially social media. The results of Dicker's survey¹⁰³ conclude that 37% of the curators in the survey do not use social media, primarily due to time constraints, temporality of the media, and lack of competences. Parry, on the other hand, argues that museums instead of embracing online media have been too concerned with upholding and preserving an identity as curatorial authorities in which the core values are authenticity, trustworthiness and accuracy (2013, p. 18). This creates a schism between the physical museum object versus the digital museum object which was introduced in Chapter 2, Section 2.5.1, in which the perspective of physical museums and authentic museum objects are superior to the online representations. While this debate reflects a valid concern, it also reflects a bias towards scholarly knowledge and a 'correct' way of experiencing the cultural heritage that does not favour other forms of experiences and emanate from reflection and immersion.

Observation of the participants in both workshops indicated an apparent scepticism towards the results of the National Museum Web User Survey (2010), in particular, the quantitative results. Many of the questions raised in the workshops rightfully addressed what the survey could not answer. However, this, to some extent, influenced the discussion directing it towards its limitations instead of emphasising its qualities. This is interesting because many of the themes in the workshops concerning the barriers for not appropriating online media were specifically related to the lack of knowledge about the online users. The data cannot conclusively determine whether this tension is an indication of a sceptical approach towards the Danish Agency for Culture, TNS Gallup or the subject matter, in general. In order to examine this more comprehensively, I could have conducted follow-up interviews with individual museums afterwards. In existing Danish studies (Kjeldsen, 2012; Løssing, 2008; Skov, 2009), interviews with individual museum professionals have been conducted about the museums' current communicative practices, perceptions of online museum communication and exhibitions. These studies do not by any means conclude that there exists a general dissatisfaction or disbelief towards the Danish Agency for Culture in the Danish museum landscape, however, all three authors refer to the current political climate (as I do in Chapter 2), which among others call for a professionalisation of the museum organisations and their interaction with the circumjacent society.

The dissatisfaction with the Danish Agency for Culture was not openly articulated, but there was a general critical attitude towards the survey, but also all other surveys initiated by the Danish

¹⁰³ Dicker's survey was an online questionnaire in which 96 curators from Australia, UK, USA, Norway and New Zealand were anonymously participated in 2009. The respondents were from a wide range of institutions, including science museums, natural history museums, art museums, history museums, indigenous centres, aquariums, university collections, regional museums and galleries and children's museums (2010). The paper does not include details about sampling methods, response rate etc., thus the reliability and validity of the results can be questioned. However, as research that builds on empirical studies within this field is limited, the results are still considered relevant in comparison with my findings.

Agency for Culture. Some museum representatives questioned the purpose of all visitor surveys (both the *National Museum Web User Survey* and the surveys relating to the physical museum visitors). They claimed that these surveys were not conducted to help the Danish museums learn more about their visitors, but were simply another management and evaluation tool. In addition, several museums criticised the increased governmental recommendations and expectations in various reports (f.i., Danish Ministry of Culture, 2006, 2008, 2009a, 2009b; Løssing, 2009) of employing new media formats, as well as new forms of user-involving and participatory dissemination and communication without providing extra economical resources as, a prohibitive and unattainable goal (Appendix 2).

Because, as previously stated, few Danish museums have staff specifically employed in communication positions, let alone, employees who solely has online dissemination and communication as their key result area, the use of online media becomes something extra the employees need to do on top of everything else. From that perspective, there appears to be a mismatch between the policy recommendations and the museum managements' employment prioritisations, which results in increasing the workload of museum employees. A possible explanation can be found in the (mis)understandings of online media, as these media are often regarded as less demanding in terms of resources and skills compared to older and more traditional museum media, such as text labels, wall posters, catalogues, etc. (Holdgaard & Simonsen, 2011, p. 111).

Weber affirms this perspective in her evaluation and discussion of the museum as a social platform (2011). With point of departure in "Flirt, philosophy and Facebook", the National Museum of Denmark's outreach project on Facebook¹⁰⁴, Weber states that one of the most interesting aspects of the project is its translatability to other museums

[I]n principal, the project can be copied by all cultural heritage museums. The project does not entail other competences which the museums not already have at their disposal. The museums do not need to buy expensive equipment or consultancy. The historians have quite simply used a new platform and expanded the palette of dissemination and from which made the museum into a virtual hub.¹⁰⁵ (Weber, 2011, p. 202)

According to Weber, projects such as "Flirt, Philosophy and Facebook" do not demand other extraordinary competences in the museum; the curators could use their existing knowledge on an existing (free) platform. Weber's assumption is interesting because it resonates in many Danish museums. On the contrary, when examining the article in which the project is evaluated (Boritz et al.,

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¹⁰⁴ The main character of the project "Flirt, Philosophy and Facebook" was a young woman, Ida Charlotte, from the Danish aristocracy in the latter half of the 18th century. Ida Charlotte had a page on Facebook and posted and discussed her everyday life including her love life. The aim of the project was to highlight this particular historical period by 'digital re-enactment'. The project began in April 2010 and ended in October 2010 (Boritz, Ramsing, Jensen, & Lund-Andersen, 2011).

¹⁰⁵ My translation.

2011), one of the conclusions drawn suggested that the project was resource demanding – primarily in relation to man-hours and enthusiasm of the individual curator. Thus the project involved two museum curators, a student assistant and the web editor of the museum (who is known as one of the front-runners in the Danish digital museum landscape). Additionally, according to Boritz et al. you need experienced curators that dare to enter into dialogue with the users and take their ideas and comments into consideration in order to carry out a project like "Flirt, Philosophy and Facebook" (Boritz et al., 2011, pp. 76–78).

In the workshops, the inadequacy of prioritisation of online competences in the museum managements was also raised as an important factor for not appropriating online media. As one museum representative articulated

It is extremely difficult to take action, when the museum management doesn't prioritise online communication. (Appendix 2)

The relatively low number of Danish museums with communication specific competences in their management (Holdgaard & Simonsen, 2011, p. 110), may be a reason why some museums deprioritise the importance of online media, despite the recent political and academic attention. Although, it should be noted that knowledge about online media is by no means exclusively related to the field of communication.

In conclusion, it is noted that the negative or critical attitudes towards employing online media for dissemination and communication purposes among the Danish museums are mainly related to the lack of online competences as we saw in the previous section, which again often resulted in arguments concerning the lack of resources, both financial, as well as staff related resources. Financial cut-backs in the Danish cultural sector, including the museum area, is repeatedly put forward as one of the main claims for not living up to the public responsibilities according to the Museum Act, but also in relation to embracing new media formats. Conversely, according to Skot-Hansen, overall there has been an increase in the public expenditures to the Danish museums (Skot-Hansen, 2008, pp. 35–36). However, this does not entail that the experienced economic reality might be different for the individual museum.

Although critical attitudes towards how and why the museums should have an online presence were raised during the museum web user workshops, there were also very optimistic and positive voices, primarily among the very large museums from the larger cities (Aarhus, Odense and Copenhagen). These museums had high expectations to the potentials of online media in line with the positive sentiments described previously, focusing on outreach and new interaction and engagement forms of online media. And several of the museum representatives referred to the international studies and experiences, e.g., the Museums and the Web conferences, the Smithsonian, etc. Several museums

emphasised that the museums should take advantage of the online media's specific characteristics that do not bind them to a physical locality. These museums highlighted the Schweibenz' ideas of the virtual museum (2004) and Parry's notion of the localised museum visit (2007, p. 94), and emphasised the importance of establishing networks between the museums and their collections not limited by the individual museum's walls, making the history and the stories available and accessible on platforms were the users already are, instead of forcing the users to the museums. As the museum representative argued

I believe that we as museums should stop thinking ourselves as enclosed silos, especially when it comes to web communication. Instead of expecting the users to come to us at our websites, I think, we should attempt to find the users where they are whether that is on Facebook, Wikipedia, YouTube or somewhere else. (Appendix 2)

Accordingly, the museums with positive attitudes towards utilising online media expressed wishes to develop and experiment with the media formats and one museum predicted that museum websites in the future would be reduced to a front page with opening hours and links to other sites and media platforms. At the same time as this museum representative presented this statement, he also affirmed that even if this was his intensions these ideas were not met in the museum management, partly because the management did not consider dissemination and communication on social media or external platforms as relevant and valuable for the museum as other more traditional paper-form activities, and partly because the management did not understand the terms and logic behind social media. Thus, even if a museum has employees that wish to use online media in innovative ways, this perspective might not be shared by the museum management.

6.2.3 Motivations

From the museum perspective, motivations is related to the individual organisation or the individual museum worker's interest in experimenting with new dissemination and communication forms and new media platforms. The political arguments and different policies concerning digitalisation of the cultural heritage (Section 2.4.3, Chapter 2) are central for understanding the context for the Danish museums' overall prioritisation of their online dissemination and communication activities. However, when we move from the government level to the museum level where the actual and practical decisions are being made, the considerations are of course different from the political arguments as they are closely related to the everyday practicalities of the individual museums. Hence, the different approaches to and motivations behind Danish museums' usage of online media is diverse, and ranges from almost no motivation to actually being leading motivators and innovators within the field. The museums with

minimal or no motivation to engage with online media feel pressured to learn and implement online media in their existing work practices. These museums correctly related the pressure to the government digitalisation recommendations.

On a practical level, some museums consider their web presence as a problem-solving tool. By problem-solving, the museums did not refer to research related problems, e.g., getting access to meta-data and information about objects or collectors, or to issues related to other aspects such as users who do not have the possibility of visiting the physical museums due to disabilities, time constraints, and geographical location. When asked about the functionalities of the ideal museum website, one museum representative said it should

Solve simple and practical issues related to physical museum visits, and contain information about opening hours, entrée fees, guided tours... (Appendix 2)

According to the museum representative, such information was assumed to reduce the calls to museum and it would benefit the museum as the museum preferred not to spend time on answering these questions. This perspective on the users is very similar to the 'stranger' approach of Doering (see Section 3.3.2, Chapter 3). In the stranger approach, the museum users are regarded as intruders in the museum. This attitude arises when the museum regards the collections as primarily meant for them and not for the public. According to Doering,

Many curators understandably take this posture, as do institutions primarily devoted to research. Such museums emphasize "object accountability." The public, while admitted, is viewed as strangers (at best) and intruders (at worst). The public is expected to acknowledge that by virtue of being admitted, it has been granted a special privilege. (Doering, 1999, p. 75)

This rationale of understanding the museum as a research institution with research obligations should be found in the history of the museum. Despite the fact that the public museum were established to civilise the public in the 18th century, the museums were not open for everyone as it had restricted opening hours, dress codes, and rules regulating visitor's behaviour.

Considering museum websites and social media appearances for branding was another dominant topic among the Danish museums at the museum web user workshops. According to some museums

A [museum] website is about telling people who you are, where you are and why you are. (Appendix 2)

Therefore the website can be considered as part of the museum branding in which the website communicates the identity of the museum. Thus, one of the museums' motivations for maintaining a website was to attract more physical visitors to the museum.

Another motivational factor of the museums for appropriating online media that was raised in the workshops was to educate and prepare the users for the actual physical visit. One of the museum representatives stated

If we provide our visitors with extensive information about the exhibition, the artist, etc. prior to their [physical] visit, then we might get well-prepared and knowledgeable visitors who to a much larger extent can engage and participate actively in our exhibitions. (Appendix 2)

The museum representative had recently read Nina Simon's blog Museum 2.0, which had inspired him to create an environment at the museum where the visitors could become participators rather than passive observers. Thus, from his perspective, it is important to engage the museum visitors in innovative ways not only in the online space but also in the physical museum space.

6.2.4 Actual usage of online media

In this subsection, I examine the utilisation of interactive feature of all museum websites and the museums' presence and practices on social media. Thus, I understand actual usage of online media within the usage of interactive features including user-involvement and audio-visual features, as well as museum presence on different social media platforms and the museums' communicative practices on these platforms.

6.2.4.1 Museum websites

Studies from other empirical fields (of e.g., newspaper websites) show that the utilisation of interactive features on organisational or company websites are influenced by several internal and external factors among others including ownership, geographical location, completion within the region, length of web presence, and age and number of staff (Larsson, 2012, p. 199). With regard to the museum literature, the implementation of communication strategies and use of online media have been examined through categories such as country, type of museum, annual budget, ownership, education and number of staff and number of onsite visitors (Bysted-Sandberg & Kjeldsen, 2008; Fletcher & Lee, 2012; López et al., 2010). Fletcher and Lee's study examines the American museums' use of social media and builds on quantitative survey data from 315 American museums and nine interviews, whereas the study of López et al. explores the extent to which museums across five countries, four European countries (England, France, Italy, Spain) and the USA have adopted interactive and web 2.0 tools on their websites. López

et al.'s study includes 240 websites, which were selected based on socio-demographic criteria. ¹⁰⁶ The museums span across four categories: art, natural science, human science and specialised museums, and the latter category include museums focusing on specific subjects, namely chocolate, soccer teams, etc. Hence, their study is different from mine as these two studies have surveyed a sample of museums whereas I study the entire Danish museum population. Adding to this is the definition of a museum. I define a Danish museum as the state-owned and state-subsidised museums pursuant to the Danish Museum Act whereas both Fletcher and Lee and López et al. have more including definitions. However, I still consider the studies as relevant due to their extensiveness, large sample sizes and empirical nature, as such empirical studies within the museum field are still very limited.

The present analysis includes type of museum, museum affiliation (major museum or museum branch), museum size by numbers of employees, and geographical region as independent variables in the content study of the actual usage of online media by Danish museums. As presented in Chapter 2, several Danish research projects have examined Danish museums' usage of online media, however, not on a national level as this current project. Thus, this project is focused on finding an answer to whether all Danish state-owned and state-subsidised museums have an online presence. The study found that, in 2010, all Danish museums had at least a website though the websites differed in size and style. Some museum websites were simple static HTML sites with less than 20 web pages, while others had complex dynamic sites with more than a thousand web pages. The websites generally focus on providing basic information to plan a physical museum visit. This information includes opening hours, entrance fees, location, etc. The communication style is mainly mono-directional, from the museum to the users, and the style and content of communication seem to indicate that the online users are primarily thought of as future museum visitors of the physical museum, which is also in line with how the Danish museums articulate their motivation for appropriating online media.

Figure 8 presents the results of the content study of the Danish museums' websites (major museums and museum branches) based on the data collected in 2010 and 2011. As much attention was (and still is) given to online museum communication by the policy makers, the museum community, private foundations, scholars, etc., the number of interactive features on the museums' website were expected to increase in 2011 from 2010. As Figure 8 indicates, there is a slight increase in the percentages from 2010 to 2011 for the categories blogs, videos and podcasts; however, there is a decrease from 2010 to 2011 for games at 3% and online exhibition at 6%.

¹⁰⁶ The authors selected different cities across the countries based on population and used Google search engine to choose from the online list of each city's museums (López et al. 2010, p. 238).

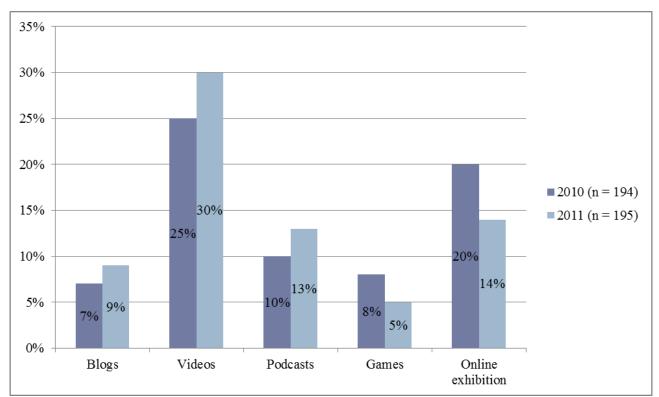


Figure 8: Presence of interactive features on Danish museums' websites (Table Appendix 18)

The impact of museum size, museum type and geographical location on the usage of online media were closely examined. Museum size (number of employees) was considered as a means for resources and possibly also competences; thus the assumption was that the size of the museum did have an impact on the usage of online media. It was considered relevant to examine if different types of museums (art, cultural heritage, natural history and special) had different online media practices. Lastly, geographical location was selected as a variable in order to examine possible regional differences.

6.2.4.1.1 Blogs

In 2010, many international museums were experimenting with different forms of communication, for example, blogs. However, it was not clear if the Danish museums had followed suit. Seven percent (13) of all Danish museums had one or more blogs on their website and several museums had stated on their website that they were planning to establish a blog. In 2011, there was an increase in the number of museums with one or more museum blogs by 2% (Figure 8). The study revealed that that there is a significant relationship between the size of the museum and percentage of museums with blogs. ¹⁰⁷ Of the very large museums with more than 35 full-time employees, 67% had a museum blog, thus 36% of

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 $^{^{107}}$ The two-tailed Fisher's exact test revealed a significant relationship between the museum size and museum blogs in 2010 (p=.002). The effect size for this finding was relative strong (Cramer's V=.415) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5) (Table 5, Appendix 20).

all museums with one or more blogs were very large museums (Table 24, Appendix 18). None of the very small museums had museum blogs in 2010 and only one of the smaller museums had a blog (Table 24, Appendix 18). In conclusion, it can be understood that the museums with adequate resources and communicative competences use museum blogs for their online communication. The number of museums with blogs did not increase dramatically from 2010 (7%) to 2011 (9%); nevertheless, what is interesting is that the museums that adopted the museum blog in 2011 were primarily middle size museums (Table 25, Appendix 18). However, the results persistently ascertain that the museum size is significant in relation to whether or not a museum uses blogs. None of the museums with less than three employees had a blog in either 2010 or 2011. Surprisingly, the large museums too did not have blogs either.

In 2010, 42% (5) of the blogging museums were cultural heritage museums and 33% (4) were art museums (Table 20, Appendix 18). Within each museum type, 7% of all cultural heritage museums and 12% of all art museums had a blog. While in 2011, 67% (10) of the blogging museums were cultural heritage museums and 27% (4) were art museums (Table 21, Appendix 18), which corresponds to 13% of all cultural heritage museums and 12% of all art museums. Thus, within the group of cultural heritage museums, museums with blogs saw an increase of 5% from 2010 to 2011. For the two remaining museum types, natural heritage museums and special museums, the actual number of museums are small (three and six, respectively); therefore, the number of natural heritage museums with a blog is low. In 2010, one natural heritage museum and two special museums had a museum blog (Table 20, Appendix 18). This corresponds to 17% of all museums with a blog and within each museum type to 33% of all natural heritage museums and 33% of all special museums. In 2011, while none of the natural history museums had a blog and only one special museum had a blog (17% of the special museums).

In relation to geographical location, in 2010, 50% (6) of the major museums with one or more museum blogs were located in the Capital Region of Denmark, which equals 18% of all museums in the region, whereas the North Denmark Region had no museum blogs (Table 22, Appendix 18). In 2011, the museum blogs became more evenly distributed across Denmark, except for the North Denmark Region (Table 23, Appendix 18).

The most common goal of international museum blogs is to create a more open, participatory and dialogue oriented museum, engaging the museum users in conversations about the museum, the museum objects, strategies, work-behind-the-walls, etc. (Gates, 2007; Chan & Spadaccini 2007; Dicker, 2010). Danish museum blogs were diverse in relation to communication style and

 $^{^{108}}$ The two-tailed Fisher's exact test revealed a significant relationship between the museum size and museum blogs in 2011 (p = .016, two-tailed Fisher's exact test). The effect size for this finding was moderate (Cramer's V = .327) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5) (Table 6, Appendix 20).

establishing dialogue with the users. Some museum blogs were part of present and previous special exhibitions and projects, which meant when the exhibitions and projects were finished; the blogs became inactive on their sites. Generally, Danish museum blogs have the following functions:

- To disseminate research activities of the museum (most often related to archaeological excavations for the cultural heritage museums or restoration/preservation projects)
- To inform and communicate news from and about the museum (in line with newsletters and press releases)
- To relate to a special exhibition or project (behind the scenes of an exhibition)

An example of a museum using blogs is the Museums of South West Jutland (Sydvestjyske Museer). This museum has several blogs, e.g., 'Udgravningen ved Ribe Domkirke', which disseminates the archaeological work, excavations and findings around Ribe Cathedral. Another blog provides information on what is happening behind the scenes, e.g., blogs about moving the museum collection.

In one of the workshops, a museum stated that having a blog was part of the museum's communication and marketing strategy. According to the museum representative, the museum used the blog to push information and news to the media, in particular the local newspapers (Appendix 2).

The popularity and the impact of the Danish museum blogs cannot be deduced from the content study; however, when examining the blogs more thoroughly, it became evident that most of the Danish museum blogs had few to none user comments. These findings suggest that the Danish online museum users either do not wish to interact with the museums, at least not on a blog, or do not have the communicative skills to do so. The almost absent user interaction on the Danish museum blogs is not due to Danes' general lack of interest in the genre. In 2009, 33% of the Danes read blogs on a regular basis, while 20% of the Danes produce blog content (Statistics Denmark, 2010, p. 18).

 $^{^{109}}$ http://lindegaarden.wordpress.com

http://museumsmagasin.wordpress.com

¹¹¹ I refer to statistics from 2009, as from 2010 onwards Statistics Denmark do not include specific statistics on the use of blogs.



Figure 9: Screen shot of the Immigrant Museum's blog (part of Furesø Museer). February 2010.

The lack of user interaction might be due to the Danish museums way of appropriating the blog format as a type of 'broadcast channel', in which the museums broadcast information and news to the users as on their websites and in their newsletters. However, the Danish museum users do not currently appear to be interested in museum blogs or engage in dialogue with the museum, as they are unable to relate this type of interaction with a museum (see Chapter 7). Figure 9 is a screen shot of the Immigrant Museum's blog which is integrated into the website. The blog post shown in the figure is an update from the museum director reporting the museum's recent website launch which took place at the physical museum, thus this blog post is in the second museum blog category — to inform and communicate news from and about the museum. As I did not have access to the web statistics, it is not possible to conclude whether this blog is a popular feature on the website or not, however, from the number of user comments, it does not appear so.

6.2.4.1.2 Videos

Videos were another category related to Danish museums' actual usage of online media and their handling of different interactive features. Traditionally, museums have focused on written formats when communicating with their audiences; therefore, it was thus interesting to examine if the Danish museums had adopted another format and how. Of all the Danish museums (major museums and museum branches), 25% (48) had videos on their website in 2010, and the following year the

percentage of museums with videos had increased to 30% (59) (Figure 8). I have categorised the museums' videos into four categories, but the study does not conclude upon the distribution of videos in each category.

- 1. Videos about the museum (e.g., an introduction video to the museum).
- 2. Videos showing events and activities at the physical museum (e.g., a concert, a guided tour etc.).
- 3. Videos with learning and education content targeting children and young people (these videos are often related to e-museum projects).
- 4. Videos about an artist/historical period, etc. linked to the museum collection or special exhibition (e.g., video about the Danish Golden Age).

The number of videos and the quality of the videos varied. Some museums have only one video on their website while others have several dozen. For instance, Give-Egnen's Museum had published one video from an evening event in order to communicate the atmosphere and the activities of the event. Interestingly, it was the only video on their website. The National Gallery of Denmark, on the other hand, had about 70 videos on their website presenting the activities of the museum, special exhibitions and artists in the museum collection and has employees specifically assigned to produce web-TV for the museum. A large part of the Danish museums' videos were produced to target children and young people as part of an educational program or activity and the e-museum project (see Section 2.4.3, Chapter 2). Most museums display videos of the second category, events and activities. These videos show an event (such as concert or opening of a special exhibition) or activities (such as guided tours).

Although 25% of the museums in 2010 and 30% had videos on their website, this did not entail that the museums also had a YouTube channel where they could further promote the videos. Until 2010, only 5% of the Danish museums had a profile on YouTube. In 2011, the percentage of museums with a YouTube profile had increased to 21%. The museums that had videos were predominantly cultural heritage and art museums (as the majority of Danish museums generally fall into either category). In 2010, 36% of all cultural heritage museums and 35% of all art museums had one or more videos on their website, and in 2011. One natural history museum had videos on the website in 2010, whereas the percentage of special museums was much higher (83%) (see Tables 28-29, Appendix 18).

As with the museum blogs, it is primarily museums with many staff resources that have videos on their website. In 2010, 31% of very large museums, 27% of middle size museums, and 2% of very small museums had videos on their website. 64% of the very large museums and 50% of the large museums had videos on their website (Table 9). In 2011, the numbers had increased slightly, i.e., 33% of the very large museums and 30% of the middle size museums had videos on their website. Interestingly, smaller museums had recorded a decrease (3%) in the number of videos from 2010 to 2011 (Table 9).

Year	Very small (<3 employe es)	Smaller 4-10 employees	Middle (11-20 employees)	Large (21-34 employees)	Very large (> 35 employees)	Total
2010 (n =118)	2% (1)	22% (10)	27% (12)	18% (8)	31% (14)	100%
Within museum size	20% (1)	25% (10)	35% (12)	50% (8)	64% (14)	(45)
2011 (n =119)	2% (1)	19% (10)	30% (16)	17% (9)	33% (18)	100%
Within museum size	20% (1)	25% (10)	47% (16)	56% (9)	82% (18)	(54)

Table 9: Videos. Percentage of major museums with moving images on their website (Tables 32-33, Appendix 18)¹¹²

Most of the museums with videos were from the Capital Region of Denmark (33%) and least of the museums are from the region of North Denmark (7%). In the Capital Region, 44% of the museums had videos, while North Denmark had 23% (Table 30, Appendix 18). In 2011, the percentages did not change remarkably (Table 31, Appendix 18).

6.2.4.1.3 Podcasts

In 2010, 10% (20) of all Danish museums had podcasts on their website, which became 13% (25) in 2011 (Figure 8). Around 53% (10) of the museums with podcasts were cultural heritage museums, 42% (8) were art museums and 5% (1) were natural heritage museums. None of the special museums had podcasts on their website (Table 44, Appendix 18). In comparison, 13% of all cultural heritage museums, 24% of all art museums and 33% of all natural heritage museums had podcasts on their website. In 2011, the number of podcasts increased in the cultural heritage museums, art museums and special museums websites, thus 20% (15) of all cultural heritage museums, 27% (9) of all art museums and 17% (1) of all special museums had podcasts on their website. No natural history museum had podcasts on their website in 2011 (Table 45, Appendix 18).

Table 10 reveals that very large museums often have podcasts on their websites, in contrast to the very small museums. However, the growth in podcasts rate has been recorded in middle size museums. In this museum size category, the number of museums with podcasts has doubled from 2010 to 2011.

The two-tailed Fisher's exact test revealed a significant relationship between the museum size and museum videos in 2011 (p=.001). The effect size for this finding was moderate (Cramer's V = .394) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5). The relationship between the museum size and museum blogs in 2010 was not significant (Table 7-8, Appendix 20).

Year	Very small (<3 employees	Smaller 4-10 employees	Middle (11-20 employees)	Large (21-34 employees)	Very large (> 35 employees)	Total
2010 (n =118)	0%	16% (3)	26% (5)	5% (1)	53% (10)	100%
Within museum size	0%	8% (3)	15% (5)	6% (1)	46% (10)	(19)
2011 (n =119)	4% (1)	12% (3)	40% (10)	0%	44% (11)	100%
Within museum size	20% (10)	8% (3)	29% (10)	0%	50% (11)	(25)

Table 10: Podcasts. Percentage of major museums with podcasts on their website (Tables 48-49, Appendix 18)¹¹³

The Capital area had more podcasts on their website in both 2010 and 2011. In 2010, 47% (9) of the museum podcasts were found on websites of museums in the Capital Region, which decreased to 40% (10) in 2011 (Tables 46-47, Appendix 18).

6.2.4.1.4 Games

Worldwide, numerous museums, such as CyberMuse – the education and research site of The National Gallery of Canada¹¹⁴, use online games to engage, especially with a younger audience. In the Danish museum context, 8% (16) of all Danish museums have games (or game-like activities) on their website in 2010 and 5% (10) in 2011 (Figure 8). The reason for the decrease in the games on their website between these two years is not obvious. The majority of games are specifically targeted at children and families and appear to have specific learning goals, e.g., to learn about the dangerous animals by answering a quiz (Figure 10).

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¹¹³ The two-tailed Fisher's exact tests revealed significant relationships between the museum size and museum podcasts in both 2010 and 2011. For 2010 (p=.005) The effect size for this finding was moderate (Cramer's V = .381) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5). For 2011 (p=.000) The effect size for this finding was relatively strong (Cramer's V = .413) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5) (Table 9-10, Appendix 20).

¹¹⁴Cybermuse: http://cybermuse.gallery.ca



Figure 10: Do you dare to feed the Nile crocodile? Game at Natural History Museum, Aarhus. February 2010.

Museums use memory games for children e.g. Art-memory¹¹⁵, to motivate children's participation. The National Gallery of Denmark has specifically experimented with museum games developed for an older audience. For instance the word game, Cadavre Exquis, on the National Gallery of Denmark's website, is inspired by the methods and ideas of the surrealists. 116

The number of museums that had games on their website in 2010 was interestingly the same for smaller museums and very large museums (27%) (Table 40, Appendix 18). In 2010, 50% (8) of the museums that had games on the website were cultural heritage museums, 38% (6) were art museums and 13% were natural history museums. Thus, 11% of all cultural heritage museums, 18% of the art museums, and 67% of the natural history museums had games on their website. The following year, 70% of the museums with games were cultural heritage museums, 20% were art museums and 10% were natural history museums (Table 36-37, Appendix 18). The museums with games on their website do not come from a particular region but are spread across Denmark (Table 37-38, Appendix 18).

Online exhibition 6.2.4.1.5

In 2010, 20% (38) of the Danish museums had specific online exhibitions, curatorial content that was available only on the museum website, and in 2011, the percentage of museums was 14% (28) (Figure 8). The cause of the decrease from 2010 to 2011 cannot be found in this study; however, the six museums that did not have exhibitions on their website in 2011 were art museums, predominantly

116 Cadavre Exquis: http://freddie.smk.dk/#/spil

¹¹⁵ Art memory: http://www.aabne-samlinger.dk/fuglsang/formidling/familie/memory.asp

'smaller' and not from the capital area. In comparison, results from *Danske museer i tal* (2011) show that, in 2009, 34% of the Danish museums had online exhibition(s) on their website (Table 11, Appendix 18). This either suggests a general decrease in the number of online exhibitions from 34% in 2009 to 20% in 2010 and further to 14% in 2011, or that the museums' definition of online exhibitions differs from mine. Data from *Danske museer i tal* (2011) and my content study was similar to that data reported by the museums, which showed presence of online exhibitions in 2009, while only 35% of these museums had online exhibitions in 2010 (Table 11-2, Appendix 18).

The size and style of the online exhibition varied considerably. A large part of the museums had created online exhibitions targeting children and young people. This is related to the museums' understanding of online media and their motivation for appropriating online media. However, it may also be because that the Danish government has encouraged museums (and science centres) to develop digital teaching and educational resources, e.g., through the e-museum initiative. Other museums have exhibited objects and artefacts from the collection, which is not exhibited in the physical museum. For some museums, the online exhibitions were a product or part of a research or project and were large and extensive subsites, while other museums showed a handful of images and reproductions of objects and artefacts.

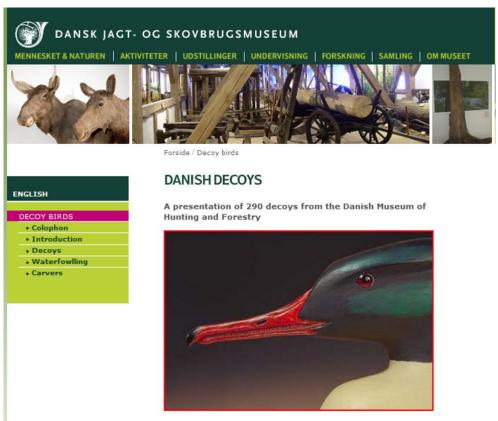


Figure 11: Online exhibition: Danish decoys at the Danish Museum of Hunting and Forestry (2009)

Danish Decoys (Figure 11) is an example of an online exhibition created in 2009. The online exhibition was developed with external funding from the digital pool KulturNet Danmark (see more in Section 2.4.1, Chapter 2). Danish Decoys is a typical example of a Danish online exhibition, which is not an exhibition in regular terms as in the physical space, but rather a database and presentation of images. In Danish Decoys, the users can search for specific decoys across species, gender, material, etc. and obtain images and information about each decoy. From that perspective, as a user you have to be extremely interested in decoy birds in order to browse through the content. Whether Danish Decoys should be defined as an actual online exhibition can be discussed, however as the Danish Museum of Hunting and Forestry itself designates this as an online exhibition, it convey something about how the museum perceives what an online exhibition is, or at least, was in 2009 when it was developed.

About half of the museum with online exhibitions have listed previous online/web exhibitions on (sub)sites/or webpages. One of the earlier expectations for the online museums online was to make the museum collections accessible online and in Denmark it has been possible to search in the museum collections across the Danish museums¹¹⁷ since 2004. Notably, only a limited number of museums highlight this feature in their online communication or even link to the sites.

In 2010, the majority of museums with online exhibitions were cultural heritage museums (more than 60%); however, only one-fourth of the cultural heritage museums have online exhibitions. In comparison, 29% (10) of the museums with online exhibitions were art museums that accounted for 31% of all major art museums. Half of the special museums had online exhibitions in both years (Table 63-64, Appendix). Surprisingly, 34% (11) of the museums with online exhibitions in 2010 were smaller (art) museums, whereas 25% (8) and 19% (6) were very large museums and large museums (Table 11). This means that 28% of all smaller major museums had exhibitions on their website, 40% of all very small museums and 35% of all very large museums in 2010 (Table 65, Appendix 18). In 2011, the museums with more employees tended to have online exhibitions (Table 11).

