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Medieval polychrome sculptures in Norwegian museum collections and churches

Are there differences in how they are retouched, presented and perceived?

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Polychrome sculptures from medieval Norway are found both in churches and museum collections. The two kinds of institutions, one religious and the other secular, provide different viewing contexts for these objects which in turn influence how they are perceived. Does the difference in context affect the choices made in retouching and presenting medieval surfaces to the viewers? To investigate this issue, conservation treatment reports from museums have been collected and analysed to register visual reintegration of damages on medieval three-dimensional polychrome objects in Norwegian museum collections. The results have been compared with those from a similar study (in 2017) of visual reintegration of damages on medieval sculptures from Norwegian churches. The conservation reports show some differences in conservation strategies between museums and churches regarding how visual integration is executed. The findings from the survey are discussed in the light of relevant literature dealing with religious objects in churches as secular venues and museums as religious venues. The comparison reveals smaller differences than expected, regarding presentation, conservation and visual reintegration of medieval polychrome sculptures in churches versus museums.

Introduction

In Norway, there are approximately 514 medieval polychrome wooden sculptures preserved (Hohler 2017: 36–55) and these are all housed in museums and churches. These two institutions, one secular and the other religious, can be regarded as opposites and provide different contexts for medieval works of art. The difference in context can influence the choices a conservator makes when retouching them, how the curator presents them, and how the viewer perceives the polychrome sculptures.

In an article from 2017, "Retouching medieval sculptures in Norwegian churches: Fifty years of practical work and written reports", we provided an overview of visual reintegration of damages on medieval three-dimensional art in Norwegian churches. The treatments were all carried out by the conservation department at Riksantikvaren/the Directorate for Cultural Heritage (DCH) and subsequently by the Norwegian Institute for Cultural Heritage Research (NIKU).

Whereas the first study focused on different retouching strategies, how they had changed from 1970 to 2016, how conditions in individual churches influenced decision making in visual reintegration and the condition reports themselves as source materials, the present follow-up study focuses on the same materials, but from museums.

In this project, the objective is to investigate how this difference in context influences the ways that medieval polychrome sculptures are presented to the viewers in museums and churches, as well as how this is manifested in the selection of retouching methods for sculptures in churches and museums. Are there differences in how medieval objects are perceived in a museum context versus as part of a church interior? If so, do these differences influence how damages on these objects are visually reintegrated? The data for the study is collected from written conservation reports from six Norwegian museums.

Methods

Review of conservation reports and other written sources

To analyse past and present practices of retouching medieval sculptures in Norwegian museums, conservation treatment reports from 1970 to 2016 were used as source material.[1] This period was chosen to make the results comparable to those from the equivalent survey of reports from Norwegian churches (Mengshoel & Kjølsen Jernæs 2017: 215–217). Hohler's list of medieval wooden sculptures in Norway (2017: 36–54), search in the open database *Digitalt museum* for medieval sculpture (Digital museum 2018) and own experience formed the basis for requesting access to conservation treatment reports from the relevant museums with medieval sculptures in their collections.[2]

[1] The medieval sculptures in this study are from the late twelfth century to the early sixteenth century.

[2] Only reports from visual reintegration of sculptures and three-dimensional surfaces were collected. This delimitation was initially chosen for collecting data for the previous article where the aim was to analyse retouching of medieval church art objects, not interiors. The same criteria were chosen in this following project to make the data comparable.

In total, there are approximately 312 three-dimensional medieval objects in Norwegian museums.[3] In addition to the university museums' medieval collections, there are 13 smaller county museums which have between one and three sculptures in their care. All 17 museums that are in possession of one or more medieval polychrome sculptures agreed to grant access to their archives. 11 museums stated that either no conservation work had been done over the period 1970–2016, or they did not find any documentation of conservation work from the time span in question. In total, 155 reports on conservation treatments of painted three-dimensional medieval sculptures were collected from six museums. In 18 cases, a treatment had been conducted, but the corresponding report was not found.[4]

"Visual reintegration" is used to describe how the disturbing effect of damages on a surface is reduced through filling, inpainting, glazing, and so on. The word "method" signifies the strategy chosen to do so. "Retouching" refers to the inpainting itself, and "technique" the actual application of paint.

The types of reports in our materials include exam theses, thorough condition reports, card files with brief notes and summary reports/annual treatment overviews. The type of report mirrors the level of detail in describing the retouching of the object.

Secondary literature

Much has been written on religious art in museums and churches, both within the conservation field and in neighbouring research fields. The literature discusses expectations about and curation of religious objects in museums and forms the foundation for this article.

Our previous article discusses past and present retouching practices by analysing conservation treatment reports from 1970 to 2016 (Mengshoel & Kjølsen Jernæs 2017: 205–232). It also studies the decision making behind the choices for visual reintegration and assesses the reports as source material. The present article is a continuation of this project. References are made to this previous study to compare the findings from retouching sculptures in churches with the new findings from the museum reports.

