

Accessing the Past in the Present: A Search for Meaning in Polychrome Medieval Art

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KEYWORDS

medieval sculpture, materiality, colour, polychrome, conservation, restoration

ABSTRACT

This research is part of the author's PhD. The hypothesis is that there is a deliberate visual vocabulary embedded in the polychrome expression of Christian medieval sculpture from the period 1100–1350 in Norway.¹

The article examines the attitude to colour on polychrome medieval art, its impact on the understanding of medieval polychrome, the consequences for its preservation, and where the investigation of this material stands today. The reading of the materiality of medieval art in their own time was based in a worldview that is essentially different than that of today. The interpretation based on modern terms has led to a failure to recognise original intent, which in turn has resulted in harmful treatments. To avoid modern bias, a search for meaning must therefore be based on an understanding of the society that produced them. Fundamental components of the medieval worldview shaped the perception of matter, light and colour. How they conditioned the making of church art into visual references to the Divine are examined.



Fig. 1: Detail from the frontal from Dale II, Sogn og Fjordane, Norway c. 1300. Now in Bergen: MA 9. Photo © University Museum of Bergen, the Cultural History Collections.

INTRODUCTION

The aim of my research is to add to our knowledge of how polychrome medieval art communicated meaning in its original context at a time when philosophical ideas, emerging

sciences and alchemical theory were part of theology. A multidisciplinary approach is required in order to adequately examine this hypothesis. The main sources are the objects themselves, which are extra ordinary well preserved in Norway. Examination of period texts of a proto-scientific and theological-philosophical nature are used to construct an understanding of the meaning embedded in the materiality. The findings are compared against analysis of both original and recreated objects with the tools of modern science. These secondary sources reveals shared ways of thinking that formed the cultural matrix, in which these objects were produced and towards which they were experienced.

HISTORY OF RESEARCH INTO THIS MATERIAL

Since the 1950's a more scholarly and scientific approach to the examination and treatment of medieval painting and sculpture have developed in Norway in line with the development in Europe and USA. Conservation as a developing profession has been a central part of this. A first step of any professional conservation treatment process is a detailed examination of the physical object to gain a deeper understanding of materials, construction, preservations state and original intent. The conservation documentation that follows the object normally presents the information collected from this work, often coupled with scientific analysis together with an interpretation of the findings. As a result there are numerous publications and sizeable unpublished resources within these archives.² Systematic analysis and physical reconstruction of the painterly techniques, often conducted as part of this investigation, has produced a great deal of knowledge about the pigments, fillers and binders available to the medieval gilder and painter. Taken a step further such detailed investigations provide an insight into the technology and knowledge that underlie the production of functional paints. Based

in the examination of a broad group of objects, clear tendencies are identified in the way the differently coloured paints were applied to the form (Plahter, 2004 and 2014). This seminal work is the foundation on which more overarching questions related to how these physical objects communicated the divine through their materiality.

Despite good intentions for interdisciplinary work in Norway, the different research carried out by historians and within conservation has been conducted mostly in parallel, with little true collaboration. Literature searches suggest that although historians have attempted to address the topic of colour for more than a century, colour as visual expression, its role, significance and meaning, has not been a central focus. Colour is still rarely considered in discussions of artistic style or in stylistic analysis. There has however been a positive development from the 1970's when, together with broader investigations of materiality and the wider sensorial context of these works, scholars such as Patrik Reuterswård, Johannes Taubert, John Gage and Michel Pastoreau brought light and colour to the forefront of their research (For example Reuterswård 1969; Taubert 1978; Gage 1978, 1990, 1993, 1999; Pastoreau 2001, 2009, 2014). Other researchers, for example Liz James, Heather Pulliam, and Spike Bucklow, focussing on Byzantine mosaics, insular illuminated manuscripts and medieval art and in the UK, have demonstrated how the wider aspects of colour can be more fully understood by combining studies of materials with their metaphoric significance (For example James 1991, 1996, 2003; Pulliam 2011, 2012; Bucklow 2009, 2014).

MISCONCEPTIONS AND NEGATIVE VIEWS WITH SERIOUS CONSEQUENCE FOR THE POLYCHROMY

The lack of precise understanding of the construction of medieval polychrome, its materials

and role combined with the judgement of these objects in modern terms, have led to some major misconceptions and negative views. The examples where this has led to misguided treatments with removal of or damage to the original material are many.