Year	Very small (<3 employees)	Smaller 4-10 employees	Middle (11-20 employees)	Large (21-34 employees)	Very large (> 35 employees)	Total
2010 (n =118)	6% (2)	34% (11)	16% (5)	19% (6)	25% (8)	100%
Within museum size	40% (2)	28% (11)	15% (5)	38% (6)	36% (8)	(19)
2011 (n =119)	0%	25% (6)	13% (3)	21% (5)	42% (10)	100%
Within museum size	0%	15% (6)	9% (3)	31% (5)	46% (10)	(25)

Table 11: Online exhibition. Percentages of major museums with online exhibitions on their website (Table 16-17, Appendix 18)¹¹⁸

¹¹⁷ The Heritage Agency of Denmark has developed two databases "Museernes samlinger" (The Museums' Collections), which gives access to the Danish cultural heritage museums' collection. The counterpart is "KunstIndex Danmark" (Art Index Denmark), which gives access to the Danish art museums' collections.

¹¹⁸ There was not a statistically significant relationship between the museum size and games neither in 2010 nor 2011.

6.2.4.1.6 Languages

All museum websites were in Danish in both 2010 and 2011. In 2010, 39% (39) of the major museums and in 2011, 32% (38) had websites entirely in Danish (Table 12). However, since Denmark is a small country population wise; many museums had translated their sites into other languages, possibly in order to make the museum known to a wider audience beyond the borders of Denmark. Around 35% of the museums had translated their websites into English in 2010 and 39% in 2011. In 2010, 29% of the museums had a website in three languages (Danish, English and German). Very few museums had a website in more than four languages (including languages such as Chinese, Polish, French, Dutch, etc.) (Table 12). All museums with websites translated into languages other than Danish had not translated the entire website, but larger parts. Particularly, the sections with information 'about the museum' and 'events' were translated into English, German or other languages. This reinforces the argument about Danish museums using their websites as part of their marketing activities towards future visitors and tourists.

Year	Danish	Danish & English	Danish &	Danish, English	Danish, English,
2010 (n =119)	33% (39)	35% (41)	German 1% (1)	& German 29% (34)	German & others 3% (3)
2011 (n =119)	32% (38)	39% (46)	1% (1)	25% (30)	3% (4)

Table 12. Languages. Percentages of use of languages by major museums (Tables 1-2, Appendix 18)

The museums with websites entirely in Danish were primarily cultural heritage museums (70% in 2010 and 76% in 2011) (Table 3-4, Appendix 18) and smaller museums (58% in 2010 and 61% in 2011) (Tables 7-8, Appendix 18). Thus, 38% of the cultural heritage museums and 58% of the smaller museums had websites completely in Danish (in both years) (Table 3-4; 7-8, Appendix 18). The majority of museums with websites in several languages (Danish, English and German) were also cultural heritage museums (74% in 2010 and 73% in 2011), thus 33% of the cultural heritage museums had websites in three languages in 2010 and 29% in 2011 (Table 3-4, Appendix 18). Whereas museums with websites only in Danish were predominantly smaller museums, the museums with websites in Danish, English and German were more evenly distributed across museum size. Interestingly, this was also the case for museums with websites in more than four languages (Table 7-8, Appendix 18). This is of interest as it is mainly the larger museums with more resources and more staff with online communication competences. Thus, one would expect that it was the larger museums that primarily had websites in several languages. The museums with websites in Danish and English were mainly cultural heritage museums and art museums (Table 3-4, Appendix 18). There was a statistically significant

relationship between the museum size and language used on the museum websites in both 2010 and 2011. 119

Analysing the regional differences in relation to the language on the Danish museum websites, the regions close to the German border which typically have many German tourists had a German version of their website. Seventy-five percent of the museums with a website in German were geographically located in Southern Denmark or Central Jutland close to the German border.

6.2.4.2 Social media presences and practices

As I have already discussed previously, although social media in a museum realm have received much attention, empirical studies and research on Danish museums' use of social media is scarce. Therefore, the longitudinal study of Danish museums on social media presented in this thesis is a unique contribution to the field as it outlines the general state of affairs as well as the developments in social media use from 2010-2013.

Figure 12 presents the results of the four-year study across the social media platforms, namely, Facebook, YouTube, Foursquare, Twitter and Flickr. Facebook has by far been the most popular of all social media platforms in Denmark throughout the four years, and it is also the social media platform used the most by Danish museums in 2010 and 2011 (thus, the museums' Facebook presence and usage will be addressed in more detail separately). Interestingly, in 2010 only one museum had a profile on Foursquare; however, in 2012, the percentage of Danish museums on Foursquare had exceeded the number of museums on Facebook. It was first in January 2010 that the Foursquare app began to allow check-ins from any location, making it possible for Danish users to check anywhere they liked. Thus, until then the possibilities in Foursquare were rather limited. Another reason for the interest in location-based services and apps was the increase of mobile Internet access. In 2010, 24% of the Danish population with mobile phones used had mobile Internet (Statistics Denmark, 2011b, p. 24) (Statistics Denmark, 2011b, p. 20) (Statistics Denmark, 2011b, p. 20). In 2011, the percentage had risen to 35% (ibid.), and in 2012, the share of users with mobile Internet was 54% (Statistics Denmark, 2012b, p. 25). Thus, this increase in mobile Internet access and the potential of downloading apps such as Foursquare, might explain the adoption of Foursquare among the Danish museums.

The two-tailed Fisher's exact tests revealed significant relationships between the museum size and language used on the museum websites in both 2010 (p= .016) and 2011 (p= .016). The effect sizes were moderate (Cramer's V= .365; .262 and .315) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5) (Table 11-12, Appendix 20).

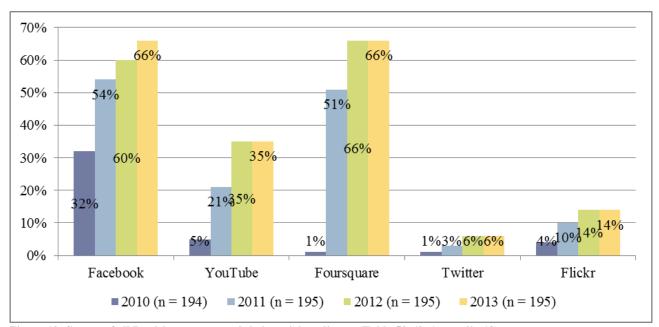


Figure 12: Survey of all Danish museums and their social media use (Table 50-69, Appendix 18)

In 2010, YouTube, Twitter and Flickr, had a relatively limited usage among the Danish museums. The museums with a YouTube account were primarily very large museums (56%)¹²⁰ and art museums (67%) (Table 70; 74, Appendix 18)¹²¹; whereas, only one museum, the National Museum of Denmark, was on Foursquare and had a Twitter account (Table 71-72, Appendix 18). In relation to Flickr, 50% of the museums were cultural heritage museums, 38% were art museums and 12% were special museums (Table 73, Appendix 18). Of these museums, 75% were either large or very large museums (Table 77, Appendix 18)¹²². There was a statistically significant relationship between the museum size and the museums' usage of Flickr in 2011-2013¹²³ and between the museum type and the museums' usage of Flickr in 2012 and 2013¹²⁴.

The following year, there was a substantial increase in the use of social media platforms, particularly in the museums' usage of Foursquare and YouTube (Figure 12). For Foursquare, 35% of the museums were smaller museums, thus 57% of the smaller museums were using Foursquare, and 25% were middle size museums, which mean that 53% of the middle size museums used Foursquare

¹²⁰ This percentage only covers the major museums, not the museum branches.

¹²¹ There was a statistically significant relationship between the museum size and the museums' usage of YouTube in 2010 (p = .003), 2012 (p = .019) and 2013 (p = .015). The effect sizes were moderate Cramer's V = .286; .224; and .229) (Table 25-27, Appendix 20).

This percentage only covers the major museums, not the museum branches.

 $^{^{123}}$ 2011 (p = .002). The effect size was moderate (Cramer's V = .394); 2012 (p = .000). The effect size was relatively strong (Cramer's V = .486); and 2013 (p = .000). The effect size was relatively strong (Cramer's V = .472) (Table 20-22, Appendix 20).

 $^{^{124}}$ 2012 (p = .030). The effect size was moderate (Cramer's V = .204); 2013 (p = .047). The effect size was weak (Cramer's V = .197) (Table 18-19, Appendix 20).

(Table 78, Appendix 18). ¹²⁵ In relation to YouTube, 57% of the very large museums had a YouTube account, whereas it was only 16% of the smaller museums. ¹²⁶ There was a rather large difference between Foursquare and YouTube in relation to the availability of content. The content on Foursquare provided information about the locations and the users' check-ins at the locations. Thus, being present at Foursquare is less resource demanding compared to YouTube where the museums need to produce actual content. Therefore, it is not surprising, that mainly the very large museums have a YouTube account. When examining the museums' activity, e.g., YouTube, it becomes evident that the majority of museums on YouTube have uploaded few videos, 65% have uploaded less than ten videos; of these 33% have uploaded one or two videos (Table 79, Appendix 18).

In 2012, 14% of the Danish museums used Flickr. Of these, 60% were cultural heritage museums, 30% were art museums (Table 80, Appendix 18) and 53% were very large museums (Table 81, Appendix 18). In comparison, 35% of the museums used YouTube, 66% used Foursquare, and 6% used Twitter (Figure 12). Comparing these results with American museums' social media usage in 2012, American museum used social media to a much higher degree (70%) than Danish museums, particularly in relation to Twitter, this may be because Americans who use Twitter are more compared to Danes (in Denmark, the percentage of Twitter users are still relatively small); in terms of Facebook, it was 94%, Flickr, 49% and YouTube, 56% (Fletcher & Lee, 2012, p. 511).

The difference in percentages of Danish museums social media usage from 2012 to 2013 is insignificant; this is surprising as one would assume that the percentage of museums using social media would increase. This might be due to an increased usage of other social media platforms, such as Pinterest, Google Plus, Instagram, and LinkedIn, which have not been included in my study. However, from my information observations, which I in the Methods chapter refer to as contextual framing (see Section 5.4.9), I can conclude that an increasing number of Danish museums as of today (2014) have appropriated the in particular Instagram and Pinterest, which enable users to take, tag and share photos.

If the Danish museums' usage of social media is compared with the Danish organisations' usage of social media (Haug & Christiansen, 2014), ¹²⁷ Facebook is also the most widely used among the Danish organisations (86%), followed by Twitter (49%), YouTube (48%), LinkedIn (47%) and blogs (18%) (Haug & Christiansen, 2014, p. 5). Thus, Danish museums do not use social media to the

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There was a statistically significant relationship between the museum type and the museums' usage of Foursquare in 2011 (p = .000). The effect size was moderate Cramer's V = .360) (Table 28, Appendix 20).

¹²⁶ There was a statistically significant relationship between the museum size and the museums' usage of YouTube in 2010 (p = .003), 2012 (p = .019) and 2013 (p = .015). The effect sizes were moderate Cramer's V = .286; .224; and .229) (Table 25-27, Appendix 20).

The report builds on a survey answered by 127 different organisations, including interest groups, unions, trade associations, NGOs, sports organisations, political parties and others (Haug & Christiansen, 2014). The sample is not representative; however, as there are no studies or research of the Danish organisations' usage of social media, I consider it relevant to compare the results of this report with my findings.

same extent as other Danish organisations. This might be due to the fact, that my results are based on data from 2010 to 2012, whereas Haug and Christiansen's report is from 2014, additionally that the size of the organisations is in general larger than the Danish museums, and that these organisations have employees specifically assigned to manage social media. According to Haug and Christiansen, Danish organisations mainly use social media for 'communication purposes' (89%) (2014, p. 12), what this communication purpose imply is not specifically clarified; however, from this study it is understood that communication is different from campaigns, membership recruitment, staff recruitment, fundraising and others (2014, p. 6).

Examining the Danish museums' content and activity on social media, the purpose do appear to be communication, however, not the two-way communication, which the platform affords, but rather communication in a traditional broadcast sense, that is as a one-way transmission of a message to multiple receivers. Thus, the notion of social media as online venues for user interaction, network, co-creation and participation is not part of a Danish museum context. Danish museums primarily use YouTube and Flickr as a broadcast platform from which they inform users about the museum activities, exhibitions and special events. According to the highly cited article "Users of the world, unite! The challenges and opportunities of social media" of Kaplan and Haenlein (2010)¹²⁸, YouTube and Flickr as social media are defined as belonging to the subgenre 'content communities', which build on sharing of content, either videos or photos (2010, p. 63). These content communities are often used as platforms to distribute various kinds of content and users are not required to create a personal profile in order to access or view the content, thus making these platforms a 'very attractive contact channel' for companies and businesses (2010, p. 63). My research also believes that this line of thought is also typical for the Danish museums.

6.2.4.2.1 Facebook

The use of social network sites in Denmark has increased significantly in the last years, in particular since June 2008 when Facebook was first introduced in a Danish version (Brügger, 2013, p. 23). In 2008, 27% of the Danes with Internet (16-74) access used social network sites. The following year, this percentage had grown to 42%; of which, 95% of these were on Facebook (Statistics Denmark, 2009). In 2010, 54% (2.2 million) of the Danes used social network sites (94% of these users used Facebook), and in 2011, the percentage of Danes on Facebook had risen to 58% (2.4 million) (Statistics Denmark,

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¹²⁸ In their article, Kaplan and Haenlein (2010) define and conceptualise social media as social presence/media richness and self-presentation/selfdisclosure to categorise the different types of social media.

2012a, p. 13). In 2013, 65% (2.7 million) of the Danes (16-89) used social network sites¹²⁹. Overall, this makes Facebook by far the largest social media site.

The importance of Facebook to museums has already been discussed in the museum literature and community. The Danish museums have also noted the growing popularity of Facebook among the Danes as well as among international recognised museums. Table 13 presents the Facebook usage across museum type. In 2010, the majority of museums on Facebook were cultural heritage museums and art museums. However, when each museum category is examined, the findings suggest that more art museums than cultural heritage museums are on Facebook, as 68% of the art museums had either a Facebook page, group or profile in 2010, whereas only 25% of the cultural heritage museums were on Facebook (Table 82, Appendix 18).

Museum Type	Facebook 2010	Facebook 2011	Facebook 2012	Facebook 2013
Cultural heritage	56% (35)	66% (69)	67% (78)	67% (87)
Art	41% (26)	27% (28)	27% (31)	26% (33)
Natural heritage	3% (2)	6% (6)	5% (6)	5% (7)
Special	0% (0)	2% (2)	2% (2)	2% (2)
Total	100% (63)	100% (105)	100% (117)	100% (129)

Table 13: Facebook usage across museum type (Table 82-85, Appendix 18)¹³¹

In 2011, 75% of the natural history museums were on Facebook, while 49% of cultural heritage museums were on Facebook (Table 83, Appendix 18). In 2012 and 2013, 82% and 87% of the art museums were on Facebook, respectively; whereas, the percentage of the cultural heritage museums were a little lower, 55% and 61%, respectively (Table 84-85, Appendix 18).

In the beginning, predominantly the major museums used Facebook. In 2010, 45% of the museums on Facebook were major museums; whereas, in comparison only 13% of the museum branches were on Facebook (Table 90, Appendix 18). From 2010 to 2011, the number of museum branches on Facebook increased to 38% (Table 91, Appendix 18). The number of museums on Facebook continued to increase in 2012 for both major museums and museum branches (Table 92,

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¹²⁹ Statistics Denmark has not reported specific overall usage of social media or Facebook usage for 2012, instead they present percentages of users who have uploaded self-created content on websites (including social network sites, such as Facebook and LinkedIn) (Statistics Denmark, 2012b, p. 13).

¹³⁰The importance of Facebook has also been discussed in other areas of the cultural sector, e.g. in the library literature where Facebook has been acclaimed for its marketing value and the possibilities of promoting visibility and connecting library services to the users (Xia, 2009, p. 470).

¹³¹ The two-tailed Fisher's exact tests revealed significant relationships between the museum type and the usage of Facebook among the Danish museums in 2010, 2012 and 2013: 2010 (p= .000), 2012 (p= .044) and 2013 (p= .010). The effect sizes were moderate (Cramer's V= .234; .262; and .315) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5) (Table 13-15, Appendix 20).

Appendix 18) and as well in 2013, where 77% of the major museums and 49% of the museum branches were on Facebook (Table 93, Appendix 18).

In 2010, there were no indications if museum size had any impact on museums due to its Facebook presence. More than half of the middle size (56%), large (60%) and very large (55%) museums were using Facebook, whereas 20% and 26% of the very small and smaller museums, respectively, were on Facebook (Table 14).

	Very small	Smaller	Middle size	Large	Very large	Total
2010 count	1	11	19	12	12	55
% within museum size	20%	26%	56%	60%	55%	44%
% within total museums on Facebook	2%	20%	35%%	22%	22%	100%
2011 count	3	21	24	14	17	79
% within museum size	60%	48%	71%	70%	74%	63%
% within museums on Facebook	4%	27%	30%	18%	22%	100%
2012 count	3	25	25	14	18	85
% within museum size	60%	57%	74%	70%	78%	68%
% within museums on Facebook	4%	29%	29%	17%	21%	100%
2013 count	3	29	27	14	20	93
% within museum size	60%	66%	79%	70%	87%	74%
% within museums on Facebook	3%	31%	29%	15%	22%	100%

Table 14: Major museums on Facebook across museum size (Table 86-89, Appendix 18)¹³²

Table 15 illustrates whether the museums had a page, a group or a profile on Facebook across the four years. Most of the museums, which were already on Facebook, had a page ¹³³; however, in 2010, 22% of the museums had a Facebook group ¹³⁴, and 5% had a Facebook profile. It is of interest that from 2010 to 2013, the percentage of museums with groups and profiles decreased.

In the years following Facebook's transformation from being an online network solely for US college students to be open for everyone with an e-mail address, Facebook groups were launched as a feature for users to share similar topics and content of interest among group members. From the beginning, Facebook groups were rather popular among the Danish museums, 22% of the Danish museums had created a Facebook group (Table 15). And in 2010, the communication on the Danish museums' Facebook pages and the groups was very similar. However, one crucial difference between the communication from the museum pages and the museum groups was the messages. A smaller

¹³² The two-tailed Fisher's exact tests revealed significant relationship between the museum size and the usage of Facebook among the Danish museums in 2010 (p= .014). The effect size was moderat' (Cramer's V=.312) (Rea & Parker (1992) in Kotrlik & Williams, 2003, p. 5) (Table 13-15, Appendix 20).

¹³³ A Facebook page is according to the official Facebook definition a page "for organizations, businesses, celebrities, and bands to broadcast great information to fans in an official, public manner" (Facebook, 2010, 1). The users can choose to express that their likes to the page, thus becoming *likers* of the page.

According to Facebook Inc., a group is organised around a real-life interest or group, though a group can also be used to declare an affiliation with a brand (Facebook, 2007).

number of museums sent out messages to the group members' personal inbox.¹³⁵ These messages usually contained information about upcoming events at the physical museum, such as special seasonal activities, special exhibitions etc., but had much more personal sentiments.

In relation to the Facebook profiles, in 2010, 5% (3) of the Danish museums on Facebook had created a profile. One of the three museums had added personal information and features, such as gender, relationship status, likes and interests to their profile, in order to create the image of a person and not a museum institution. Thus, it communicated and interacted on Facebook (almost), as if it were a real person. However, few to none museums had made use of this method and just created a profile but by 2013, only one museum had a Facebook profile.

	Facebook Page	Facebook Group	Facebook Profile
2010	73% (46)	22% (14)	5% (3)
2011	78% (80)	17% (17)	3% (3)
2012	92% (108)	4% (4)	1% (1)
2013	98% (126)	2% (2)	1% (1)

Table 15: Facebook page, group or profile (Table 94-97, Appendix 18)

However, throughout the four years, the percentages of museums with a Facebook group and profile have diminished. From the e-mail correspondences concerning the Facebook Insight study, I learned that several museums had created a Facebook group by coincidence and not as part of a specific strategy. This is in line with the previous findings of the thesis concerning the museums' online competences. My data does not support arguments of online media competency development; however, from following and observing the Danish museums on Facebook for years, a noticeable change has taken place in how the museums use Facebook. Figure 13 illustrates the Facebook page of Elsinore Municipality Museums (Helsingør Kommunes Museer) in 2010 and in 2014. This is a state cultural heritage museum of middle size in the Capital Region of Denmark and rarely made use of interactive features on their website in 2010 and 2011. In 2010, the museum's Facebook page was a page with no content, i.e., no photos, videos, information about the museum and no updates, and had four followers (including me). From 2010 to 2012, the number of Facebook users increased to eight. From 2012 to 2013 the number of users increased to 111, and as the screen shoot from 2014 indicates, the communication and online interaction is very different from 2010. The museum now makes regular status updates that both informs about the onsite events, present behind-the-scenes stories, link to external information sources, etc. using photos and videos.

 $^{^{135}}$ I have had access to these messages as I have been a member of all Danish museum groups on Facebook from 2010 to present.

However, not all museums pushed information on Facebook in 2010. A very limited number of museums tried to engage and initiate discussions asking users specific questions. For instance, Den Gamle By (Open-Air Museum) when developing a new museum café asked the users on Facebook what they would like to eat there. Other museums asked the users to upload photos or to help the museum with collecting objects and artefacts for special exhibitions. This tendency of employing Facebook has grown since 2010, in accordance with what DeSanctis and Poole would refer to as the 'spirit' of Facebook.





Figure 13: Facebook page of Elsinore Municipality Museums in 2010 and 2014

In addition to the development of the museum organisations' online media competences, the development and changes of Facebook's design and application, such as the 'like button' and 'timeline' have had an impact of the Danish museums appropriation of Facebook. Recalling the concept of affordances from the first chapters of this thesis, it is worth noting that design and functionalities do have an impact on the online museum practices as they both condition and enable the possibilities of communication and interaction.

	Cultural heritage	Art	Natural history	Special
2010	11.746 (24)	42.784 (21)	57 (1)	0
2011	20.351 (52)	67.644 (13)	1.311 (5)	0
2012	79.295 (71)	102.254 (31)	3.358 (6)	107 (2)
2013	65.143 (85)	158.180 (33)	8.647 (6)	969 (2)

Table 16: Numbers of museum Facebook users (Facebook pages) (in parenthesis is the number of museums) (Table 98, Appendix 18)

Table 16 presents the number of museum Facebook users across museum type. Art museums' Facebook pages have more users than any of the other museum types. The next most popular museum type is cultural heritage museums. The number of Facebook users is in most cases related to the size of the museum and the number of physical visitors. This means that the largest Danish museums in terms of physical visitors are also the largest on Facebook. Hence, Louisiana Museum of Modern Art, which was the most visited museum in Denmark, in both 2009 and 2010 at their physical location, was also the museum with most museum Facebook users. The results likewise confirmed a statistical significant relationship between the number of museum website users and the Facebook users. ¹³⁶

6.3 Danish museums' appropriation of online media

In the present chapter, I have presented the results of the analysis concerning the Danish museums online practices within a framework developed in Chapter 4. To understand how online media permeate museums' dissemination and communication practices, it is essential to regard the practices in relation to the government policies and recommendations concerning the museum as a public institution, digitalisation strategies as well as the four elements, namely, online media competences, attitudes, motivation, and actual usage as proposed in the analytical framework. This maps the space and the structure for understanding how Danish museums appropriate online media.

As discussed in Chapter 2, there has been an ongoing mainly theoretical discussion of whether a paradigm shift in the museum has taken place. My analysis does not indicate that a paradigmatic change has happened, at least not to the extent the discursive changes in the framing of the museum institution's function seem to suggest. I will not argue against the fact that there is an ongoing change of perspective on how the museums understand their role in the Danish society, as Danish museums no longer guard themselves against the public, but do take their dissemination obligations seriously. However, how the dissemination should be executed, in particular in the online space, is still

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 $^{^{136}}$ Spearman's rho revealed a statistically significant relationship between the museum website users and Facebook users in all four years (2010 rs = .509, p < .001) (2011 rs = .379, p < .001) (2012 rs = .337, p < .001) (2013 rs = .371, p < .001) (Table 17, Appendix 20).

a point of discussion. What has been the intention has not only been to describe the relationship between the individual museum and online media and how the museum implements and applies online media in the everyday work practices but also to point to the complexity of online museum practices and the many aspects that affect and determine the appropriation decisions across the Danish museums landscape.

One of the main points was to examine whether or not the Danish museums had an online presence, i.e., either a website or social media presence. This may seem trivial because the widespread online media diffusion and adoption among museums have been proclaimed as a fact (Pekarik, 2003; Veirum & Christensen, 2011). In 2010, all Danish state-owned and state-subsidised museums were online, first and foremost in the form of one or more websites, subsequently on Facebook (32%). The general objective of the online presence appears to be first and foremost directed towards potential visitors who seek information needed to plan a physical museum visit. This trend is seemingly similar to the results of López et al. (2010), which show that 94% of the 240 websites surveyed, presented basic information related to museum visit planning or information related to the objects in the collections. From my perspective, it would have been relevant to split the category into two, distinguishing between information related to onsite museum visits and information related to the museum collections as these two things do not necessarily have anything in common. A museum visitor who is planning a visit might also want specific information about objects in the collection; however, in most instances, my assessment is that this is not the case. Often when users search for object-specific information, it is for educational or work related purposes (see the following chapter). An important aspect of having a museum website is to provide basic information to the visitor. This idea is also reflected when examining the Danish museums' motivations where the website by many museums is regarded as a problem-solving tool and a filter for direct interaction with the users. This type of museum website is what Schweibenz refers to as the 'brochure museum' (2004), and Løssing pointed it to as the most predominant museum website type among the Danish art museum (2008).

Overall, the Danish museums' usage of interactive features (addressed as blogs, videos, podcasts, games and online exhibitions) on their websites is rather limited. Several studies have shown that museums in the English-speaking world (primarily England and USA) to a much higher degree than other European museum websites make use of web 2.0 tools (López et al., 2010; Schweibenz, 2010). These studies do not present an answer but simply conclude on the basis on comparative studies. One can speculate that it might have to do with how the museums are funded and the tradition, especially in the US, for external funding possibilities, another reason could be how the museums in the English-speaking countries to a larger extent than the Danish museums have been forced to think about visitor numbers as a parameter of success and justification for their existence. However, with the introduction of new public management in the Danish cultural sector, performance contracts and

framework agreements have been introduced in the Danish museums, the Danish state-funding has also been reduced and restructured, and the Danish museums have now been assigned quantitative objectives, such as visitor numbers (among a number of other things). Additionally, it has become a necessity for Danish museums to obtain private funding (Lyck, 2010; Skot-Hansen, 2008). Therefore, it could be expected that the museums would increase their usage of online media in order to fulfil the criteria of increasing the number of visitors by attracting and engaging new user groups.

The low prevalence of interactive features on the Danish museum websites and the usage of social media might be consistent with other Scandinavian countries. According to a Swedish study (Olsson & Svensson, 2013), Swedish museums have been unsuccessful in their appropriation of online media. Despite the Swedish government's investment of one billion Swedish Crowns on the digitalisation of the museums. According to Olsson and Svensson, the result was that the Swedish museums were still not able to communicate with either one another or with the public (2013, p. 46). 137 Of the interactive features, Danish museums primarily have videos on their websites, to a lesser degree podcasts and a small percentage games (Figure 8). The museums that have integrated interactive features are predominantly larger or very large museums. A report of the Danish museums' strategic communication from 2008 concluded that the least strategic museums were smaller cultural heritage museums, which had low prioritisation of communication including online communication (Bysted-Sandberg & Kjeldsen, 2008, p. 15). Thus, from that perspective, it might not be so surprising, that the very small and smaller museums do not have same integrated interactive features on their websites. The implementation of (interactive) online exhibitions is still relatively small; this is in particular surprising because online exhibitions has been heralded as one of the main features in relation to how the museums could make use of the Internet.

When comparing the Danish museums' usage of interactive features with the study of López et al., the Danish museums have to a lesser degree integrated interactive features on their website, except for the blog. In 2010, 6% of all 240 museums had a blog, 42% of the museums had multimedia and 18% had single-player games on their websites (2010, p. 241). The category of multimedia covers audio, video, podcasts and animations (2010, p. 239). In relation to how the four different museum types (cultural heritage, art, natural history and special) appropriate online media, the percentage of natural history museums which have implemented interactive features, are higher than for any of the other three types of museums. However, that said, the total number of major natural history museum is no more than three major museums, which are either of middle size, large or very large. Interestingly, special museums have not to the same extent as natural history museums implemented

¹³⁷ Although the conclusions of the Swedish study are similar to mine, it should be noted that Olsson and Svensson build their argument upon interviews with government officials and not on an actual empirical study that survey how the museums appropriate online media.

interactive features on their websites that even if these museums as the major natural history museums are larger museums. Art museums more than cultural heritage museums have implemented interactive features and use social media. This pattern is also visible in the study of López et al. (2010).

As stated, it is predominantly larger museums (including middle size museums) that are the front-runners in relation to online media. It is noteworthy though that the group of large museums appears not to use interactive features as much as one would expect, when compared with middle size and very large museums. Large museums did not have blogs on their websites in either 2010 or 2011, and they had fewer videos on their website than both middle size and very large museums. The characteristics that separate large museums from the other museum sizes are the museum type and number of visitors; large museums are predominantly cultural heritage museums (65%)¹³⁸, and they have less than 150.000 onsite visitors per year (2009)¹³⁹.

In the early days of social media, Russo, Watkins, Kelly and Chan (2006, 2007) argued that social media would have an impact on the museum's self-understanding in relation to the users changing perception of authority, knowledge, authenticity, and not the least the communication models and practices. However, despite the potentials offered by social media, Russo et al. argue that the museums remain slow in recognising and acknowledging these potentials. For the museums to be relevant in the 21st century they need to engage and communicate differently with the museum users: "[...] social media have yet to make a significant impact on museum communication models, which remain fundamentally one-way" (2007, p. 21).

To a large extent, the Danish museums' usage of Facebook can be characterised in the same way as the museum websites presenting visit planning information. Most museums posted (or pushed) information about museum activities, guided tours, special talks, new exhibitions, etc. in order to entice the Facebook users to come to the physical museum. Therefore, the frequency of updates varied from several times a week to every half year or even less, depending on the necessity. In other words, in 2010 majority of museums used Facebook as a traditional broadcast medium. This is also the case in relation to the museums' appropriation of blogs. More recently, there has been an observed difference in the communication style of the Danish museums on Facebook that to a much larger extent use dialogic and compelling forms.

The tendency to use social media as a one-way communication method is by no means a special Danish trend. Although the American museums regard social media as important, according to Fletcher and Lee (2012), they still use social media, such as Facebook and Twitter, to promote the physical museum and its events and to attract new online user group. Only a small group of American

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¹³⁸ Within the category of 'large museums', 65% are cultural heritage museums, 24% are art museums, 6% are natural heritage museums and 6% are special museums.

The number of onsite visitors for 'large museums' range from 20.560 visitors to 139.133 visitors.

museums attempt to use dialogic communication forms to foster user engagement and participation; however, according to this study, this was a minority. Relating this to DeSantis and Poole's notion of 'spirit' (see Section 3.2.3, Chapter 3), one could argue that using social media to broadcast messages would be an 'unfaithful appropriation', because the museums' use of both Facebook and blogs is inconsistent with the general intent (1994, p. 130). Both Facebook and blogs are defined within the umbrella of social media. According to my discussion in Chapter 3, a common understanding of Web 2.0 technologies is that they allow for social interaction, community formation and tackling of collaborative projects (Bruns & Bahnisch, 2009, p. 7). However, in general the Danish museums' appropriation of Facebook and blogs do not invite the museum users to interact, form communities or enter into collaborations.

According to my research, these practices reflect the museums' general attitudes towards online media, as well as their inexperience with online media, since they seem to consider new forms of dissemination and communication on new online platforms as unnecessary and extra work. The museums' attitudes towards and motivations for appropriating online media and in particular social media for dissemination and communication purposes is relevant to include as an argument for why the museums chose to appropriate online media as they tend to do. Some museums consider working with online media as superficial and unimportant in relation to their other work task. Especially at smaller museums, the museum curators have multiple functions and obligations in addition to planning and setting-up exhibitions, apply for external funding, conduct research, disseminating research results to peers primarily at conferences, in journal articles, catalogues, etc. Therefore, when adding new media platforms with different affordances affordability that constantly change, the work load increases and the idea of integrating online media into existing work practices becomes a nuisance. My observations at the museum web user workshops points to that many museums are frustrated because they feel pressured by the various governmental initiatives and policies to implement online media in their current work practices or to develop new programs or projects (Appendix 2). This pressure to constantly learn and implement new technologies has also been addressed in other museum studies (Marty, 2007b).

As the study of Dicker (2010) showed, the curators in her study did not use social media in their work because of time issues. In addition, the mistaken assumption that online media demands fewer resources precisely because of the ostensibly temporal characteristics and the easiness with which one can publish content on a website or at a social media platform, compared to publishing exhibition catalogues, might also have an impact on the decisions to appropriate online media but also on the

¹⁴⁰ Although blogs, according to Kaplan and Haenlein, are considered as an early form of social media, a specific type of personal website with a date-stamps, they due provide the possibility of social interaction with others through the addition of comments (2010, p. 63).

actual online content published online (Hertzum, 1998, p. 135; Holdgaard & Simonsen, 2011, p. 111). However, as it has been proven numerous times in various projects, facilitating dialogue, participation, etc. demands just as much preparation, time and energy online as it does offline (Boritz et al., 2011; Dicker, 2010; Hertzum, 1998; Russo et al., 2008). And in order for museums to become successful online and use social media successfully, the Danish policy makers and museum managements need to realise that appropriation of online media is more than getting hardware and software into the organisations, it demands skills, time and resources (Olsson & Svensson, 2013, p. 56; Russo et al., 2008, p. 29).