Lena Liepe's *A case for the Middle Ages: The public display of medieval church art in Sweden 1847–1943* (2018) provides a detailed account of how national and provincial Swedish museums displayed medieval religious art in the period mentioned. The exhibitions described in the book include Norwegian religious objects, and since Sweden

[3] Including sculptures, altarpieces and three-dimensional carved objects, but not two-dimensional frontals or altar wings.

[4] The authors would like to emphasise that this is an overview of relevant treatment reports from the given time-period, not a statistical analysis.

influenced Norwegian museums in matters of display and the focus on telling stories, this overview with references to context and ideology is relevant to this project.

Crispin Paine's *Religious objects in museums: Private lives and public attitudes* (2013) discusses how religious objects, curators and visitors relate to one another.

Steph Bern's PhD thesis, "Sacred entanglements: Studying interactions between visitors, objects and religion in the museum" (2015), is a study of how religious members of the public experience sacred artefacts in museum exhibitions. Her thesis was based on interviews with visitors who were observed venerating objects on display in the British Museum in London. Although this study was carried out in exhibitions of objects with a different history than the Norwegian medieval sculptures, we find the study relevant for this article as it addresses secular museums as context for religious objects in a modern society and how the public responds to this.

Collection and museum: Chapters in the museums' history, practicality and ideology[5] (2010) is an introductory reading on museums and museology in general, from a Norwegian perspective. Bjarne Rogan's contributions (chapters 8 and 15 of the book) deal with categorisation of objects when incorporated into a museum collection and how their meaning shifts once they are removed from their original context. Ragnar Pedersen's essay (chapter 3) also provides an overview of the development of Norwegian museums.

Nanna Løkka (2017) discusses how religious artefacts produced before the Reformation are managed, and in her paper questions the university museums' claim for ownership. She also discusses the difficulties involved in returning these items back to the churches.

Several texts are relevant for shedding light on how the lack of an original context, a change in the original context and the transformation to a museum object form the new experience of religious items. Amongst them is "The baptismal house from Ringsaker church: One object, multiple stories"[6] (Seim 2011) on the history of a eighteenth-century baptismal house, is relevant for this article as changes in context influence the reading of both object categories. Another text used, is *Religion for atheists* (de Botton 2012). Although this is a controversial book, in the chapter "Art", de Botton points out issues relevant in this article. It should be mentioned that this book is not commonly referred to in scientific papers, but when dealing with religious art it gives some interesting views on transformation of use and new experiences and was therefore read in this regard.

[5] Original title: *Samling og museum, kapitler i museenes historie, praksis og ideologi*.

[6] Original title: "Dåpshuset frå Ringsaker kirke: Én gjenstand, mange fortellinger".

An overview of the literature on visual reintegration is not included here as we have already provided a comprehensive review in our previous article (Mengshoel & Kjølsen Jernæs 2017).

When examining the differences in communicating objects in the original context and in museums, it is relevant to consider the museums' mandate and role in society. To define their role, we have reviewed the International Council of Museums' (ICOM's) statutes and the Ministry of Culture's current strategic document on museums.[7]

Background

University museums

The four university museums in Norway are situated in Oslo, Bergen, Trondheim and Tromsø. They have somewhat similar histories in collecting medieval objects. With a mandate from the Cultural Heritage Act, the university museums manage the material from pre-Reformation (1537) and are often the legal owners of these objects (Løkka 2017: 38). All of the four major religious medieval collections were founded out of the wish to preserve and present a well-sorted selection of objects from Norwegian church history. As part of the Enlightenment, categorisation of objects and scientific research on cultural heritage were emphasised (Pedersen 2010: 41). The idea of building a national identity by collecting and displaying Norwegian cultural heritage artefacts was based on the romantic philosophy of the 1830s–1840s, with an ambition for cultural history to help shape society (Pedersen 2010: 54).

The earliest religious collection was initiated in 1760 by Bishop Gunnerus, one of the founders of The Royal Norwegian Scientific Society.[8] This collection is currently a part of the Norwegian University of Science and Technology's (NTNU) museum collection in Trondheim. The initiative to start collecting historic objects in the western regions was made by the President of the Parliament, W. F. K. Christie, in 1825. "Relics of the Catholic cultus" were explicitly mentioned as potential collection items (University of Bergen website 2018). These objects are currently on display in the church art exhibition at the Bergen University Museum, as seen in fig. 1 on the following page (von Achen 2018: 12). In Oslo, The Royal Norwegian Society for Development[9] donated its collection of antiquities to the University of Oslo in 1817, which formed the basis for the University of Oslo's prehistoric collection[10] and in

[7] In Norwegian: Kulturdepartementets Stortingsmelding nr. 49 (2008–2009) Framtidas museum – Forvaltning, forskning, formidling, fornying.

[8] In Norwegian: *Det Kongelige Norske Videnskabers Selskab*.

[9] In Norwegian: *Det Kongelige Selskab for Norges Vel*.

