

# Retouching Medieval Sculptures in Norwegian Churches: Fifty Years of Practical Work and Written Reports

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The focus of this article is retouching of medieval sculptures in Norwegian churches. Our aim is to discuss past and current practices by analysing conservation treatment reports. We study the reasoning behind the decision making to the extent the information is available in the reports, and assess the reports as source material. To form a background for the discussions, we review relevant literature on history of retouching. We study conservation treatment reports in the period from c. 1970 to date and we have a data set consisting of 65 reports. Our results show that over half of the reports include decision making for retouching the artwork. The data set also shows changes through time in retouching techniques and methods. We discuss the reasons for differences in past and present practises after registering changes in conservation ideology and the development of the conservation training. Discrepancies between written retouching theories and conservation practices are assessed. The article also discusses conservation reports as source material. Since we have studied practices within our own institution, objectivity is a part of the discussion, along with possible future projects that may follow from this research. In conclusion the conservation treatment reports reflect changes in conservation education, the profession's ethics, retouching methodology and decision making. The reports give us descriptive information about the objects and their condition, but the chosen retouching procedure is often coloured by the individual conservator's values and perspectives. The material, which spans almost fifty years, clearly mirrors the tendencies in the methodology of visual reintegration.

## Introduction

Medieval polychromy is often damaged and fragmented, and thus hard to read in a meaningful way. It is the conservator's role to interpret and help communicate these

objects to the viewer through visual reintegration and retouching of damages. 'Visual reintegration' is all measures taken to reintegrate damages in the surface to recreate wholeness in an object, for instance retouching, filling and varnishing. The challenges and dilemmas in retouching medieval polychrome sculptures often involve balancing their poor condition and fragmented surfaces and the wish for a visible authentic, historical object. A thorough decision making process is needed when attempting to recreate wholeness through visual reintegration without hiding the traces of history and earlier use. Documentation of the undertaken treatments is usually found in conservation treatment reports. The conservator writes these reports for several reasons, and for a diverse audience; the commissioner, medievalists, sometimes for researchers and perhaps most importantly for future conservators. The reports differ in structure, in level of detail and in accessibility. The main objective for this paper is to discuss past and current practices for retouching polychromy on medieval sculptures in Norwegian churches by analysing conservation treatment reports. We will study the reasoning behind the decision making to the extent the information is available in the conservation reports, and assess conservation reports as source material.

Norwegian conservators have been, and are generally well read in retouching theory. The profession has developed through time regarding education, work ethics and writing treatment reports. How do theory and practices of the past and present connect? Do treatment reports describe the conservation treatments precisely?

Due to online publications and digital archives, accessibility of reports from work undertaken on medieval artworks in Norwegian churches has increased, and their readership has widened. By studying and discussing conservation treatment reports, this article can contribute to a debate on their content and function.

In this article, the word 'retouch' is used for the inpainting itself: Applying medium and pigment to compensate for a loss of paint without covering any original surface. 'Retouching method' signifies the strategy chosen for reintegrating damages, such as *tratteggio*, neutral toning, full reintegration etc., whereas 'technique' means how the actual mixing and application of colour to the surface is executed, like hatching, underpainting and glazing.

## Methods

### SECONDARY LITERATURE

To give a background to retouching theory, this article presents an overview of important publications and main discussions on the topic of retouching and retouching

theory. There is no aim at presenting all the retouching theories and techniques, but rather to describe the differences and the development of the field with a Norwegian focus.

Previous articles summarise visual reintegration and retouching theory and history, but no one has studied how conservation treatment reports reflect a development in retouching practices. The development of the education of conservators and the following increased demand for thorough reporting have already been published elsewhere (e.g. Brønne 2012; Nadolny 2012; Stein 2003). Restoration ideology in Norway in the 20<sup>th</sup> century and comparison between conservation theory and the actual practice has also been addressed. There is however a lack of analysis of written treatment reports over time, and discussion of the values reflected in this material.

#### REVIEW OF CONSERVATION REPORTS

To analyse past and present practices for retouching medieval<sup>1</sup> sculptures, conservation treatment reports from 1970 to date were used as source material.<sup>2</sup> This period was chosen because the level of detail in the reports increased post 1970. In addition, the Directorate for Cultural Heritage (*Riksantikvaren*) initiated the 'Medieval program'<sup>3</sup> in 1975 (Stein 1987: 7), and the conservation work undertaken on medieval objects in churches increased after this (Brønne 2012: 104).

We chose to limit the material to three-dimensional objects. Our material spans from altar pieces and retables to tabernacles with polychrome sculptures. If a report contained separate treatment documentation of each sculpture, the sculptures were registered separately in our data set. Likewise, if a report documents the same treatment of a tabernacle containing multiple sculptures, it was registered as one object. The overview is therefore not an exhaustive list of treated objects in the period 1970 to date, but rather a quantified overview of different approaches to retouching of medieval sculptures in Norwegian churches.

<sup>1</sup> In this paper we will use the definition of the medieval period that spans between 1030 and 1537. The Catholic church became properly organized in Norway around year 1030. The end of Norwegian Medieval time is parallel to the entry of the Reformation.

<sup>2</sup> The Directorate for Cultural Heritage is by law responsible for managing medieval art in Norwegian churches. In 1994 the conservation studio was separated from the Directorate, and practical conservation was performed by a newly founded organization named NINA-NIKU. In 2003 NINA and NIKU split and practical conservation was continued carried out by NIKU. As a consequence, the source material for this survey is mainly reports from these three institutions. The retouched objects themselves were not examined as part of this project, mainly due to accessibility.