In conclusion, the Danish museums' appropriation of online media should be regarded in the light of the museums' various online media competences, motivations and attitudes towards online media and the museum users. Museum websites and the use of social media platforms were mainly considered as a problem-solving tool related to 1) reduce the phone calls by the visitors to the museum, 2) brand and communicate the identity of the museum in order to attract more physical visitors, and 3) educate and prepare the users for the actual physical museum visit. Very few museums articulated user-involvement and participation as motivational factors for appropriating online media. On one hand, the museums wanted to use online media in the transformation of the museum institution from being an elitist temple to being a social platform. However, on the other hand, the museums were also reluctant to accept and integrate online media because they, at least on the surface, challenge and deinstitutionalise the museum, and according to some museums devalue and reduce the core values and professional expertise. Therefore, the use of online media and in particular social media for dissemination and communication purposes was to a certain degree equated with giving away the institutions' most profound trademark – its authority, credibility and authenticity.

7

Online Museum Users and Their Visiting Practices

Previous international research has stressed the need for more empirical studies on the use of online museum resources from a user perspective (Bowen, 1999; Haley-Goldman & Schaller, 2004; Marty, 2008; Peacock & Brownbill, 2007). These studies were undertaken in English-speaking countries and have included users from one or several museums, but without a national scope. The study that Bowen (1999) refers to in his conference paper dates back to 1997¹⁴¹, and although it is more than 15 years old, and its reliability and validity are questionable ¹⁴², it has been widely cited through Bowen's paper. Based on the Bowen's finding, Løssing argues why the museums should establish an online presence: "Despite the fact that the user survey by now is older, it is nevertheless still relevant because it contributes with the important message about what the audience expects from the museums' digital art dissemination" (2008, p. 20). However, during that period, there were no large-scale studies examining Danish online museum users, their motivations and online practices. The purpose of this thesis is to remedy this lack of knowledge.

In this chapter, I address research question four: "How do Danish museum users visit the online museums' websites and follow their social media profiles?" and its pertaining sub-questions:

- 4.1 Who are the Danish online museum users?
- 4.2 What are Danish museum users' online media competences, motivations and attitudes towards online media?
- 4.3 How and to what extent do Danish online museum users use the museums' websites and follow their social media profiles?

The first part of the chapter, Section 7.1, is a demographic overview of the online users of Danish museums. The data for this overview was obtained from the *National Museum Web User Survey* (2010), but the analysis diverges as mentioned in the Chapter 5, Section 5.4.4. The overview consisting of characteristics of gender, age, education, and geographical residency will serve as the foundation for the following analysis. In Section 7.2, the second part of the chapter, I examine the online practices of Danish online users along the four elements: online media competences, attitudes, motivation, and actual usages. The first three elements mainly draw on results of data from the qualitative methods, the

It is unclear how many respondents answered the questionnaire.

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¹⁴¹The survey is conducted as part of the M.Sc. thesis "Museums and the Internet: What purpose should the information supplied by museums on the World Wide Web serve?" by R. Reynolds, University of Leicester in 1997.

focus group interviews and the semi-structured interviews, whereas actual usage is primarily based on data from the *National Museum Web User Survey* (2010), as well as the Facebook Insight study. In the final section, I conclude by discussing the online visiting practices of the Danish museum users.

7.1 Characteristics of Danish online museum users

Multiple researchers have emphasised the need for expanding the research on museum visitors by including factors other than demographical descriptions (Ellenbogen, Falk, & Haley-Goldman, 2008; Falk, 2009, pp. 22–37; Packer & Ballantyne, 2002). According to Falk, "[...] quantitative measures such as demographics provide too little information about museums to be useful variables for describing and understanding the museum visitor experience" (Falk, 2009, p. 32). I agree with Falk and believe that demographic details alone are not sufficient to understand the online users' online museum visiting practices. Nevertheless, I consider demographics as an important part of understanding the Danish online museum users, because the knowledge about the online museum users in a Danish context has been almost non-existent, despite the various policies and recommendations within the area.

7.1.1 Who are the Danish museum website users?

In the *National Museum Web User Survey* (2010), as well as in this thesis, a Danish museum website user was defined as someone who has visited a Danish museum website at least once within the last year. Users who visit a museum website without ever visiting the physical museum (henceforth 'online only museum users') are an interesting user group. Early literature has pointed out that this group of users consists of 13% of all the users, and it is still growing (Kravchyna & Hastings, 2002, fig. 3)¹⁴³. However this group was excluded by TNS Gallup from the official analysis due to a minimal number of users (3%) (see Section 5.4.5, Chapter 5). The report on the Danes' cultural activities from 2012 indicates that 6% of Danes experience cultural heritage only through the Internet (Epinion & Pluss Leadership, 2012, p. 74). Whether there is an actual development in the online museum user pattern that changes the museum visiting experience into the online space or if the difference it caused by sampling strategy, response rate or a third parameter is not apparent. However, in the following analysis, these users are featured as a separate group. I am aware that this subgroup is considered too small to be statistical representative; however, I have analysed the data as it might indicate particularities, which could be of interest for further investigations.

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¹⁴³ This study was conducted as an online questionnaire with 124 respondents among these were 14 scholars, 21 teachers, 34 students, 35 regular visitors, and 20 members of museum staff (Kravchyna & Hastings, 2002), thus the reliability and validity of the results can be questioned.

Most users visit websites of art museums (41%) or cultural heritage museums (35%) while 10% visit the websites of natural history museums (Table 20, Appendix 19). However, art museums and cultural heritage museums also account for the majority of museums in Denmark (Table 4, Chapter 6). According to the survey, 47% of the website users are male and 53% are female. Further, the majority of art museum websites are visited by females (61%) (Table 5, Appendix 19), whereas males primarily visit natural history museum websites (57%) and cultural heritage museum websites (54%) (Figure 36). The majority of museum website users are above 50 years, 32% are between 50 and 64, and 26% are above 65 years whereas the users between 14 and 29 make up 12% of the total website users (Figure 14). This is not a particular novel result, as all Danish museum visitor studies show that physical museum visitors are generally older (Moos & Brændholt, 2011, p. 61). The 'online only museum users' are comparatively younger than both the museum website users and the physical museum visitors, 20% are between 14 and 29 (Figure 14).

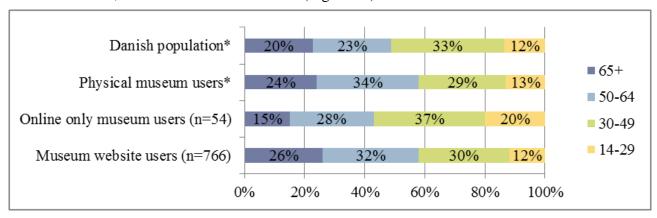


Figure 14: Age (Table 1 & 6, Appendix 19) *(Moos & Brændholt, 2011, p. 61)

As Figure 15 illustrates, the younger users primarily visit websites of cultural heritage and art museums, whereas the majority of users above 65 primarily visit art museum websites. The group of users between 30 and 49 visits natural history museum websites the most.

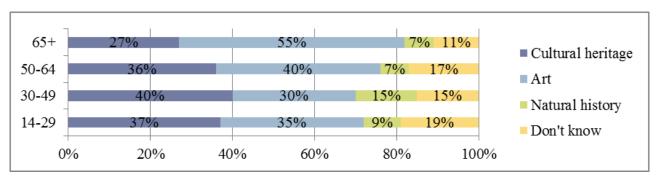


Figure 15: Age across museum type (Table 9, Appendix 19)

As Figure 16 shows most museum website users live in the capital area of Denmark (37%) and the smallest percentage of museum website users lives in the North Denmark Region, which is also the

region with fewest museums (Table 5, Chapter 6). In comparison, there is no major difference between the museum website users and the physical museum visitors or the Danish population; however, in relation to the 'online only museum users', the regional residence appear to be more evenly distributed. The percentage of users from the Region of Northern Denmark for the 'online only museum users' is almost double (15%) than that of both the museum website users and the physical museum visitors.

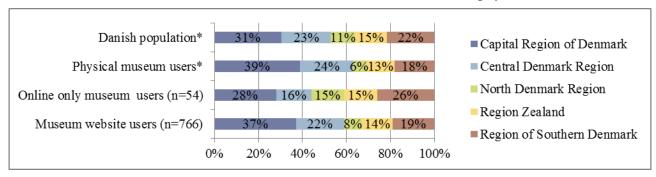


Figure 16: Regional residence (Table 4 & 8, Appendix 19) *(Moos & Brændholt, 2011, p. 64)

As most international and national user studies have shown, the general museum visitor has a higher level of education in comparison to the general public. When comparing these results with the results of the Danish population in general, it shows that the level of education is much higher among the museum website users than the general Danish population, where only 6% of the population had a higher education (Figure 17). For museum website users, this percentage was 17%, whereas for the physical visitors was 26% in 2010. The higher level of education among the physical museum visitors compared to the museum website users in 2010 suggests that the Danish museum website users are a different group than the physical museum visitors. In relation to the educational level among the online only museum users, the percentage of users with lower/upper secondary school was much higher (43%) than for the museum website users in total (24%), thus the educational level of online only users is much more in line with that of the general Danish population.

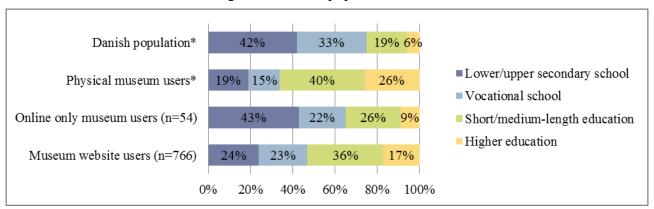


Figure 17: Level of education (Table 3 & 7, Appendix 19). *(Moos & Brændholt, 2011, p. 62)

Figure 18 illustrates the level of education among the museum website users across museum types. As the figure demonstrates, the majority of users with a higher education mainly visit art museum websites

(50%); in comparison, 30% users with lower or upper secondary school exams visit art museum websites. However, this group of users has the highest percentage of online visits to the natural heritage museum websites.

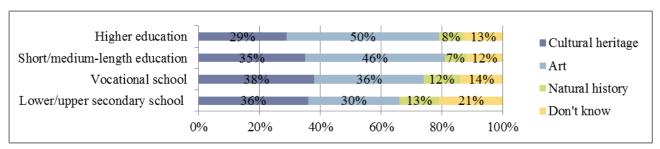


Figure 18: Level of education among the website users across museum types (Table 10, Appendix 19)

In regards to why online only museum users do not visit the physical museums, the visitors predominantly sited the following three reasons (the users could choose multiple answers): 1) museums are not interesting, 2) lack of time and 3) others (Figure 19). Although these results should be interpreted cautiously, it is notable that a large part of these users expresses no interest in museums as such, nevertheless have visited museum website within the past year.

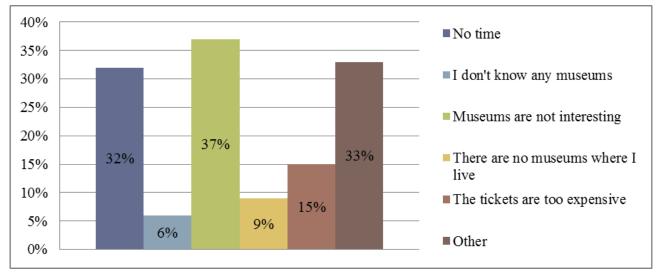


Figure 19: Reasons for not visiting museums (Tables 14-19, Appendix 19)

7.1.2 Who are the Danish museum Facebook users?

Large-scale studies of museums' social media users are scarce; and the few that exist, mostly focus on the museums' communicative strategies (or the lack of it) of only art museums (Damkjær & Schick, 2013; J. Floris, 2011), or are confined to case studies of single museums (Bernstein, 2008; Boritz et al., 2011; Dicker, 2010; Wong, 2011). This section deals with findings related to the Danish museums' Facebook users that include gender, age, and county of living. The analysis builds on the Facebook

Insights study, which involve 96.411 users (see Section 5.4.7, Chapter 5). The Facebook 'likers' of the museum Facebook pages are in this context defined as Facebook museum users and do not include users who are members of a museum Facebook group or users who are Facebook friends with a museum.

Art museums have more Facebook users than any other types of museums, 80% of the Danish museums' Facebook users have liked an art museum, 18% have liked a cultural heritage museum, and two percent have liked both natural history museums and special museums, 1% each. The majority of museum Facebook users are women; 64% of Danish museum Facebook users are female, whereas 33% are male, and 3% are unknown¹⁴⁴. Art museums have more female Facebook users than other museums, 65% of Facebook users of art museums are women, 31% are men, and 4% are unknown. For cultural heritage museums, the gender distribution is 60% female, 37% male and 3% unknown; and for special museum, 65% female, 33% male and 3% unknown. Whereas, natural history museums has a more even gender distribution, 52% female, 44% male, and 4% unknown (Figure 35).

Where the majority of Danish museum website users (58%) are more than 50 years, only 14% of the Danish museum Facebook users are more than 55 years (Figure 20). Although the age categories of the museum website users and the museum Facebook users are not completely comparable, there is still a significant difference between the two, which illustrates that Danish museum Facebook users are comparatively younger than the website users.

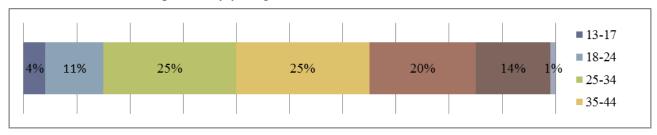


Figure 20: Danish museum Facebook users (n = 96.411) (Appendix 7)

Cultural heritage museums have relatively older Facebook users than the other types of museums. Less than 37% of the cultural heritage users are older than 45 years and 17% are more than 55 years, whereas natural history museums appear to have younger Facebook users. In the case of natural history museums, 30% are between 13 and 17 years. In contrast, cultural heritage and art museums have less than 5% of their users in the same age group (Figure 21).

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¹⁴⁴ Regarding the unknown category, Facebook Insights draws on the users' own profile information and it might be that some users have not listed their gender, therefore falls into this category. It could also be the case that 'unknown' represents other Facebook groups or pages.

The age categorisation is Facebook's own.

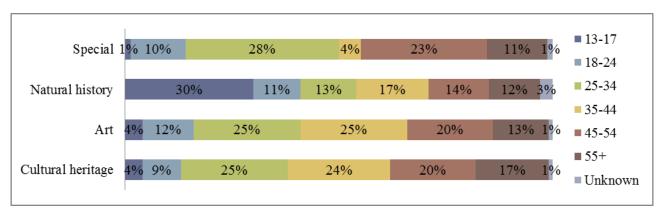


Figure 21: Age of Museum Facebook users across museum type (Appendix 7)

The majority of Danish museums' Facebook users are from Denmark (66%), and 21% are from the neighbouring countries, Sweden and Norway. However, Danish museums' also have Facebook users from countries all over the world; 3% from the USA, 2% from Germany, and 8% from the rest of the world (Appendix 7). Thus, in total, 34% of the users are international users or non-Danes, which is a relatively high percentage, taking into consideration that all communication on the Danish museums' Facebook pages are in Danish (with a very few exceptions). Figure 22 illustrates the distribution of museum Facebook users from Denmark across museum type. Art museums have the least number of users from Denmark and natural history museums have the most users from Denmark. The majority of the art museums' international users come from Sweden (21%) (Appendix 7).

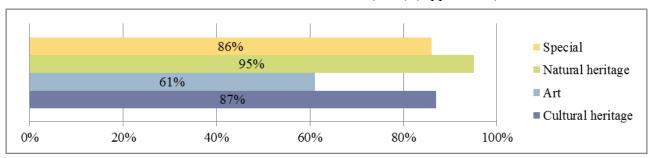


Figure 22: Museum Facebook users from Denmark across museum type (Appendix 7)

7.1.3 Danish online users

In the first part of this chapter, I have presented the demographic characteristics of Danish online museum users, namely website users and Facebook users. Although it is a descriptive analysis, it essential to understand the practices of the online museum users from which the remaining part of the chapter builds on. Furthermore, it adds to the relatively limited body of empirical knowledge about online museum users in the Danish context.

The majority of museum website users are above 50, however, the online only museum users are much younger. In comparison, of the museum Facebook users, 14% of the museum Facebook

users are more than 55 years. Thus, users that only visit the museums' websites and not the physical museums as well as the museum Facebook users are comparatively younger, than both the museum website users and the physical museum visitors. The website users of the art museums are the oldest (63% are above 50), whereas only 13% of the art museum Facebook users fall into the same age group. Interestingly, the website users of natural history museums only make up 1% but 30% for the Facebook users. The museum website users primarily live in the capital area of Denmark, and have a higher level of education than the general Danish population, however not quite as high as the physical museum visitors do. The Facebook Insight study does not include data on the level of education or region of residency, but only country of living. The Danish museum Facebook users are predominantly from Denmark; interestingly, a large portion of international museum Facebook users is Scandinavians.

7.2 Online museum visiting practices

The remaining part of the chapter addresses the Danish museum users' online practices along online media competences, attitudes, motivations and actual usages. Online museum visiting practices refer to the museum users' online actions on the museums' websites and social media profiles. I define the users' online museum practices as 'visiting' knowing well that the concept of 'visitor' and 'visit' in a museum context has different implications. Yet visiting is regarded as an appropriate term to describe the users' practices because visiting is also used in relation to accessing websites or other online environments which are not museum related. Furthermore, visiting does not as such imply a certain level of either (inter)activity or passivity reception but visiting can encompass both active and passive user activities.

7.2.1 Online media competences

Online media competences is partly defined as abilities and past experiences in using online media. As discussed in chapter four, it is relevant to address impact of experience on the users' perception of online museum content and their rationales behind the museum visiting activities. In this subsection, the data obtained from the web questionnaire (i.e., the *National Museum Web User Survey*) regarding the museum website users' Internet usage to illustrate the users' online media competences and is compared with the statistics on the Danes general Internet usage in 2010 (Statistics Denmark, 2011b). In the focus group interviews and the semi-structured interviews, a recurrent theme was the users' general online behaviour.

7.2.1.1 Internet skills

Almost all the museum website users (93%) accessed the Internet every day for private purposes (not business or educational purposes) (Table 32, Appendix 19). In comparison, the percentage of Danes that used the Internet every day in 2010 was 76% (Statistics Denmark, 2011b, p. 17). ¹⁴⁶ One of the reasons why the percentage of users who accessed the Internet every day is much higher among online museum users can be that the respondents in the web questionnaire were sampled from TNS Gallup's Internet panel, thus most likely these users were more frequent Internet users compared to the total Danish population. In addition, as the questionnaire was an online survey, one can presume that all the respondents have a relatively high level of perceived self-efficacy (Straub, 2009; Venkatesh & Davis, 2000) and did not as such distrust their own capabilities in relation to use the Internet to access the museums' websites or follow the museums on the various social media platforms.

The so-called 'digital divide', which describes the inequality between groups in terms of access, use, and knowledge of ICTs, appears to be almost non-existent among both the Danish museum users and the Danish population in general, as the percentage of Danes who had never accessed the Internet in 2010 was 9% (Statistics Denmark, 2011b, p. 18). Thus, from that perspective, lack of Internet access does not hinder online museum visiting practices. When asked about the physical location of where the users accessed the museum websites, 97% answered from home, and 20% of the users accessed the museum websites at work (Table 22-23, Appendix 19)¹⁴⁷, primarily in the age group between 30 and 64 years (89%) (Table 31, Appendix 19). A minority used the websites at school or other educational institution (7%) (Table 24, Appendix 19). It is not surprising that the majority of these users are under 25 years (Table 30, Appendix 19). Very few users accessed the museum websites at the museums on their physical location (Tables 24-29, Appendix 19).

The data revealed that 99% of website users accessed the museums' websites from a computer and 2% from a smart phone, and 1.5% through other modes (Tables 78-80, Appendix 19). ¹⁴⁸ The low percentage of users accessing museum websites from a smart phone is not because Danes did not have mobile Internet access. Actually, 54% of the Danes used mobile devices for Internet access in 2010 (Statistics Denmark, 2011b, p. 20). The question of why the users accessed the museum websites is important in relation to the users' motivational and actual usage of the website, e.g., in relation to the hypotheses of museum website usage before, during and after the onsite museum visit.

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¹⁴⁶ There exist more recent publications on the Danes' Internet usage (e.g. Statistics Denmark, 2012a, 2013); however I employ the numbers from 2010 in order to compare the results from the *National Museum Web User Survey* which also are from 2010.

¹⁴⁷ The respondents were not asked to choose either-or, but could choose several options.

¹⁴⁸ The respondents were not asked to choose either-or, but could choose several options.

In the focus group interviews and semi-structured interviews, information searching and interpersonal communication were some of the recurrent themes the users discussed in relation to their Internet usage. This was not just among the younger users but also among the older users

My Internet usage has changed. From just having an e-mail to search for special knowledge about something I needed, I'm now on Facebook and need to keep up with that... I use it more and more and because I don't have a laptop everything take place sitting in front of my desktop computer. And know I've just gotten a mouse-related RSI¹⁴⁹ [laughs] because I have surfed too much and because I really like it (Female, 69 years, 2012)

Statistics on the total Danish population show that Danes in 2010 used the Internet for various purposes, including communication, information searching, games and online shopping (Statistics Denmark, 2011b, p. 21). According to Statistics Denmark, the application possibilities become more and more concurrent with the increasing appropriation of the Internet into the everyday life. This was also reflected in the both the focus group interviews and the semi-structured interviews.

7.2.1.2 Social media skills

In relation to social media (the respondents were presented with examples such as Facebook and Twitter), 56% of the museum website users use social media (Table 34, Appendix 19). This corresponds with the total Danish population, where 54% in 2010 used social network sites. Among these, 94% had a Facebook profile. In 2010, it was primarily the younger users who used social network sites, 92% of the users were between 16 and 19 whereas only 18% of the users were between 60 and 74 (Statistics Denmark, 2011b, pp. 25–26).

Figure 23 below illustrates the frequency of museum website users' social media usages. Thirty percent of the museum website users use social media every day, 14% once a week and 7% once a month, 5% less than once a month and 44% never or almost never use social media.

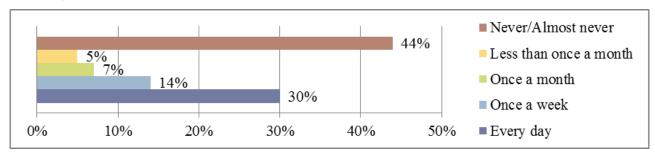


Figure 23: Social media usage (Table 34, Appendix 19)

¹⁴⁹ RSI - repetitive strain injury.

In the focus group interviews from 2010, one of the central arguments in relation to not using social media, in particular Facebook was the inability or inclination to understand the social purposes of Facebook. Thus, in relation to adopting social media, particularly the older users expressed distrust and suspicion.

I use the net very much to get images and teaching material... I don't use social media – it makes my blood boil that you can become 'friends' with someone you have never met. (Male, 62 years, 2010)

Social media is a superficial waste of time and energy. (Male, 52 years)

I don't use social media – I don't want to live my life through the Internet. (Female, 52 years, 2010)

I don't use the Internet, I know nothing about it, but soon I'm going to school and learn about... I'm still not sure what I'm going to use it for, but everyone talks about it all the time. It's the same with Facebook. My grandson tricked me to sign up, but it doesn't say me anything. (Female, 66 years, 2010)

These users reaction to social media adoption was antipathy against the idea of having communities and friends on Facebook which you have not met in real life, especially the question of the concept of 'friends' were raised as a discussion point. The literature, e.g. by Jensen and Sørensen (2013), also discusses this issue. In their study of Danish Facebook users, which were conducted in 2009-2010, Jensen and Sørensen found that the majority of users were critical towards a very high number of Facebook friends, and it was perceived as uncool to have too many friends. The main concern of the museum users from the focus group interviews was that Facebook friends are not real friends if you have not met them offline. Findings from Jensen and Sørensen's study substantiate argument and conclude that most Danish Facebook users do not request Facebook friendships with people they had not met face to face (2013, p. 55). This is not a Danish phenomenon but is also supported by empirical studies in the international literature (e.g., Ellison, Steinfield, & Lampe, 2011).

In 2012, the users in the semi-structured interviews presented a slightly different approach towards social media and Facebook in particular compared to the above-mentioned negative statements. This could possibly be caused by the general diffusion of social media or related to how the users for the semi-structured interviews were sampled (see Section 5.4.8, Chapter 5). Where the percentage of Danes using social media in 2010 was 54%, this number increased to 65% (2.7 million) in 2012 (Statistics Denmark, 2012b, p. 13). This percentage seem to have stagnated in 2013 (Statistics Denmark, 2013, p. 14). As presented in the previous chapter, Statistics Denmark did not report on the percentages of Danes using social network sites in 2013, instead users who uploaded self-created content on websites (including social network sites, such as Facebook and LinkedIn) were examined.

The Association of Danish Media¹⁵⁰ published a report *Danskernes brug af Internettet* [The Danes' Internet Usage] on the Danes' Internet usage by evaluating more than 300 Danish websites, which includes the largest Danish online news media sites (Association of Danish Media, 2012, p. 4). According to this report, Facebook is the number one website in relation to the Danes' average time consumption on the Internet (Association of Danish Media, 2012, p. 13).

Users in the focus group interviews and the semi-structured interviews felt they were pressured into using Facebook and other social media partly because their friends or family already used Facebook. Others stated that they had signed up partly due to curiosity and partly not to feel left out or missing out on a phenomenon, which everyone, including the Danish news media, constantly referred to

I remember at some point I thought, I'm never going to be on Facebook, and then when I finally signed up on Facebook I though...ay, I should never have done this, what is it for, and today, I would never want to be without Facebook. Despite all, I think it is a nice way to keep up, not just keep up with what other people eat for dinner because I find those things very uninteresting, but I enjoy when other people tell about their travel experiences or if someone proposes a minor problem, then suddenly 25 people can jump in and help. This is how my workplace back in the days used to work. In that sense, it's like getting a bunch of new colleagues again. Facebook is a community, and I mean you decide on your own how much information you want to share and how often. (Female, 69 years, 2012)

To say it as it is. Facebook came in relatively late in my life. It started out because my son, who is grown-up, needed a competitor in some kind of war game and for that you had to be on Facebook. Then I said, well okay then and signed up. And I quickly realised that I was actually good at it. And before long, I thrashed everyone I played against [laughs]. That was how I got started. And now I'm very happy that Facebook exists, but it is not the only thing in my life. (Male, 78 years, 2012)

Where the most critical attitudes towards social media in 2010 were raised by the older users, these same critical attitudes were not reaffirmed in 2012. From 2010 to 2012, companies and institutions' have increasingly appropriated social media. Thus, social media was not limited to (semi) private interpersonal relations but largely used as part of the users' work life. As two users stated

Well, what do I use Facebook for...? To be updated, to coordinate, send invitations to events etc. I have also used it professionally to create attention on a band and a company. (Male, 29 years)

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¹⁵⁰ The Association of Danish Media is the private media's mouthpiece in relation to the Danish and international governmental authorities in all questions that concern the media. The Association of Danish Media was established in 2012-2013 by merging the all Danish professional media, including the Association of Danish Interactive Media who published the annual report on Danskernes brug af Internettet (Association of Danish Media, n.d.).

I'm crazy much on Facebook... I use it both for private and work purposes, so I think that I check Facebook more than 50 times a day. I know it can sound a little crazy, but it is also to be updated at work, and I have it always open in my browser, or what it is called, because then I can always see if I've gotten new messages or new updates. It is a little sick. On the other hand, I'm not much on Facebook at home. (Female, 34 years, 2012)

Despite these generally positive approaches to the importance and impact of social media and Facebook, the users do not completely and unreflectively accept all aspects of either Facebook or social media in general, but reflect upon themes, such as affordances, privacy and copyright issues.

Although I'm on Facebook I haven't really gotten to like anything yet. It is not so much because it is private it is more related to... I can't really find myself in this forum. It's something with rights and ownership of the stuff that's on Facebook. I think there are some underlying things which are not okay... (Female, 49 years, 2012)

What is interesting in the quote above is how the user until now has refrained from following cultural institutions on Facebook, because she is sceptical about the commercial implications of her liking a museum on Facebook. This user does not relate to IT security issues like spam, viruses, economical swindlers, which Statistics Denmark addresses (Statistics Denmark, 2012b, p. 17), but rather to privacy, ownership, distribution of personal data, use of uploaded content, etc., which among others have been raised by Valtysson (2012). This discussion is interesting, as social media including Facebook has been conceived as a free, inclusive and democratic online space. Similar to this discussion is the polemical contribution "Perspectives on participation in social media" (Holdgaard & Valtysson, 2014) in which we discussed cultural participation on social media in a Danish museum context. Further, it addressed issues that related to rights of (user-generated) ownership and the (mis)use of participation in the popular discourses concerning the importance of introducing social media to the cultural sector.

7.2.2 Attitudes

In this section, the museum users' attitudes towards the Danish museum institution and their attitudes towards online media and their usage in museums are unfolded. Attitudes are defined as (re)considerations, prejudices and presumptions. They are thus building on the individual's experiences, interpretations and understandings.

7.2.2.1 A museum to me is...

As stated already, the physical museum space is not the analytical focus of this thesis; however it is an impossibility not to address it, because without the physical museum there would not be the online counterpart. In the second chapter, I presented ICOM's museum definition, as well as the Danish Museum Act's definition of a museum. Both these definitions are useful for understanding the societal role and the institution's public obligations; however, the two definitions do not necessarily reflect the users' perceptions of museums. Naturally, there are many different attitudes towards Danish museums. When John Falk's museum visitor typology was applied to the Danish museum visitors from 2012 (briefly introduced in Section 3.3.2, Chapter 3), it reflected different attitudes towards museums and motivational factors for visiting museums. The purpose here is neither to compare my findings with this typology nor to make another visitor typology, instead my objective is to present and discuss the different perceptions of what a museum is in relation to how the users perceive the museums' usage of online media.

For some users, a museum is related to old objects and old people. Instead of being perceived as inclusive institutions that have cultural relevance for the entire Danish populations (the ideal image of museums as stated in the Danish Museum Act), museums are considered as stagnant, irrelevant and excluding institutions by many users. This is not only the perception of young people but also of older age group.

Museums are a bit boring... grey and tedious. (Female, 50 years, 2010)

A museum for me is related to a childhood memory. I was at a place where there was an old, dusty stuffed fox. This is how I envision a museum. (Male, 52 years, 2010)

These two quotes reflect how some users perceive museums as boring and with little relevance for them. Others expressed how museum visiting is mostly designed for an older audience (55+) due to the nature of the museum experience as a solitary event.

It is after all very remarkable that you suddenly become interested in museums when you turn 55. Why is that? Is it simply because you have reached a stage in life where you have time and mental resources..? (Male, 44 years, 2010)

From his perspective, families with children often choose different venues, such as amusement parks where they can better play and interact with their children. This assumption is presumably related to the perception of museums as a space for quiet reflections and does not involve active and interactive activities. The museum architecture has been framed as a determinant for the users' perceptions of and expectations to the museum institution that also structures the users' behaviour in a museum (Bennett,

1995; Falk & Dierking, 1992; Giebelhausen, 2006). Giebelhausen's argument is that the architecture *is* the museum; this perspective means that the architectural constructions are what present the meaning as it both shapes the exhibitions, configuration, experience and the viewing conditions (Giebelhausen, 2006, p. 42). In this project, it is museum users' (mis)understandings and (mis)interpretation of what a museum is that are the architecture as these to a large degree determine and shape the way the users want to engage with the museums online. Thus, the users' familiarity with the physical museums, structure their understanding of how museums should communicate and present themselves online.

One user states that she does not have an interest in museums and does not know what is going on at the Danish museums. On the other hand, she has very firm ideas that a museum is boring place that emphasises inactivity and that does not challenge its visitors.

If I must go to museums, I need to be challenged – I can't stand to go around and read signs. (Female, 24 years, 2010)

According to this user, passive reception experiences are not challenging, and her idea of a common museum experience includes reading through a forest of signs and labels. It is a very common assumption. In all the previous four national museum visitor surveys, the core service which gets the lowest score is the possibility to be active (Andersen et al., 2012, p. 36; Bruun et al., 2013, p. 32; Moos & Brændholt, 2010b, p. 19, 2011, p. 24). As another user emphasises

I really want more active experiences – normally at museums you just walk around and can't touch anything... (Male, 34 years, 2010)

However, although one of the museum understandings was rooted in the critical perception of Danish museums that it offers boring and inactive experiences, without making any effort keep the ordinary people active. This critical approach towards the museums offering passive experience did not entail that these users had positive attitudes towards the possibilities of online media and social media in a museum context.

In the other end of the scale are the museum enthusiasts who cannot imagine a life without museums and consider them as important as food – 'food for the mind'.

It is something... I was almost about to say that it is a form of childlike, joyous experience, however it can also be very powerful and intense. I relate museums to the big emotions, happiness and thankfulness; they are enriching in a way... [the museum visit] is for my existence. It is of major importance and belongs to the big box of emotions, it is like when I hear a piece of music and is knocked backwards. (Female, 49 years, 2012)

¹⁵¹ In *The Birth of the Museum* (1995), Bennett defines the museum space as a tool for the emerging nation states to discipline the people, whereas in *The Museum Experience*, Falk and Dierking argue how the museum physicality determines the visitors' behaviour, their observation, and their recollection (1992, p. 3).

Another user compared museum experiences with receiving a revelation.