Fig. 1 The exhibition design creates an "illusion" of a church interior by creating a typical placement of objects. Crucifix from Leikanger church, Sogn, reg.nr. MA 48 (appr. 1150), the Virgin from Urnes church, Sogn, reg.nr. MA 46 (appr. 1200) and altar frontal from Ulvik church, Hardanger, reg.nr. MA 3 (appr. 1260), in Bergen University Museum. Photo: August 2018, NIKU.

turn became the Museum of Cultural History (KHM) under the University of Oslo (Pedersen 2010: 43).

The museums have protected historic religious objects from fire, damage and reuse. However, which objects have been included in museum collections, which have been sold and which have remained in churches seems quite arbitrary. Some objects have been donated to the museums, several have been purchased, and others have again entered the collections, temporarily or permanently, for preservation purposes because the climatic conditions in churches can be unfavourable. Others had become museum objects but have been returned to the church after several centuries.

Today, responsibility for management of medieval art in Norwegian churches lies at the Directorate for cultural heritage (DCH). In 1994, The Norwegian institute for cultural heritage research (NIKU) was founded and took over the practical conservation from DCH involving the same conservators. When referring to conservation work on objects in churches, this was carried out by the DCH before 1994 and NIKU after 1994.

[10] In Norwegian: *Universitetets Oldsakssamling*.

Museum context versus church context

The ICOM (founded in 1947) defines a museum as "[...] a non-profit, permanent institution in the services 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 purpose of education, study and enjoyment" (ICOM statutes 2017: 2). The current strategy of Norwegian museums is defined in the strategy document *Stortingsmelding nr. 49*, which emphasises availability, conducting research, conveying stories and taking an active role in the present society (2009: 13). As mentioned in the previous section, the university museums have built their medieval collections to conserve and exhibit this heritage.

Fig. 2 Detail of the new exhibition of medieval sculptures at the Museum of Cultural History, University of Oslo. Example of grouping sculptures. Photo: April 2019, NIKU.

For the objects to enter a museum, the act of registering the items in the museum's database, conducting an inventory and packing can be regarded as a ritual process (Seim 2011: 171). The classification that takes place in the museums indicates how society views the objects and can have societal and political consequences (Rogan 2010: 255). Taking an object out of its context and incorporating it into a collection is thus a transformation of meaning (Rogan 2010: 141). Fig. 2 is an example of grouping sculptures in a museum exhibition.

However, medieval objects in their church context and as parts of museum collections are not necessarily opposites. When reading Liepe's (2018) work, it is apparent that different types of museums exhibit their religious objects in different ways, either as an aesthetic object or a cultural historical object. These ways of exhibiting religious objects have changed over time. Many museums

and exhibition halls in the early twentieth century were arranged to create the illusion of a religious context (Liepe 2018: 174–200). Especially the museums of cultural history made tableaux to exude a certain religious atmosphere (Liepe 2018: 144). Fig. 3 and 4 show examples of a "tableau" where the visitors are able to come close to the sculpture.

Fig. 3 (above left). Example of a "tableau" where the visitor comes close to the sculpture. The Virgin from Korskirke, Romsdal, reg.nr. MA 44 (13th century, repainted in the 1400's), in Bergen University Museum. Photo: August 2018, NIKU.

Fig. 4 (above right). Detail of The Virgin from Korskirke, Romsdalen, reg.nr. MA 44, in Bergen University Museum. Photo: August 2018, NIKU.

Exhibition spaces are often calm, designed to accommodate contemplation, reflection and even insight at an individual level, similar to churches and cathedrals. At a social level, mastering these secular rituals confirms a person's identity as a member of a certain cultural group (Duncan 2005: 78). It is clear from visiting church art exhibitions today that the members of the public behave similarly to how they would in a church, albeit in a seemingly secular environment. This is in line with the notion that museums are modern secular churches and their objects are the modern world's relics (Paine 2013: 72). According to Paine, numerous scholars have regarded museums as "temples".

In fact, several churches are consecrated and in use but under a museum's management, which gives this discussion another dimension. St. Jørgens Church, Olavskapellet, Garmo Stave Church, Eidsborg Stave Church and Gol Stave Church are all in use but managed by museums.[11] The Religious Art Exhibition[12] at Norsk Folkemuseum is also consecrated and can be used for baptisms and weddings (Seim 2011: 174). The churches mentioned above became parts of museums to avoid destruction, except from Olavskapellet. This was built in 1930 as a chapel to house the museum's religious collection. The consecrated and religious spaces give the museum another function; the public still builds relations to the churches, as they carry on playing an integrated role in important life events.

Religious objects in a secular context

No matter how exhibitions are designed, the medieval religious objects are inevitably historicised or aestheticized. Berns (2015) believes that these items are thereby prevented from performing their intended function as objects of veneration. She argues that the social norms for how to act in a museum are restricting the way that museum objects could be encountered spiritually, as they are intended, not just analytically and cognitively as is considered "normal" among museum visitors and staff. Nonetheless, she also shows numerous examples of religious members of the public defying these norms and expectations by venerating these objects (Berns 2015: 8).