<sup>3</sup> In Norwegian: *Middelalderprogrammet*. A survey of medieval objects' condition in Norwegian churches and the following conservation treatments.

The archives used are the P360 archive and Fotoweb, owned by the Directorate for Cultural Heritage,<sup>4</sup> the open archive of the Directorate for Cultural Heritage<sup>5</sup> and the paper- and digital archives at the Norwegian Institute for Cultural Heritage Research (NIKU).<sup>6</sup> Neither the Fotoweb nor the paper archive at NIKU are searchable, hence information pre 2000 was found as specific restoration cases that are registered in the digital database of medieval artwork in Norwegian churches.<sup>7</sup> The data set also includes some correspondence on treatment undertaken on medieval sculptures found in the archives. All raw data exists in the collected reports which are available in the archive at NIKU for future reference.

Our selection of material is based on the accessibility of the archives combined with available resources. Reports from the 1990s and onwards were overrepresented, which caused a slight distortion of the data set. This is taken into account when discussing the results. In the available material there are reports written by our former and present colleagues, and also by ourselves.<sup>8</sup>

The relevant data from the treatment reports was registered by plotting it in a data sheet (See Appendix, Table 1). We analysed the reports by looking for information in four categories; information about the object, overall condition before treatment, surface phenomena before retouching, and the retouching procedure described.

When deciding on the categories used in the data sheet, terms were chosen from the established conservation vocabulary, and supplied with terms from the reports. As with all written sources there is a certain level of interpretation involved in reading

<sup>4</sup> The digital archive P360 was initiated in 2006. Fotoweb is where all documentation at the Directorate for Cultural Heritage is found, in scanned versions. All work undertaken on medieval objects in churches is by law reported to the Directorate for Cultural Heritage and the information stored in their archives. P360 and Fotoweb are open on request.

<sup>5</sup> In Norwegian: *Vitenarkivet*. Launched in 2012, includes digital publications, not exhaustive. Available on Internet.

<sup>6</sup> The material here can also be found in the archive of The Directorate for Cultural Heritage.

<sup>7</sup> In Norwegian: *Middelalder-tavla*. Established in 1986 by the Directorate for Cultural Heritage and transferred to NIKU in 1994. Open on request.

<sup>8</sup> When research is made within one's own culture, own institution or on colleagues, it is recommended to be aware of certain issues, for instance the need for precise descriptions rather than ascribing value to the source material (Repstad 2014: 39) and establish a perspective where the researcher can see his/ her own culture from a different view (Thaagard 2013: 86). We have been aware of these issues when working on this article. There are also positive aspects in conducting research on one's own field: Studying material that you have a solid understanding for is important when interpreting the sources (Repstad 2014: 39), here; conservation reports.

these texts. When reports describe objects as ‘fragmented’<sup>9</sup> or with a ‘degraded’<sup>10</sup> surface, these terms were chosen as categories in our data sheet. In other reports the actual terms have not been used, but surfaces were described in such a way that we interpreted them to have either of the two characteristics, or they were registered as either ‘fragmented’, ‘degraded’ or both.

There has been no attempt to make a statistical analysis, rather to point out tendencies that became apparent when systematising the different retouching strategies.

We have not studied the objects and the retouches themselves, only what is written in the reports. The aim was to look for tendencies in conservation practices through the years independent from the object treated or the conservator responsible. Hence personal discrepancies and tendencies have not been registered, and all cases are anonymised.

#### TREATMENT REPORTS AS SOURCE MATERIAL

The Ministry of Church and Education established the official training programme for conservators at the Directorate for Cultural Heritage in 1965 (Brønne 2012: 102), hence there are several exam theses among the reports included in the data set. These differ from other reports by being more thorough in all aspects; the description of the object, analysis of support and paint layer, condition of the object and description of conservation treatment. In many of the exam thesis, decision making is emphasised. There is a clear tendency also in reports that are not part of an exam, descriptions of both the objects, the surfaces and their conditions become more detailed after 1990.

When going through the material, it becomes clear that the actual treatment report to be filled out has changed through the years. There are different set-ups, boxes to tick off etc. The fact that the format of the report has changed, might have influenced the reports as source material.

## Results

#### LITERATURE ON THE HISTORY OF RETOUCHING AND CONSERVATION TREATMENT REPORTS

<sup>9</sup> Fragmented surface: A surface where the general impression is broken up and hard to read.

<sup>10</sup> Degraded surface: A surface where the paint layer itself is broken down and deteriorated.



Crucifix from Gjerstad church, Osterøy in Hordaland county. Dated around 1280-1350, conservation treatment undertaken in 2015. Photo: B. Lindstad for NIKU, after conservation 2015

Several scholars have given overviews of the history of retouching: Heinz Althöfer's "Zur Frage der Retuschen in der Gemälderestaurierung" from 1974; David Bomford's "Changing taste in the restoration of paintings" from 1994; Kim Muir's "Approaches to the reintegration of paint loss: theory and practice in the conservation of easel paintings" from 2009, and Jilleen Nadolny's contribution to "History of visual compensation for paintings" from 2012. They all go through the history of visual reintegration, and some give an overview of important conferences on the topic.