Whether it is art or history, it is a part of our culture and our development. It is both stimulating and educating to go to a museum - it is like getting a revelation. (Male, 71 years, 2010)

And a third user emphasises what in John Falk's museum visitor terminology is a 'recharger' that uses museums to recharge their batteries, thus consider museum experiences as contemplative and the museums as oasis far away from the everyday life (Falk, 2009, pp. 230–231).

I work a lot so I think museums are a good break. If you are at a museum it is like watching a movie because you get so many visual and sometimes also auditory inputs, and then you think of something else. I use museums as a form of mindfulness in my everyday life and that I think is great! (Female, 34 years, 2012)

Between the two extremes of perceiving museums as grey, dusty and boring places to regarding them as a life-essential (among the interviewed users), other attitudes were identified which reflected an understanding of the museums as a traditional knowledge institutions which contain, produce and disseminate knowledge, in addition to including the newer approach where museums are regarded as social learning spaces that "contribute to culture being an active resource in society. This implies that museums as social learning spaces for knowledge producing processes can create social change and sustainable growth" (Lundgaard, 2013, p. 5). One of the users perceived museums as spaces that combine knowledge and social experiences. Another stresses

I really like to show my daughter what history can offer. It is a part of her upbringing and it is fun for all of us. (Female 36 years, 2010)

Although some consider museums as irrelevant for their personal wellbeing or everyday activities, many users expect them to be available and respect them as preservers of (Danish) history and culture. Thus, many use museums when they have (foreign) guests to teach them about Denmark.

We use museums a lot during the winter. I have a foreign husband and it is a great way to learn about Denmark. (Female, 50 years, 2010)

Or as another user stated

When I have company from abroad I usually show them the Workers' Museum because it displays so much about life in Denmark.... (Female, 46 years)

These different notions of what a museum is naturally related to why and how the users visit museums (this is not only in relation to physical museum visits but also to online museum visits). Therefore, the users' perceptions of their own museum habits, and presumably also their friends, families and peers' perception, vary a lot. Thus, the user's museum visiting practices are very much affected by one's

social environment and their museum attitude and museum visiting practices. Some users state that they are frequent and ardent museum-goers visiting museums three to four times a year, while others visited museums occasionally, i.e., at least once a month. For example, this user who explains

You don't have a lot of spare time with two kids and an old house... we want to do family activities like go to museums, but you know....

After being asked how many times she visited a museum in a year, she continued as

Hmm, about 10 times a year. We usually visit the large museums, Koldinghus and Trapholt and the National Museum, Glyptoteket and the National Gallery of Art in Copenhagen. We navigate after the exhibitions we would like to see... (Female, 36 years, 2010)

Whereas another user considered himself as an urban museum-goer, referring to several museum visits at Louisiana. He had different opinions about Danish museums and related them to large international museums, such as Museum of Modern Art (MoMA) in New York. However, when asked in the end he admitted that he did not go to museums more than three to four times a year. It is not certain whether he introduced this narrative because of the situation and the interview that I from the beginning had framed as concerning museum experience and online media, and he wanted to live up to this, or if it was because he wanted to appear as a museum-knowing person (only the museums with a large branding value), which for some also equals being well-educated and hip. Another interviewee was perplexed when he was asked about the reasons for his museum interest

Well, you have to consider that I am a relative intelligent human being, and therefore I find museums interesting (Male, 78 years, 2012)

This is interesting because here it becomes obvious that one's own perceptions of museum visiting practices are related to your identity, e.g., a well-educated person, as well as related to impression management in the Goffmanian sense (see Section 7.2.4.1.3), as presented in the previous section, that in all social situations, the individual performs according to the social situation in order to appear in a specific way. These above-mentioned attitudes reflect the physical museum and physical museum visits; the following will address the users' attitudes towards the online museum visit.

7.2.2.2 Danish museums online

As the users' attitudes towards the Danish museums alternated between (almost) discontent to life-essential, the users' perspectives on Danish museums online also fluctuate from (almost) indifference to advocacy. In the *National Museum Web User Survey* (2010), the respondents were asked: "What do you think a museum website should be?" a question to which they could reply by choosing between nine

different answering options (they could choose multiple answers). The majority of respondents answered that they thought the museum website was a space for advertising or publicity (Figure 24).

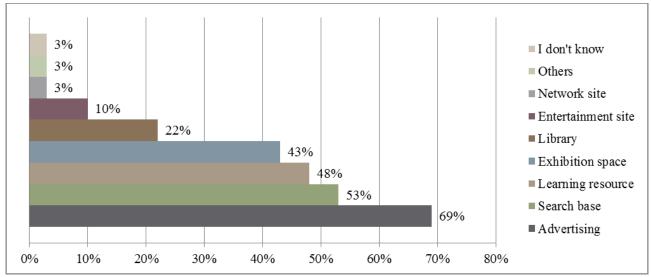


Figure 24: What do you think a museum website should be? (Tables 37-45, Appendix 19)

This corresponds to the notion of online brochures (Schweibenz, 2004). According to Schweibenz, this perspective reflects museum websites as being online business cards "[...] which contains the basic information about the museum, such as types of collection, contact details, etc. Its goal is to inform potential visitors about the museum" (Schweibenz, 2004). And as stated in the preceding chapter, many Danish museums also consider this as the websites' primary function. Advertising was also one of the key words in relation to the museums' usage of Facebook (Section 6.2.2, Chapter 6)

I think it is a great show card... and frankly speaking, I think that many Danish museums could use a bit more visitors. I enjoy being alone at a museum, but I guess it is good if there are more visitors than me, they have to make ends meet... (Male, 78 years, 2012)

Both the 'ordinary' users who visit museums a few times a year as a leisure activity and the users who have a more strained relationship to museums (compare them to dusty stuffed animals) appear to have dispassionate and conservative attitudes towards possibilities of online media for the Danish museums. Understandably, if a user does not consider museums as a vital part of his/her life, it might be difficult to have firm opinions about anything that is related to museums. On the contrary, if one thought museums as tedious and irrelevant mainly because museums make one feel estranged due to the architecture and the ambience which promote a certain type of passive behaviour and activities. I would expect that initiatives and ideas that emphasised opposite tendencies that involved other forms of dissemination or other media (not the usual pamphlet or poster) would be suggested. Nina Simon argues for more participatory activities in the cultural institutions (2010) in order for the institutions to

reconnect with the public and demonstrate their value and relevance in contemporary life, because this is 'what users wants' as Simon states

As more people enjoy and become accustomed to participatory learning and entertainment experiences, they want to do more than just "attend" cultural events and institutions. The social Web has ushered in a dizzying set of tools and design patterns that make participation more accessible than ever. Visitors expect access to a broad spectrum of information sources and cultural perspectives. They expect the ability to respond and be taken seriously. They expect the ability to discuss, share, and remix what they consume. (Simon, 2010, p. ii)

From my perspective, Simon builds her argument mostly on assumptions and expectations on the participatory potentials of social media. Throughout her book she chiefly refers Henry Jenkins et al. (2006) and their notion of 'participatory culture' which has influenced much of the discourses concerning the potentials of social media, as I presented in chapter three. Simon suggests the rise of the 'social web' as one of the determining factors for the users' expectations to the cultural institutions. By social web, Simon refers to Web 2.0 technologies, which according to her, has reframed online participation from being limited and infrequent to something anyone can do, anytime and anywhere. Thus, the users anticipate instant online access and being involved and included. Simon's statement is interesting in relation to the findings of this PhD project, because her hypothesis was presented at the same time the *National Museum Web User Survey* was conducted, and in many ways reflects the participatory potentials of social media in the popular discourses.

The results from my studies indicate that Danish museum users are more hesitant both with regard to their acceptance and expectations of the Danish museums to use online media and social media. The findings from the *National Museum Web User Survey* reveal that the users are limited and rigid in their approach to the possibilities for museums to enter the online space. This schism between users articulating museums as John George Wood did in the 1887, as something extremely dull and irrelevant for the general public because they were established in the minds of the minority elite (Section 2.4, Chapter 2) on one hand, but then, on the other hand, still cannot envisage the linkage between online media and museums. Then again, it might be because of this inflexible notion of what a museum is that rests upon old museum childhood experiences that these users cannot picture online media in a museum realm at all. These users' first encounter with museums took place in 1960s and 1970s, where the museum exhibition practices and dissemination ideals were different from today. Among these users, a common understanding of what a museum website should be was 'practical information about the museum'. This not only included opening hours and entrance fees, but also information about the museum, what kind of museum it was, what it could offer, etc. In the focus group

interviews, a recurrent theme was the need for a portal of all Danish museum websites because several of the users expressed that they only knew of very few museums.

M: Instead of focusing so much on their individual websites I think they should develop a site that included all Danish museums. That would be so much easier! (Male, 34 years, 2010)

L: Yes, they should make a map of Denmark with all the museums. In this way it would make it easier to get an overview of the different museums (Female, 32 years, 2010)

Several of the users stated that they were not aware of the existence of such a portal, e.g., kulturklik.dk¹⁵² or the Danish Agency for Culture's site¹⁵³. This portal idea was by no means reflected in any of the semi-structured interviews, which could be related to 1) the social dynamics of a focus interview and 2) the focus on the physical museum visit the interviewer from Gallup presented, which from my perspective to a large extent framed the group discussions (Section 5.4.6, Chapter 5).

In relation to Facebook and other social media, the attitudes of the ordinary users were indifference and bewilderment. A concern was frivolity – that social media would decrease the entire purpose of museums. From this perspective, social media is regarded as being in opposition to museums. Also, several users' stated that they could not see the relevance of museums entering the social media space as they regarded social media and museums to belong to two very different realms. The following statements were made by users in 2010 where 54% of the Danish population used social media. At this time, 63 Danish museums were on Facebook.

I don't feel like reading about museums on Facebook. Facebook is for my friends not museums (Female, 25 years, 2010)

Why would Facebook make me more interested in museums? (Male, 34 years, 2010)

I'm consistently against it. Maybe it is for young people, it is not for me, everything becomes so fake and artificial (Male, 56 years, 2010)

Maybe it is more for young people [than for me] (Male, 48 years)

I think it is extremely frivolous, not something for the museums (Female, 31 years, 2010)

¹⁵² The site www.kulturklik.dk was previously called MIK – museer i København [Museums in Copenhagen]. It is run by the organisation Museer i København og Omegn [Museums in Copenhagen and Environs] and includes more than 80 state-subsidised museums, science centres, etc.

¹⁵³ The site <u>www.kulturarv.dk/museer/oplev-museerne/</u> is the former dmol.dk – Danske Museer Online [Danish Museums Online].

The idea may be really swell; I just don't think the target group [young people] would be very serious about it (Male, 59 years, 2010)

These very sceptical sentiments about Facebook and Danish museums correspond with the very low interest in social networking on museum websites and the perceptions of Facebook as an online network for personal relations. Three percent of the web museum users responded in the questionnaire that a museum website should be an online network site (Figure 24). These opinions were assumedly not from young users. The low percentage means that it statistically is not relevant to make inferences; however that does not entail that the results are of less interest. Remarkably, 14 out of 22 users were above 60 years, and only two users were below 45 years (Table 58, Appendix 19). Half of these users visit a museum website at least once every third month (Table 59, Appendix 19), and half of these users use social media once a week (Table 60, Appendix 19). Therefore, it cannot be concluded that older users are more hesitant to appropriate online media, at least not in a Danish museum context. Whether this low number is caused by the lack of social networking features on the Danish museum websites or by other factors cannot be answered here.

However, some users in the focus group interviews from 2010, primarily the users who expressed a frequent pattern of museum visits or articulated museums as a vital part of their life, conveyed much more positive attitudes towards social media and museums.

I think it is a great idea. I believe the museums could reach many new groups using social media. Especially the young people. (Female, 52 years, 2010)

...but also soon the older people like me [laughs]. (Female, 46 years)

I like the idea; I think it adds something extra to be able to follow the museums this way. (Male, 60 years, 2010)

In the semi-structured interview from 2012, the users did not express dislike towards the museums' usage of social media, possibly because several of the interviewees were contacted through Facebook, but also at this time in 2012, 65% of the Danes used Facebook and 117 Danish museums had a Facebook page or group (Figure 12). Thus, at this time the focal point was not so much about whether or not to the Danish museums should be on Facebook, but rather a question of a different motivation for following museums on Facebook. Although these users did not articulate resentment, but different questions were raised that questioned the idea because Facebook and museums to some degree can be regarded as incompatible

Facebook and me are the not the best friends. I'm not a Facebook-person, well I am part of some Facebook groups, but I don't use it in relation to museums because I don't think I've understood the idea or the concept behind it. (Female, 49 years, 2012)

In 2010 survey, 10% of the users felt that a museum website should be an entertainment site, as the questionnaire did not define 'entertainment', which could have been one of the reasons for this relatively low percentage. However, another reason might be the long-lived entertainment-enlightenment dichotomy, which has been and partially still is repeated and reproduced in both the common, generic understanding of what a museum is and in the museums' self-understanding (see Section 2.3.1, Chapter 2).

About half of the users regard the museum website as a search base and a learning resource, and 43% of the users regard the museum website as an online exhibition space (Figure 24). Whether this implies the museum users' perception of what a museum should be, or indicates the users' past experiences with Danish museum websites, is inconclusive. When comparing these results with the findings from the previous chapter, 20% (38) of the Danish museums had online exhibitions specifically curated to be exhibited on their website in 2010 and 14% (28) in 2011 (Section 6.2.4.1, Chapter 6).

However, even though 43% of the website users considered museum websites to be an exhibition space, this does not, by any means, entail that the users regard the physical museum space as superfluous. In the qualitative studies, even the most ardent users advocating for the museums' usage of online media stressed the importance of 'being there' in the physical space because online experiences cannot be compared with the 'real' three-dimensional onsite experience.

I need to be there! When it comes to images and colours on a screen, I rarely think it corresponds to what I can see with my own eyes. That said, sometimes I can think it is fantastic to see on a screen, however ideally I need to have been there myself... Yes, I have to go there in person. I have a hard time imagining that I can enjoy [an artwork] as much on a screen (Female, 49 years, 2012)

Here online museum exhibitions are voiced as online supplements to the physical exhibitions.

It can whatsoever never replace the physical visit! And I don't think it never will. It is a worthy and indispensable supplement... I mean, for a very long time museums have been something which you didn't have any knowledge of what happened behind the walls, then they began to have image databases and now it is possible to vivify it, they can create spaces where you can virtually walk around the sculptures and not just see an image of it or have experts talk about it [in videos], it is something very different than sitting and reading a text, there are so many more nuances which the written or the static image cannot convey, I think it is great, but it is still far from being there and get the physical experience....(Female, 38 years, 2012)

The results show that it is the users, who never visit the museums regard museum websites as exhibition space. This group has the lowest number of users, among all the visitor groups. Table 17 shows that

among the users (32%) who never visit a museum within a year, 5% regard the museum website as an exhibition space. Among the high frequent users who visit a museum more than 11 times a year, 39% of the users have answered that a museum website is an exhibition space. The users that visit a physical museum six to ten times a year have highest percentage of users who consider a museum website to be an exhibition space (54%).

How many times do you visit	Users who perceive a museum website is an	All users who perceive a museum	
a Danish museum per year?	exhibition space in each frequency category	website is an exhibition space	
None	32% (17)	5%	
1-3 times	40% (174)	53%	
4-5 times	50% (88)	27%	
6-10 times	54% (49)	12%	
More than 11 times	39% (10)	3%	
Total	43% (329)	100% (766)	

Table 17: Users who think a museum website is an exhibition space across museum website frequency (Table 77, Appendix 19)

Although I questioned the reliability and validity of the survey that Bowen referred to in his article (1999), it is still interesting to note how much the results diverge. According to the referred study, 74% of the respondents expected museums to have online exhibitions on their websites, whereas only 43% of 'all Danish museum website users' perceive a museum website to be an exhibition space. Both Kravchyna and Hastings (2002) and Marty (2007a) have emphasised that access to online museum resources does not diminish the importance of physical museum visits. Rather the two should be considered as complementary, as there is a relationship between museums and their websites. This was not reflected in the interviews; however, it was stressed that content published on the museums' websites, e.g., in relation to special exhibitions, is relevant and very useful when it is not possible to visit the physical museum. In this context, time, money, location, etc. were among the factors that the users highlighted for not visiting the physical museums, in particular the international museums, e.g. MoMA, Louvre, etc. One user emphasised how online museum content makes it possible to relive the experience, not as an after-visit experience, but rather as an online substitute. The respondent recounted that he used to visit museums several times each month before he was attacked by stroke, but not after the stroke.

Now it is like a days' journey to get anywhere for me. It is like sitting as Tantalus¹⁵⁴ and everything you want keeps eluding when you get close.

¹⁵⁴ The user is here referring to the Greek mythological figure Tantalus who was made to stand in a pool of water beneath a fruit tree. The fruits kept eluding his grasp and the water kept receding before he could drink.

Now I use the Internet to get as close as possible and re-experience art works, for example. (Male, 78 years, 2012)

The web questionnaire also illustrated that the majority of users did not have any idea about what is lacking in the functionality or design of Danish museum websites. The questionnaire tried to capture what was missing in the online features on the Danish museums' websites (Figure 25). Around 55% claimed that they did not know what they missed on Danish museum websites. This might either indicate that Danish museums provide all the features a user can possibly wish for on their websites, or the users do not have any interest in refining the website; for the majority of respondents, museums and museum websites do not play an integral part of their everyday lives, as most of the respondents visit a Danish museum one to three times a year and a museum website one to four times a year. Therefore, issues on why and how the museums present themselves online is neither relevant nor of interest, and "I don't know" is thus the correct response to the questions. This is of course speculative, but such sentiments were also presented in the focus group interviews.

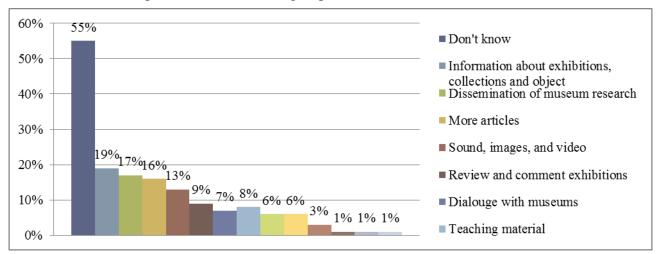


Figure 25: What do you miss on Danish museum websites? (Table 63-70, Appendix 19)

What is interesting in this figure is how low the percentages of 'games and competition', 'user-generated content' and 'creating web-exhibitions' are. Especially keeping in mind the quote from Simon in which she underscores how social media have changed the users' attitudes and expectations to the museums.

7.2.3 Motivation

In chapter four, motivations was defined as a tool for reaching a goal, where tool is understood in the widest possible sense, including ideas, meanings, theories and documents. In relation to the online museum users, motivation is related to the user's individual preferences, past experiences and (information or communication) needs.

In the international museum literature about user motivations for visiting museum websites, several studies have pointed to the following as main factors (Bowen, 1999; Ellenbogen et al., 2008; Kravchyna & Hastings, 2002; Marty, 2007a, 2008; Peacock & Brownbill, 2007):

- Gathering information for the upcoming visit to the physical site
- Casual browsing
- Research for specific content, e.g., an artist, a historical period, etc.
- Educational research related to school assignments
- Transactions or interactions with the museum, e.g., other museums who want to collaborate, sale of photos, etc.

In 2008, Ellenbogen, Falk and Goldman suggested that motivational factors for engaging with online museum content would evolve significantly given the constant development and transformation of museums and the Internet (Ellenbogen et al., 2008, p. 193). The authors do not present any examples, but one could assume that the development of Web 2.0 technologies and the many participatory, coproducing, remixing cross-media museum initiatives would impinge upon the motivational elements of online museum visiting. This is in line with the Simon's assumptions about social media's impact on the users' renewed expectations of being able to actively participate in a museum realm, presented in the previous section. However, as presented in the previous subsection, it does not appear as if the users neither expect nor miss these features.

7.2.3.1 Do you want to participate?

The expectations to become active participants were not reflected in my data material, neither in the web questionnaire nor in the interviews, at least not to such a high degree as described by Ellenbogen et al. (2008) or Simon (2010). Figure 26 shows the motivational attitudes for participatory actions in a Danish online museum context. The majority of the museum website users responded 'very unlikely' or 'unlikely' to the statements concerning active involvement on the museums' websites. Sixty-six percent (501) considered it either 'very unlikely' or 'unlikely' to be updated on the museums' onsite activities through blogs, Facebook or Twitter (45% were thought it 'very unlikely' and 21% 'unlikely'), and 11% (78) considered it 'likely' or 'very likely' (6% thought it 'likely' and 5% 'very likely'), and only 7% (78) stated that they would like to chat or communicate with the museums on their websites and 4% (29) wish to chat or communicate with other users. This fairly negative attitude towards following the museums on blogs or other social media is not to related to the museum website users' lack of online media abilities, because as illustrated in the online media competences section, almost all museum website users use the Internet frequently and more than half of the users have a Facebook account.

It could be argued that the motivations for becoming an active participant, engage in discussions or create content in an online museum environment is rather limited because it is not obvious through the questions what the purpose of e.g. commenting, writing, or tagging content on the museum websites would be. And if a user does not belong to the group of people who are very interested museums and the Danish cultural heritage, then the motivation to actively engage with the museum online might be low or non-existent.

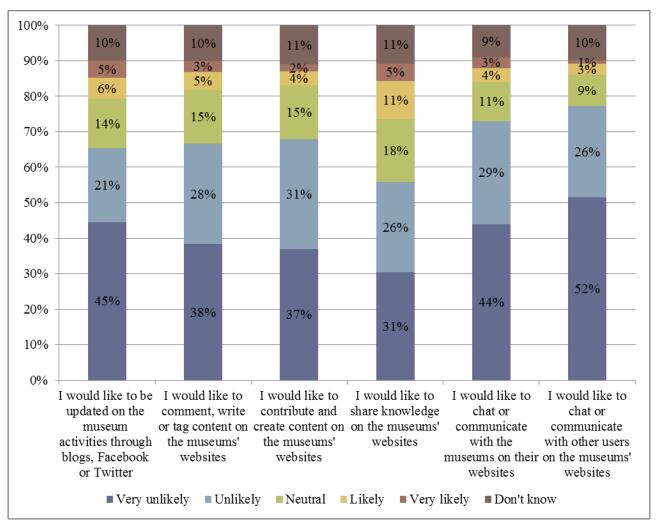


Figure 26: Motivational attitudes towards participatory actions in an online museum context in 2010 (n =766) (Table 96-101, Appendix 19)

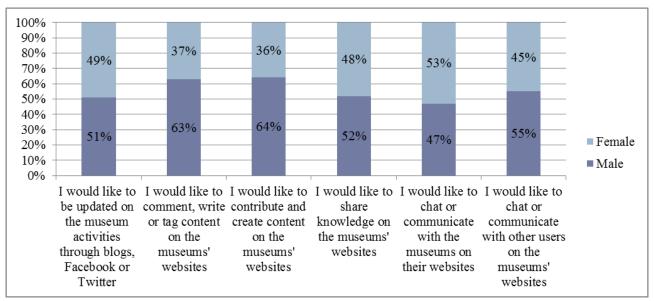
If the web questionnaire had been conducted again in 2012, the results might have been different, because the users in the semi-structured interviews had different attitudes towards their usage. They emphasised how they used Facebook to be updated on the museums' onsite activities. As two users stated

I use Facebook as a scout and if I come across something really interesting, I'll click on the link and go to the specific website. You can say

that I move from Facebook to the wider web, so to speak. (Male, 78 years, 2012)

It is in a way, on Facebook I get the information I typically miss in the local newspapers. Of course not the big exhibitions and the like, but other types of information such as newly acquired objects (Female, 69 years, 2012)

Whether this observed change of perspective is due to a more widespread use of Facebook in general among the Danish museum users, cannot be concluded from this study. However, Facebook has become part of everyday life of many users, and online Facebook routines can no longer only be defined as using a social network site, but Facebook can rather be considered as a meta-medium that integrates a number of existing media, media formats and genres (Brügger, 2013). Other users in the semi-structured interviews stressed that following a museum on Facebook and getting updates through it was less intrusive and less binding than receiving newsletter emails, which were regarded almost as spam by some users (Appendix 12). Furthermore, they often used other types of media to get informed of exhibitions and activities on the Danish museums, and if it was of interest, they would visit the museum websites. Many users read newspapers, radio, local news, or magazines to keep updated on the museum activities and special exhibitions which may motivate them to visit the museum websites.



Figure~27: Motivational~attitudes~towards~participatory~actions~of~museum~website~users~(most~likely~or~very~likely)~across~gender~(n=766)~(Table~110-115,~Appendix~19)

More males than females of the museum website users responded 'likely' or 'very likely' to the statements, "I would like to comment, write or tag content on the museums' websites" and "I would like to contribute and create content on the museums' websites", these were primarily more above 50 years (Figure 27). To the statement "I would like to be updated on the museum activities through blogs,

Facebook or Twitter" the distribution of gender is almost equal. This is of interest as the Facebook Insights results from 2012 concluded that the majority of museum Facebook users are female.

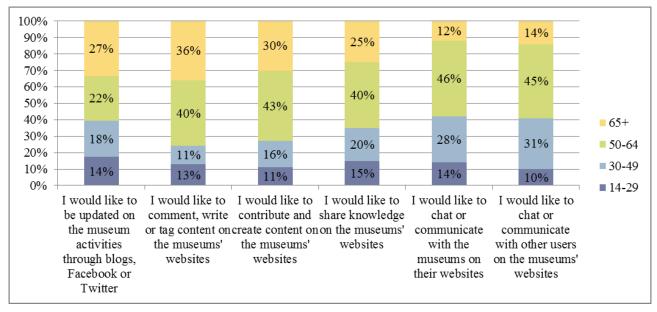


Figure 28: Motivational attitudes towards participatory actions of museum website users (most likely or very likely) across age (Table 104-109, Appendix 19)

In general, the users who had positive attitudes towards active involvement on the museums' websites were primarily between 50 and 64 years (Figure 28), 36% of the users with most positive attitudes towards commenting, writing and tagging content on the museums' websites were above 65. In comparison, only 13% of the users between 14 and 29 shared the same attitudes.

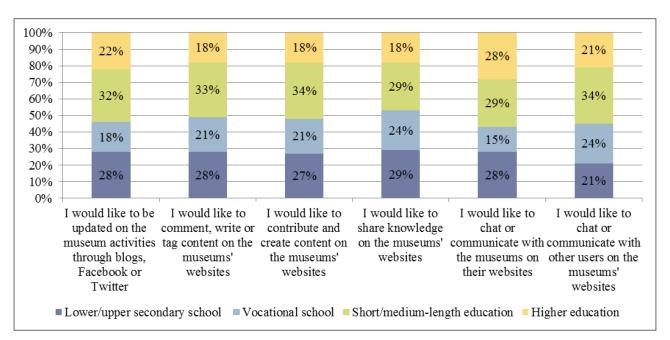


Figure 29: Motivational attitudes towards participatory actions of museum website users (most likely or very likely) across level of education (Table 116-121, Appendix 19)

As Figure 29 illustrates, it is mainly the website users with a short/medium length education that were most positive towards active involvement on the museums' websites and social media. The website users with higher education were the least interested in commenting, writing, tagging, creating and sharing content on the museums' websites; however, they were more positive towards communicating with the museums on their websites.

7.2.3.2 Self-representation and loyalty

User studies of social media often address themes, such as identity formation, and in particular self-presentation. In this context, identity formation is often related to studies of how young people use social media (M. C. Larsen, 2009); whereas, self-presentation is not limited to a particular user age group. Self-presentation is most often linked to Goffman's understanding of people trying to influence the perception of the image that others may have of them and to the usage of social media because users commonly need to create a personal profile through which they present themselves and act and interact with other users (boyd & Ellison, 2007; Ellison & boyd, 2013; Kaplan & Haenlein, 2010). It is disputable whether self-presentation belongs to the online media competences category or rather belongs to the motivations category as users' reflect upon how the performative elements of Facebook are part of their usage motivations. It could also be considered as part of the attitudes category from the

¹⁵⁵ It is not only in the research literature that impression management and social media have been linked together. Also in the mainstream Danish news media, impression management has been one of the central themes when covering social media in the news.

framework because the users in their articulations about impression management on social media express their attitudes towards social media and Facebook as a space for certain forms of social interaction. Possibly, self-presentation belongs to all the categories. From this, it is apparent that the four elements in my analytical framework are not mutually exclusive categories. However, as I have also stated in Chapter 4, the framework was never intended to have explicatory force, but rather a frame to guide the analysis, as the elements in the framework are both interrelated and complementary.

Self-representation is referred in relation to how online users articulate their museum visiting habits and in general to their Facebook usage. In focus group interviews as well as the semi-structured interviews, the primary focus was not on Facebook; however, it quickly became obvious that users mainly referred to Facebook when discussing social media. This was true not only while referring to their own social media usage but also when they related to the importance and impact of social media on a more general level. This is understandable as Facebook is the dominant platform among the social media in Denmark (see the discussion in Section 7.2.1.2). Some users are very cautious regarding what to post, comment, share and like on Facebook

I often delete something I've liked [on Facebook]. Let's say it's some kind of competition where the payoff is really big, and I have to like the page in order to be in the competition. Usually, I will delete my like from my timeline afterwards because I don't want anyone else to see that I've liked an ice cream company for example, because I don't want others to think that I'm some kind of an ice cream-idiot. (Male, 29 years, 2012)

Another user stressed

I would like to say it didn't matter [that my friends on Facebook can see what I like] but I think it matters. For example, most of my academic friends all like Deadline 156 including me. I mean none of us like Ekstra Bladet 157. Eh, so I think that when I like something, an organisation for example, it is because I think it is an important organisation and I want to show loyalty but also because being related to that organisation adds to my profile...I know it sounds terribly calculating and most of the times I don't sit and analyse the situation, but I think the consideration is somewhere back in my mind. (Female, 34 years, 2012)

Not all users had such reflections as these two users, before they liked, commented, and shared on Facebook. The users in the semi-structured interviews expressed more critical sentiments towards issues, such as what to display in a public online forum, how the information will be used (commercially) and how it will reflect upon the self-image. This might not only be due to the Danish media coverage of the negative effects of Facebook, but also may be due to the fact the users in the

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¹⁵⁶ Deadline is a Danish news program on the channel DR2 which presents in-depth analyses.

¹⁵⁷ Ekstra Bladet is a Danish tabloid newspaper.

semi-structured interviews (unintentionally) had experience with dissemination and communication either through their educational background, or their work. Even though, it did not necessarily entail online media, it might impinge on attentiveness towards how to present and communicate in general.

When comparing the number of users on the Danish art museums' Facebook pages with that of users on the cultural heritage museums', the number of users on the art museums' pages is much higher (Section 7.1.1). For instance, the two museums, namely ARoS, the art museum, and Den Gamle By - Open-Air Museum, the cultural history museum, which in many respects are very alike. Both museums are geographically located in the Central Denmark Region, in Denmark's second largest city, Aarhus. Both are very large museums with more than 35 employees and log almost the same amount of opening hours within a year. ARoS had 201.272 physical visitors and Den Gamle By had 361.989 physical visitors in 2009, but when it comes to Facebook, ARoS presently has 25.608 Facebook users and Den Gamle By 7.700 Facebook users. ¹⁵⁸ There should be no obvious reasons related to why this is. Neither ICOM nor the Danish Museum Act prioritise the heritage, thus from that perspective cultural heritage, art and natural history is equally important; however, that does not mean that each has gained the same status. In different areas, cultural heritage, art and natural history are naturally valued differently; however considering the museum object from an authenticity perspective, art works take precedency compared to cultural heritage and natural heritage objects as art is defined as the original and unique, whereas the cultural heritage objects represent the ordinary and common (Clifford, 1988, pp. 223–225). This is one possible explanation to why more users chose to like an art museum on Facebook than a cultural heritage museum, because they want to present themselves in a particular way or want to be related to certain museums that have a certain image. Louisiana Museum of Modern Art is an example of a popular Danish museum that has a specific profile that appeals to and attracts much Facebook users than any other Danish museums. Users compare Louisiana Museum of Modern Art with famous New Yorker museums, such as Solomon R. Guggenheim Museum and MoMA, places you want to see and want to be seen at.

Yes, I like Louisiana on Facebook. Why? Well, I mean, it sort of fits into the narrative, I would rather not reduce it to a matter of self-representation... [laughs]... because I don't think it's that simple. It's not! I really like Louisiana, it's a cool place and I don't mind that other people can see that I like it, because I do like it! (Male, 29 years, 2012)

The quote above is interesting because the user is extremely conscious about how he presents himself online, as illustrated in one of the previous quotes, where the user dissociates himself from 'ice creamidiots' who like random things on Facebook in order to win a prize in a competition. However, at the same time, the user does not identify himself as a shallow and superficial person who only cares about

 $^{^{158}\,\}mbox{The}$ number of museum Facebook users was counted on 4 March 2014.

his appearance. From my perspective, it is not a coincidence that he mentions the museum Louisiana due to the museums' position in the Danish cultural sector. ¹⁵⁹ Inscribing oneself as a Louisiana-going person becomes a marker that signifies the possession of a high level of education and intellect.

Muniz and O'Guinn presented the notion of 'brand community' in 2001, a "[...] specialized, non-geographically bound community, based on a structured set of social relations among admirers of a brand' that share the same community markers of traditional communities. These markers include shared consciousness, rituals and traditions, and a sense of moral responsibility (Muniz, Jr. & O'Guinn, 2001, p. 412). It is not my intention to advocate that there exist a Danish online museum community on Facebook in which the museum users attempt to be included as members; however, I do identify similarities in the users who wish to be related to a specific museum and their brand. The particular user mentioned above instead of articulating a 'shared consciousness' or common understanding of people going to Louisiana, he defined himself by stating what he was not or what he did not do, thus established this 'us versus them' demarcation, between 'pop culture' and 'high culture'. Another user stressed that following a museum on Facebook is also related to signify one's loyalty towards a museum. Whether this can be directly translated to the 'moral responsibility' that Muniz and O'Guinn present or not can be discussed. However, several users articulate that the act of 'liking a museum' commensurate to 'loyalty-like', as emphasised by another user.