Paine quotes Quatremère de Quincy (1755–1849) commenting Paris during Napoleon's rule and the development of the modern museums: "A museum robs them (the objects) of identity and value" (Paine 2013: 14). Although this harsh statement was from an eighteenth-century political, active Catholic point of view, it can

[11] St. Jørgens Church: Part of Bymuseet in Bergen, Olavskapellet: Part of Borgarsyssel museum in Sarpsborg, Garmo Stave Church: Part of open-air museum at Maihaugen, Lillehammer, Eidsborg Stave Church: Part of open-air museum at Vest-Telemark museum, Gol Stave Church: Part of open-air museum at Norsk Folkemuseum.

[12] In Norwegian: *Kirkekunstutstillingen*.

be stated that the religious object's truth is somehow lost when it is removed from the church. According to both Paine and Berns, some religious visitors may come to museums, not as secular churches, but as places of worship, and thereby break the script (Paine 2013: 32). They might not master the cultural codes of the social groups that are comfortable in museums. The religious visitors are counteracted and prevented from using the object as it was intended. By the social norms of behaviour in a museum, they are forced to approach the item as a museum object.

De Botton goes further by comparing museums to universities when he emphasises the enlightenment inherent in religious sculptures. According to De Botton, both universities and museums tend to fill the gaps left by a decline in faith; they give people meaning by seeking old knowledge but without the need for superstition (De Botton 2012: 209). The religious landscape in Western Europe is drastically changing with a steady decline in religious affiliation in several countries, among them Norway, Great Britain and the Netherlands are mentioned (de Bayer & Takke 2012: 5, 7). This is supported by Urstad, who has investigated the religiously unaffiliated in Norway. Urstad points out changes in both demography and culture (2017: 61–81). In that sense, museums are able to take over the aesthetic responsibilities of churches. A person can learn about a past religion, faith and culture by visiting an exhibition of religious artefacts. This view can be regarded as the rationale for museums that exhibit multiple sculptures side by side, and it encourages the visitor to look at the beauty, the technique and the materials. It enables the visitor to compare them and appreciate their history; by doing so, one loses the cultural context and function.

In a Norwegian context, this view can be supported by an example from the web page for the exhibition "Transition – faith and sacred objects in the Middle Ages" at the Museum of Cultural history. It states that the "exhibition contains a number of beautiful artefacts which Norwegians regarded as being sacred during the Middle Ages". This use of the past tense illustrates how these objects are considered museum objects, frozen and with an altered meaning after their entry to the museum collection. This reduces the objects' religious and use value and increases their age- and historical value.

The interviewees in Berns' project were mainly Catholics, eastern Orthodox or members of the Church of England, and they were selected for interviews after being observed venerating exhibition pieces. They would not be representative to the typical visitor to the British museum, which include tourists from different countries and different creeds, including non-religious. The body of visitors to an exhibition of medieval art in Norway are probably equally complex.

Religious interest is perhaps not the main motivation for visiting such exhibitions, but rather an interest in cultural history. If at all religious, most Norwegian visitors are probably protestant, which creates a further distance to these artefacts of a catholic era.

Results

Review of treatment reports

The analysis of the collected conservation treatment reports focuses on the results that can contribute to the study's objectives. We do this in order to point out possible differences in the visual reintegration of medieval sculptured surfaces in museums and in churches. The hypotheses that are not confirmed by the findings in the dataset, or where the dataset shows other tendencies, are also discussed.

There is evidence of 173 conservation treatments of medieval polychrome sculptures between 1970 and 2016 in the museum collections. We find 155 treatment reports, including handwritten notes, summary reports and card files. 18 treatments are described or referred to in other reports, but the conservation reports themselves are not found. Eight of these are sufficiently described in other reports to be included in our dataset. In total, 163 treatments are included in the dataset of reports from the museums and form the basis for the analysis.

The majority of the entries in the dataset come from three well-established conservation departments. Of the 163 treatment reports, only three are from smaller museums or collections. The conservation departments and their conservators are anonymised, and the institutions' names are substituted with the letters A to F.

The survey's results are plotted in a datasheet for analysis[13] and presented in three tables: Description of objects before treatment/condition (Table 1), Description of treatment: Methods and techniques of visual reintegration (Table 2) and Treatment reports (Table 3).[14] The results of the 2017 survey of treatment reports from sculptures in churches are included in the last column of each table for easier comparison. In the churches, there are 98 known treatments, but only 65 are adequately documented to be included in the dataset.

The numbers listed in the tables reflect the use of certain phrases in the reports that we defined prior to the survey. We have not inspected the objects or the retouches themselves. More than one phrase can be used in the same report; thus, the total number of mentions of the phrases can be greater than the number of the reports. It is important to read the findings in relation to the total number of treatments (in

[13] Available at NIKU on request.

[14] For a more detailed account of the registration of data, see Mengshoel & Jernæs (2017).

bold font) and not simply compare numbers due to the relative difference in quantities in museums and churches.