Ethical discussions regarding visual reintegration of damages on art date back to the 17<sup>th</sup> century (Bomford 1994: 35). Visual reintegration has moved from restoration through overpainting and fully integrated retouches with a sole focus on the aes-

thetics, to minimal, visible retouches that emphasise the authenticity of the surface. Max Doerner in 1922 and Helmut Ruheman in 1931 were early in advocating visible retouches in hatching technique<sup>11</sup> to ensure distinction between the original and secondary additions (Bomford 1994: 37, Muir 2009: 23).

In Italy, a lively debate on retouching resulted in Cesare Brandi's methodology of *tratteggio*<sup>12</sup> published in 1962 (Muir 2009: 23) and Umberto Baldini and Ornella Casazza's version of *tratteggio*<sup>13</sup> developed during the extensive restoration campaigns after the flood in Florence in 1966 (Skaug 1993: 19). In France, there was a parallel development of a retouching technique where 'pointillism'<sup>14</sup> was used to distinguish secondary retouches from original surface (Nadolny 2012: 581).

From the 1960s and onwards, there have been strong bonds between Norwegian conservators and European conservation studios as students were encouraged to study and work abroad (Brønne 2012: 101). European thoughts on visual reintegration found their way north and were adapted to suit Norwegian conditions and art objects. Svein Wiik published the first Norwegian paper on the ethics and execution of retouching in 1982. This paper opened with the question: "What is the most visually interruptive for the art work; the damages or the retouches?"<sup>15</sup> (Wiik 1982: 201).

Wiik's further work during the 1980s and 1990s on retouching fragmented surfaces communicated perception psychology to the conservation community. His thoughts has had a huge impact on how reintegration and retouching was understood and practiced in Norwegian conservation studios, and was summed up in his article "Perception Psychology in Re-Integration Processes" from 2003.<sup>16</sup> Wiik exemplified how recreating wholeness to an image is possible through retouching as little as possible. Wiik describes how damages in an otherwise intact area tend to stick out and are perceived as 'dominant details'. A 'deviant detail' on the other hand is an anomaly which tends to be overlooked as it does not fit into the viewer's expectations for what

<sup>11</sup> Hatching technique: Paint applied in lines rather than a uniform paint film.

<sup>12</sup> *Tratteggio*, also known as *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).

<sup>13</sup> A more adaptable system of paint application based on 'selection' and 'abstraction' of colour rather than primary colours (Skaug 1993: 19).

<sup>14</sup> Paint applied in dots, optically blended in the eye of the viewer.

<sup>15</sup> Translated by the authors. Original: "Hva er mest skjemmende for kunstverket, skadene eller retusjeringene?"

<sup>16</sup> In this article Wiik refers to R. Arnheim, C. Brandi, E. H. Gombricht, A. T. Welford, E. v.d. Wetering and J. J. Gibson, among others as background for his work.



Detail of crucifix from Gjerstad, old retouchings and damages to the ground is visible, before filling and retouching. Photo: NIKU

to see. Reducing a loss from a 'dominant detail' to a 'deviant detail' through visible retouches is now a well-established method: The deviant detail is simply overlooked in the perception of a work of art because it does not fit into the totality. The opposite, the dominant detail, becomes an interesting figure in its own right, and steals attention from the motif (Wiik 2003: 98).

Wiik also differentiates between retouching paintings and sculptures, where he argues that it is easier to execute a visible retouch on a sculpture due to its three-dimensionality. The three-dimensional form has plasticity, interspaces, graduation of light, shade and texture, to mention the most obvious. Nevertheless, he argues that the sculpture's form willingly accepts more damages than an illusionary painting



(Wiik 2003: 100). This taken into account, one can argue that some retouching methods are more suitable for two-dimensional paintings, taking the ‘neutral retouch’ as an example (see Appendix, Table 2).

Value analysis for historical artefacts was often an integrated part of decision making in the 1980s and 1990s. (Wiik 1982: 201; 1999: 255). The system was based on the Austrian art historian Alois Riegl’s works (Riegl 1903), but adapted by Dag Myklebust who made it relevant for Norwegian artefacts. The value analysis system was published in “Value thinking, a work tool in conservation”<sup>17</sup> as part of a publication from the Directorate for Cultural Heritage in 1987 (See Appendix, Table 3).

“Restoration ideology: Theory and practice in restoration of pictorial art in Norway in the 20<sup>th</sup> century”<sup>18</sup> by Mille Stein (2003) takes us through the conservation practices in Norwegian studios in the previous century. She discusses the relationship between ideals and practicality in conservation, and gives an account of the discussions and disagreements between and within conservation studios. Stein also makes a division between the years 1910–1970 where the focus of restoration was to ‘re-generate the past’ and the period 1960–2000 which aimed at ‘fixating the past’. This is reflected in the use of the words ‘restoration’ and ‘conservation’, and brings us to the topic of decision making in visually reintegrating damages in works of art.

Several articles and chronicles published in newspapers and were reported in the journal “Meddelelser om konservering”<sup>19</sup> in the 1960s. They started discussions on issues concerning conservation training, cooperation between the art historians and the conservators, and the need for better conservation treatment reports (Tschudi Madsen 1960; Anker et al. 1961; Berg 1961; Plahter 1961).

Art historian Stefan Tschudi Madsen<sup>20</sup> at the Directorate for Cultural Heritage, launched in 1960 a debate in Norway concerning major matters like the need for better documentation (Tschudi Madsen 1960: 34). He wrote that “after an examination it is easy to interpret observations in a certain way, and make the report fit the interpretations. Because the evidence often is removed (red.: or altered), it is an important claim that the report is based on notes and has a good scientific level of documentation. After passing generations, the treatment reports will become the most important art historical source of material”<sup>21</sup> (Tschudi Madsen 1960: 37–38).