It is also a little bit about obligation, I mean, by liking a museum on Facebook I communicate to the museum that I support them and at the same time communicate to my friends that may not be as museum interested as I am, that this particular museum is interesting. In this way you are also part of making the museum known to the rest of the world, it is like distributing old print advertising... (Female, 38 years, 2012)

Letting your friends know where you are through social media is also a part of constructing a certain image. Foursquare has been one the fastest growing social media, at least in the context of Danish museums, where the percentage of Danish museums on Foursquare have risen from 1% in 2010 to 66% in 2013. In the same period, Facebook also added Facebook places allowing the users to check-in and share information about where you were and whom you were with (Brügger, 2013).

I think it's because it would feel too forced if I had to check-in at for example Statens Museum for Kunst. Then all my friends would think, Christ, you only check-in here to show off how intellectual you are. Because that would be what I would think if I saw any of my friends do it. (Female, 34 years, 2012)

¹⁵⁹ In contrast to the established and traditional museum that is like a sacred and unapproachable temple, Louisiana was founded by Knud W. Jensen in 1958 with a vision to keep it open for the entire public in a congenial environment.

When the users were asked about this functionality and how they used it in relation to visiting Danish museums, they referred to impression management. Some even stated that because 'everyone' knows that checking-in is used to show-off, it would then become too much, too feigned to check-in at a museum. On the other hand, when you as a user check-in at a museum, you are at the place and have made an effort of going to the museum, that is, the check-in is more than just posing or branding yourself, because you actually made an effort to go there. Thus, the users do not want to check-in at museums in order not to brag about visiting a museum, even though they are visiting the museum.

7.2.4 Actual usages

In the online museum practices framework, I specified that actual usages are related to 'things and their use', i.e., the direct interaction between the user and the online museum content on websites and social media platforms. In addition, it also includes ideas of how the online museum experience impacts everyday life or activities of users. The users' actual usages depend on, or at least intertwined with, the users' motivations. For example, a user enters a museum website in order to know how long the museum is open the following Sunday. Thus, an individual's usage is motivated by the need to get information about the museums' opening hours, and when she gets the relevant information she acts in accordance with that information. The results of the web questionnaire do not reflect the actual online practices, but the users' conceptions of how they remember the reason for visiting a Danish museum websites this of course causes a bias in the interpretation. Even though the previous question in the questionnaire was framed as "what do you think a museum website should be?", one can speculate whether or not the users' answers regard the purposes of their online museum visit, what they miss at a museum website, what they believe a museum website should be or for which purposes it should be used.

In relation to the Danish museums' actual usage, it was simpler to distinguish between motivations and actual usages, than for the online museum users. This might be due to the methods used and the available data. Had I, for example, collected log-files from online museum users, it would have been possible to map the precise and in detail the actual online usages. However, in my case, to elucidate the users' actual usages of museum website, I primarily rely on the users' own statements from the interviews about their actual usages and the users' self-reports from the web questionnaire. Despite this potential bias, this still reflects, at least how the users perceive their actual usage of museum websites. In relation to the museum Facebook users, the data was obtained from the Facebook Insight study, which to a certain degree informs about the users' actual online museum Facebook activities.

7.2.4.1 Actual usages of museum websites

The majority of users visit a Danish museum website at least four times a year: 27% of the users visit a museum website every third month, 29% every sixth month, and 28% once a year. Less than 10% visit a museum website once every month and less than 1% once a week (Table 21, Appendix 19). Females are the highest frequent users, 71% of the website users who visit a museum website once a week or more are female (Table 13, Appendix 19). The high frequent users are primarily above 65 years, whereas the majority of the least frequent users are the users between 30 and 49 years (Figure 30).

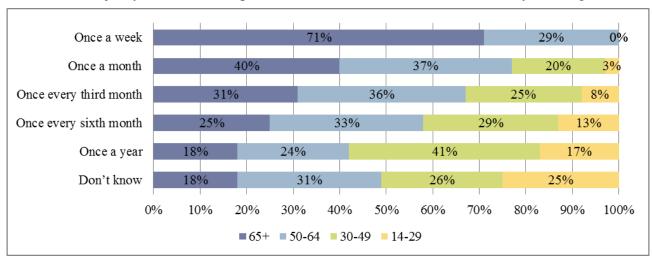


Figure 30: Frequency of museum website usage across age (n=766) (Table 11, Appendix 19)

According to Figure 31, museum website users primarily use the Danish museum websites for practical information (78%), information and knowledge about objects, collections or exhibitions (61%), and information and knowledge after a museum visit (53%). These categories are further discussed in Section 7.2.4.1.1 and 7.2.4.1.2. Few to none users use the museum websites for online shopping, entertainment, competition and games, and social networking, as explained in Section 7.2.4.1.3.

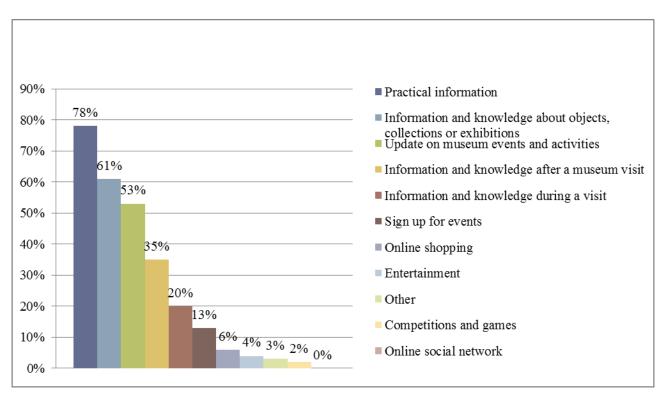


Figure 31: Museum website usages (Table 47-57, Appendix 19)

7.2.4.1.1 Before the visit

Existing research has already attempted to elucidate the connection between the use of museum information content before and after the physical museum visit (Franciolli, Paolini, & Rubegni, 2010; Kravchyna & Hastings, 2002; Marty, 2007a, 2008; W. A. Thomas & Carey, 2005). Marty insists on more exploratory research to examine the 'why' question: "Why do people visit museum website?" (Marty, 2007a, p. 341). Despite Marty's study being extensive, it does not present an answer to the question; instead it reaffirms the argument of a complementary relationship between the physical museum visit and the online visit. This is probably related to the survey method used in which the respondents were asked to assess the possible outcome of a series of imagined situations related to online and onsite museum visits on a Likert scale ranging from 'very unlikely' to 'very likely'. This approach and questioning technique are problematic both because the respondents were asked about imagined situations and also because the respondents were not able to answer beyond the before and after visit. In the web questionnaire of the *National Museum User Survey*, the respondents were asked about the purposes of visiting a Danish museum websites. Thus, this question was related to previous experiences, but nonetheless actual experiences. The users responded that they mainly used the websites for practical information purposes in relation to planning onsite museum visits (78%) (Figure

31). The answer was same across both genders and the various age categories (Table 81-91, Appendix 19). This may not come as a big surprise as there is a relationship between the frequency of physical museum visits and online museum visits (see Section 6.1, Chapter 6). Practical information was also emphasised by the interviewees as one of the focal points for accessing museum websites. Primarily the users searched for the opening hours and entrance fees that were underlined as important information; whereas, information about special exhibitions had lesser importance. Possibly because a large part of the users were directed to the museum websites through other media. However, in the questionnaire, 61% of the website users expressed that they used the museum websites in order to get 'information and knowledge about objects, collections or exhibitions' and 53% used the websites to get 'updates on museum events and activities' (Figure 31).

In many instances, the decision of visiting the physical museum was already taken prior to the museum website visit, and getting access to the practical information on the museum websites was a tool in the process of planning this visit. As one interviewee stated

First we talk about it [the museum] – then I check the opening hours on the net – and sometimes it also happens that I reserve the tickets. (Female, 79 years, 2010)

And another user specified the purpose of her husband's museum website usage as follows:

About 16 years ago we were on our way to Hjemsted Oldtidspark and one of our children became sick and we had to return home – this time we decided that now was the time and my husband checked the opening hours on the web. (Female, 46 years, 2010)

Although most users pointed to the museums' website for finding practical information, one user also mentioned the museum Facebook pages as a valid source for finding updated visitor information.

Do you use the museums' websites?

Yes, I do. Well, at least sometimes I do. This doesn't only concern museums but also smaller shops and the like; sometimes I try Facebook first because here it is much easier to update opening hours, because they don't need to go into some CMS system... (Male, 29 years, 2012)

The first two statements both imply that visiting a museum is a social event. This is likewise supported by the literature and other studies (Andersen et al., 2012; Bruun et al., 2013; Falk & Dierking, 1992; Galani & Chalmers, 2008; Moos & Brændholt, 2010b, 2011). A social event often includes brunch, lunch or coffee breaks, thus finding about the existence of museum café or restaurant was important when planning a social outing. As a consequence, practical information about a physical museum visit also involved checking the café, the menu and the prices:

I would like to know whether or not there is a cafe, and how much their cakes are [laughs] Sometimes I use quite a lot of time checking their menus. (Male, 29 years, 2012)

Information about entrance fees is important too while planning a museum visit. Especially because museums are in tough competition with other entertainment offers like cinemas, theatres, zoos, water worlds, amusement parks, etc. In that sense, the amount of the fee does seem to matter. And as one interviewee emphasised

The price is about almost the same as a ticket to the cinema! (Female, 66 years, 2010)

The user continued by stating that she thought museum entrance fees were too high, in particular compared it with other cultural offers. In this case, she compared it with the cinema where she really thought she got great and moving experiences. Another user expressed some of the same reflections:

I need to know if it [the museum] is worthwhile – I don't want to pay 70DKK to see some dolls (Female, 31 years, 2010)

Despite that fact, the admission fee did have an influence; it was reflected as one of the main reasons for not visiting the museums (Figure 19). Others use the practical information to learn when the museums have days when you do not have to pay an entrance fee, and plan their visit in accordance with that information.

Typically, I'm too stingy to pay for a ticket so very often we [my girlfriend and I] use the free admission. It is simply just limited how long time I can be interested in art of the Golden Age. (Male 29, years, 2012)

For these three users, museums do not play an important role in their life, whereas for the users who consider museums as food for the mind, their response to admission fees was quite opposite:

Of course I'm willing to pay the price, however, with a high price comes high expectations. (Male, 53 years, 2010)

Or

The price is unimportant for the decision. (Male, 57 years, 2010)

7.2.4.1.2 During and after the physical visit

The results of the web questionnaire indicate that users do not use the museum websites during their physical museum visit. This information was deduced from the question from where (the physical location) they accessed the museum websites. Only 3% of the users responded that they accessed museum websites at the museums (Table 25, Appendix 19). Therefore, it is likely to assume that the majority of website users do not use the museum websites during the visit. The low percentage of users

who access a museum website from a mobile device substantiate this assumption (see Section 7.2.1.1). This might be due to the fact, that most users consider museum visiting as a social event, and from that perspective does not want to use smartphones or other mobile devices to access information in order not to seem impolite or showcase antisocial behaviour. Additionally, the usage of mobile devices in museums has been discouraged as its usage blocks the exhibition halls because all the visitors follow the same pre-selected tracks, further it distracts the attention from the exhibited objects to the screen (Tallon, 2008, pp. xx–xxi).

Another reason for the low percentage of museum users accessing the website on their smartphone or mobile device may have been due to the absence of free Wi-Fi connections in many Danish museums. Users who considered the physical museum visit as a mindfulness-experience, visiting a museum was exactly to escape from the stress of the everyday life including being constantly online. This was not solely experienced by adults with a busy work life who wanted contemplative experiences. In a small-scale study of young people's attitudes towards digital media in museums (Holdgaard & Simonsen, 2010)¹⁶¹, our results indicated that young people do not consider especially mobile phones to belong in a museum environment, because they too demanded media-free zones but also because their perceptions of museums did not match with mobile phones (Holdgaard & Simonsen, 2010).

There appear to be a discrepancy in the answers of the website users regarding museum website usages 'during' the onsite visit, as 20% of the users answered they used a museum website to access 'information and knowledge during a visit' (Figure 31), but only 3% of the users answered they accessed museum websites at the museums' physical locations (Table 25, Appendix 19). Whether this discrepancy is caused by the framing of the questions in the questionnaire or if it is related to how the users perceive their own usage of museum websites is uncertain.

One of the recurring themes in the qualitative data material was how museum websites were considered as an online supplement, very often in relation to after-visits. Thirty-five percent of the website users answered that they used museum websites to get 'information and knowledge after a museum visit' (Figure 31). Users between 50 and 64 years, more than any of the other age categories, used the websites to search for information after the visit (Table 92, Appendix 19). In comparison with Marty's study (2007a), 69.5% of the respondents answered they were either 'likely' or 'very likely' to visit a museum website after a physical visit (2007, p. 347). There is a large difference between the results of the Danish web questionnaire and Marty's study; this might be due to different survey

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¹⁶⁰ See f.i. Humphrey's article "Cellphones in the public: social interactions in a wireless era" (2005) in which she discusses about how mobile phones (may) change the social interaction in public spaces.

The study was conducted in 2008 and consisted of a focus group interview with seven girls aged 16 to 17 and observations of a school class in a role-playing learning game at an Open Air Museum using mobile phones and GPS.

methods used. The online survey of Marty's was on the museums' own website, therefore, the respondents were already visiting a museum website, and possibly more likely to answer these questions positively. Secondly, the survey was constructed to explore the relationship between the online visit and the physical museum visit. Whereas, the respondents in the web questionnaire were, as already presented in Chapter 5, from TNS Gallup's Internet panel, and therefore, not as the respondents of Marty's survey (2007) spurred to answer questions about their online museum usages.

For other users, the link between museum and computer is very weak after coming home.

The distance between museum and computer is poles apart. I have forgotten all about the museum when I'm home again. (Male 29 years, 2012)

The website users who responded they did not use websites to get 'information and knowledge after a museum visit' were primarily between 30 and 49 years (33%); with a short/medium length education (36%) and visited a physical museum one to three times a year (58%) (Tables 93-95, Appendix 19).

7.2.4.1.3 Social networking, shopping and entertainment

According to the results of the web questionnaire, none of the users indicated that they visited the museums' websites for social networking purposes, in addition very few answered that their museum website usage included online shopping, entertainment, competitions and games, and others (Figure 31). As it was reflected in the previous section on the attitudes towards the museum institution, users who regarded museums as almost irrelevant or at least not very central part of their life, had also difficulties imagining the relevance of social media in relation to museums. Only 3% of the website users thought, a museum website should be a site for social networking and two users answered that they used the Danish museum websites to engage in social networks. Adding to this, the results from the content study of the usage of interactive features on the Danish museums' websites in the foregoing Chapter 6, revealed that the vast majority of Danish museums do not use interactive feature though they are encouraged to actively engage, create, play, participate, comment, connect, etc. (Figure 8, Chapter 6). Thus, if there are no possibilities to actually participate on the museum websites, e.g., blogs, then obviously the users cannot answer that they visit the museum websites for networking purposes. And as presented in this chapter, the respondents in the web questionnaire had negative attitudes towards the museums' usage of social media (Figure 26).

The number of website users, who use the museum websites for online shopping or entertainment, are relatively low. Only 6% answered that they used the museums' websites for online shopping (Figure 31), among which 72% are females (Table 84, Appendix 19). This low percentage may be caused by the fact, that the majority of museums do not have online shops on their website. In

relation to entertainment, 4% of the website users indicated entertainment as a purpose for visiting a museum website (Figure 31). This might be due to the users' common understanding of the museum is as knowledge institution that educates and enlightens the public.

7.2.4.2 Actual usages of social media

Where the previous section was concerned with users' website usage, this section examines their social media usage. Figure 32 below illustrates what the museum users do on the museums' Facebook profiles, groups and pages (what the users click on). Sixty percent of the clicks are 'other clicks', which is defined as clicks on content of the page, comments, posts, information, polls, etc. (any click that is not a link click, photo view or video play). Twenty-eight percent of the clicks are to view photos and 10% to check links. The usage categories are very vague especially 'link clicks' and 'other clicks', thus making it difficult to infer any meaningful conclusions about user-patterns. However, it is interesting to note how similar the usage is across the different museum types. In particular, as discussed in Section 7.2, the user characteristics of the Danish museum Facebook users are not very similar. There is a difference in gender and age. The art museums' Facebook users are predominantly older than any of the other museums' Facebook users; at the same time, the natural heritage museum Facebook users much younger. Therefore, one could assume greater variation. Why it is not, could be related to the imprecise usage categories of Facebook, but it could also be related to how the Danish museums communicate on Facebook.

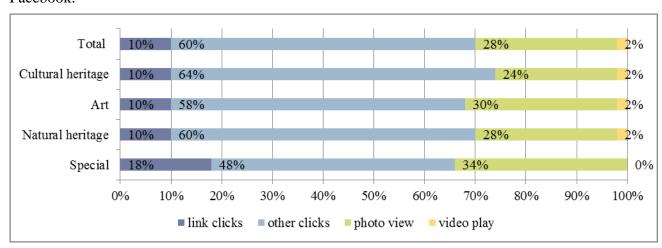


Figure 32: Distribution of Facebook usage by museum type (Appendix 7) $\,$

Figure 33 presents the distribution of engaged and sharing museum Facebook users. As the figure suggests, there are more engaged users than sharing users. Around 20% of all museum Facebook users are engaged users; whereas, 7% can be regarded as sharing users. Facebook defines 'engagement' as page click, whereas, 'sharing' in Facebook can be defined as 'shared stories' which include the act of

liking content on the page, wall postings, commenting, sharing page content, answering questions, responding to an event invitation, tagging or checking-in (Facebook, n.d.). The definitions of engagement and participation made by Facebook are arguable as they conflate the concepts to merely clicking on content (for further discussion participation see Section 3.2.5, Chapter 3). Cultural heritage museums have a higher number of engaged users (33%) and sharing users (12%) than any of the other museums. Even though art museums have more Facebook users in general, the proportions of users who engage with content (18%) and share content (6%) are lower than both cultural heritage museums and special museums, but still not as low as natural heritage museums.

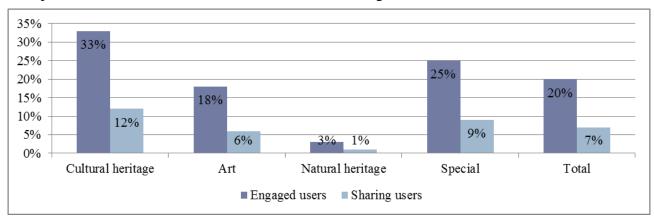


Figure 33: Engaged and sharing museum Facebook users (Appendix 7)

Figure 34 illustrates age and gender of the sharing museum Facebook users. As the figure depicts, the most sharing users are between 25 and 34 years. Interestingly, across all age groups, the percentages of sharing female Facebook users were almost double as high as the males. Whether this can be considered as particular female characteristics is arguable, as according to Statistics Denmark, 53% of the Danish Internet users who write or post content on blogs or Facebook are females, whereas the percentage of males is 48% (Statistics Denmark, 2012b, p. 14). This is obviously not directly comparable with the results of the Facebook Insights study; however, it does imply that on a general level, the difference between the genders is relatively insignificant.

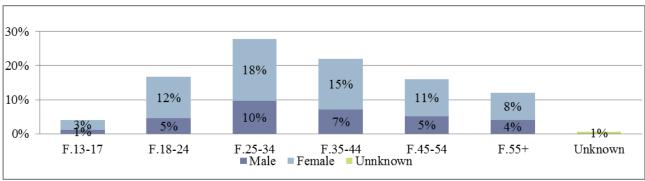


Figure 34: Sharing museum Facebook users across age and gender (Appendix 7)

Except for the Facebook usage, I have not examined to what degree the content on the social media has been shared by museum users. The sharing of content is usually defined as a measurement of success in social media environments; however, what is included in my study, is the number of subscribers (YouTube), followers (Flickr and Twitter), the number of views (YouTube), the number of user comments (YouTube and Flickr) and tweets (Twitter).

In 2011, 21% (40) Danish museums had a YouTube channel; these museums had uploaded between 1 and 116 videos (Table 79, Appendix 18). The number of subscribers was at a minimum. There were only five museum YouTube subscribers of all the museum YouTube channels. The majority of museum YouTube pages (88%) did not have any comments at all: two pages had one user comment, and the other two pages had two user comments, and one page had four comments (Table 81, Appendix 19). Of these comments, one was made by the museum itself replying to a user saying "thanks for introducing the museum". This pattern is very similar on the Danish museums' Flickr profiles where few users had commented on the museums' photos. The lack of user comments on YouTube should be related to the subject of the videos (see Chapter 6). It might be that these types of videos, e.g., introduce the museum, or document an event, do not incite the users to comment on the content. Other reasons could be related to the museum users' attitudes towards the museum institution, which suggests that, the majority of Danish online users still associate museums as knowledge institutions that guards as well as shapes our cultural heritage, therefore, cannot relate the museums' online activities to online networking, user-generated content, dialogues, etc. (Figure 24).

Despite the non-existent interaction on YouTube, this did not entail that the museum videos were not viewed. The total YouTube views on the museum channels ranged from 7 to 155.175 views; 35% of the museums had between 7 and 1.000 views, 37,5% had between 1.000 and 10.000 views and 25% had between 10.000 and 50.000 views and one museum (2.5%) had 155.175 views (Table 80, Appendix 19). The following years (2012-2013) the number of museum with a YouTube channel increased to 35% (69) (Figure 8), as did the number of subscribers and views. Thus, in 2012 the total number of museum YouTube subscribers was 901 and 983 in 2013. The YouTube subscribers are not unique users; therefore, it cannot be rejected that users might subscribe to more than one museum on YouTube.

Although 66% of the Danish museums used Foursquare in 2012, the number of check-ins was relatively limited, 72% (93) of the museums had less than 50 check-ins, 11% (14) had between 51 and 100 check-ins, 13% (16) had between 101 and 1000 check-ins and 4% (5) had more than 1000 check-ins (Table 84, Appendix19). Of the five museums with more than 1000 check-ins, four of the museums were very large art museums and the fifth was a very large cultural heritage museum, all five museums had more than 200.000 physical visitors in 2009, thus they were among the 10 most visited museums. In comparison, the museums with few check-ins were generally smaller cultural heritage

museums. The low number of check-ins at Foursquare and Facebook through Facebook Places may be related to the users' (from the semi-structured interviews) perceptions of checking-in at museums as being 'show-off' and 'too much'.

In comparison with Facebook, YouTube and Foursquare, the number of Danish museums that use Twitter is rather limited in all four years of study (Figure 12). This also reflects the number of followers on these platforms. In 2011, the number of Twitter followers of the six museums on Twitter was in the range 1 and 823, while in 2012, this number increased and ranged from 9 and 1530 in the 12 tweeting museums' (Table 82-83, Appendix 19). The museum with most followers was also the museum that tweeted the most.

Although the Danish museums increasingly used social media platforms to present themselves and engage their users, user interaction is still rather limited, in particular in relation to user social interaction and dialogue.

7.3 New media, new users, new practices?

In this chapter, I have presented the results of the analysis concerning the museum users' online visiting practices. The objective of this analysis was to identify and discuss the factors that impact the decisions to visit a Danish museum website and to follow the museums on social media across the four elements from the analytical framework, not to determine and categorise different online museum visiting practices of the users.

7.3.1.1 Young or old, male or female?

As previously discussed, online media has been expected to engage new museum users based on accessibility, involvement and active participation, thus transforming extending and possibly prolonging the museum experiences into the online space, especially social media space (Danish Ministry of Culture, 2006, p. 26; López et al., 2010; Løssing, 2009, pp. 13, 26; Russo et al., 2007). Young people, in particular, are under-represented groups at the museums, and online media have been considered to attract and engage these users. The prevalent rationale behind this assumption is grounded in the notion that young people widely use online media, therefore, possess certain technical skills and have certain preferences when it comes to how they want to experience museums (Danish Ministry of Culture, 2009b, p. 16; J. Hansen & Hansen, 2007, pp. 5–6; Løssing, 2009, p. 41) (see also Section 2.4.3, Chapter 2). However, the findings show that the Danish museums have not succeeded in attracting a younger group of users by creating websites, as the age groups of the museum website users was almost similar to that of the physical museum visitors. Conversely, the museum website users who never visit a

museum but only the website are comparatively younger and have a lower level of education than the museum website users and the physical museum visitors (Figure 17). It should be noted that the 'online only museum users' are also included in the total of museum website users. Also the Danish museum Facebook users are younger than both physical museum visitors and the museum website users. The youngest museum Facebook user groups 13-17 and 18-24 are the two smallest groups and represent 4% and 11%, respectively, of the total museum Facebook users (Figure 35). In comparison, the same groups make up 15% and 19% of Danish Facebook users in general. Thus, from that perspective it can be argued that the Danish museum by having an online presence do reach other user groups, than the typical well-educated female above 50.

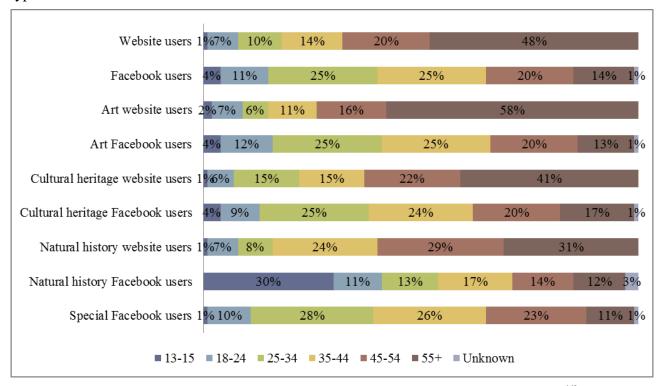


Figure 35: Age distribution of website users (n = 766) and Facebook users (n = 96.411) across museum type. 162

The primary reason for the 'online only museum users' not to visit the physical museums is that the museums are not interesting. The findings on age and level of education suggest that many of these users use the museum websites to get information to do homework or other school assignments. This finding is in accordance with the results of a report on the young people's media and museum habits (Kobbernagel et al., 2011), which conclude that 29% of young Danes between 13 and 23 years use the museums' websites to view the museums' collections and 32% of the young users use the websites to

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¹⁶² In order to compare the two user groups, the age categories of the website users have been re-categorised to match the age categories of the museum Facebook users.

find content and information about a specific subject area. However, the highest score is "to find practical information such as opening hours and entrance fees" (69%) (2011, p. 72).

Results show that even if the Danish museums are able to create connections to younger users through Facebook, the youngest users (13-17) share the museums' content on Facebook to a very limited degree (Figure 34). This implies that Facebook might be useful as a tool to be used to maintain interpersonal relationship for young people, but it is a fallacy to assume that Facebook can entice young people who are not initially interested in cultural heritage to become active museum participants (a belief, which stated in Section 2.5, Chapter 2). This conclusion is also reflected in the Facebook project "Flirt, Philosophy and Facebook" of Boritz et al. (2011) (presented in Chapter 6). The target group for this project was young females in the age 14 to 30 years, although 46% of the users following the project on Facebook were in the target group, but it was users with an existing interest in cultural activities and cultural heritage that engaged and participated in the project (Boritz et al., 2011, p. 73). In comparison, the majority of museum Facebook users between 25 and 44 years are also the users who are most active on museum Facebook fan pages as they might see greater value of sharing museum updates, events, etc. with their family or like-minded friends. Likewise, at this stage of life it may be more acceptable to express an interest in museums and cultural heritage. However, this cannot be concluded solely on the basis of this particular study. Museum Facebook users in the age 45-54 years (20%) are equally over represented, therefore, weighed against Danish Facebook users in the same age group (18%). This disproportion might be explained by the general age distribution among the physical visitors.

Females dominate the Danish statistics on high cultural activities, such as going to theatres (or live performances including ballet, opera etc.), libraries and museums (Epinion & Pluss Leadership, 2012, p. 46; 69; 81). According to all the national museum user survey of the physical visitors, the gender imbalance has been 40/60 (Andersen et al., 2012; Bruun et al., 2013; Moos & Brændholt, 2010b, 2011), except in 2009, where the distribution of gender was 41/59. Figure 36 below depicts the distribution of gender among the Danish museum website users, 'online only museum users', museum Facebook users and the physical museum visitors across museum type. Interestingly, for the museum website users, the distribution of gender is almost equal, 47% male and 53% female; whereas the gender distribution of Facebook users is similar to the physical museum visitors, 64% are female and 33% are male (Figure 36).

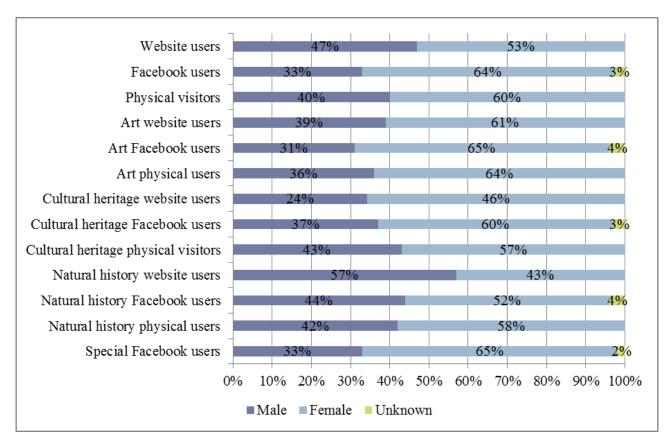


Figure 36: Gender distribution of website users (n = 766), Facebook users (n = 96.411) and physical visitors (n = 56.124) across museum types 163

There are not obvious reasons that explain the gender difference between museum website users and the museum Facebook users. However on examining the purposes of the online visits there appear to be a difference across the genders. More females use the museum website to prepare a physical museum visit, be updated on activities, sign-up for events at the museum and shop in the museums' online shops. Particularly, in the latter category, there is a significant difference between males and females. In relation to information searching activities that concern information about objects, collections and exhibitions the difference is insignificant.

In comparison, the museum Facebook users are predominantly females, 64% are females and 33% are males, the statistics on Danish Facebook in general do not suggest a gender imbalance, 51% of Danish Facebook users are females and 49% are males (Socialbakers, 2012)¹⁶⁴, thus the percentage of Danish men and women with a Facebook account is almost the same. It is of interest to note that dissimilarity exists between the two online groups, namely, the museum website users and the

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¹⁶³ Neither in the museum web user survey nor in the national museum visitor survey, special museums were considered as a museum category, thus in the figure, the percentages for museum website users and the physical museum visitors visiting special museum websites and the physical museums do not appear.

special museum websites and the physical museums do not appear.

164 Unfortunately, the Statistics Denmark has not included the distribution of the gender in relation to the use of Facebook (Statistics Denmark, 2010, 2011, 2012b).

museum Facebook users. Especially, as in the museum web user survey, the attitudes of males towards following museums on social media and to create content on the museums' websites, were generally more positive than the females (Figure 27). This is interesting, as the Facebook Insights results show that more women than men engage and share museum content on Facebook (Figure 34).

7.3.1.2 Local or global users?

As discussed in the previous chapter, Danish museums communicate mainly in Danish, both on their websites and social media. Therefore, it was an unanticipated finding that a relatively large percentage (34%) of the museum Facebook users was not from Denmark. On the other hand, on Facebook, users, like any other online users (see discussion Section 2.2, Chapter 2), are not limited by physical constraints, opening hours, admission fees, etc. in order to 'visit' the museum, access content, enter a dialogue, etc. However, as it was expressed in the semi-structured interviews, following or liking a museum on Facebook, may simply indicate that you have enjoyed visiting the museum or you want to showcase your support to both the museum and your friends on Facebook. It is likely that this is also the case for the international museum Facebook users; however, my data cannot as such support this conclusion.

The vast majority of international users of Danish art museums are from Scandinavian countries, primarily from Sweden and Norway. As Swedish and Norwegian have many similarities with the Danish language, museum Facebook users from these two countries are able to read, understand, interact with and participate on museum Facebook fan pages from Denmark. Danish art museums have significantly more international Facebook users compared to cultural heritage, natural heritage and special museums. As not all international users of Danish museums on Facebook understand Danish, thus it can be suggested that international users, as well as the Danish users in general, do not exclusively follow a museum on Facebook in order to receive information or news from the museum, but there might be other motivating factors in line with what was expressed in the semi-structured interviews. One could assume that the international users start to follow a Danish museum on Facebook after a physical visit, however, comparing the results of the Facebook Insights study with the visitor statistics from the national user survey of the physical museum visitors from 2011 (the same year the Facebook Insights data was collected), cultural heritage museums had the most international visitors (28) and natural heritage museums, the least (6%) (Andersen et al., 2012, p. 10). Thus, based on these findings alone, it is not possible to conclude that, e.g., art museums have the most international museum users, because they have the highest percentage of international physical visitors.

7.3.1.3 Linkage between the physical and online museum visits?

As concluded in many studies, there is a close relationship between the physical and the online museum visit (Franciolli et al., 2010; Kravchyna & Hastings, 2002; Marty, 2007a, 2008; W. A. Thomas & Carey, 2005). According to my results, this is also the case for Danish museum users, where 78% of the museum website users used the Danish museum websites to find practical information (hours of opening, location, admission fees, etc.), 61% were looking for information and knowledge about objects, collections or exhibitions, and 53% were checking for updates on museum events and activities (Figure 31). When examining the frequency of the online visits in comparison to physical visits, there appear to be an overlap, 84% of the users visit a Danish museum website one to four times a year (84%), whereas 80% visit a physical museum one to five times a year (Table 103, Appendix 19). This is also consistent with international studies (Marty, 2007a; W. A. Thomas & Carey, 2005).