The focus has been on the differences and the similarities between treatments and reports from museums and the DCH/NIKU, but some internal differences among the museums also exist. They are presented in the tables, but only the most significant differences are pointed out in the text.

Description of the objects before treatment

One of the most important premises for choosing the visual reintegration strategy[15] is the current appearance of the surfaces of the objects. Table 1 lists the different terms used in the conservation reports to describe the objects before treatment – the starting point for the visual reintegration of the damages.

The numbers of sculptures with original polychromy are 70/163 and 26/65 (both 43%) for museum and church objects, respectively. The terms used to describe the surfaces are also similar.[16]

The most striking differences are that there is more overpaint on objects in churches (27/65) than in museums (25/163), more overpaint has been removed (churches: 15/65, museums: 14/163), and surfaces are more damaged by overpaint removal (churches: 15/65, museums: 8(10)/163).

Description of treatment: Methods and techniques of visual reintegration

Overpaint and old retouches

Full overpaint removal is hardly carried out on the objects placed in churches, as opposed to museums, where it is slightly more common. Partial overpaint removal is also undertaken more often in museums,[17] as is clearing the surface of the remains after past removals.

In churches, it is far more common to overpaint overpainted surfaces instead of uncovering them (7/65). This is not the case in museums (1/165). Likewise, old retouches are adjusted rather than removed.

[15] Visual reintegration strategy: The overall approach to reducing the disturbing effect of damages to a surface.

[16] As there is no common understanding of when to use these different terms, they might be used differently, which is important to bear in mind.

[17] It is interesting to see how the majority of overpaint removals, both full and partial, are executed in one museum, but to analyse the reason for this is outside the scope of this article.

Table 1. Description of objects before treatment/condition

Description and overall condition before treatment	A	B	C	D	E	F	Sum from museums A–F	Sum from churches (2017)
Known treatments	62	67	31	1	1	1	**163 entries in the dataset**	98
Registered treatment reports, card files, summary reports or articles	61	61	30	1	1	1	155	**65 entries in the dataset**
Original polychromy	27	27	13	1	1	1	70	26 (28)
Traces of original polychromy	25	14	5	-	-	-	44	11 (13)
Worn	13	10	1	1	-	-	25	Not registered
Fragmented	16	4	3	-	-	-	23	15
Degraded	17	4	-	1	-	-	22	17
Overpainted	5	10	8	-	1	-	25	27
Partially overpainted	12	4	8	-	-	1	25	18 (19)
Damaged by overpaint removal	4 (6)	1	-	1	-	-	8 (10)	10
Uncovered polychromy	4	1	8	1	-	-	14	15
Overcleaned	1 (5)	5	1	-	-	-	7 (11)	6

Retouching methods and techniques

Neutral retouch is a museum phenomenon and is not chosen for retouching church objects. However, fully integrated retouches are preferred more often for church objects. Normal retouches are used slightly more frequently in churches (4/65) than in museums (4/163).

Table 2. Description of visual reintegration

Visual reintegration	A	B	C	D	E	F	Sum from museums A–F	Sum from churches (2017)
Known treatments	62	67	31	1	1	1	**163**	98
Registered treatment reports, card files, summary reports or articles	61[1]	61	30	1	1	1	155	**65**
Retouching/inpainting	51	46	10	-	1	1	109	44
No retouching explicitly mentioned	8	12 (13)		1			21 (22)	13 (16)
Hatching straight, curved, cross, rigatino[2]	17	16	-	-	-	1	34	18
Fully integrated retouches	7	-	-	-	-	-	7	8
Neutral retouch[3]	13 (12)	7	3	-	-		23	-
Glaze	2	1	1	-	-	1	5	6
Normal retouch (viewing distance)[4]	4	-	-	-	-	-	4	4
Retouch to local colour	13	7	-	-	-	1	21	13
Retouch to colour of wood	21	3	1	-	-	1	26	10
Retouch to colour of ground	1	-	-	-	-	-	1	1
Retouch to colour of overpaint	-	-	-	-	-	-	0	8
Tone in[5]	8	8	2	-	-	-	18	Not registered

[1] Including one treatment of objects belonging to other museums, and one treated by an external conservator.
[2] Hatching technique: Paint applied in lines rather than a uniform paint film. Trateggio, or rigatino: A retouching technique where transparent colour is applied in vertical lines, sometimes in pure, primary colours, optically blended in the eye of the viewer (Nadolny 2012: 581).
[3] Neutral retouch: Retouching lacunae by inpainting in a single flat tone, often grey.
[4] Normal retouch: Visible at a short distance and blends in with the surrounding area at a normal viewing distance.
[5] Tone in: Reduce the contrast in colour between damage and the surrounding area by applying paint to the damage.