A main obstacle for the appreciation of medieval polychrome came from the neoclassical movement of the late 1700s and early 1800s that revived the ancient Greek and Roman styles. The prevailing view within this movement was that this type of sculpture was without colour (Kollandsrud 1994; Panzanelli 2008). This led to a widespread taste for white marbles that shunned bright colours, especially on three-dimensional form. The art historian Andreas Aubert already in 1901 fully acknowledged this ‘farveskræk’ [chromofobia] when he wrote that “it has been like a ‘law’ here at home [Norway] until recently, that the woodcarvers work should be colourless” (Aubert 1901: 209–214; Kollandsrud 1994: 103).³ The admiration of the naturalistic beauty of Greek art as the ideal unpainted form still affects our appreciation. Until quite recent in Europe this led to the overpainting of the medieval polychrome and even removal of the original paint on wooden sculpture (Koller 2008). That these ancient statues were originally polychrome and had lost their colour over time was revealed in classical texts and confirmed by the technical analysis performed of sculpture from the period. These results were overruled by a greater imperative of aesthetic and political art (Richter 1944; Panzanelli 2008; Brinkmann, Primavesi & Hollein 2010).⁴

Another erroneous theory, with serious consequence for the treatment of early polychrome, was the belief based in Vasari’s anecdote; that van Eyck invented oil painting. This led to the conviction in the early nineteenth century that objects dating before this so-called ‘invention’ must be a type of tempera. As a consequence overpaint bound in oil were removed with a sol-

vent based paint stripper that also damaged the original medieval polychrome that later has been identified as based on oil and vulnerable resins mainly. The early thirteenth century crucifix from Haug in Buskerud, Norway, is one of several examples from the collections of the Museum of Cultural History, University of Oslo (MCH) where the original polychrome was seriously damaged when overpaint was removed with this paint stripper in the late 1920s (Kollandsrud 1994: 100–105 and 1997). The solvent also softened and removed parts of the original polychrome. The new examination in 1992 showed that the original polychrome had been in an excellent state of preservation before the removal. In this case the treatment was a result of both the art historian and the technician making wrong assumptions together.



Fig. 2: Haug crucifix, Buskerud, Norway c. 1225–50. 235.5 x 146.5 cm. Now in MCH: C 3604. After uncovering in the late 1920’s. Before treatment in 1992. Photo: Eirik I. Johnsen © MCH, UiO.



Fig. 3: Haug crucifix. After conservation and partly restored in 1992. The white gouache lines marks the treated areas. Photo: Kaja Kollandsrud © MCH, UiO.

PRESERVATION STATE AS AN OBSTACLE FOR GAINING ACCESS TO THE ORIGINAL

The medieval polychrome church art in Norway have been better sheltered from destructive political, economic and cultural forces than similar places in Europe. Both in Sweden and Norway there are examples of extraordinary well-preserved polychrome that has never been overpainted. But even the best appearance of the better preserved objects have changed, due to the natural ageing of materials. The interpretation of original intent relies on decoding the original appearance of the materials and surfaces. The altered surface has, for many modern scholars, been an obstacle for understanding the whole piece, as the changed appearance is difficult to interpret and identify as original.

The lack of written historical evidence supporting their manufacture makes the physical

objects our foremost source. Any restoration work will be the result of the information directly gathered from the object. The visual result of such work affects the presentation of this primary source material and consequently its future interpretation. This is where the conservator contributes with the knowledge gained through their close examination and analysis of the object. When a restoration is well performed it can present the object in a way that aids the visual interpretation in a positive manner, but if such work is carried out based on incorrect premise, the result can be misleading. Paul Philippot summed up this dichotomy elegantly: "... restoration, before becoming a technical problem, is primarily a cultural challenge, as the former is only the consequence of the second" (Philippot 1985).⁵ Authorities responsible for conservation have therefore an obligation to secure that such work is performed in the best interest for the preservation of the objects. The safeguarding of the source material for future research must be balanced against the need to make them available and legible to the public.

The significant cultural differences that have influenced how these objects have been perceived in the past needs to be taken into consideration when interpreting these objects. The following section will look at some of the main factors that affected the perception and appreciation of these works in their own time.

THE PERCEPTION OF LIGHT AND COLOUR

My research identifies light as central in the exegeses of the polychrome church art (Kollandsrud in print). God created earth, as we know it, from darken by way of light (Genesis 1:3).⁶ Light, whether reflected from the surfaces of goldsmith's work, radiating through the stained-glass windows or interacting with the polychrome surfaces of panel paintings and sculpture, was

seen by worshippers as a source to the Divine light itself. It therefore symbolised a path for the enlightened 'mind's eye' to experience spirituality.