From the online museum visiting pattern of the Danish users, it appears that most users neither visit a museum website or a physical museum on a regular basis; therefore, museums are not an integral part of the majority of users' everyday life or concern. This might be reflected in the results relating to what the users miss on the museums' websites. The majority of users (55%) answered "I don't know" to the question "What do you miss on a museum website?" compared to the other answering possibilities (Figure 25).

Instead, museums are considered as part of the array of leisure attractions in line with cinemas, amusement parks, etc., and for a great part of the users, museums may not be their first choice of preference, and for that reason, the physical museum is irrelevant and uninteresting. These users display attitudes towards the museum institution that reflects past childhood experiences or common prejudices of the museum as a static institution which neither change or relate to the society, nor respond to the wishes and interests of the public. Yet, when proposed with the idea of changing the institution and its forms of museum dissemination and communication using online media was not considered as something positive either. This is not due to a lack of online media competences, but mainly related to a lack of motivation, relevance and interest in museums. On one hand, the users criticised and complained about the museums' status as excluding and inaccessible for a layman. As my analysis has shown museums were related to being boring and of irrelevance; a similar view was accorded to the museums' authority and the museum's 'unassailable voice' (this was presented in Section 2.5.2, Chapter 2). On the other hand, the users who disliked museums also dismissed the idea of using online media and social media to transform the museum experience and create new learning opportunities, user-involvement and not the least user participation. These users were very dismissive, and as it was stated multiple times, this would undermine the museums' entire foundation and purpose. From this perspective, it appeared as if the users did not want the institution to change but wanted to reaffirm the idea of museums as boring, dusty places filled with stuffed animals.

That said all the users' attitudes towards museums entering the online space were not negative. Especially the museum enthusiasts for whom museums played a more vital part, the possibility of online museum visit enthused much more positive attitudes. However, it does not mean that these users wanted to replace the physical museum visit with an online visit. According to international studies, there are a high percentage of users who wish to see images of the collection and exhibitions after a physical museum visit (Marty, 2008; Thomas & Carey, 2005). My findings do not suggest the type of information or knowledge the users want to access after a museum visit, but they do show that a large part of the users visit a Danish museum website after a visit to the physical museum in order to gain more information and knowledge (Figure 31).

The analysis also indicates that there has been a change in the users' attitudes towards social media in general and the museums' usage of social media from 2010 to 2012. In 2010, many of the users had very little appreciation for and understanding of social media and the concept of being Facebook friends, particularly in relation to the museums' usage of social media, these perceptions appeared to have changed in 2012. And some users almost expected the museums to be on Facebook, just as they were expected to have a website.

7.3.1.4 Participatory culture, participating users?

Participation, dialogue, and sharing of experiences, thoughts and knowledge have become a matter of course for manage users. Culture is not only just for the citizen, but is also to a greater extent with and by the citizen. (Danish Ministry of Culture, 2009b, p. 13)

Multiple studies, policies and reports have heralded the 'participatory culture' with its notions of the users as being notoriously active and socially connected individuals that share, create and remix content online. This perception has also found its way into the museum sector. Thus, it has been widely discussed and to a large degree impacted and framed the understanding of museum user participation. In this setting, participation is most often inscribed in an idealistic and normative understanding in which more user participation equals more democracy (this is addressed in Section 3.2.5, Chapter 3). However, according to my previous argument, there has been a tendency to uncritically adopt the concept without reflecting upon the concept's history or many different connotations. As a result, I dismissed participation as an operable analytical concept, both because the concept is contested and because the online actual usages of the online museum users would be defined in a particular framing in which their motivations and perceptions possibly would match the understandings of participation – at

least not within the definitions of democratic participation. Therefore, I have suggested directing the attention towards practices as a way to conceptualise the users' online activities. Nevertheless, I still partly return to participation in this discussion of the online museum users' visiting practices, as it is an unavoidable concept in a museum studies context that continues to flourish in both popular and academic literature, e.g., the newly published anthology *Democratising the Museum. Reflections on Participatory Technologies* (Runnel & Pruulmann-Vengerfeldt, 2014).

According to my research there are very few indications of the general Danish online users wanting to become active participants and creators in an online museum context. Ten percent of the museum website users indicated that it was 'very likely' they would comment, produce or share content, as well as interact with either the museums or other users (Figure 26). The high expectations for the users to become 'produsers', (a suggestion given by Bruns (2008) to call the active users who engage in user-led content creation as produsers), unfortunately the percentage of online museum users who participates, creates and shares is very low. That said, the percentages of Facebook engagement or sharing on museum Facebook pages do not necessarily signify that the majority of users are indifferent to the museum Facebook content. Users can follow a museum's updates without engaging (clicking) with it, and studies have shown that users do enjoy and follow museum Facebook updates and dialogue without interacting themselves (Boritz et al., 2011, p. 74).

In any case, as it has been argued by Russo and Peacock (2009), user motivations, engagement and participation cannot and should not be explained by archaic dichotomies of active and passive participations, as these structures are insufficient to illustrate museum experiences and behaviour as distributed in social media. Instead content, context, exchange and distribution should be taken into consideration as participatory in social networks with complex dynamics. Overall I agree with the argument of Russo and Peacock; however, my research does not indicate that the present online museum practices of Danish museum users across the online platforms involve serious involvement or engagement. This is related to the users' perceptions of the museum not only as a traditional knowledge institution, but also related to how the majority of Danish museums have appropriated social media (a transmission of one-to-many media) and publish updates on activities (guided tours, family events, etc.) and exhibitions at the onsite museum in a brochure fashion (see previous chapter), and not utilise social media on its own terms.

In conclusion, the lack of user participation does not indicate that the users are completely indifferent to the idea of interacting with the museums on social media, or that museums being on Facebook is a waste of effort. As it was reflected in the semi-structured interviews, following a museum, e.g., on Facebook, even without being an active, creating or networking user, has a significant meaning for the individual user, as it denotes a relationship or association with the museum.

8 Conclusion

The chapters of this thesis have each contributed to the characterisation and examination of online museum practices in a Danish context. The objective of this final chapter is to recapitulate and discuss the main findings of the thesis, to present the contributions of the thesis, and finally to reflect on the limitations of the study and suggest directions for future research.

In Section 8.1, I summarise the thesis and present the main results in relation to the research questions. Section 8.2 discusses the barriers and discrepancies of the museums in relation to appropriating online media and the barriers and discrepancies concerning the users' online visiting practices. In Section 8.3, I outline the contribution of the thesis and the final section and in Section 8.4 I present the limitations of the project and suggest recommendations for future research.

8.1 Summarising the thesis by chapters

The overall aim of my PhD project was to discuss our understanding of the public Danish museum institution in the 21st century and to provide information so far not available about the online museum practices of Danish museums and their users, based on solid empirical foundation from which general tendencies about the entire museum sector can be drawn. In this thesis, I have developed a research design and analytical framework that address online museum practices from a holistic perspective integrating the present and historical setting, online media competences, attitudes, motivations and actual usages both from a museum and user perspective.

In **Chapter 2**, I presented the historical and political context and the various discourses influencing the present day Danish museum. The purpose of the chapter was to answer the first research question, "How is the museum paradigm shift related to the Danish museum context, how has it historically been translated and how is it currently understood?" This question was addressed by a presentation and a discussion of the establishment of the Danish museum and the institution's obligations and responsibilities. This provided the contextual understanding of the reality of Danish museums and unfolded the complexity, conditions and demands that the Danish museums must live up to as public cultural institutions. Further, I discussed the paradigm shift in which the museum institution has been described as transformed from being an elitist temple, i.e., focusing on collection or artefact-centric, to being an institution that includes and focuses on the visitors, their needs and involvement and

participation. As argued earlier, this paradigm shift has been presented as a fact or even a historical occurrence (G. Anderson, 2004; Center for Cultural and Experience Economy & Danish Ministry of Culture, 2012; Danish Ministry of Culture, 2006; Løssing, 2009; Weil, 2002). The notion of the paradigm shift has affected the articulations and definitions of the institutional values, governance, strategies and communication ideologies. However, many Danish museums of today are still challenged by the same issues that were raised in the beginning of the 1900s.

Chapter 2 also examined how online media in museums have been perceived to play an important part in the understanding of the transformative processes in the museums. As part of the discourse, online media has been heralded as saviours of the museum that enable new interactive and participatory museum experiences, reshape the understanding of cultural heritage by facilitating dialogue and involvement, and thus bridge the gap between the institutionalised knowledge and knowledge sharing, and create new relations between the museum institutions and the public (Chan, 2007; Giaccardi, 2012, 2012; Grabill et al., 2009; Russo et al., 2008, 2008; Russo, 2011; Stuedahl, 2011).

My study does not indicate that a paradigmatic change has happened, at least not to the extent the discursive changes in the framing of the museum institution's function seem to suggest. Instead, I have argued that the paradigm shift to a certain degree has been imagined or alleged and overestimated by museum scholars, cultural politicians and museum professionals. Indeed, one should distinguish and differentiate between ideals and theoretical discussions about the paradigm shift and transformation processes, actual organisational changes and the users' expectations and perceptions of the museums. I will not dismiss the fact that there is an ongoing change of perspective on how the museums understand their role in Danish society, as Danish museums no longer guard themselves against the public and do take their dissemination obligations seriously. However, how museum dissemination and communication should be executed, in particular in the online space, is still a point of discussion.

The main objective of **Chapter 3** was to position the PhD project at the intersection of museology, Internet and media studies, and audience and reception studies, and address the surrounding discussions and controversies related to the key concepts of the thesis. In the field of museology, I positioned the thesis in the era of 'post-critical museology', which can be described as a period concerned with the interrelation between theories and practices. This position marks a shift from the critical approach in 'new museology' towards a more pragmatic research (Dewdney et al., 2013) (see Section 3.1). Overall, the interdisciplinary approach has provided me with a frame for examining online museum practices using concepts and contexts from

- Museology to understand the museum realm as a specific domain;
- Internet and media studies to approach the special characteristics of online media and social media and how that relates to the processes of appropriation and ideas of online participation;
- Audience and reception studies in order to conceptualise the user, which encompass active and passive strands, as well as the notion of audiencing and reception of media content.

In **Chapter 4,** I developed the analytical framework for the thesis to answer the second research question, "How can online museum practices as a holistic analytical framework that consider both Danish museums and their users be conceptualised?" The framework was partly inspired by Schrøder's reception model (Schrøder, 2000, 2003), which I have modified by both adding and deleting elements. Thus, online museum practices in this thesis consists of four elements: online media competences, motivations, attitudes and actual usages. I was well aware that the model of Schrøder is an empirically based model, developed as a general prescriptive model of media reception in order to approach the complexity of the various aspects of media reception (Schrøder, 2000, 2003), and that it is not developed to analyse processes or practices of media appropriation, nor to include quantitative data. However, I used the reception model as inspiration for developing an analytical framework that would both support and structure the research design and data analysis in order to unfold and capture the multiplicity of meaning-making, interests, dispositions and behaviour related to online museum dissemination and communication.

I employed practices as a concept to conceptualise what Danish museums do online and why, as well as what Danish museum users do and why. Accordingly, my approach to practices referred to a collection of online activities and shared understanding of Danish museums and their users. By redirecting the attention towards current online practices of both museums and users, I attempted to move away from the oppositional pitfall of treating online media as either saviours or destroyers of the museum institution and exceed the dichotomous perception of active-passive users; instead I studied the online practices in contexts.

From the institutional perspective, the online practices were approached through the understanding of appropriation and defined as current, actual practices and actual use linked with the users' motivations and competences. This understanding was mainly inspired by Carroll, Howard, Peck and Murphy (2001, 2002, 2003), as well as DeSanctis and Poole's elements of adaptive structuration theory (1994). From a user perspective, online museum visiting practices referred to the museum users' online actions on the museums' websites and social media profiles. I defined the users' online museum practices as 'visiting' well aware that the concept of 'visitor' and 'visit' in a museum context has certain implications that refer to the museums' history and their mission as a knowledge and educational institution. Despite these implications, I still regarded visiting as an appropriate term to describe the users' practices as visiting is also used in relation to accessing websites or other online environments which are not museum related. Additionally, visiting does not as such imply a certain

level of either (inter)activity or passivity reception, but visiting can encompass both active and passive user activities.

In Chapter 5, I presented the methodological framework and the mixed-methods research design (Creswell & Plano Clark, 2011; Greene, 2007; R. B. Johnson et al., 2007; R. Burke Johnson & Onwuegbuzie, 2004). My object of study required an approach that took various contexts into account covering both the museum perspective and the user perspective in an online environment. Thus, in order to examine the museums and the users, I developed a research design, which combined a series of methods – not only quantitative and qualitative methods, but also online and offline methods. The methods used were selected from the principle of complementarity in which different theories and methods were employed for different levels of the analysis in compliance with the overall objective (Greene et al., 1989; Hammersley, 2008). The complementarity approach was important since one of my research objectives addresses online museum practices from a holistic perspective (Deacon, 2003; Schrøder et al., 2003, pp. 48–49; Sinha, 1989). Therefore, I employed mixed and multiple methods that complement each other in order to examine different aspects of online museum practice.

Although I have examined the online practices of the Danish museums and their users, the physical museums have not been disregarded or omitted from the study. Thus, I have not defined online museum practices as phenomena separate from its offline counterpart, but have included experiences at the physical museum and the perceptions of the physical museum as these are interlinked with the motivations and attitudes towards what museums should and can do in the online space. Therefore, this has not been a study of museum practices that only exist online, but a study that includes the physical museums, as their presence in the online space is indeed an extension of the physical museum.

Chapters 6 and 7 constitute the analysis of the thesis in which the empirical results of the thesis are addressed based on the online museum practices framework. In **Chapter 6**, I answered research question 3, "Why do Danish museums appropriate online media?" and its relating sub-questions. In order to understand why and how online media permeate museums' dissemination and communication practices, the first part of the chapter outlined the Danish museum landscape by addressing sub-questions 3.1, "What characterise Danish museums?", and thus Section 6.1 presented an overview of the Danish state-owned and state-subsidised museums including distributions of museum types, geographical location, museum size and number of physical and online (website) visitors based on data extracted from *Danske museer i tal* (Landert & Kjærside, 2011, 2013) as well as the state-owned museums' annual reports (Appendix 3). Although, data from *Danske museer i tal* was already presented in the reports, they did not include the state-owned museums, and data specifically related to online dissemination and communication was examined to analyse the relationship between the various variables (see Section 6.1, Chapter 6). My analysis of the Danish museums included 14 state-owned and 181 state-subsidised museums; of which, the majority of museums are cultural heritage museums.

Across the five Danish regions, the Region of Southern Denmark had the most museums and North Denmark Region, the least. There were statistical significant relations between opening hours and museum size as well as between opening hours and onsite visitors, which meant that the more employees a museum had the more hours it was open; furthermore, the more opening hours a museum had opened, the more visitors it had. There were likewise significant relationships between the museum size and the museum's physical visitors, as well as the museum's physical visitors and online visitors, again proving that more employees mean more physical visitors, and the more physical visitors the more online visitors.

In Section 6.2, I examined the Danish museums' appropriation practices employing the analytical framework and answering the three research questions 3.2, 3.3, and 3.4.

The first part answered question 3.2, "What are the Danish museums' online media competences, motivations and attitudes towards online media?" Overall, with regard to online media competences, inadequate resources, knowledge and skills were considered by the Danish museums as the main hindrances for not appropriating online media. My study pointed to a limited extent of online media competences, particularly in relation to evaluating the online performance, and also negative attitudes towards online media in general, as new forms of dissemination and communication on new online platforms were regarded as unnecessary and unimportant extra work. This perspective was especially typical for smaller museums with fewer employees and fewer resources, whereas larger museums displayed much more positive attitudes towards online media and wanted to develop and experiment with the media formats. However, these museums also pointed to the lack of resources as a hindrance to fulfil their goals. My observations suggested that many museums were frustrated, partly because they felt pressured by the various governmental initiatives and policies to implement online media in their current work practices or to develop new programs or projects involving new forms of user-engagement and participation, and partly because their concerns and opinions relating to online media were not heard or met. These frustrations were voiced both by the museum management and the museum curators; however, the museum curators primarily directed their dissatisfaction towards the museum managements or board of directors, which according to the museum curators neither prioritised nor understood the conditions for working proficiently with online media. Thus, the museums' sceptical attitudes towards and misconceptions of online media should also be related to 1) a general understanding of the incompatibility of online media and museums in line with the entertainmentenlightenment dichotomy; 2) the authenticity debate of the physical museum object versus the digital museum object, in which the perspective physical museums and authentic museum objects are superior to the online representations, thus it was raised as a concern that online media would increase the distance between the user and the actual museum objects; and 3) the misunderstanding of online media as less demanding in terms of resources and skills compared to older and more traditional museum media, such as text labels, wall posters, catalogues, etc.

As the museums had different online media competences and attitudes towards online media, this was also reflected in the various motivations behind the Danish museums' use of online media. Museum websites and the use of social media platforms were mainly considered as a problem-solving tool with the aim of 1) reducing the phone calls by the visitors to the museum; 2) to brand and communicate the identity of the museum and attract more physical visitors to the museum; and 3) to educate and prepare the users for the actual physical visit. Few museums articulated user-involvement and participation as motivational factors for employing online media.

The research questions 3.3, "What kind of interactive features do Danish museums present on their websites?" and 3.4, "To what extent do Danish museums use social media?", were answered in Subsection 6.2.4 drawing on data from the content study. All Danish state-owned and state-subsidised museums used online media, first and foremost in the form of (one or more) websites. Generally, the Danish museums' usage of interactive features (understood as blogs, videos, podcasts, games, online shops and online exhibitions) on their websites were rather limited. The most commonly utilised feature was videos, which about one-third of the museums had on their websites, followed by online exhibitions. A small number of museums had blogs or games. With regard to blogs, which typically allow for communication, and peer-to-peer interaction through comments and links (Lomborg, 2009; Mortensen & Walker, 2002; Nardi et al., 2004), the Danish museums had primarily appropriated blogs on par to other types of informational museum dissemination and communication. Overall, the tone of the museum blogs was more colloquial than, e.g., newsletters and catalogues, yet did not entice users to enter into dialogue. It was predominantly larger museums that were the front-runners of blogging.

The museums' appropriation of social media increased dramatically from 2010 and 2013. The social media Foursquare increased the most, which is also the least labour-intensive among the examined social media platforms, as it does not rely on content as other platforms do. Besides Foursquare, Facebook was the most commonly used social media platform. The general Danish museum Facebook page allowed and encouraged users to read, comment and question, tag, and share museum content. Museum pages were less common where users were probed and inspired to upload user-generated content of any kind. This tendency to use social media as a one-way communication method is by no means a trend specific to Danish museums. However, since 2010 I have observed a development in the museums' appropriation of social media, both in terms of number of museums actually on Facebook. The percentage rose from 32% in 2010 to 66% in 2013, but also in relation to the museums attitudes and motivations for using Facebook, many museums have presented themselves with much more confidence and accustomed to the media, answering comments and linking to and uploading content than they did in 2010.

In **Chapter 7**, I examined and analysed the museum users' online visiting practices by answering research question 4, "How do Danish museum users visit the online museums' websites and follow their social media profiles?", and the relating sub-questions. The objective of this analysis was to identify and discuss the factors that impact the decisions to visit a Danish museum website and to follow the museums on social media across the four elements from the analytical framework, not to determine and categorise different online museum visiting practices of the users.

The first part of the chapter, section 7.1, was a demographic overview of the online users of Danish museums, which served as the foundation for the following analysis. The overview mapped the characteristics of gender, age, education, and geographical residency, thus answering question 4.1, "Who are the Danish online museum users?" My analysis concluded that the majority of museum website users were above 50, which is demographically very similar to the physical museum visitors. However the Danish museum Facebook users were comparatively younger than both physical museum visitors and the museum website users. From this, it cannot be concluded that the museum Facebook users were a completely different user group, however what can be concluded is that the museums generally reached out to younger users through Facebook than through their websites.

According to the Danish statistics on 'high culture' activities, females tend to dominate (Epinion & Pluss Leadership, 2012, p. 46; 69; 81), this pattern also showed for the physical museum visits (Andersen et al., 2012; Bruun et al., 2013; Moos & Brændholt, 2010b, 2011). Interestingly, for the museum website users, the distribution of gender was almost equal; whereas the gender distribution of Facebook users was similar to the physical museum visitors and the general cultural statistics. The museum website users primarily lived in the capital area of Denmark and had a higher level of education than the general Danish population, however not as high as the physical museum visitors did. The Danish museum Facebook users were predominantly from Denmark; but interestingly, among the international museum Facebook users, a large portion of users were Scandinavians.

In Section 7.2, I addressed question 4.2, "What are Danish museum users' online media competences, motivations and attitudes towards online media?" and question 4.3, "How and to what extent do Danish online museum users use the museums' websites and follow their social media profiles?" The analysis relating to question 4.2 was built on data mainly from the focus group interviews and the semi-structured interviews, whereas the analysis regarding question 4.3, was based on data from the web questionnaire and the Facebook Insight study. The analyses showed that the vast majority of online museum users use online media on a daily basis both for personal, work and educational purposes. This was true for overall social media usage; however, my findings illustrated a development from 2010 to 2012 in the way social media, and in particular Facebook, was perceived by the users. Where Facebook in 2010 was regarded as a platform to update and connect with personal relations, and could not be related to museum dissemination or communication, but this had changed in

2012. In the semi-structured interviews, having a presence on Facebook for museums was considered just as important as having a museum website. This should obviously be related to the development of social media and their general prevalence in all parts of businesses and organisations (Brügger, 2013; Haug & Christiansen, 2014).

The attitudes towards museums entering the online space were restrained and moderate, which were grounded in the users' very traditional perception of the museum institution as a repository of knowledge. The users still had sceptical attitudes towards new online forms of dissemination and communication. The online users primarily regarded the museum website as an advertising platform for the physical museums and to a very small degree a space for neither participatory or creative actions nor social networking purposes. Therefore, it is not surprising that while examining the users' motivations the main motivational factors for engaging into participatory actions were relatively low. According to the results of the interviews, there were several reasons for users not to follow a museum on social media, mainly due to issues concerned with privacy and self-representation. Whereas the arguments for following a museum on social media included loyalty and association, which to some extent are also related to issues of self-representation.

The research questions 4.3, "How and to what extent do Danish online museum users use the museums' websites and follow their social media profiles?" was primarily related to the element of actual usage from the analytical framework. The results included frequency of the museum website usages which showed that the museum users visited a Danish museum website at least four times a year, females were the most frequent users and primarily above 55 years.

The frequency pattern of museum website visits suggested that most users do not visit a museum website or a physical museum on a regular basis; therefore, museums were not an integral part of the majority of users' everyday life or concern, thus their reflections upon what they missed on the museums' websites had limited value. The primary cause for visiting a museum website was to obtain practical information, e.g. opening hours, entrance fees, guided tours, etc., in order to prepare a physical museum visit, or to get information and knowledge about objects, collections and exhibitions, and updates on museum events and activities. This substantiates the argument for the necessity of linking between the physical museum visit and the online museum visit. Some users visited the museum websites with the purpose of shopping, entertainment, games and social networking, i.e.; few want to actively engage with the museums on their websites.

The study also pointed to the fact that users to a limited degree wanted to become active participants and creators in an online museum context. The results of the Danish museums' Facebook users showed that in spite of the number of museum Facebook users having increased, the percentage of engaging and sharing users (as defined by Facebook) was relatively low. Even though engagement in a Facebook sense should be extremely 'effortless interactions', while from a user perspective, it is

defined as clicks on content. Nevertheless this does not imply that the majority of users are engaged users. However, my findings also illustrated that as more museums implement Facebook as part of their dissemination and communication activities and become more competent, they attract more users on Facebook.

8.2 Barriers and discrepancies

In this thesis, I have not only been concerned with determining the actual online activities of Danish museums and their users in order to establish whether or not the Danish museums have appropriated online media and how or whether or not the Danish museum users visit the museums' websites or follow their social media profiles. This thesis objective was also to address the complexity emerging in the relationships between the prescriptive literature, government policies, and the various perceptions and expectations to online museum dissemination and communication. In this subsection, I discuss discrepancies and conflicting interests which have surfaced in the analysis relating to the barriers of the Danish museums' appropriation of online media and barriers concerning the users' online visiting practices.

The Danish government's recommendations and policies herald online media as a means to attract new visitor groups to the museums and make the museums more accessible, as it is suggested that accessibility and diversity are closely related. With that in mind, the museums' online presence and activities have from a governmental level been upgraded to be considered equal to the physical museum space and activities (see discussion Section 2.4.3, Chapter 2). However, it is still far from all Danish museums that share the motivations, attitudes and abilities to realise this goal. The list of hindrances that limit the full use of the digital potentials and prioritise digital communication which was presented in the *Danish National Educational Plan* (Danish Ministry of Culture, 2006) included five points (see also Section 6.2.1, Chapter 6). Although, the Plan is almost ten years old, all the points are valid even today. The following addresses these five points of impediments from the Plan with results of this study.

• The museum collections have not been fully digitalised, which means that most of the resources are being used to digitalise the collections

Danish museums have not yet digitalised their collections, which therefore makes it a continuous labour-intensive project to create and develop online initiatives, such as online exhibitions, which also had only 20% of the museums in 2010 and 14% in 2011. Digitalising of collections also entails having an adequate IT-infrastructure, which many museums, even at the very large museums, still at this point do not have. Adding to this, in order to make full use of

the digitalised museum collections, and to manage, document and share their collections, it is necessary to have sufficient metadata. Metadata can be defined as structured data about data (Baca, Coburn, & Hubgard, 2008); the most obvious example is the museum catalogue record (structured data about an object in the museum's collection). And many Danish museums lack consistent and structured metadata and needs financial and staff resources to build a consistent and standardised metadata structure.

• Scarce resources and employees at smaller museums

At smaller Danish museums, the resources and employees allocated to online dissemination and communication are scarce. Similarly, at larger museums, even the very large museums, the resources and employees are limited as expectations to the museums' online dissemination and communication seem to increase with the size of the museum.

However, it is not in all larger museums that the museum management understand or prioritise online dissemination and communication or even include online media as part of their strategies. Therefore, many museums are dependent on skilled and dedicated individuals to propel online museum initiatives, not just the actual and practical maintenance work, but also to initiate and develop new projects and apply for external funding. And as my findings showed, applying for external funds both at government and private funds is also time-consuming and is not usually part of the traditional set of skills a museum curator possess, but has become an essential necessity.

• Resource intensive digital content maintenance

The lack of resources was a recurrent theme for the Danish museums, and it was obvious that for some museum curators producing and maintaining online content was considered burdensome and a distraction from the 'real' work, even more so in relation to sustaining dialogue and participation with users. Others articulated the management's poor understanding of the online media and the misapprehension that producing online material require fewer resources than, e.g., printed exhibition catalogues or pamphlets. Despite the fact that this study's main focus was not the museums' organisational structures or prioritising in relation to online dissemination and communication, I observed that the progress and development of the Danish museums prioritise online dissemination and communication in their organisations.

• Complex digital dissemination and communication project development as it involves many different disciplines

This point was not emphasised in my study, though the interdisciplinary museum projects should not be a hindrance in itself, as most museum projects related to conservation, exhibitions, collecting, etc., often involve various disciplines and competences from the entire

museum organisation. Instead, insufficient IT-infrastructure and online communication competences as well knowledge about the users should be addressed as hindrances.

• Sceptic attitudes of museum staff towards the Internet at the museums

Sceptic attitudes towards online media were also one of the main themes in my data material. This scepticism was related to the lack of skills and experience with online media, the possible pitfalls of using them as well as a lack of knowledge about the online users. Therefore, for many museums, online media was considered secondary and associated with sentiments of loss of control and authenticity. This again, related to the museums' perception of the museum institution's mission as a public knowledge and research institution. And the use of online media and in particular social media, which at least on the surface, deinstitutionalise the museum, because in social media, the value and knowledge of professional expertise are reduced and equalled with the amateurish creations and comments. Therefore, implementing online and social media as an integral part of the museums' dissemination and communication practices was equated with giving away the institutions' most profound trademark – its authority, credibility and authenticity.

Another concern associated with the usage of online media especially for exhibition purposes was that online exhibitions would cause the physical museums and their exhibitions to become unimportant and unnecessary. However, nothing in my data or in the literature suggested that having an online presence would make the physical counterpart superfluous. In fact, more physical visitors attracted more online users. And adding to this, the number of the museums' website users outnumbered physical visitors, and although the majority of the users visited the museum website with the overall purpose of finding practical information, nothing indicated that if the users were presented with other forms of communication and content on the museum websites that they would not use these initiatives.

According to my research, there are other relevant discussions which should be brought forward when trying to understand the circumstances of the Danish museums' appropriation of online media. The following discussion points will not only take a point of departure in the list of hindrances from the *National Educational Plan*, but will address other implications related to the museums, and the user perspective. The users' online practices and reflections upon their practices are equally as important when discussing the impact of online media in the museums. Both related to the hindrances and conditions that influence the museum users' online practices.

• Sceptic attitudes of the museums towards the government policies and recommendations

The lack of resources was presented as an argument for several of the points raised for not implementing online media in museums. In order to meet and overcome these hindrances, specific pools have been established under the auspices of the state to secure the development of online museum dissemination and communication projects. Additionally, the Danish Agency for Culture has organised seminars and conferences to emphasise and enhance the museums' online media qualifications. It has sought to enhance the idea of the online museum visits by upgrading its status as equal with the physical museum visit and has provided the museums with knowledge about their users both the physical visitors (Andersen et al., 2012; Bruun et al., 2013; Moos & Brændholt, 2010b, 2011) and their website users (Moos & Brændholt, 2010a). Despite these efforts, critical attitudes towards the government policies, recommendations and initiatives were still articulated at the workshops. The dissatisfaction and frustration were grounded in the perceptions of the museums feeling misunderstood and insecure about ulterior motives of the governing agencies.

• Public institutions' use of commercial platforms and services

First, from the viewpoint of outreach, it is important to locate the users, both the potential and actual users, and follow them to where they are and where they prefer to be. And when the users chose to be on the social media, it is natural that the museums follow suit. However, one could and should question our public cultural institutions' actions on and usage of commercial platforms. In contrast to the highly acclaimed notion about the Internet as a liberating and democratic space, most social media, such as Facebook, Twitter, Flickr, YouTube, etc. are all owned by corporate companies and in this relation, it becomes relevant to question whether Danish public cultural institutions should support commercial business models of e.g., Facebook. It is also important to discuss issues of privacy, ownership of content when these platforms are being used professionally. In particular, right of ownership has been a discussion point and hurdle for many art museums for expanding into the online space, as they cannot freely display their artworks online due to copyright infringement.

Second, as these social platforms are all privately owned, rules, regulations, design, functionalities, etc. might be subject to change at all times, making the online environment fluid and ever-changing. Facebook f.i. has constantly changed since its beginning. Certainly, this is not exclusive for online media but for most media environments. However, because of the fast pace change the changes in design determine the users' interactions and experiences. This should also be considered when discussing the museums' use of social media.

Third, also on a structural level the museums' usage of commercial platforms and services should be discussed. From a user perspective, concerns of corporate companies getting access to personal data and content of the users were also raised. These sceptic attitudes related to a

distrust of privacy issues of Facebook and concerns about Facebook's commercialisation of private photos and Facebook likes. Thus, in some instances this lead to reluctance of engaging with museums on Facebook and critical attitudes towards the museums for entering these commercial spaces.

• Diverging perceptions of the museum institution of both museums and users

The literature has sought to redefine the museum institution reinterpreted as 'responsive', 'transformative', 'connected', 'engaged', 'medialized', 'total', 'participatory', 'digital', 'virtual', 'exploded', etc. (Holdgaard & Klastrup, 2014). Centrally, these new attributions to the museum imply a change of perspective in the museum institution's self-identification, as well as new views on the museum's societal role in relation to its visitors; thus the museum is articulated to take on a social responsibility, be audience focused, be accessible, interactive, dialogical, knowledge sharing, etc. According to the results of this study, it was far from all Danish museums or their users shared this perception of the transformed museum institution. Indeed, no museum would dismiss the museum's public and social responsibilities; however, the idea of museums being for someone instead of about something (Weil, 2002) was not embedded by museums and in all their online practices. Whether this should be interpreted as obduracy, a reaction to the user-centrism which has thrived in the last decade, or related to a lack of knowledge or interest is an open question. The users were likewise unwilling to accept the idea of a transformed museum. Museums were for many not only connected with childhood memories and representatives of nostalgia but also boring and uninteresting places. Thus, the users' perceptions of the museum as a knowledge institution were embedded in the way the users perceive how to interact with the museums through online media.

Museums are considered as incompatible with online media

Although many users appeared to have a strained relationship to museums, they also appeared to have rather dispassionate and conservative attitudes towards possibilities of online media for the Danish museums. One might expect that the users who disliked museums because of dull and inactive experiences would grasp the idea of online museum dissemination and communication that involved other forms than the one-to-many approach. However, this appeared not to be the case. On the contrary, the more interested in museums the users were, the more appealing they found the possibilities of online museum dissemination and communication. Specifically related to social media, the notion of incompatibility between the museum institution and social media were even greater as the users' understanding of social media were closely connected to their personal sphere of life, keeping in contact with friends and family, and not interactions with public institutions, such as museums. Hence, there was a

disconnect between the use of social media for private social purposes and connecting with museums on these same platforms.