Tone down[6]	12	12	4	-	1	-	29	15
Aqua sporca[7]	-	-	1	-	-	-	1	3
Filler[8]	3	-	1	-	-	-	4	16
Full overpaint removal	-	1	2	-	-	-	3	(2)
Partial overpaint removal[9]	5	2	10	-	-	1	18	11
Removal of remains of overpaint	2	2	5	-	-	-	9	
Overpaint of older overpaint[10]	-	-	-	-	-	1	1	6 (7)
Defining of forms, finishing of outlines and contours	2	4	-	-	-	1	7	5
Retouch without filling	10	2	-	-	-	-	12	12
Retouch of large lacunae[11]	1	-	3	-	-	-	4	2
Retouch of small lacunae	3	2	1	-	-	-	6	9
Retouch of all lacunae	-	1		-	-	-	1	-
Wood retouching, darker, lighter, bleached	7	-	-	-	-	1	8	3
Removal of old retouches	2	8	3	-	-	-	13	11
Adjustment of old retouches	1	2	-	-	-	-	3	8
Pointillist retouch[12]	-	-	-	-	-	-	-	-
Regilding	-	-	-	-	-	-	-	2
Different techniques for different areas	12	10	-	-	-	-	22	14

[6] Tone down: Reduce the contrast in value between damage and the surrounding area by applying paint to the damage.
[7] Aqua sporca: Dirty water. Brownish glaze used to tone down damages.
[8] Application of filling material to bring a damage to the level of the surrounding area before retouching.
[9] Partial over paint removal: Only parts of the object are cleared of overpaint.
[10] Overpaint overpaint: Cover an older overpaint with a new one, either with paint or glaze.
[11] Lacunae: A defined area of paint loss.
[12] Pointillist retouch: Paint applied in dots, optically blended in the eye of the viewer.

The hatching technique is used in both museums (34/163) and churches (18/65).[18] Glazes are preferred slightly more often in churches (6/65) than in museums (5/163), as is the use of aqua sporca (1/163 in museums, 3/65 in churches).

Based on the dataset, it is difficult to conclude which losses are retouched and which ones are not retouched, but there is a slight tendency that smaller lacunae are retouched more often in churches than in museums. None of the institutions have reported retouching of all lacunae on an object.

There are few differences in whether losses are retouched to the local colour, the colour of the wood or the colour of the ground. However, retouching to the colour of overpaint is practised only on church objects.

Fig. 5, 6 Detail of retouching without filling. Part of triptych from Nesna church, Nordland, reg. nr. MA19 (appr. 1470). Bergen University Museum. Photo: August 2018, NIKU.

[18] Museum C stands out as it never chooses this technique.

The greatest difference lies in the use of filler. Retouches are applied straight into damages more often in museums. In churches, damages tend to be filled more often before retouching. Regilding of damaged gilded areas is only executed in two cases, both on church objects. Different techniques are described as used on the same object more often in church reports than in museum reports, indicating a greater variety of techniques.

As shown in tables 1 and 2, there are still more similarities than differences in the treatment of objects in museums and churches.

Treatment reports

The three major conservation departments follow different routines for reporting. They all produce not only conservation treatment reports but also condition reports, file cards and summary reports. One of the archives also includes four exam theses, which are more thorough than a typical treatment report and include more of the reasoning leading to decisions regarding visual reintegration. Some conservators also prefer to update the previous reports by adding handwritten notes instead of creating new documents.

Table 3. Treatment reports

Treatment reports	A	B	C	D	E	F	Sum from museums A–F	Sum from churches (2017)
Known treatments	62	67	31	1	1	1	**163**	98
Registered treatment reports, card files, summary reports or articles	61	61	30	1	1	1	155	**65**
Missing reports from known treatments	2	11	2	-	-	-	14	33
Decision making included in reports	17 (19)	12	3	1	-	1	34 (36)	37

The number of missing treatment reports is much higher in the DCH/NIKU than in museums, with 33 out of 98 known treatments, as opposed to 14 out of 163 in museums.

The decision making behind the reintegration of damages are to some degree included in 36/163 museum reports. They are relatively evenly distributed across the three major institutions and include two cases where retouching is not executed.[19] Decision making is included much more often in the DCH/NIKU reports (37/65).

Reducing contrasts between exposed white ground and surrounding areas, unifying scattered impressions and "recreating wholeness" are typical examples of the reasons for retouching in both museums and churches.[20]

Discussion – differences in visual reintegration between objects in museums and in churches

Before starting this project, the assumptions were that museums and churches would be fundamental opposites as venues for displaying medieval art. We believed that this dissimilarity would affect the perception of the objects, and in turn influence how they would be curated and presented. This difference has not been as evident as expected. The integrity of the objects themselves seems more important than the context in which they are exhibited. Medieval polychrome sculptures have a strong standing in the museum and conservation world, and conservators, curators and museum staff are professionals with consistent ethical standards. The objects are in focus, not the viewers.

According to Paine, most museums in the western world exhibit religious art but are mostly operated by non-religious staff (Paine 2013: 23), which is in itself a paradox. This is perhaps also the case in Norway. It is still our impression that respect for religious objects does not require personal faith. For both conservators and curators, professional ethics implies that religion is accommodated in handling, preserving and exhibiting religious objects, perhaps bridging the gaps between secular and sacred exhibition spaces. This practice is in accordance with the literature that emphasises how the line between museum and church is not as definite as most would think (Berns 2015; Seim 2011).