The medieval perception of colour was based in the early classification systems, of which Aristotle was the most influential. This system was built on a classification of colours tonal value or inherent brightness, measured on a sliding scale between black and white (Gage 1978: 107). In the process of elevating polychrome objects from the earthly mundane to images with a status that connected them to the Divine, colour aesthetics was closely linked to light, brightness and lustre. In medieval polychrome this is achieved through the use of unadulterated, saturated colours made from valuable materials combined with metal surfaces with highly reflective surfaces. The theological implications of these bright, light reflecting coloured surfaces has been discussed in conjunction with Byzantine mosaics and insular manuscripts (James 1991, 1996; Pulliam 2012), but has until my research not been brought into the discussion on the Norwegian church art.

Unn Plahter's analysis of the Norwegian painterly techniques shows that the thirteenth and twelfth century painter applied paints consisting most frequently of one or two pigments applied in welldefined areas. If two pigments are mixed it was often the addition of lead white or a lighter pigment of similar hue to brighten the colour, such as red lead added to darker red vermilion. A lighter hue was also achieved by exposing a lighter coloured underpaint in halftones and highlights. Black was generally not used to darken the paints when bound in oil (Plahter 2004). As desire was towards bright lustrous colours, black brings down their tone and saturation. The brilliance of the polychrome was brought out by the reflection and refraction of light in the surfaces. The effects of the changing nature of natural light and open flame constantly transformed, modified, and re-created

the image through its reflection and refraction in the surfaces. This brought the image to life in the church space before its audience (De Montebello 1982).

There is a paradigm shift in the perception of colour, when Newton in 1672 demonstrated the colour spectrum by passing light through a prism onto a white surface (Shapiro 1994). From then on, the emphasis in the theory of colour has been increasingly concerned with the understanding of colour as generated and articulated by the mechanisms of vision and perception psychology. Newton showed that colours are indeed illusory, and that light only was its begetter. His circular arrangement of colours hues illustrated the ideas on harmony and 'complementary' contrasts (Gage 1990: 528).

It was Newton's theories that laid the foundation for the understanding of colour in the western world today, where colour and hue (red, green etc.) are virtually synonymous (Gage, 1978; James, 1991). Even though modern systems like the Munsell model are based on the constant phenomenon of Newton's spectrum, the identification of the more important or primary hues are still not standardized (Bolman 1999: 23).⁷

The spectral composition of colour is not the only parameter of importance; it has additional qualitative dimensions that affect how they are perceived, such as luminosity, transparency, texture and lustrousness (Concklin 1973: 939). The neural processes that identify these qualities are still relatively poorly understood. The complexity of surface phenomena such as gloss and translucency are confirmed in the new research prompted by the demand for physical realism in modern computer graphics.⁸ Achieving the correct surface textures was also central in the medieval polychrome expression. Light scattered from a dry mat deep blue area could act as juxtaposition for light reflected from highly polished or matt surfaces of applied metal leaf and the richness of colour created from coloured glazes.

THE RELATIONSHIP BETWEEN COLOUR AND FORM

The importance of hue in the perception of colour in the modern western society is profoundly different from the medieval period where the most valued colours are the inherent bright, pure, saturated and light generating.

Colour contributes to articulate the surface, model and manipulate the three-dimensional form. This important relationship is illustrated in the three identical shaped heads manipulated with colour only in Fig. 2. From the same three-dimensional form, a polychrome typical for a Norwegian Virgin dated to the latter part of the thirteenth century can easily be turned into a crucifix. The latter is based on the celebrated crucifix figure of c. 1200–1220 in the parish church of München-Forstenried, Bavaria in Germany (Wiik 2002: 104).



Fig. 4: Painted identical plaster casts by Svein A. Wiik and Marianne Selsjord. 28 x 9 x 9 cm. Photo © MCH, UiO.



Fig. 5: Virgin from Biri, Oppland c. 1230–40. 100 x 99 x 27 cm. Now in MCH: C 3480. Original (a) and recreated by Marianne Selsjord in 2014 (b), using the same materials and techniques as identified in the original. Photo © MCH, UiO.

This clearly illustrates that sculpture is *as much colour, as it is form* in this period,⁹ and thus cannot be discussed separately. Colour does not operate alone, but only takes on meaning and ‘functions’ fully from the social, artistic and symbolic perspectives, when it is associated with or in juxtaposition with neighbouring colours (Pastoreau 2009: Introduction). Because the meaning of colour is complex and fluid, its wider “context is everything – both anchor and compass”, when approaching the “tricky waters” of decoding medieval colour symbolism (Pulliam 2012a: 5).