• Users are not necessarily eager online participators

In much of the social media research and participatory culture literature, we have witnessed claims of the death of both the author and the audience (see f.i., Bruns, 2008) due to online media and the convergence of production processes. The user has been ascribed with notions of autonomy and empowerment and redefined as produsers, prosumers, participators, creative audience, etc. And all these neologisms concerning the users convey forms of engagement interaction, contribution, sharing, and remixing, which to a very high degree leads us to believe that all users in online media environments are active participants and that passive forms of consumption are either completely absent or deplorable. This is in particular visible in relation to the ideas of non-active or low-frequent users, such as lurkers, browsers and sporadics (see f.i., Brandtzaeg & Heim, 2011). Despite the promising participatory potentials of online media in the literature, there were very few indications of the general Danish online users wanting to become active participants and creators in an online museum context. This was related to how the majority of Danish museums have appropriated social media (as a transmission of one-tomany media); the users' perceptions of what a museum was, and general ideas of incompatibility between museums and online media. The mismatch between social media and museums has been observed to have changed during my PhD project in the way the users' approach and regard social media. Thus, from some users' perspective a museums' Facebook page could in many ways be compared with their website as the Facebook pages also contained practical information needed for a physical visit.

Another factor that influenced the museum users' unwillingness concerned the users overall interest in participating online. This was the role museums played in most users' everyday lives. And thus, could neither relate to why they should participate nor did they find it relevant as such to participate. This lack of interest should also be considered in perspective of users being insecure in a space which to a large degree was still perceived as 'elitist temple', where users expected to be informed and enlightened by the museum curators and not by other users. And therefore some users were reluctant to contribute and participate. On the other hand, users who considered themselves as expert within a museum area did not consider the possibilities of interacting and engaging with the museums as they considered this type of initiatives should be directed at non-experts and did not consider themselves as target group of many of these initiatives.

• Museums as part of the users' online self-representation

The signalling effect of being associated with or associate oneself with a museum on social media also had an impact on the museum users' decisions of participating or following museums on these various platforms. In general users were very specific and cautious about what image they created of themselves online, which affected the way they wanted to be linked with museums on their social media profiles. Some users used their Facebook like to show affiliation or loyalty to a certain museum and by this they also wanted to promote this museum to their Facebook friends, while others used the certain museum brands to brand themselves. Others again considered their museum preferences as a private matter and did not want to publicly show them on Facebook.

In the above, I have emphasised an incompatibility between the idea of the public museum, online media and the users' interest in engaging and participating in online museum environments, these tensions and disconnect have primarily been highlighted in order to address the assumptions of why the Danish museums to a limited degree have appropriated online media and to challenge prescriptive ideals of online media democratising and liberating potentials and the idea of the participatory culture, but also to counterbalance the many studies that build their arguments on assumptions rather than empirical findings or studies of particular groups, such as fans (Jenkins, 2008).

Certainly, there was a general unwillingness or inability of the Danish museums to harness the full advantages of online media for dissemination or communication purposes. This does not entail that the Danish museums do not use online media at all. Danish museums do use online media in their dissemination and communication, and to a much higher degree than they used just ten years ago. Danish museums do make attempts to overcome the baggage of being an elitist temple, which presents, produces and preserves the national cultural heritage by entering the online space. However, the users' perception of museums inadvertently structures the way the users want to meet the museums online and what to expect of the museums online. The typical user museum interaction on the Danish museums' websites and Facebook pages primarily consists of clicks and likes. That said, the lack of user participation does not indicate that the users are completely indifferent to the idea of interacting with the museums on social media, or that museums being on social media is a waste of time and resources. However, one should question whether clicking and liking online museum content is the same as participation, but also question whether it is relevant to keep reaffirming or retracting the participation discussion as participation might not be optimal concept to conceptualise the processes that take place. The findings of this thesis suggest that we should move ahead and direct our attention towards online practices, as these to a much higher degree can encompass current and actual online media usages of both museums and users and inform us about the underlying rationales of how these usages come into play.

8.3 The contribution of the thesis

In the concluding paragraph of the Introduction to Museum Communication and Social Media (2013), Drotner and Schrøder suggest 'connected museum research' as a holistic and interdisciplinary approach to the museological field that integrates and bridge the gaps between the neighbouring fields of studies in order to better explore the meaning-making processes that emerge in the relationship between cultural institutions, various media platforms, content and the users (Drotner & Schrøder, 2013, pp. 7– 13). The objective of this thesis was to do exactly that. The overall aim of the thesis was to contribute to the discussion and understanding of the impact of online media in a museum context. By pursuing an interdisciplinary and holistic perspective, I did not consider museums and their online users as two isolated phenomena; instead I have examined both the Danish museums' appropriation of online media and the users' online museum visiting practices, as these two are related naturally. My aim was to point out the necessity of considering the relationship between the two and to integrate both perspectives on appropriation, which usually are studied separately. Adding to this was the inclusion of the historical perspective of the public museum institution at a general level and in a Danish context, in which the Danish Museum Act and the various digitalisation policies, reports and recommendations concerning the Danish cultural institutions were included. As my study has shown, it is important to take the institution, user, online media and the historical and political context into careful consideration when examining online museum practices. Because only in the combination of these dimensions, one can obtain a complete understanding of what these practices are, how they are why they are.

The overall conclusions might not be either very surprising or novel as they at large reaffirm conclusions presented in earlier research; however, my research builds on an extensive data material over a period of four years that covers the online practices of all the 195 state-owned and state-subsidised museums in Denmark and a representative sample of the Danish online museum users. Thus, my conclusions are firmly empirically grounded and can be applied and generalised to the entire Danish museum field. By doing so, I have not only addressed the research gap related to the lack of studies of social media pointed out by Russo et al. (2006) who argued for more research within the field of social media in museums, but also to the general lack of empirical research on museums and online media. Consequently, the conclusions made in this thesis are not based on assumptions or findings from select case studies of special innovative or extraordinary projects or pioneering museums. Thus, from an empirical perspective, this study has mapped the general tendencies of the Danish online museum landscape from 2010 to 2013 and is thus, not just a snapshot of the current state of the field. The findings of the PhD project has added to the existing body of knowledge regarding the online museum users from the *National Museum Web User Survey* (Moos &

Brændholt, 2010a) as well as has established a solid foundation of knowledge on how the Danish museums appropriate online media.

Through the empirical examination, this PhD project has contributed to the ongoing discussion of the 'digitalisation of the cultural heritage' and its implications for both institutions and users. Additionally, the thesis also provides insights into the Danish users' perspectives on social media and their usage of social media in general.

From a theoretical perspective, this study was positioned in interdisciplinary approach. This means that some of the arguments, findings and conclusions presented in this thesis might be obvious and familiar in some disciplines while considered new and important in other fields. The thesis added to the discussion of a rethinking of sender-receiver relation and the media-text relation. By suggesting a practice approach to online museum settings, I have not approached media as objects, texts, production or perception tools, but addressed media-related practices from an open and holistic perspective that included and integrated the two perspectives, i.e., media production and media reception. The museum's perspective on online practices was related to current and actual use of online media linked with how online media was perceived, altered and constructed and how online media transformed not the institutions but their dissemination and communication practices, therefore, to a certain extent related to 'appropriation'.

From a methodological perspective, the study integrates and combines a set of methods that shed new light and new understanding on a relatively unexplored area. The content study, in particular, should be emphasised due to its extensiveness of surveying all Danish websites twice in two consecutive years and all Danish museums' existence on five different social media platforms. In addition, the content study was a further development of the (qualitative) content analysis approach adhering to its particular characteristics relating to the unobtrusive technique; handling of unstructured data; contextualise process texts that are significant, meaningful, informative and representational; and coping with large volumes of data Section 5.4.3.1, Chapter 5), but at the same time developing categories and collecting data that suited the objective of this particular PhD project.

8.4 Limitations and future research

In continuation of the results and contributions of the present PhD project, the limitations of the project will be briefly discussed and ideas and suggestions for future research endeavours are presented in this final section of the concluding chapter.

First, the need for further longitudinal studies should be stressed. While this thesis already builds on longitudinal studies, future research looking into online museum practices should attempt to clearly adopt such a perspective for data collection and analysis. Although, I in this current thesis have

examined the development over a four-year period, I still suggest to repeat the study or to conduct similar studies, which examine practices over time. The study was conducted at a point in time when the interest in online media, especially social media was starting to take off among non-profit organisations, which my findings also show. And as indicated, the Danish museums have today (2014) to a large degree appropriated online media as part of their dissemination and communication strategies. Therefore, it would be of interest to conduct a similar study in the future in order to examine this development over a longer period of time as it would be expected that the museum by then would have a more competent use.

Second, having an interdisciplinary approach and concomitantly using mixed-methods can be challenging. On one hand, interdisciplinarity helped answer and solve problems beyond what could have been done within a single discipline. On the other hand, when it has been complicated to navigate in the waters of several disciplines, and to completely avoid the so-called kitchen-sink mentality, the inclination to employ too many concepts and methods, in order to explore and examine the research project as wide-ranging and nuanced as possible. Although the disciplines in this study can be said to be neighboring fields, using concepts and methods that from various disciplines, mixing and crossing the traditional epistemic boundaries of quantitative and qualitative research can be problematic in relation to validity and reliability. Additionally, using a variety of methods, it is difficult to be an expert in every method. In this study, I have combined both quantitative and qualitative methods mainly being experienced with qualitative data collection and analysis. Therefore, the statistical analysis in this thesis has primarily been descriptive or has pointed to correlations. In future research, it would be relevant to conduct regression or cluster analyses from which causal relations can be determined.

Third, as the objective of the thesis has been to examine online museum practices, it has purposely not been focusing on the online media as such, nor on the design elements, the technical affordances, etc. of the various online media platforms. This does not mean that I dismiss or belittle the importance of these as they condition online practices of both Danish museums and their users, but within this scope it was not possible. Regarding the importance of design and technology itself, during the project period Facebook's design and functionalities have changed multiple times, from being Facebook fan to Facebook liker, Facebook has implemented a Timeline etc., and all these changes naturally have an impact on how the platform is used by the museums and their users. This makes the objects of study (in this case the museums' official pages) into moving targets, and makes it difficult to distinguish between the factors that cause the change in online practices. I have responded to this by using a mixed-method approach as well as the focusing on practices, which also take competences, attitudes, and motivation into account, rather than examining actual usage alone. However, future research might in greater detail include design and technical affordances as part of the analysis.

Finally, the analytical framework was developed with the sole purpose of capturing the processes of Danish museums' appropriation of online media and the Danish museums' online museum visits integrating theoretical concepts from various disciplines in relation to the available data. As several scholars have already pointed out, the concept of practices is useful in media and audience studies as it is able to address these open questions that transgress traditional approaches that either relates to consumption or production (Couldry, 2010; Postill, 2010). With a point of departure in this thesis, I too acknowledge the usefulness of the practice concept to examine and conceptualise the ongoing processes that take place when introducing online media in the museum. So far, the practice approach is still very limited in the museum studies field, therefore, I suggest that much more research needs to be done to explore the usefulness of the concept and develop the framework further within the museum field.

References

- Aboelela, S. W., Larson, E., Bakken, S., Carrasquillo, O., Formicola, A., Glied, S. A., ... Gebbie, K. M. (2007). Defining Interdisciplinary Research: Conclusions from a Critical Review of the Literature. *Health Services Research*, 42(1p1), 329–346.
- Abt, J. (2011). The Origins of the Public Museum. In S. Macdonald (Ed.), *A Companion to Museum Studies* (pp. 115–134). Chichester, West Sussex, U.K.: Wiley-Blackwell.
- Andersen, J. B., Jensen, J. T., & Brændholt, I. L. (2012). *Nationale brugerundersøgelse 2011*. Copenhagen: The Danish Agency of Culture.
- Anderson, G. (Ed.). (2004). Reinventing the Museum. Historical and Contemporary Perspectives on the Paradigm Shift. Lanham Md.; Walnut Creek: Altamira Press.
- Anderson, G. (2012). Reinventing the Museum. The Evolving Conversation on the Paradigm Shift (Second revised edition.). Lanham Md.; Walnut Creek: AltaMira Press.
- Anderson, P. (2007). What is Web 2.0? Ideas, Technologies and Implications for Education (TechWatch). JISC Technology and Standards Watch. Retrieved from http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf
- Association of Danish Media. (2012). *Danskernes brug af Internettet 2012*. Copenhagen: Association of Danish Media. Retrieved from
 - $http://danske medier.dk/wp-content/uploads/2012/11/Danskernes_brug_af_internettet_2012.pdf$
- Association of Danish Media. (n.d.). Danske Medier. Retrieved 4 March 2014, from http://danskemedier.dk/
- Atkinson, P., & Hammersley, M. (1994). Ethnography and Participant Observation. In K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 248–261). Thousand Oaks: SAGE Publications.
- Aarseth, E. J. (1997). *Cybertext: Perspectives on Ergodic Literature*. Baltimore: Johns Hopkins University Press.
- Baca, M., Coburn, E., & Hubgard, S. (2008). Metadata and Museum Information. In P. F. Marty & K. B. Jones (Eds.), *Museum Informatics: People, Information, and Technology in Museums* (pp. 107–127). New York; London: Routledge.
- Battro, A. M. (2010). From Malraux's Imaginary Museum to Virtual Museum. In R. Parry (Ed.), *Museums in a Digital Age* (pp. 136–147). London; New York: Routledge.
- Bearman, D., & Trant, J. (2006). *Survey of Museum Web Implementations*. Toronto: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/research/mwbenchmarks/report/mwbenchmarks2005.html
- Bell, P. (2008). Content Analysis of Visual Images. In T. van Leeuwen & C. Jewitt (Eds.), *Handbook of Visual Analysis*. London: SAGE.
- Bencard, M. (1993). Museerne og verdensordenen. Kunstkammerets opståen og grundide. *Nordic Museology*, (1), 3–16.
- Bennett, T. (1995). The Birth of the Museum: History, Theory, Politics. London; New York: Routledge.

- Bernstein, S. (2008). Where Do We Go From Here? Continuing with Web 2.0 at the Brooklyn Museum. In J. Trant & D. Bearman (Eds.), *Museums and the Web 2008: Proceedings*. Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2008/papers/bernstein/bernstein.html
- Bhaskar, R., Lawson, T., Archer, M., Bhaskar, R., Collier, A., Lawson, T., & Norrie, A. (1998). Introduction. Basic texts and developments. In *Critical Realism: Essential Readings* (pp. 3–15). London; New York: Routledge.
- Bille, T. (2012). The Scandinavian approach to the experience economy does it make sense? *International Journal of Cultural Policy*, 18(1), 93–110.
- Bille, T., Fridberg, T., Storgaard, S., & Wulff, E. (2005). *Danskernes kultur-og fritidsaktiviteter 2004:* med udviklingslinjer tilbage til 1964. AKF forlaget.
- Bitgood, S., & Shettel, H. H. (1996). An Overview of Visitor Studies. *The Journal of Museum Education*, 21(3), 6–10.
- Black, G. (2005). *The Engaging Museum: Developing Museums for Visitor Involvement*. London; New York: Routledge.
- Black, S., Bowen, J. P., & Kelsey, G. (2010). Can Twitter Save Bletchley Park? In J. Trant & D. Bearman (Eds.), *Museums and the Web 2010: Proceedings*. Toronto: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2010/papers/black/black.html
- Boas, F. (1907). Some principles of museum administration. Science (New Series), 25(650), 921–933.
- Boritz, M., Ramsing, M., Jensen, C. S. H., & Lund-Andersen, I. (2011). Digital levendegørelse 1700-tals faktionsleg på facebook. *Nordic Museology*, *Digital Museology*(1).
- Bowen, J. P. (1999). Time for Renovations: A Survey of Museum Web Sites. In *Museums and the Web 1999: Proceedings*. New Orleans, USA: Archives & Museum Informatics. Retrieved from http://www.museumsandtheweb.com/mw99/papers/bowen/bowen.html
- Bowen, J. P. (2000). The Virtual Museum. *Museum International*, 205(1), 4–7.
- boyd, danah, & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, *13*(1). Retrieved from http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html
- Brandtzaeg, P. B., & Heim, J. (2009). Why people use social networking sites. *Computer Science*, 5621, 143–152.
- Brandtzaeg, P. B., & Heim, J. (2011). A typology of social networking sites users. *International Journal of Web Based Communities*, 7(1), 28.
- Bräuchler, B., & Postill, J. (Eds.). (2010). *Theorising media and practice* (Vol. 4). New York: Berghahn Books.
- Brügger, N. (2009). Website history and the website as an object of study. *New Media & Society*, 11, 115–132.
- Brügger, N. (2010). *Website Analysis*. Aarhus: Papers from The Centre for Internet Research. Retrieved from http://cfi.au.dk/fileadmin/www.cfi.au.dk/publikationer/cfis_skriftserie/012_brugger.pdf

- Brügger, N. (2013). Facebooks historie. Udviklingen af en tom struktur. In J. L. Jensen & J. Tække (Eds.), *Facebook fra socialt netværk til metamedie* (pp. 17–44). Frederiksberg: Samfundslitteratur.
- Bruns, A. (2008). *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang.
- Bruns, A., & Bahnisch, M. (2009). Social media: tools for user-generated content: social drivers behind growing consumer participation in user-led content generation [Volume 1: state of the art]. Retrieved from
 - http://www.smartservicescrc.com.au/PDF/Social_Media_State_of_the%20Art_March2009.pdf
- Bruun, S., Jensen, J. T., & Brændholt, I. L. (2013). *Brugerundersøgelse 2012*. Copenhagen: Danish Agency for Culture. Retrieved from http://issuu.com/kunststyrelsen/docs/brugerunders__gelse_2012?e=1320125/2145797
- Buch-Hansen, H., & Nielsen, P. (2005). Kritisk realisme (1. udgave.). Frederiksberg:
- Samfundslitteratur; Roskilde Universitetsforlag.

 Bysted-Sandberg, M., & Kjeldsen, A. K. (2008). *Strategisk museumskommunikation en undersøgelse af, hvordan danske museer forstår og anvender strategisk kommunikation anno 2008*. Aarhus:
- af, hvordan danske museer forstår og anvender strategisk kommunikation anno 2008. Aarhus: Aarhus School of Business/Center for Museology, University of Aarhus. Retrieved from http://www.asb.dk/fileadmin/www.asb.dk/forskning/forskningscentreoggrupper/forskningscentre/centerforvirksomhedskommunikation/forskning/publikationer/rapporter/2006/rapportomstrate giskmuseumskommunikation/fileexplorer_fetchfile-aspx-file-6388.pdf
- Cairns, S. (2013). Mutualizing Museum Knowledge: Folksonomies and the Changing Shape of Expertise. *Curator: The Museum Journal*, 56(1), 107–119.
- Cameron, D. (1971). The Museum, a Temple or the Forum. In G. Anderson (Ed.), *Reinventing the Museum Historical and Contemporary Perspectives on the Paradigm Shift* (2004th ed.). Oxford: AltaMira Press.
- Cameron, F. (2007). Beyond the Cult of the Replicant Museums and Historical Digital Objects: Traditional Concerns, New Discourses. In F. Cameron (Ed.), *Theorizing Digital Cultural Heritage*. A Critical Discourse (pp. 49–75). Cambridge Massachusetts: MIT Press.
- Cameron, F., & Kenderdine, S. (Eds.). (2007). *Theorizing Digital Cultural Heritage: A Critical Discourse*. Cambridge Massachusetts: MIT Press.
- Carpentier, N. (2011a). *Media and Participation: A Site of Ideological-Democratic Struggle*. Bristol: Intellect.
- Carpentier, N. (2011b). The concept of participation. If they have access and interact, do they really participate? *CM: Communication Management Quarterly*, 21(Special issue), 13–36.
- Carroll, J., Howard, S., Peck, J., & Murphy, J. (2002). A Field Study of Perceptions and Use of Mobile Telephones by 16 to 22 Year Olds, 4(2), 49–61.
- Carroll, J., Howard, S., Peck, J., & Murphy, J. (2003). From Adoption to Use: The Process of Appropriating a Mobile Phone. *Australasian Journal of Information Systems*, 10(2), 38–48.

- Carroll, J., Howard, S., Vetere, F., Peck, J., & Murphy, J. (2001). Identity, power and fragmentation in cyberspace: technology appropriation by young people. In *Proceedings of the 12th Australasian Conference on Information Systems (ACIS 2001)* (Vol. 1, pp. 95–102).
- Carroll, J., Howard, S., Vetere, F., Peck, J., & Murphy, J. (2002). Just what do the youth of today want? Technology appropriation by young people. In *System Sciences*, 2002. *HICSS. Proceedings of the 35th Annual Hawaii International Conference on* (pp. 1777–1785). Retrieved from http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=994089
- Caruth, N. J., & Bernstein, S. (2007). Building an On-line Community at the Brooklyn Museum: A Timeline. In *Museums and the Web 2007: Proceedings*. San Francisco, 11-14 April, 2007: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2007/papers/caruth/caruth.html
- Center for Cultural and Experience Economy, & Danish Ministry of Culture. (2012). *Reach out inspirationskatalog: naviger i brugerinddragelse og brugerdrevet innovation*. Roskilde: Center for Cultural and Experience Economy in collaboration with Danish Ministry of Culture.
- Chadwick, J., & Boverie, P. (1999). A Survey of Characteristics and Patterns of Behavior in Visitors to a Museum Web Site. In *Museums and the Web 1999: Proceedings*. Toronto: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw99/papers/chadwick/chadwick.html
- Chan, S. (2007). Tagging and Searching Serendipity and museum collection databases. In *Museums and the Web 2007: Proceedings*. San Francisco, 11-14 April, 2007: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2007/papers/chan/chan.html
- Christensen, H. D. (2007). Hvad er et museum? Den danske museumslov mellem teori og praksis. Presented at the Nordic Conference on Cultural Policy Research, Bø: Høgskolen i Telemark. Retrieved from www.hit.no/nor/content/download/48160/402903/file/Christensen.pdf
- Clark, A. M. (2004). Critical Realism. In *The Sage Encyclopedia of Social Science Research Methods* (Vol. 1, pp. 221–223). Thousand Oaks: SAGE Publications.
- Clifford, J. (1988). *The Predicament of Culture : Twentieth-Century Ethnography, Literature and Art.* Cambridge Massachusetts: Harvard University Press.
- Consolidated Act on Museums, Pub. L. No. 1505 (2006). Retrieved from http://kum.dk/Documents/English%20website/Archives,%20museums%20and%20cultural%20 heritage/Consolidated_Act_on_Museums_Executive_Order_No.1505%5B1%5D.pdf
- Couldry, N. (2010). Theorising media as practice. In *Theorising Media and Practice* (Vol. 4, pp. 35–54). New York: Berghahn Books.
- Couldry, N. (2011). The Necessary Future of the Audience ... and how to Research it. In V. Nightingale (Ed.), *The Handbook of Media Audiences* (pp. 213–229). Oxford, UK: Wiley-Blackwell.
- Couldry, N. (2012). *Media, Society, World: Social Theory and Digital Media Practice*. Cambridge Massachusetts: Polity.
- Cover, R. (2006). Audience inter/active: Interactive media, narrative control and reconceiving audience history. *New Media & Society*, 8(1), 139–158.

- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). Los Angeles: SAGE Publications.
- Crow, W. B., & Din, H. (2009). *Unbound by Place or Time. Museums and Online Learning*. Washington D.C.: American Association of Museums.
- Damkjær, K., & Schick, L. (2013). Can You Be Friends with an Art Museum? Rethinking the Art Museum with Facebook. In P. Runnel, P. Pruulmann-Vengerfeldt, P. Viires, & M. Laak (Eds.), *The Digital Turn: User's Practices and Cultural Transformations* (pp. 105–118). Frankfurt am Main: Peter Lang International Academic Publishers.
- Dana, J. C. (1917). The Gloom of the Museum. In *Reinventing the Museum Historical and Contemporary Perspectives on the Paradigm Shift* (2004th ed., pp. 13–29). Oxford: AltaMira Press.
- Danermark, B. (2001). Interdisciplinary Research and Critical Realism: The Example of Disability Research. Presented at the 5th Annual International Association for Critical Realism (IACR), Roskilde University. Retrieved from http://www.criticalrealism.com/archive/iacr_conference_2001/bdanermark_ircr.pdf
- Danermark, B., Ekström, M., Jakobsen, L., & Karlsson, J. C. (2002). *Explaining Society: Critical Realism in the Social Sciences*. London; New York: Routledge.
- Danish Ministry of Culture. (2006). *Udredning om museernes formidling*. Copenhagen: The Danish Ministry of Culture.
- Danish Ministry of Culture. (2008). Reach out! Inspiration til brugerinddagelse og innovation i kulturens verden. Copenhagen: Danish Ministry of Culture.
- Danish Ministry of Culture. (2009a). *Digitalisering af kulturarven. Endelig rapport fra Digitaliseringsudvalget*. Copenhagen: Danish Ministry of Culture.
- Danish Ministry of Culture. (2009b). *Kultur for alle Kultur i hele landet*. Copenhagen: Danish Ministry of Culture.
- Danish Ministry of Culture. (2011). *Udredning om fremtidens museumslandskab*. København: The Danish Ministry of Culture. Retrieved from http://www.kulturarv.dk/fileadmin/user_upload/kulturarv/publikationer/emneopdelt/museer/udredning_museer_2011.pdf
- Danish Research Centre on Education and Advanced Media Materials. (n.d.). DREAM. *DREAM*. Retrieved 6 November 2012, from http://www.dream.dk/?#/172504/
- Davis, C. H., & Michelle, C. (2011). Q Methodology in Audience Research: Bridging the Qualitative/Quantitative 'Divide'? *Participations: Journal of Audience and Reception Studies*, 8(2), 559–593.
- Dawson, B., McDanald, F., & Trépanier, G. (2008). Social Presence: New Value For Museums And Networked Audiences. In J. Trant & D. Bearman (Eds.), *Museums and the Web 2008: Proceedings*. Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2008/papers/dawson/dawson.html
- Deacon, D. (2003). Holism, Communion and Conversion: Integrating Media Consumption and Production Research. *Media, Culture & Society*, 25(2), 209–231.

- DeSanctis, G., & Poole, M. S. (1994). Capturing the Complexity in Advanced Technology Use: Adaptive Structuration Theory. *Organization Science*, *5*(2), 121–147.
- Desvallées, A., & Mairesse, F. (Eds.). (2010). *Key Concepts of Museology*. [Paris]: Armand Colin. Retrieved from http://icom.museum/fileadmin/user_upload/pdf/Key_Concepts_of_Museology/Museologie_An glais_BD.pdf
- Dewdney, A., Dibosa, D., & Walsh, V. (2013). *Post-Critical Museology: Theory and Practice in the Art Museum*. London: Routledge.
- Dicker, E. (2010). The Impact of Blogs and Other Social Media on the Life of a Curator. In J. Trant & D. Bearman (Eds.), *Museums and the Web 2010: Proceedings*. Toronto: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2010/papers/dicker/dicker.html
- Dickson, K. (2006). Podcasting 101. Presented at the Museums and the Web, Alburquerque: Archives & Museum Informatics. Retrieved from http://www.museumsandtheweb.com/mw2006/papers/dickson/dickson.html
- Dietz, S. (1998). Curating (on) the Web. Presented at the Museums and the Web 1998: Proceedings, Toronto: Archives & Museum Informatics. Retrieved from http://www.museumsandtheweb.com/mw98/papers/dietz/dietz_curatingtheweb.html
- Din, H., & Hecht, P. (Eds.). (2007). *The Digital Museum: A Think Guide*. Washington D.C.: American Association of Museums.
- Doering, Z. (1999). Strangers, Guests or Clients? Visitor Experiences in Museums. *Curator: The Museum Journal*, 42(2), 74–87.
- Drotner, K., & Schrøder, K. (Eds.). (2013). *Museum Communication and Social Media: The Connected Museum*. New York; London: Routledge.
- Drotner, K., Weber, C. P., Larsen, B. A., & Løssing, A. S. W. (2011). *Det interaktive museum*. Frederiksberg: Samfundslitteratur.
- Ellenbogen, K., Falk, J. H., & Haley-Goldman, K. (2008). Understanding the Motivations of Museum Audiences. In *Museum Informatics: People, Information, and Technology in Museums* (pp. 187–194). New York; London: Routledge.
- Ellin, E. (1968). An international survey of museum computer activity. *Computers and the Humanities*, 3(2), 65–86.
- Ellison, N. B., & boyd, danah. (2013). Sociality through Social Network Sites. In W. H. Dutton (Ed.), *The Oxford Handbook of Internet Studies* (pp. 151–172). Oxford: Oxford University Press.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New Media & Society*, *13*(6), 873–892.
- Epinion, & Pluss Leadership. (2012). *Danskernes kulturvaner 2012*. Copenhagen: Danish Ministry of Culture. Retrieved from http://kum.dk/Documents/Publikationer/2012/Bogen%20danskernes_kulturvaner_pdfa.pdf

- Erzberger, C., & Kelle, U. (2003). Making Inferences in Mixed Methods: the Rules of Integration. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks, CA: SAGE Publications.
- Facebook. (n.d.). Page Post Metrics. *Facebook Help Centre*. Retrieved 15 March 2012, from https://www.facebook.com/help/?page=258216927554796
- Falk, J. H. (2009). *Identity and the museum visitor experience*. Walnut Creek: Left Coast Press.
- Falk, J. H., & Dierking, L. D. (1992). The Museum Experience. Washington D.C.: Howells House.
- Field, A. P. (2009). *Discovering statistics using SPSS: (and sex, drugs and rock 'n' roll)* (3rd ed.). Los Angeles: SAGE Publications.
- Fiske, J. (1992). Audiencing: A cultural studies approach to watching television. *Poetics*, 21(4), 345–359.
- Fletcher, A., & Lee, M. J. (2012). Current social media uses and evaluations in American museums. *Museum Management and Curatorship*, 27(5), 505–521.
- Floris, J. (2011). Unge i dialog med kunstmuseernes? En empirisk undersøgelse. In K. Drotner, C. P. Weber, B. A. Larsen, & A. S. W. Løssing (Eds.), *Det interaktive museum* (pp. 103–117). Frederiksberg: Samfundslitteratur.
- Floris, L., & Vasström, A. (1999). *På museum mellem oplevelse og oplysning*. Frederiksberg: Roskilde Universitetsforlag.
- Franciolli, M., Paolini, P., & Rubegni, E. (2010). Multimedia Communication Issues: Why, What and When. In J. Trant & D. Bearman (Eds.), *Museums and the Web 2010: Proceedings*. Denver, 13-18 April, 2010: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2010/papers/francioli/francioli.html
- Galani, A., & Chalmers, M. (2008). Blurring Boundaries for Museum Visitors. In P. F. Marty & K. B. Jones (Eds.), *Museum Informatics: People, Information, and Technology in Museums* (pp. 157–177). New York: Routledge.
- Gates, J. (2007). Case Study: New World Blogging within a Traditional Museum Setting. In *Museums* and the Web 2007: Proceedings. San Francisco, 11-14 April, 2007: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2007/papers/gates/gates.html
- Giaccardi, E. (2012). *Heritage and Social Media. Understanding Heritage in a Participatory Culture.*New York: Routledge.
- Giebelhausen, M. (2006). The Architecture is the Museum. In J. Marstine (Ed.), *New Museum Theory and Practice*. *An Introduction* (pp. 41–63). Malden, MA: Blackwell Publishing.
- Goffman, E. (1959). The Presentation of Self in Everyday Life. New York: Doubleday.
- Grabill, J. T., Pigg, S., & Wittenauer, K. (2009). Take Two: A Study of the Co-Creation of Knowledge on Museum 2.0 Sites. In *Museums and the Web 2009: Proceedings*. Indianapolis, 15-18 April, 2009: Archives & Museum Informatics. Retrieved from http://www.museumsandtheweb.com/mw2009/papers/grabill/grabill.html
- Greene, J. C. (2007). Mixed Methods in Social Inquiry (1st ed.). San Francisco: Jossey-Bass.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11(3), 255–274.

- Gundestrup, B. (2005). Kunstkammeret 1650-1825 og dets betydning for dannelsen af det nationale museumsvæsen i Danmark. In B. Ingemann & A. Hjelskov Larsen (Eds.), *Ny dansk museologi* (pp. 13–36). Aarhus: Aarhus Universitetsforlag.
- Ha, L., & James, E. L. (1998). Interactivity reexamined: A baseline analysis of early business web sites. *Journal of Broadcasting & Electronic Media*, 42(4), 457–474.
- Haley-Goldman, K., & Schaller, D. (2004). Exploring Motivational Factors and Visitor Satisfaction in On-line Museum Visits. In *Museums and the Web 2004: Proceedings*. Arlington, USA: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2004/papers/haleyGoldman/haleyGoldman.html
- Halkier, B. (2002). Fokusgrupper. Frederiksberg: Samfundslitteratur & Roskilde Universitetsforlag.
- Hammersley, M. (2008). Troubles with triangulation. Advances in Mixed Methods Research, 22–36.
- Hansen, D. W., Alapetite, A., Holdgaard, N., Simonsen, C. E., & Vilsholm, R. L. (2009). Location-based solutions in the experience centre. *Nordic Museology*, (1), 44–52.
- Hansen, J., & Hansen, C. (Eds.). (2007). *Digital kulturformidling børn og forskere har ordet*. Copenhagen: The Heritage Agency of Denmark. Retrieved from http://www.kulturarv.dk/publikationer/publikation/artikel/digital-kulturformidling/
- Haug, A., & Christiansen, M. (2014). *Sådan bruger danske medlemsorganisationer sociale medier*. Retrieved from http://socialemedlemmer.dk/media/12279/rapport%20medlemsorg.pdf
- Hein, G. (2012, April 16). *The Social Responsibility of Museums in a Democracy*. Keynote presented at the Unge og Museer, Copenhagen. Retrieved from http://www.kulturarv.dk/fileadmin/user_upload/kulturarv/museer/George_Hein.pdf
- Henning, M. (2006). *Museums, Media and Cultural Theory*. Maidenhead; New York: Open University Press.
- Herring, S. C. (2010). Web Content Analysis: Expanding the Paradigm. In J. Hunsinger, L. Klastrup, & M. Allen (Eds.), *International Handbook of Internet Research* (pp. 233–249). Dordrecht: Springer. Retrieved from https://webmail.itu.dk/rc/?_task=mail&_framed=1&_action=get&_mbox=INBOX&_uid=21003 &_part=1&_frame=1
- Herring, S. C., Scheidt, L. A., Wright, E., & Bonus, S. (2005). Weblogs as a bridging genre. *Information Technology & People*, 18(2), 142–171.
- Hertzum, M. (1998). A Review of Museum Web Sites: In Search of User-Centred Design. *Archives and Museum Informatics*, 12(2), 127–138.
- Himmelstrup, K. (2004). *Kulturens former og institutioner: Grundbog i kulturformidling*. Copenhagen: Hans Reitzel.
- Hjørland, B., & Christensen, F. S. (2002). Work tasks and socio-cognitive relevance: A specific example. *Journal of the American Society for Information Science and Technology*, *53*(11), 960–965.
- Hobart, M. (2010). Whar Do We Mean by 'Media Practices'? In B. Bräuchler & J. Postill (Eds.), *Theorising Media and Practice* (pp. 55–75). Oxford: Berghahn Books.