The spreadsheets clearly indicate that retouching treatments in museums are carried out before upcoming exhibitions and loans.[21] This practice follows the ethical

[19] In the chronological overview of the reports, we see no change over time in whether or not decision making is included in the reports.

[20] Another, more specific example of decision making was found in a treatment report from museum C, where the conservator reports retouching several years after the main conservation work was undertaken. The reason was that visitors complained that the surface was "messy" and the motif difficult to read. The conservator improved the disturbing effect of the damages by applying a glazed neutral retouch in grey- brown.

[21] Chronology is not represented in the tables under Results. Spreadsheet available at NIKU on demand.

guidelines in conservation. However, medieval art in churches is always on display. Whether or not damages on a church sculpture are reintegrated depends more on the viewing distance, the lighting conditions, and so on. In museums, a short viewing distance can be assumed, and retouching is executed accordingly. Nonetheless, there are examples of how an object's condition and conservation history are the grounds for the retouching choices, how it should be exhibited and thus which story it should tell.[22]

The objects in churches seem to have been subjected to fewer but heavier treatments prior to 1970 than the museum objects. The DCH/NIKU reports use terms, such as "overpainted", "uncovered polychromy" and "damage by overpaint removal" (table 1), more often than the museum reports. Perhaps the conditions were more severe before the conservation had been initiated; this might have been caused by more severe changes in indoor climate conditions in the churches, and less frequent conservation treatments. This may have led to a more pragmatic approach to visual reintegration in the timespan of our survey. The conservators working with church objects report using different techniques on various areas of the surfaces more often than the museum conservators. Retouching lacunae to the colour of the overpaint is only reported from churches, which is also a fairly pragmatic approach, perhaps not in keeping with DCH/NIKU practices.

There are also no reports of regilding from museums, but two from churches, in 1978 and 1981. This low number indicates that when working on Norwegian medieval sculptures, conservators in general seldom aim for pristine results. In contrast, the use of aqua sporca involves glazing in a brownish tone, thus imitating an aged appearance. This technique is used more often in churches than in museums.[23]

Overpainted areas on church objects are often overpainted again, and retouches are adjusted rather than removed.[24] Overpainting of overpaint is more efficient than removal and perhaps works better aesthetically from a distance than up close, as in a museum. This also supports our impression that conservators are more focused on

[22] In one case, the object remained unretouched due to its "virgin-like" state, and its worn and fragmented appearance. The museum chose to exhibit the object to represent the treatment of paintings and sculptures under the Biltstürm, a typical example of "museum thinking".

[23] The term "tone down" could be used instead of "aqua sporca", they both describe reducing contrast. "Tone down" is reported used as often in museums as in churches.

[24] Most of the overpaint removals in museums are carried out in one conservation department, in museum C. This department also reports more overpainted surfaces, either full or partial, and hardly any "overcleaning" or "damage by paint removal". The reason for the higher occurrence of "overpaint removal" probably lies in the nature of the collection, not in the preferences of the conservator.

details when working on museum objects but are forced to step back and prioritise the totality when working on objects in churches. When discussing different conservation strategies, the focus tends to be on conservation ethics, but our impression is that external factors, such as project deadlines, economic limitations and staff shortage, also play a role when deciding on a treatment strategy. Perhaps the DCH/NIKU personnel have had stricter budgets and fewer work hours than their colleagues in museums and are thus forced to compromise more often.

There are also differences in the reports from the museums and the DCH/NIKU. Museum reports are more focused on detail in describing a condition before treatment. They tend to describe individual damages rather than the overall condition. The museum reports seem to be for internal use and intended to be read with the object at hand, as opposed to the DCH/NIKU reports, which are written to stand alone after the sculpture itself is returned. Additionally, the NIKU reports from the last 13 years are published online, and reach different readers than the museum reports. The church reports are generally more extensive and have more elaborate descriptions of conditions, focusing on the overall impression and using terms such as “fragmented” and “degraded”.

The DCH/NIKU reports tend to include more of the reasoning behind the visual reintegration. Perhaps museums have a more standardised retouching policy, and less discussion is needed before each decision is made. The tendency to choose different retouching techniques for different areas on the same item, as is the case for church objects, also calls for a more thorough account of the reasons in the reports. More intervening treatments, including regilding or overpaint removal, perhaps also demand more detailed justification based on ethical standards in comparison to treatments that involve less retouching.

Retouching is executed in 68% of the treatments in both museums and churches, so there is no difference in the frequency of retouching when the object is being restored. The retouches themselves are surprisingly similar across institutions, according to the written sources. The hatching technique is used in both museums and churches as a way to ensure that the retouch is easily identifiable, which is ideal for medieval art.[25] However, the term “hatching technique” is used only from 1996 onwards in the church reports, a little later than in the museum reports.[26]

[25] There is one example from a museum where an integrated retouch was removed, and neutral retouch applied, to make it more visible.