<sup>17</sup> Title translated by the authors. Original: “Verditenkning, et arbeidsredskap i konservering”.

<sup>18</sup> Title translated by the authors. Original: “Restaureringsideologi: Teori og praksis ved restaurering av bildende kunst i Norge på 1900-tallet”.

<sup>19</sup> In English: “Announcements in Conservation”. Nordic journal for conservators.

<sup>20</sup> Head of the Directorate for Cultural Heritage in the period 1978–1991.



Detail of crucifix from Gjerstad, after filling and retouching in 2015. Photo: B. Lindstad for NIKU

Jon Brønne's article "Riksantikvarens restaureringsarbeider 1912–1994" was published in National Trust of Norway's (Fortidsminneforeningen) yearbook of 2012. This article presents the history of the conservation department at the Directorate for Cultural Heritage until the department was transferred to NIKU when the institute was formed in 1994. The history of conservation of medieval art closely follows this conservation department since The Directorate for Cultural Heritage was and still is, responsible for medieval art in Norwegian churches. Brønne's article also emphasises the importance of formalised training of conservators for the level of investigation and documentation of conservation treatment.

<sup>21</sup> Translated by the authors.

#### FINDS IN SURVEYED CONSERVATION TREATMENT REPORTS FROM 1970–2016

We found evidence of 98 treatments of medieval three-dimensional objects in Norwegian churches in the period from 1970 to date in the database of medieval artwork and in the atelier protocol<sup>22</sup> from the Directorate of Cultural Heritage.<sup>23</sup> Out of these 98 treatments, reports from 33 of them were not found in the archives. Non-documented treatments have been referred to in letters, later reports or plotted in the database of medieval artwork. Out of these, only the cases containing clear information about retouching are included in the data set.

65 treatment reports from conservation of objects from 36 churches form the basis of the data set for this survey.

#### DECISION MAKING: REASONS TO RETOUCH OR NOT TO RETOUCH

In the data set, 28 reports give no reason for their choice of retouching method (or lack of retouching). 37 give a reason, but in variable detail. There is no increase in the inclusion of 'decision making' in the reports from 1970 to date. Where a reason for retouching is given, there tends to be a multifaceted explanation for why different approaches were chosen when retouching one object.

One reason for choosing retouching method that is mentioned, is the need to balance the level of damage between one part and the totality. This argument can be found in cases where one area of a sculpture is balanced to the rest of the object, or one sculpture to the rest of a group or tabernacle.

Only one report explicitly uses Myklebust's system for value analysis as a tool for decision making, and discusses the object's 'age value' weighed against its 'art value' in the section for decision making (1988).

Some reports mention long viewing distance as the reason for keeping retouching to a minimum.

We expected to find a significant correlation between long viewing distance in the church and refraining from retouching small damages, but this was not the case. There are however cases where the conservator argues that the sculptures would be hung high above floor level in a poorly lit church, and visual reintegration would not make a difference aesthetically. Some conservators made an active decision to refrain from retouching, without long viewing distance as the explicit reason for this.

<sup>22</sup> Protocol kept from 1947 to 1989.

<sup>23</sup> The data set also includes conservation projects where retouching was not included. However, it does not include reports from emergency conservation (stabilisation) in the churches.

No reports clearly state that an object was not retouched due to the sculpture's 'source value' (see Appendix: Table 3). In one case however, the main reason for refraining from retouching was the move of the sculpture from the church to a museum for preservation reasons (2009). No retouching was chosen to emphasise the 'cultural historical value' of the object rather than the aesthetical. Another describes the general expression of the surface as 'damaged', and is reluctant to disrupt the balance between the different surface phenomena (1992). Some reports argue that retouches will complicate future sampling and analysis of the paint's stratigraphy. The rest of the reports do not give a reason for not retouching, and some simply don't mention retouching at all.

In the older reports (and sometimes only in correspondence), there are mentions of meetings between different professionals in the cultural heritage management to discuss retouching approaches. These meetings tend not to be summarised in the conservation treatment reports. There are nevertheless a couple of reports presenting a disagreement between experts representing different professions.

#### RETOUCHING METHODS AND TECHNIQUES

Our survey shows a slow decline in the practice of 'filling' damages before retouching in the period 1970 to date.

For sculptures with damages with 'visible ground', the overall tendency is that all these areas have been retouched either in the colour of the surrounding wood or in local colour, rarely both. This tendency is constant over time.

Reintegrating damages with the aim of 'defining forms/finish outlines/contours' has little mention in the data set, and mostly in the later reports: In one case from 1988 damages were retouched to define transitions between forms, and in four cases from 2008 and 2016 damages were retouched to finish contours.

On surfaces described as 'fragmented', 'toning down'<sup>24</sup> was used to a lesser degree than on damages on other surfaces. 'Hatching technique' however seems to be preferred over other techniques.

Hatching technique is also preferred for reintegration of damages on surfaces described as 'degraded'.