- Holdgaard, N. (2011). The Use of Social Media in the Danish Museum Landscape. In *Museums and the Web 2011: Proceedings*. Philadelphia, 6-9 April 2011: Archives & Museum Informatics. Retrieved from
 - http://conference.archimuse.com/mw2011/papers/the_use_of_social_media_in_the_danish_museum_l
- Holdgaard, N. (2012). Museum Facebook Users... Who are they? In *The Transformative Museum Proceedings*. Roskilde University.
- Holdgaard, N., & Klastrup, L. (2014). Between control and creativity: the challenges of co-creation in a museum context. *Digital Creativity*, 25(2).
- Holdgaard, N., & Simonsen, C. E. (2010). Kan digitale medier og teknologi få unge til at gå på museum? *Danske Museer*, 21(1), 22–23.
- Holdgaard, N., & Simonsen, C. E. (2011). Attitudes towards and conceptions of digital technologies and media in Danish museums. *MedieKultur: Digital Technologies and Museum Experiences*, 27(50), 100–118.
- Holdgaard, N., & Valtysson, B. (2014). Perspectives on participation in social media. In M. Sanderhoff (Ed.), *Sharing is Caring. Openness and sharing in the cultural heritage sector* (pp. 221–225). Copenhagen: Statens Museum for Kunst.
- Hooper-Greenhill, E. (1994). Museums and their Visitors. London; New York: Routledge.
- Hooper-Greenhill, E. (Ed.). (2004). The Educational Role of the Museum (2. ed.). London: Routledge.
- Humphreys, L. (2005). Cellphones in public: social interactions in a wireless era. *New Media & Society*, 7(6), 810–833.
- Hutchby, I. (2001). Technologies, Texts and Affordances. Sociology, 35(2), 441–456.
- ICOM. (2007). Museum Definition. *ICOM. The World Museum Community*. Retrieved 25 August 2011, from http://icom.museum/who-we-are/the-vision/museum-definition.html
- ICOM. (2013). Code of Ethics. International Council of Museums. Retrieved from http://icom.museum/fileadmin/user_upload/pdf/Codes/code2006_eng.pdf
- Jenkins, H. (2008). *Convergence Culture: Where Old and New Media Collide* (Updated and with a new afterword.). New York; London: New York University Press.
- Jenkins, H., & Carpentier, N. (2013). Theorizing participatory intensities: A conversation about participation and politics. *Convergence: The International Journal of Research into New Media Technologies*, 19(3), 265–286.
- Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., & Robison, A. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century* (White paper). Chicago: The John D. and Catherine T. MacArthur Foundation.
- Jensen, J. L., & Sørensen, A. S. (2013). Nobody has 257 Friends. *Nordicom Review*, 34(1), 49–62.
- Jensen, J. T. (2013). Improving the Educational Role of Museums in Society. In I. L. Brændholt & J. T. Jensen (Eds.), *Museums Social Learning Spaces and Knowledge Producing Processes* (pp. 26–42). Copenhagen: Danish Agency for Culture.
- Jensen, K. B. (2012a). A Handbook of Media and Communication Research: Qualitative and Quantitative Methodologies (2nd ed.). Abingdon Oxon; New York: Routledge.

- Jensen, K. B. (2012b). The Complementarity of Qualitative and Quantitative Methodologies in Media and Communication Research. In K. B. Jensen (Ed.), *Handbook of Media and Communication Research. Qualitative and Quantitative Methodologies* (2nd ed., pp. 283–301). Abingdon Oxon; New York: Routledge.
- Jensen, K. B. (2012c). The Qualitative Research Process. In K. B. Jensen (Ed.), *A Handbook of Media and Communication Research. Qualitative and Quantitative Methodologies.* (pp. 265–282). London; New York: Routledge.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, *33*(7), 14–26.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research*, *I*(2), 112–133.
- Johnson, T., & Svenonius, T. (2006). Power to the Pod People: Design Your Own Podcast [workshop]. Presented at the Museums and the Web, Albuquerque: Archives & Museum Informatics. Retrieved from http://www.museumsandtheweb.com/mw2006/abstracts/prg_300000788.html
- Jones-Garmil, K. (1997a). Laying the Foundation: Three Decades of Computer Technology in the Museum. In *The Wired Museum. Emerging Technology and Changing Paradigms* (pp. 35–62). Washington D.C.: American Association of Museums.
- Jones-Garmil, K. (Ed.). (1997b). *The Wired Museum: Emerging Technology and Changing Paradigms*. Washington D.C.: American Association of Museums.
- Kahr-Højland, A. (2009). *Læring er da ingen leg? En undersøgelse af unges oplevelser i og erfariner med en mobilfacilieret fortælling i en naturfaglig kontekst* (PhD thesis). University of Southern Denmark, Odense. Retrieved from http://static.sdu.dk/mediafiles/Files/Information_til/Studerende_ved_SDU/Din_uddannelse/phd_hum/afhandlinger/2009/AKH%20Ph%20D%20afhandling%202009%20%202.pdf
- Kaijser, L., & Öhlander, M. (1999). Etnologiskt fältarbete. Lund, Sweden: Studentlitteratur.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68.
- Katz, J. E., LaBar, W., & Lynch, E. (Eds.). (2011). *Creativity and technology: social media, mobiles and museums*. Edinburgh: MuseumsEtc.
- Kelle, U., & Erzberger, C. (2004). Qualitative and Quantitative Methods: Not in Opposition. In U. Flick, E. Von Kardorff, & I. Steinke (Eds.), *A Companion to Qualitative Research* (pp. 172–177). London; Thousand Oaks: SAGE Publications.
- Kelly, L. (2007). The Interrelationships Between Adult Museum Visitors' Learning Identities and Their Museum Experiences. University of Technology, Sydney.
- Kim, I., & Kuljis, J. (2010). Applying Content Analysis to Web-based Content. *Journal of Computing and Information Technology*, 18(4), 369–375.
- Kjaerulff, J. (2010). Internet and Teleworkers in Denmark. In B. Bräuchler & J. Postill (Eds.), *Theorising Media and Practice* (Vol. 4, pp. 213–231). New York; Oxford: Berghahn Books.
- Kjeldsen, A. K. (2012). Forandring eller fernis: Museale Translationer af strategisk kommunikation (PhD thesis). Aarhus University, Aarhus.

- Kjeldsen, A. K. (2013). Strategic communication institutionalized: A Scandinavian perspective. *Public Relations Inquiry*, 2(2), 223–242.
- Klein, J. T. (2010). A Taxonomy of Interdisciplinarity. In *The Oxford Handbook of Interdisciplinarity* (pp. 15–30). New York: Oxford University Press.
- Kobbernagel, C. (2013). *Students' Learning Experiences in Digital Workshops* (PhD thesis). Roskilde University, Roskilde.
- Kobbernagel, C., Schrøder, K., & Drotner, K. (2011). *Unges medie- og museumsbrug: sammenhænge og perspektiver*. DREAM: Danish Research Centre on Education and Advanced Media Materials.
- Kolstrup, S., Agger, G., Jauert, P., & Schrøder, K. C. (Eds.). (2011). *Medie- og kommunikationsleksikon*. Frederiksberg: Samfundslitteratur.
- Kotrlik, J. W., & Williams, H. A. (2003). The Incorporation of Effect Size in Information Technology, Learning, and Performance Research. *Information Technology, Learning, and Performance Research*, 21(1), 1–7.
- Kozinets, R. (2010). *Netnography: Doing Ethnographic Research Online*. Los Angeles; London: SAGE.
- Kravchyna, V., & Hastings, S. (2002). Informational Value of Museum Web Sites. *First Monday*, 7(2). Retrieved from http://journals.uic.edu/ojs/index.php/fm/article/view/929
- Krippendorff, K. (2012). *Content Analysis: An Introduction to Its Methodology* (Third edition.). Thousand Oaks: SAGE Publications.
- Kvale, S. (1996). *InterViews. An Introduction to Qualitative Research Interviewing*. Thousand Oaks; London; New Delhi: SAGE Publications.
- Landert, H.-H., & Kjærside, B. F. (2011). *Danske museer i tal. Baseret på oplysninger fra 2009*. Copenhagen: The Heritage Agency of Denmark.
- Landert, H.-H., & Kjærside, B. F. (2013). *Danske museer i tal. Baseret på oplysninger fra 2011*. Copenhagen: The Danish Agency of Culture.
- Lang, C., Reeve, J., & Woollard, V. (2006). *The Responsive Museum: Working with Audiences in the Twenty-First Century*. Aldershot England; Burlington VT: Ashgate.
- Larsen, A. H., & Ingemann, B. (2005). Ny dansk museologi. Århus: Aarhus Universitetsforlag.
- Larsen, M. C. (2009). Sociale netværkssider og digital ungdomskultur: Når unge praktiserer venskab på nettet. *MedieKultur. Journal of Media and Communication Research*, 25(47), 45–66.
- Larsson, A. O. (2012). Interactivity on Swedish newspaper websites: What kind, how much and why? *Convergence: The International Journal of Research into New Media Technologies*, 18(2), 195–213.
- Lee, P. Y. (1997). The Musaeum of Alexandria and the Formation of the Muséum in Eighteenth-Century France. *The Art Bulletin*, 79(3), 385–412.
- Lomborg, S. (2009). Navigating the blogosphere: Towards a genre-based typology of weblogs. *First Monday*, *14*(5). Retrieved from http://firstmonday.org/article/view/2329/2178#3a
- Lomborg, S. (2011). Social Media as Communicative Genres. *MedieKultur. Journal of Media and Communication Research*, 51, 55–81.

- López, X., Margapoti, I., Maragliano, R., & Bove, G. (2010). The presence of Web 2.0 tools on museum websites: a comparative study between England, France, Spain, Italy, and the USA. *Museum Management and Curatorship*, 25(2), 235–249.
- Løssing, A. S. W. (2008). Danske kunstmuseer på nettet: en kortlægning og diskussion af en kunstmuseal formidlings- og udstillingspraksis (PhD thesis). Aarhus University, Aarhus.
- Løssing, A. S. W. (2009). *Digital museumsformidling i et brugerperspektiv*. Copenhagen: The Heritage Agency of Denmark.
- Lund, N. D., Andersen, J., Christensen, H. D., Skouvig, L., & Johannsen, C. G. (Eds.). (2009). *Digital formidling af kulturary : fra samling til sampling*. Copenhagen: Multivers Academic.
- Lundbaek, M. (1985). Organization of museums in Denmark and the 1984 museum act. *International Journal of Museum Management and Curatorship*, 4(1), 21–27.
- Lundgaard, I. B., Jensen, Jacob Thorek (Ed.). (2013). *Museums social learning spaces and knowledge producing processes*. Copenhagen: Danish Agency for Culture.
- Lyck, L. (2010). Museer hvorfor og hvordan? København: eget forlag.
- MacDonald, G., & Alsford, S. (1997). Conclusion: Toward the Meta-Museum. In K. Jones-Garmil (Ed.), *The Wired Museum. Emerging Technology and Changing Paradigms* (pp. 267–278). Washington D.C.: American Association of Museums.
- Macdonald, G. F., & Alsford, S. (1995). Museums and Theme Parks: Worlds in Collision? *Museum Management and Curatorship*, 14(2), 129–147.
- Macdonald, S. (2011). A Companion to Museum Studies. Chichester, West Sussex, U.K.: Wiley-Blackwell.
- Markham, A. N., & Buchanan, E. (2012). Ethical decision-making and Internet research 2.0: Recommendations from the aoir ethics working committee. Association of Internet Researchers. Retrieved from www.aoir.org/reports/ethics2.pdf
- Marstine, J. (Ed.). (2006). New Museum Theory and Practice: An Introduction. Malden, MA: Blackwell.
- Marty, P. F. (2007a). Museum Websites and Museum Visitors: Before and After the Museum Visit. *Museum Management and Curatorship*, 22(4), 337–360.
- Marty, P. F. (2007b). The Changing Nature of Information Work in Museums. *Journal of the American Society for Information Science and Technology*, 58(1), 97–107.
- Marty, P. F. (2008). Museum websites and museum visitors: digital museum resources and their use. *Museum Management and Curatorship*, 23(1), 81–99.
- McMillan, S. J. (2000). The Microscope and the Moving Target: The Challenge of Applying Content Analysis to the World Wide Web. *Journalism and Mass Communication Quarterly*, 77(1), 80–90.
- McQuail, D. (1997). Audience Analysis. London: SAGE.
- Michelle, C. (2007). Modes of Reception: A Consolidated Analytical Framework. *The Communication Review*, 10(3), 181-222.
- Mintz, A. (1994). That's Edutainment. *Museum News*, 73(6), 32–35.

- Moos, T., & Brændholt, I. L. (2010a). *Museernes webbrugere: en brugerundersøgelse af museernes hjemmesider*. Copenhagen: The Heritage Agency of Denmark.
- Moos, T., & Brændholt, I. L. (2010b). *National brugerundersøgelse på de statslige og statsanerkendte museer i Danmark 2009*. Copenhagen: The Heritage Agency of Denmark.
- Moos, T., & Brændholt, I. L. (2011). *National brugerundersøgelse på de statslige og statsanerkendte museer i Danmark 2010*. Copenhagen: The Heritage Agency of Denmark.
- Mordhorst, C. (2003). *Genstandsfortællinger. Fra Museum Wormianum til de moderne museer.* Roskilde University/ National Museum of Denmark.
- Mortensen, T., & Walker, J. (2002). Blogging thoughts: personal publication as an online research tool. In A. Morrison (Ed.), *Researching ICTs in Context*. Oslo: InterMedia Report.
- Muniz, Jr., A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412–432.
- MuseumsEtc. (Ed.). (2010). *Twitter for Museums: Strategies and Tactics for Success*. Edinburgh: MuseumsEtc.
- Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and Individual Differences*, 52, 243–249.
- Nardi, B. A., Schiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why We Blog. *Communications of the ACM*, 47(12), 41–46.
- Nørskov, V., & Larsen, A. H. (2009). Samlingen i en teknologisk tidsalder. In A. S. W. Løssing (Ed.), Digital museumsformidling - i brugerperspektiv (pp. 19–24). Copenhagen: The Heritage Agency of Denmark.
- Nov, O., Naaman, M., & Ye, C. (2010). Analysis of participation in an online photo-sharing community: A multidimensional perspective. *Journal of the American Society for Information Science and Technology*, 61(3), 555–566.
- Oates, G. (2008). The Commons on Flickr: A Primer. In *Museums and the Web 2008: Proceedings*. Montreal, Canada, 09-12 April 2008: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2008/papers/oates/oates.html
- Olsson, T., & Svensson, A. (2013). Reaching and Including Digital Visitors: Swedish Museums and Social Demand. In P. Runnel, P. Pruulmann-Vengerfeldt, P. Viires, & M. Laak (Eds.), *The Digital Turn: User's Practices and Cultural Transformations* (pp. 45–59). Frankfurt am Main; New York: Peter Lang.
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The Validity Issue in Mixed Research. *Research in the Schools*, 13(1), 48–63.
- Orgad, S. (2005). From Online to Offline and Back: Moving from Online to Offline Relationships with Research Informants. In C. Hine (Ed.), *Virtual Methods: Issues in Social Research on the Internet*. Oxford; New York: Berg.
- Packer, J., & Ballantyne, R. (2002). Motivational Factors and the Visitor Experience: A Comparison of Three Sites. *Curator: The Museum Journal*, 45(3), 183–198.
- Parry, R. (2005). Digital heritage and the rise of theory in museum computing. *Museum Management and Curatorship*, 20(4), 333–348.

- Parry, R. (2007). *Recoding the Museum: Digital Heritage and the Technologies of Change*. London; New York: Routledge.
- Parry, R. (2013). The Trusted Artifice: Reconnecting with the Museum's Fictional Tradition Online. In K. Drotner & K. Schrøder (Eds.), *Museum Communication and Social Media. The Connected Museum* (pp. 17–32). New York; London: Routledge.
- Peacock, D., & Brownbill, J. (2007). Audiences, Visitors, Users: Reconceptualising Users Of Museum On-line Content and Services. In *Museums and the Web 2007: Proceedings*. San Francisco, 11-14 April, 2007: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2007/papers/peacock/peacock.html
- Pekarik, A. J. (2003). Museum Web Sites. Curator: The Museum Journal, 46(3), 276–278.
- Pine, J. B., & Gilmore, J. H. (1999). *The Experience Economy. Work is Theatre & Every Business a Stage*. Boston: Harvard Business School Press.
- Postill, J. (2010). Introduction: Theorising Media and Practice. In B. Bräuchler & J. Postill (Eds.), *Theorising Media and Practice* (Vol. 4, pp. 1–32). New York; Oxford: Berghahn Books.
- Pruulmann-Vengerfeldt, P., & Runnel, P. (2011). When the museum becomes the message for participating audiences. *CM : Communication Management Quarterly*, 21(Special issue), 159–180.
- Quistgaard, N. (2006). *1.g-elever på et science center: Engageres de? Påvirkes de?* (PhD thesis). University of Southern Denmark, Odense.
- Rasmussen, H. (1979). Dansk museums historie. Dansk kulturhistorisk Museumsforening.
- Reckwitz, A. (2002). Toward a Theory of Social Practices: A Development in Culturalist Theorizing. *European Journal of Social Theory*, *5*(2), 243–263.
- Repko, A. (2011). Defining Interdisciplinary Studies. In *Interdisciplinary Research: Process and Theory* (2nd ed.). Thousand Oaks: SAGE Publications.
- Rettberg, J. W. (2008). Blogging. Cambridge, UK; Malden, MA: Polity.
- Richards, R. (2006). Users, interactivity and generation. New Media & Society, 8(4), 531–550.
- Ridell, S. (2012). Mode of Action Perspective to Engagements with Social Media: Articulating Activities on the Public Platforms of Wikipedia and YouTube. In H. Bilandzic, G. Patriacrche, & P. J. Traudt (Eds.), *The Social Use of Media. Cultural and Social Scientific Perspectives on Audience Research* (pp. 18–35). Bristol: Intellect Books.
- Rogers, E. M. (1995). Diffusion of Innovations (Fourth edition.). New York: Free Press.
- Rogers, R. (2009, May 8). *The End of the Virtual. Digital Methods*. Presented at the Inaugural Lecture delivered on the appointment to the Chair of New Media & Digital Culture at the University of Amsterdam, Amsterdam.
- Rogers, R. (2010). Internet Research: The Question of Method—A Keynote Address from the YouTube and the 2008 Election Cycle in the United States Conference. *Journal of Information Technology & Politics*, 7(2-3), 241–260.
- Rosen, J. (2006, June 27). The People Formerly Known as the Audience. *PRESSthink. Ghost of democracy in the media machine*. Retrieved from http://archive.pressthink.org/2006/06/27/ppl_frmr.html

- Ross, M. (2004). Interpreting the New Museology. *Museum Society*, 2(2), 84–103.
- Rudloff, M. (2013a). Det medialiserede museum: digitale teknologiers transformation af museernes formidling. *MedieKultur. Journal of Media and Communication Research*, *54*, 65–86.
- Rudloff, M. (2013b). Formidling i forandring. Et casestudie af VÆGGEN et dansk eksempel på digital, interaktiv museumsformidling i overgangen fra genstandsrepræsentation til brugergenereret kultur. University of Southern Denmark, Odense.
- Runnel, P., & Pruulmann-Vengerfeldt, P. (Eds.). (2014). *Democratising the Museum: Reflections on Participatory Technologies*. Frankfurt am Main; New York: Peter Lang.
- Runnel, P., Pruulmann-Vengerfeldt, P., Viires, P., & Laak, M. (Eds.). (2013). *The Digital Turn: User's Practices and Cultural Transformations*. Frankfurt am Main; New York: Peter Lang.
- Russo, A. (2011). Transformations in Cultural Communication: Social Media, Cultural Exchange, and Creative Connections. *Curator: The Museum Journal*, *54*, 327–346.
- Russo, A. (2012). The rise of the 'media museum': creating interactive cultural experiences through social media. In E. Giaccardi (Ed.), *Heritage and Social Media. Understanding Heritage in a Participatory Culture* (pp. 145–157). Oxon; New York: Routledge.
- Russo, A., & Peacock, D. (2009). Great Expectations: Sustaining Participation in Social Media Spaces. In *Museums and the Web 2009: Proceedings*. Indianapolis, 15-18 April, 2009: Archives & Museum Informatics.
- Russo, A., & Watkins, J. (2008). New literacy, new audiences: social media and cultural institutions. In *Conference Proceedings. Electronic Information and Visual Arts Conference, S. Keane, J. Bowman and S. Dunn, eds* (pp. 54–66).
- Russo, A., Watkins, J., Kelly, L., & Chan, S. (2006). How will social media affect museum communication? In *Proceedings Nordic Digital Excellence in Museums (NODEM)*. Oslo. Retrieved from http://eprints.qut.edu.au/6067/1/6067_1.pdf
- Russo, A., Watkins, J., Kelly, L., & Chan, S. (2007). Social media and Cultural Interactive Experiences in Museums. *Nordic Museology*, (1), 19–29.
- Russo, A., Watkins, J., Kelly, L., & Chan, S. (2008). Participatory Communication with Social Media. *Curator: The Museum Journal*, *51*, 21–31.
- Saldaña, J. (2009). The Coding Manual for Qualitative Researchers. Los Angeles: Sage.
- Samis, P. (2008). The Exploded Museum. In L. Tallon & K. Walker (Eds.), *Digital Technologies and the Museum Experience* (pp. 3–17). Lanham Md.; Walnut Creek: AltaMira Press.
- Samis, P., & Pau, S. (2006). 'Artcasting' at SFMOMA: First-Year Lessons, Future Challenges for Museum Podcasters. Presented at the Museums and the Web, Alburquerque: Archives & Museum Informatics. Retrieved from http://www.museumsandtheweb.com/mw2006/papers/samis/samis.html
- Schäfer, M. T. (2011). *Bastard culture! How User Participation Transforms Cultural Production*. Amsterdam: Amsterdam University Press.
- Schatzki, T. R. (2001). Introduction: Practice Theory. In T. R. Schatzki, K. Knorr-Cetina, & E. von Savigny (Eds.), *The Practice Turn in Contemporary Theory* (pp. 10–23). London; New York: Routledge.

- Schreier, M. (2012). *Qualitative content analysis in practice*. London; Thousand Oaks: Sage Publications Ltd.
- Schrøder, K. C. (1999). The Best of Both Worlds? Media Audience Research between Rival Paradigms. In P. Alasuutari (Ed.), *Rethinking the Media Audience* (pp. 38–68). London; Thousand Oaks; New Delhi: SAGE Publications.
- Schrøder, K. C. (2000). Making sense of audience discourses: Towards a multidimensional model of mass media reception. *European Journal of Cultural Studies*, *3*(2), 233–258.
- Schrøder, K. C. (2003). Generelle aspekter ved mediereception? Et bud på en multidimensional model for analyse af kvalitative receptionsinterviews. *MedieKultur. Journal of Media and Communication Research*, 19(35), 63–73.
- Schrøder, K. C. (2012). Methodological pluralism as a vehicle of qualitative generalization. *Participations. Journal of Audience & Reception Studies*, 9(2). Retrieved from http://www.participations.org/Volume%209/Issue%202/42%20Schroder.pdf
- Schrøder, K. C., Drotner, K., Kline, S., & Murray, C. (2003). *Researching audiences*. London; New York: Arnold; Distributed in the U.S.A. by Oxford University Press.
- Schweibenz, W. (2004). Virtual Museums. The Development of Virtual Museums. ICOM News, 3, 3.
- Schweibenz, W. (2010). Museums and Web 2.0: Some Thoughts about Authority, Communication, Participation and Trust. In G. Styliaras, D. Koukopoulos, & F. Lazarinis (Eds.), *Handbook of Research on Technologies and Cultural Heritage: Applications and Environments* (pp. 1–15). Hershey; New York: Information Science Reference.
- Seligmann, T. (2006). Giv os nu arbejdsro! Danske Museer, 19(3), 22-25.
- Shove, E., Pantzar, M., & Watson, M. (2012). *The Dynamics of Social Practice. Everyday Life and How It Changes*. Los Angeles: SAGE.
- Silver, D. (2000). Looking Backwards, Looking Forwards. Cyberculture Studies 1990-2000. In D. Gauntlett (Ed.), *Web.Studies* (pp. 19–30). London: Arnold.
- Silverstone, R. (1999). What's New about New Media?: Introduction. *New Media & Society*, *1*(1), 10–12.
- Simon, N. (2010). *The Participatory Museum*. Santa Cruz: Museum 2.0.
- Sinha, A. (1989). A holistic approach to communication research: an alternative methodology. *Media, Culture & Society*, 11(4), 435–442.
- Skot-Hansen, D. (2008). *Museerne i den danske oplevelsesøkonomi når oplysning bliver en oplevelse* (1. udg.). Frederiksberg: Imagine [u.a.].
- Skouvig, L. (2009). Troværdighed eller buzzword. In N. D. Lund, J. Andersen, H. D. Christensen, L. Skouvig, & C. G. Johannsen (Eds.), *Digital formidling af kulturarv. Fra samling to sampling* (pp. 81–96). København: Multivers Academic.
- Skov, M. (2009). The Reinvented Museum: Exploring Information Seeking Behaviour in a Digital Museum ContextThe Reinvented Museum: Exploring Information Seeking Behaviour in a Digital Museum Context (PhD thesis). Royal School of Library and Information Science, Copenhagen. Retrieved from
 - http://pure.iva.dk/files/30768221/Mette%EE%80%80Skov%EE%80%81Thesis.pdf

- Smith, M. A., Shneiderman, B., Milic-Frayling, N., Mendes Rodrigues, E., Barash, V., Dunne, C., ... Gleave, E. (2009). Analyzing (social media) networks with NodeXL. In *C&T '09 Proceedings of the fourth international conference on Communities and technologies* (pp. 255–264). Pennsylvania State University: ACM Press.
- Socialbakers. (2012, March 6). Denmark Facebook Statistics, Penetration, Demography. *Socialbakers*. Retrieved 6 March 2012, from http://www.socialbakers.com/facebook-statistics/denmark
- Statistics Denmark. (2010). *Befolkningens brug af internet 2009*. Copenhagen: Statistics Denmark. Retrieved from http://www.dst.dk/pukora/epub/upload/15239/it.pdf
- Statistics Denmark. (2011a). *Aktivitet på danske museer*. Copenhagen: Statistics Denmark. Retrieved from See http://www.dst.dk/stattabel/403
- Statistics Denmark. (2011b). *Befolkningens brug af internet 2010*. Copenhagen: Statistics Denmark.
- Statistics Denmark. (2012a). *It-anvendelse i befolkningen 2011*. Copenhagen: Statistics Denmark.
- Statistics Denmark. (2012b). *It-anvendelse i befolkningen -2012*. Copenhagen: Statistics Denmark.
- Statistics Denmark. (2013). *It-anvendelse i befolkningen -2013*. Copenhagen: Statistics Denmark.
- Stein, R. (2012). Chiming in on Museums and Participatory Culture: Chiming in on Museums and Participatory Culture. *Curator: The Museum Journal*, 55(2), 215–226.
- Stensgaard, P. (2008). Da Louisiana stjal billedet. København: Gyldendal.
- Straub, E. T. (2009). Understanding Technology Adoption: Theory and Future Directions for Informal Learning. *Review of Educational Research*, 79(2), 625–649. doi:10.3102/0034654308325896
- Stromer-Galley, J. (2004). Interactivity-as-Product and Interactivity-as-Process. *The Information Society*, 20(5), 391–394.
- Stuedahl, D. (2011). Social Media and Community Involvement in Museums. A Case Study of a Local History Wiki Community. *Nordic Museology*, (1), 3–14.
- Stuedahl, D., & Smørdal, O. (2011). Young Visitors' 'Messing Around' in Museums. Exploring social media to engage teens in participation. *Barn*, (3-4).
- Svabo, C. (2010). *Portable Objects at the Museum* (PhD thesis). Roskilde University, Roskilde. Retrieved from http://rudar.ruc.dk/handle/1800/5583
- Tallon, L. (2008). Introduction: Mobile, Digital, and Personal. In L. Tallon & K. Walker (Eds.), *Digital Technologies and the Museum Experience. Handheld guides and other media* (pp. xiii–xxv). Lanham Md.; Walnut Creek: AltaMira Press.
- Tallon, L., & Walker, K. (Eds.). (2008). *Digital technologies and the museum experience : handheld guides and other media*. Lanham Md.; Walnut Creek: AltaMira Press.
- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The New Era of Mixed Methods. *Journal of Mixed Methods Research*, *1*(1), 3–7.
- Thomas, S., & Mintz, A. (1998). *The Virtual and the Real. Media in the Museum*. Washington D.C.: American Association of Museums.
- Thomas, W. A., & Carey, S. (2005). Actual/Virtual Visits: What Are The Links? In J. Trant & D. Bearman (Eds.), *Museums and the Web 2005: Proceedings*. Toronto: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw2005/papers/thomas/thomas.html Toffler, A. (1980). *The Third Wave*. New York: Bantam Books.

- UNESCO Institute for Statistics. (2012). *Measuring Cultural Participation (FCS Handbook #2)*. Montreal, Canada: UNESCO Institute for Statistics. Retrieved from http://www.uis.unesco.org/culture/Documents/fcs-handbook-2-cultural-participation-en.pdf
- Valtysson, B. (2010). Access culture: Web 2.0 and cultural participation. *International Journal of Cultural Policy*, 16(2), 200–214.
- Valtysson, B. (2012). Facebook as a Digital Public Sphere: Processes of Colonization and Emancipation. *tripleC: Communication, Capitalism & Critique*, 10(1). Retrieved from http://www.triple-c.at/index.php/tripleC/article/viewFile/312/339
- Veirum, N. E., & Christensen, M. F. (2011). If it's not on the Net it doesn't exist. *Museum Management and Curatorship*, 26(1), 3–9.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.
- Vergo, P. (1989). The New Museology. London: Reaktion books.
- Vestergaard, V. (2012). *Det hybride museum. Unge brugeres deltagelse gennem produktion og deling af indhold i et fysisk museumsrum* (PhD thesis). University of Southern Denmark, Odense. Retrieved from http://static.sdu.dk/mediafiles/F/1/E/%7BF1E90F10-9C10-4EAE-9EBC-B162D27EBC7F%7DAfhandling%20Vitus%20Vestergaard.pdf
- Villadsen, R., & Drotner, K. (2012). Dansk museumsforskning: status og tendenser. Dansk Center for Museumsforskning. Retrieved from http://www.museumsforskning.dk/wp-content/uploads/2011/09/rap-mus-forsk-0102122.pdf
- Waidacher, F. (1996). Museologiens plass i vitenskapens system. Nordic Museology, (1), 135–144.
- Walsh, P. (1997). The Web and the Unassailable Voice. In J. Trant & D. Bearman (Eds.), *Museums and the Web 1997: Proceedings*. Toronto: Archives & Museum Informatics. Retrieved from http://www.archimuse.com/mw97/speak/walsh.htm
- Waterton, E. (2010). The advent of digital technologies and the idea of community. *Museum Management and Curatorship*, 25(1), 5–11.
- Weare, C., & Lin, W.-Y. (2000). Content Analysis of the World Wide Web: Opportunities and Challenges. *Social Science Computer Review*, 18(3), 272–292.
- Weber, C. P. (2011). Museet som social platform. In K. Drotner, C. P. Weber, B. A. Larsen, & A. S. W. Løssing (Eds.), *Det interaktive museum* (pp. 197–210). Frederiksberg: Samfundslitteratur.
- Weil, S. (2002). Making Museums Matter. Washington D.C.: Smithsonian Institution Press.
- Wellman, B. (2004). The Three Ages of Internet Studies: Ten, Five and Zero Years Ago. *New Media & Society*, 6(1), 123–129.
- Wong, A. S. (2011). Ethical issues of social media in museums: a case study. *Museum Management and Curatorship*, 26(2), 97–112.
- Wood, J. G. (1887). The Dulness of Museums. In H. H. Genoways & M. A. Andrei (Eds.), *Museum Origins: Readings in Early Museum History and Philosophy* (2008th ed., pp. 217–223). Walnut Creek: Left Coast Press.
- Xia, Z. D. (2009). Marketing library services through Facebook groups. *Library Management*, *30*(6/7), 469–478.

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