[26] Hatching technique as a term is used from 1981 and onwards in museum B, as opposed to museum A, which used this term all through the time period in question, and museum C which does not use hatching at all. This perhaps indicates that museum A introduced this method and led the way for the other institutions.

Neutral retouch seems to be a museum phenomenon; there are no reports of this on church objects. Neutral retouches are also visible and identifiable but in a single grey tone adjusted to complement the totality of the surface, which is perhaps too challenging to achieve when working in situ in a church but feasible in a studio.

If a damage is surrounded by an area of bare wood, it can be retouched to match the colour of the wood instead of the lost paint layer. This type of retouch is used slightly more often in museums than in churches, and one museum in particular prefers this method. The intent is then not to recreate an original polychromy but merely to tidy up a fragmented impression and facilitate the interpretation of the three-dimensional form. In this approach, an acceptance of age and degradation is inherent, a way of thinking that perhaps comes naturally when visiting a museum.

Today's museum visitor is generally well informed. The introduction on the web page for the exhibition "Transition – faith and sacred objects in the Middle Ages" states:

> [...] today the surfaces are damaged, the colour pigments have faded and many of the statues of saints and altarpieces have been deliberately altered [...]. Pieces have been removed, moved or added. (KHM web page 2019)

Even though this is an exhibition with focus on transition of the objects, it communicates acceptance of worn, damaged and fragmented medieval surfaces.

When working on medieval sculptures from churches, the conservators tend to fill damages before retouching more often than on museum objects. In museums, the differences in the level are often used to ensure that the retouch is easily identifiable. Regarding objects from churches, damages are filled, partly to protect the vulnerable edges during handling. In museums, handling can perhaps be controlled more carefully, as opposed to in churches, where objects are left in the care of

Fig. 7 Detail of The Virgin and child with St. Anna (unknown origin) from the 16th century, in The Museum of Cultural History, University of Oslo. Photo: April 2019, NIKU.

the church after their return. Perhaps conservators working on church objects also tend to use fillers to reduce the impression of a fragmented and "messy" surface and tidy up the silhouette of a sculpture, in line with their focus on the totality, not the details.

Although conservators sometimes move between institutions, the staff in the different museums and the DCH/NIKU has been relatively stable during the reviewed time-span. Some names show up in reports from more than one institution, but on the whole, the conservators tend to stay in their conservation departments. An outsider would suspect that this could lead to different conservation practices. With few exceptions, this has not been evident in our source material, which could be an indication that conservators keep themselves updated and interact with other institutions and cities.

Despite the differences, the many similarities still mirror the blurred lines between secular museums as homes of religious objects and sacred spaces as exhibition areas.

Conclusion

Medieval art has mainly two types of exhibition spaces – museums and churches. The two are seemingly opposites. One is secular and exhibits museum objects taken out of their contexts and frozen in time; the other is religious, part of a living, yet reformed, tradition. Shifting exhibitions in museums may focus on aesthetic objects and under-communicate their religious function, while other exhibitions try to make tableaux or illusions of church interiors. In this project, the objective was to investigate how this difference in context influences the way that medieval polychrome sculptures are presented to viewers in museums and churches and how this is manifested in the choice of retouching methods on sculptures in churches and museums.

There are some differences in how sculptures are retouched, depending on where they are exhibited. Treatments on objects placed in churches are fewer and further apart; generally, they are in a worse state of conservation before they are treated than objects cared for in museums. This had also been the case in the past, calling for more varied and more invasive conservation treatments.

Museum objects are generally only retouched before exhibitions and loans. Objects from churches are always on display but are still not retouched more than museum objects. On sculptures exhibited in churches, retouching methods vary more to fit the different damages and the different areas on the same object. In museums, conservation conditions are more consistent than in churches, and the retouches are more standardised.

The conservation reports vary in size and form, depending on their area of use. In museums, reports are more focused on details and have less description of the object itself, probably because it is meant to be read with the sculpture at hand. The reports from the conservation of church objects are more descriptive, focus on the totality and are meant to stand alone. They also include more of the reasoning behind the retouching decisions, probably because the conditions are more decisive for the choices made, and the types of damages vary more as do the methods. Museum reports are mostly for internal use, while the DCH/NIKU reports are written for a wider readership.

Despite these differences, the similarities are more prominent. Conservators have high professional standards, and there are little differences in practice among institutions. Medieval polychrome sculptures have a strong standing, and their integrity seems to be more important than other considerations, such as context, functions or viewers' expectations.

The differences between secular museums and churches as exhibition spaces for medieval art are perhaps not as large as expected, either. Museum exhibitions can be visited by believers who treat religious artefacts as they are intended – objects of veneration. Museum churches are used for traditional events like Christian weddings and baptisms. Likewise, churches are visited by non-religious people who attend concerts or meetings, or as tourists enjoying an art experience. This might not be that different from the more spiritual experience of a traditional churchgoer.

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