The use of hatching technique is described more often in the reports from 1996 and onwards. Before 1996, application technique is rarely specified. None of the re-

<sup>24</sup> 'Tone down': Reduce contrast in value between a damage and the surrounding area by applying paint to the damage.

ports describe the use of 'curved hatching technique' neither is the use of 'neutral retouches'.<sup>25</sup>

'*Aqua sporca*'<sup>26</sup> as a term has a very limited use in the reports, but a few cases were found. However, the same technique might be described as 'toning down' a damage, or 'toning in'<sup>27</sup> an area.

'*Trateggio/rigatino*' as a retouching technique (see footnote 12) is described used on medieval sculptures in museums in Norway, but there is no mention of this technique in the reports from the sculptures placed in churches.

#### OLD OVERPAINT AND RETOUCHES

Some sculptures have been fully or partly overpainted in the past. On some of these sculptures the overpaint has been fully or partly removed. 'Full overpaint removal'<sup>28</sup> has become less frequent with time (pre 1970). 'Partial overpaint removal'<sup>29</sup> however has become more common after 1970.

In our material we found that eleven objects have been partly cleared of overpaint in the period 1970 to date. In contrast, we found two cases of full overpaint removal, but both treatments left one or more layer of overpaint.<sup>30</sup> Removal is described as part of the treatment with the aim to clarify the visual expression to better understand the surface. There is no description of overpaint removal with the intention to reveal the medieval paint layer.

Where the sculpture was fully or partly overpainted, there is a tendency towards retouching in local colour. To retouch in the local colour of the overpaint is often described as to 'tidy up', to recreate wholeness to an object, and to clarify the plastic form of the sculpture.

<sup>25</sup> 'Neutral retouch': Retouching lacunae by inpainting in a single flat tone, often grey. See Appendix, Table 2.

<sup>26</sup> '*Aqua sporca*': Dirty water. Used to tone down damages. See Appendix, Table 2.

<sup>27</sup> 'Tone in': Reduce the contrast in colour between a damage and the surrounding area by applying paint to the damage.

<sup>28</sup> 'Full overpaint removal': Removal of overpaint from the whole surface.

<sup>29</sup> 'Partial overpaint removal': Only parts of the object is cleared of overpaint.

<sup>30</sup> In one case, the revealed layer was the second layer, also medieval (1976). In the other case, only the top layer of overpaint was removed (1988).



Detail of crucifix from Gjerstad, before retouching in 2015–2016. Photo: NIKU

## Discussion

### ANY CHANGES IN PAST AND PRESENT PRACTICES?

Before 1970, removal of overpaint on medieval objects was done on a more regular basis (Brønne 2012: 100, 104). Overpaint removal has only been executed on a smaller scale after 1970 and often only on selected sections, e.g. the most damaged or most important area (eleven cases in this data set).<sup>31</sup> The finds from the reports correlate to the two different approaches described by Stein as ‘regenerating the past’

<sup>31</sup> A letter from the Directorate for Cultural Heritage to a church community owning a medieval crucifix in 1988 (translated from Norwegian by the authors): “The overpaint might not be as beautiful as the original, but nevertheless of historic value. An overpaint removal will not be chosen as long as the crucifix is in technical good condition. Of the crucifixes we have in our studio for treatment, and very few are cleared of overpaint. If they are, it is a decision made through thorough discussions and investigations on beforehand.”

prior to 1970 and 'fixating the past' post 1960 (2003: 147–155), with the decade in between as a transition period. The reasons behind however, can be many-faceted. This decline could be influenced by change in practise, but also by a differentiation between full overpaint removal and partial overpaint removal which we see in our material as increasingly more common. One also has to take into account the fact that many of the medieval objects already had been cleared of overpaint before 1970, thus the most obvious cases for overpaint removal were already treated.

With our own experience of working with fragmented and degraded surfaces, we expected to find descriptions of different retouching approaches to the different damaged areas of the object. Some reports describe this, but it was not the norm. The reason could be that some reports undercommunicate the use of multiple techniques, and simply describe retouching as: 'damages were retouched in aquarelle and with oil as top layer'.<sup>32</sup> It is possible that the conservator assessed every damage individually and approached them accordingly, but it is also possible that he/she used one specific retouching methodology for all damages. This material does not capture this aspect sufficiently.

We also expected to find more use of retouches 'defining forms/finish outlines/contours' in the reports, as this is a common criteria for choosing which damages are to be reintegrated in our own studio.<sup>33</sup> Finishing broken lines and transition areas is an efficient way to sort out a chaotic and fragmented impression and increase readability, hence these retouches may be registered under the category 'tidy up'.

There is a tendency over time towards retouching with colour straight into the lacuna without the use of filler. There is also a tendency of retouching visible ground to the colour of wood. One can read these tendencies as attempts to 'tidy up' a fragmented expression rather than improve the object's aesthetic condition. To tolerate and favour a fragmented surface is a part of favouring the values of age and history as described by Myklebust (1987: 91–92).

The use of hatching technique is described more often in the reports from 1996 and onwards. Before 1996 the application technique is not specified. There can be several reasons for this. The most obvious is that the level of detail in the report increased with time. Norwegian conservators were well aware of the hatching methodology presented in Italy in the 1960s partly because Norwegian conservators all studied abroad for a certain period (Brønne 2012: 101). Norwegian conservators were

<sup>32</sup> From a treatment report dated 1976.

<sup>33</sup> Only five reports mention this, and three of them are from the authors' own conservation treatment in 2016.

also important contributors after the flood of the Arno in Florence in 1966 and the establishment of the Nordic centre for restoration (Plahter 1999: 68). This technique might have been taken for granted for a long time, and thus not specified in the reports. The absence of at least 33 reports from the period 1972–1994 leads to an over-representation of the later years, and this which might bias the distribution of reports explaining the chosen technique, and explain why so many of the older reports lack specification of application technique.

Another reason not to specify retouching technique could be that discussions on approaches to retouching were held in plenum. It seems like it was more important to have a consensus on retouching method, rather than explaining why in the report. In our material we have found letters that describe committees discussing retouching matters with representatives from different professions and levels in the hierarchy within the cultural heritage professions, but these are not summarised in the finished reports.

These observations from the reports correspond to how Nadolny (2012: 582) explains the differences in decision making through time: Today, there is no formal interdisciplinary group, rather conservators alone who make retouching decisions. These meetings are also to a certain degree replaced by increasing conferences, training courses, workshops and literature on the subject (Nadolny 2012: 582). The conservator in charge might want to bring different professions together for a discussion, or a collective reflection of the visual reintegration, but in the end, retouching methods and techniques are the working conservator's choices. This reflects a change in the conservators' credibility, which largely is earned by time and is founded in the profession's education level.

#### DISCREPANCIES BETWEEN PRACTICAL WORK IN NORWAY AND RETOUCHING THEORIES?

In the reports, we see the influence Wiik has had on retouching medieval objects in Norway. His demonstration of how little retouching can give a better understanding of the fragmented surface, has its foundation in 'fixating the past'. The sculpture should not be restored to appear to be in better condition than it actually is. This is also reflected in our finds: There has been a decline in the use of filler, and an increase in visible retouching techniques. These are both measures that accommodate reading the image from a distance, but on close inspection respect the object's history.

Before starting this research, we believed that the discussions in Italy in the 1960s led to a focus on methodology and differentiated techniques in Norway in the 1970s which in turn led to a rigid and theoretical approach to retouching in the 1970s



and 1980s, and that towards the turn of the century conservators tended to be more pragmatic and flexible in their execution of retouching. Our material does not reflect these changes through time.

What is clear is that theoretical approaches to retouching like neutral retouch, '*aqua sporca*' as a term, '*trateggio/rigatino*', curved hatching technique<sup>34</sup> or 'pointillist' approach, were not described in these earlier treatment reports. One can perhaps assume that they are so methodically different from what was used before, the conservator most likely would have mentioned it if it had been used.

The absence of theoretical approaches to retouching in the data set could perhaps be explained by how some methods and techniques may be more suitable on two-dimensional than three-dimensional forms.<sup>35</sup>

Medieval surfaces tend to be fragmented, with a chaotic appearance and with a complex mixture of original and secondary material, damages and old repairs. When dealing with visual reintegration of such a surface, one is quickly faced with the shortcomings of the retouching theories. The terms of the retouching lie in the surfaces and the damages which often have to be treated individually. The absence of explicit use of retouching theory in this data set may also be the result of a discrepancy between theory and practicality. Another possible reason could be that conservators tend to be loyal to a technique they are skilled in and comfortable with.<sup>36</sup>

There is also little mention of Myklebust's terms from his value analysis system in the treatment reports in the data set. Only one report thoroughly discusses the object's inherent values using Myklebust's terms. The term 'cultural historical aspects', which is mentioned in another report is not strictly speaking a part of the established set of terms, but it reflects the same way of analysing the different values inherent in a piece of art. This shows perhaps how Myklebust's method lies in the backbone of conservators even though it is not explicitly stated in the reports.

<sup>34</sup> Other institutions are known to practice curved hatching technique, but none of the reports in our data set mentions this technique.-

<sup>35</sup> The only scholar mentioning these differences is Wiik (1982: 203; 2003: 100). Nadolny's table (2012: 574–578) is based on different retouching techniques on paintings, and she does not specify any differences between two- and three-dimensional surfaces.

<sup>36</sup> Multiple letters state that there was a "dramatical shortage of staff" working at the conservation department at the Directorate for Cultural Heritage in the 1980s, which was the peak of the 'Medieval Program'. As medieval art is pointed out as unusually time consuming work (Brønne 2012: 103), it is understandable if conservators did not spend time experimenting with new retouching techniques.



Detail of crucifix from Gjerstad, after retouching in 2015. Hatching technique is used. Photo: NIKU

#### DISCUSSION ON CONSERVATION REPORTS AS SOURCE MATERIAL

It is important to be aware of the context of the past written sources, and not interpret through today's way of thinking. An awareness of intention and function of the text is therefore essential (Repstad 2014: 105). All conservation treatment reports post 1970 are publicly available. Paper copies of the reports were sent to the owner of the object, and a duplicate was stored in the archive at the Directorate for Cultural Heritage. In contrast, reports post 2006 are published on the Internet and possibly read by a much wider audience. This change in accessibility could make a difference in readership and thus influence how reports are written.<sup>37</sup>

<sup>37</sup> As mentioned earlier, reports from 33 known treatments from between 1972 and 1994 were not found in the archives. There is no discernible pattern in which reports are missing. The absence of these reports is probably coincidental or dependant on the routines of the individual conservator, or the lack of searchability within the digitalised archives.

Were there discrepancies between the real discussion in the conservation studios and the solutions presented in the reports? We have found letters of correspondence that indicate a retouching debate that is not reflected in the finished treatment report. Generally, a treatment report will only present the finished result, and therefore only contain well considered arguments supporting the conclusion. According to Olsen (1997: 291) this lack of written discussion or evidence of doubt is known from archaeological field reports, and Olsen illustrates this dilemma by one word: 'representation'. What happens in the transition from conducting conservation to writing the text? The finished text is often a simplified version of the arisen dilemmas, as we have found evidence of in the data set.

When reading reports one has to rely on what is written. Older conservation treatment reports were often produced after a project lasting up to ten years was ended, sometimes after the object was reinstalled in the church.<sup>38</sup> The reports do not say if they were written parallel to the practical work or summarized afterwards, which would affect the accuracy of the report as a source to the treatment undertaken. Olsen sees this as a challenge also with archaeological field reports that are often written in retrospect. In addition, when reporting on complex matters, one may want documentation and reports to be clear and focused, and thus simplify any underlying uncertainties (Olsen 1997: 290).

Conservation treatment reports are to a certain extent comparable with archaeological field reports. The writer of the reports documents what he/she considers to be the most relevant and important issues through photographs, measurements, drawings and tests. Field- and treatment reports are important sources for the two professions, since the objects described may have been altered permanently. This implies that reports have their own authority and autonomy as they may be the only means to understand the object's current aesthetical and material condition (Olsen 1997: 290-291).

#### PROFESSIONALIZATION OF WRITING CONSERVATION TREATMENT REPORTS

In the 1960s and early 1970s, there was a controversy between the museum conservators and the conservators at the Directorate for Cultural Heritage, where the directorate was criticised for not being sufficiently scientific (Brønne 2012: 101).

This led to the process of formalising the conservators' education and improvement in routines for documenting and reporting conservation treatment. With 'The Medieval Program' initiated in 1975, all 200 churches with medieval objects were inspected in order to evaluate the condition of the art pieces. In this work, conservation

<sup>38</sup> Date of arrival and date of finished treatment is often mentioned in the dated report.

and documentation of medieval art was additionally systemised. (Brønne 2012: 101-105). In addition, formal training of conservators influenced the conservation field, and investigations, documentation and reporting were emphasised during the 1980s and the 1990s.

The level of detail in conservation reports have varied over the years, and it is not the case that such reports are unambiguously getting 'better'. Domenico Erdman's reports from the beginning of the 1900s have a level of detail that his successors did not continue (Brønne 2012: 98). This is also verified in our material: There are detailed, thorough and easily understandable reports in our earliest material, whilst some reports from the early 1990s are short, to the point and lack information that could be of interest. This could depend on the preferences and routines of the writer, but also the time available to write these reports and their format with boxes to tick off or pre-decided categories. When we look at the overall tendencies, essential information was easily lost with the use of these formalised reports.<sup>39</sup>

#### OBJECTIVITY WHEN EXAMINING OURSELVES?

Including one's own reports in the source material can be a complicating factor, hence it was an active choice to rely on the data sheet to look for changes in the reports through time. This way a distance to the primary sources was achieved, which was helpful in the analysis. The relevant report was written before this research started, it was treated the same way as the rest of the source material, and was streamlined into the data set. This way the analysis would not be affected or biased.

#### FUTURE OBJECTIVES

Reviewing treatment reports from a nearly fifty year period has given access to relevant and interesting material. A continuation of the project could be to compare these finds to those from a similar review of the reported visual reintegration of medieval sculptures at museums in Norway. Specific retouching techniques are sometimes used on museum objects but not on objects in churches, and perhaps vice versa.

A comparison of reintegration practices in different countries, seen in the light of educational history could also be the next step.

A more comprehensive study of visual reintegration could entail comparing the objects and the retouches themselves to the corresponding written reports to better

<sup>39</sup> From 1994, reports from NINA-NIKU were either in the format of shorter, standardised forms or more comprehensive '*Oppdragsmelding*', which determined their level of detail. In 2003, '*NIKU-Oppdragsrapport*' were introduced, which lie somewhere in between in scale. These are still in use.

understand the relationship between theory and practice. This could also shed light on how reporting on practical work is done.

Treatment reports as source material have clear similarities to other types of written material. They need to be interpreted in the light of their era and context. The older craft based conservators and the newer academic conservators with a more scientific background will read this material with different preconceptions. This topic is outside the scope of this article, but would be interesting to go into in a further study with philological perspectives.

As treatment reports are increasingly accessible to a wider readership, a debate on what information may be required in future reports is apt. This article can make a foundation for such a debate and thus raise the level of reporting of conservation treatment further.

## **Conclusion**

We have surveyed almost fifty years of conservation reports of retouching on medieval polychrome sculptures in Norwegian churches. Conservation reports as primary source material reflect changes in conservation education, the profession's ethics, retouching methodology and decision making. Tendencies seen in the material correlate to what has been written on retouching techniques and the history of conservation as a profession. Our finds exemplifies and explains how changes in the retouching methodology through time has been conducted.

Our clearest finds are that there has been a decline in overpaint removal, and a decrease in use of filler before retouching. Based on the conservation treatment reports in this data set, fragmented and degraded surfaces damages overall tend to be retouched to the colour of wood, sometimes to local colour, but rarely both. The use of hatching technique is explicitly mentioned in reports only from 1996 and onwards. This implies that there is an increasing focus on the stability of the object rather than the aesthetics, and that visual reintegration tends to focus on 'tidying up' fragmented impressions. Over the last fifty years, the communication of medieval objects has become more important than making them aesthetically pleasing.

These changes may be interpreted as a collective shift towards aiding the readability of the object without attempting to restore them to their past condition, 'fixating the past' rather than 'regenerating the past'.

Treatment reports as primary source material give us descriptive information about the objects and their condition, but the chosen retouching procedure might be coloured by the individual conservator's values and perspectives.

Some reports state the reasons for the choice of retouching method and technique, which range from balancing out the impression of damages, the object's placement in the church and weighing of the objects different intangible values to completing only essential areas in the figure and 'tidying up' its overall impression. To what degree decision making is included in the report, seems to be influenced by the format of the report and the writer him-/ herself rather than the time it was written in. Known multidisciplinary discussions in the atelier are rarely summarised in the reports. Even though multidisciplinary discussions have found place through the last fifty years, there have been no formal interdisciplinary group in this period making the retouching decisions.

This paper has discussed changes in past and present practises, discrepancies between practical work and written retouching theories, reports as source material and professionalization of writing reports. Due to long-lasting projects and omission of reporting from the retouching discussions in the studio, the reports do not always represent the reality of the challenges in decision making. Despite this, the material clearly mirrors the tendencies in the methodology of visual reintegration through the last fifty years.

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## Appendix

**Table 1:** Overview of categories for data collection from conservation treatment reports

Information about the object	
Top nr	Topographical number of church
Placement	Name of church
Object	Type of sculpture, e.g. crucifix
Date	e.g. late 1200
Restoration initiated	Year

Ended restoration dated	Year
Intendent location	In church
Viewing distance	Long/ short viewing distance
<b>Overall condition before treatment</b>	Yes/ no
Original polychromy	
Traces of original polychromy	
Degraded	
Fragmented	
Partially overpainted	
Overpainted	
Uncovered polychromy	
<b>Surface phenomena before retouching</b>	Yes/ no
Visible support (wood, stone)	
Visible ground	
Exposed metal foil	
Visible underpaint	
Exposed bole	
Damaged by insects	
Discoloured retouches	
Overcleaned	
Spills (interior paint/t-ar/candlewax)	
Small lacunae	
Large lacunae	
Damaged by paint removal	
Visible old fillings	
<b>The retouching procedure described</b>	Yes/ no
Retouch/inpainting	
Wood retouched darker/lighter	
Fully integrated retouches	
Normal retouch (integrated at viewing distance)	
Hatching straight	
Hatching curved/without direction	
Neutral retouch	
Glaze	
Rigatino/trateggio	
Filling	
Retouched to the colour of wood	
Retouched to the colour of ground	
Retouched to local colour	

Defining forms/finish outlines/contours	
Retouch small lacunae	
Retouch large lacunae	
Retouch all lacunae	
Aqua sporca	
Adjust old retouches	
Removal of old retouchings	
Imitation of craquelure	
Retouch without filling	
Partial removal of overpaint	
Full over paint removal	
Tone down	
Retouch losses in colour of overpaint	
Overpaint overpaint	
Different techniques for different areas	
Not described	
Re-gilded	
<b>General information</b>	
No report found	X
Decision making	Yes/ no
Marks	Free text

**Table 2:** Overview of approaches to visual reintegration. Based on Althöfer's five categories (Wiik 1982: 202) and Nadolny's twelve which is based on retouching of paintings (Nadolny 2012: 574-578).

No	Methods for visual reintegration	Definition
1	Overpainting	Covers original paint. Also use of glazing over original paint to unify abraded areas.
2	Fully integrated retouch, only in areas of loss	Fully integrated (fully mimetic, total, imitative, cosmetic, non-detectable, invisible, integral). Retouching seeks to match the losses to the surrounding areas as perfect as possible. Imitates structure, brush strokes, and colours as well as aging.
3	Normal retouch	It aims at being visible at a short distance and blends in with the surroundings at a normal viewing distance. Small details make it visible, like a lower layer of fill, the use of different material, structure or surface.



4	Differentiated reintegration	The reintegration is complete at a viewing distance, but clearly distinguished from the original at close range. Often achieved by a specific system of paint application like a series of hatched lines, tiny dots etc. like the theories of <i>tratteggio/ rigatino, selezione cromatica, astrazione cromatica</i> and pointillism.
5	Suggestive differentiated reintegration	The retouch gives a general indication of lost form using colour and form but without details. Often achieved by a specific system of paint application like a series of hatched lines, tiny dots etc. like the theories of <i>tratteggio/ rigatino, astrazione cromatica</i> or cross-hatching.
6	Neutral toning	An attempt to reduce visual disruption caused by the lacunae by colouring areas with a single flat tone. A neutral grey is attempted (often used in Germany), or a neutral tone that matches the surrounding original. Into this category one can put the method of applying <i>Aqua Sporca</i> .
7	Minimalist/ archaeological approach	Do nothing

**Table 3:** Myklebust's value system<sup>40</sup>

No	Value	Consequence for treatment
1	Age value	Accept decay to a degree
2	Historical value	Absolute conservation of present condition
3	Identity value	Conservation of present condition
4	Symbolic value	Conservation of present condition
5	Educational value	Accomodate certain target groups
6	Occurrence value	Both absolute conservation and accommodation
7	Art value	Accommodate maximal aesthetical satisfaction
8	Use value	Accomodate function
9	Environmental value	Treatment within certain general rules provided by surroundings
10	Negative news value	Unconditional safeguarding of existence
11	Sales value	Accomodate market
12	Anecdotal value	Absolute conservation of present condition

<sup>40</sup> The authors' translation.

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