THE MEDIEVAL VERSUS THE MODERN PERCEPTION OF THE WORLD

There are fundamental differences in the perception between the modern science and the medieval worldview. Modern scientific

theory is based on the Cartesian rationalism that assumes that ‘reality’ is what is observed in the physical world. It aims towards a true explanation of things indefinitely, while the medieval philosophy assumes that the theories describing these observations are just approximate models of reality, also taking the psychic and spiritual levels of existence into account. In other words, it recognizes “the world of thoughts as well as the world of things” (Bucklow 2009: 78-79; Perennis 2007: 7-12).

For the period discussed here most theories of matter that flourished in the seats of learning was based on the Aristotelian concept of hylo-morphism. This suggests that pure form and pure matter does not exist separately. Everything in the medieval universe exists through their interaction (Bucklow 2009: 78-79). The Christian sees nature as an ‘image of divine things’. Creation is thereby a guide to its creator. Gods essence, power and presence are reflected, however dimly, in the earthly world. Enlightenment can therefore be found in the “reading of things” (McGrath 2002: 50). Physical images are shadows, echoes, prototypes or copies rather than that is offered to the human uncultivated mind so that “through sensible things, which they [humans] do see, they may be lifted to the intelligible things, which they do see not, moving, as it were, from signs to that which they signify.” The “divine realities” will “shine forth” in the viewer when these images are mirrored in the human mind (St Bonaventure (1221-1274), *Itinerarium*, ch. 2: 11, 13).

The harmonious medieval world is hierarchically arranged, with associative power and their imbued meanings tied into the way the physical materials were placed within the proto-scientific and philosophical-theological thinking at the time. The hierarchy has cosmic proportions in the created matter: “... that [light] of higher bodies is more spiritual and simple, while that of lower bodies is more corporeal and multiplied.” (Grosseteste *De luce*, c. 1225, as cited in Bower

et al. 2014: 5). This has implications for how the material world is perceived in the culture.

The pre-Newtonian perception of form and colour, together with the hieratic view of the material world impacted the artist’s choice of ingredients that went into the paints. When creating church art it was the uncorrupted, pure and perfected materials perceived high in the hierarchy that was seen as the most appropriate and sought after.

BLUE – A COLOUR OF COSMIC PROPORTIONS

The blue natural half precious gemstone lapis lazuli was perceived as such an uncorrupted and pure material. This pigment has been identified as the generously applied saturated mat brilliant blue in the backgrounds of the wall paintings in the churches of Fornåsa and Skönberga in the Östergötland region, Sweden, dated to the latter part of the twelfth and to the first part of the thirteenth century (Henningsson 2005).¹⁰ Scientific analyses have established that lapis lazuli, or further refined as ultramarine, had a prominent place in the twelfth and early thirteenth century when it is often applied together with gold leaf ornaments or tin with a yellow glaze that appears golden.¹¹ From then on there seem to be a steady drop in the use, and by the mid thirteenth century it is displaced by azurite. Plahter has linked this change to disruption of the trade routes due to Mongol raids in Central Asia (Plahter 2010: 69-70).

The blue pigment Lapis Lazuli and when refined as ultramarine, had its own attraction and implications. The semi-precious gemstone belonged high in the material hierarchy. The blue hue is located close to black in Aristotle’s colour scale, where black is the privation of light. The divine mystery of the darkness that is described as lingering before the creation is reflected in the deep blue colour (Genesis 1:



Fig. 6: Details of the Skönberga painting. Photo: fokus GmbH Leipzig. See the full view of the Skönberga painting in Külli Erikson, fig. 2, and the Fornåsa painting in Johan Eriksson, fig. 4.

3). This darkness is the potent uncreated light described by Pseudo-Dionysius (late 5th to early 6th century) in his *On the Divine Names* as overly bright “... illuminating with its fullness every Mind above the world ...”. This blue was associated with heaven and the celestial throne, being compared to sapphire and described in terms of the luminous night sky.

The pigment was exclusive and expensive; imported all the way from the mines of Afghanistan; the only available source at the time. The laborious mining was complicated and so was also the process of refining the lapis stone to ultramarine, which recipe worked according to alchemical principles (Spufford 2010: 12; Bucklow 2009: 47-66 and 2014: 59). Bucklow has pointed out that in the medieval world, Afghanistan and its lapis mines were located on the edge of the Indian subcontinent, located at the very top of the world and close to the

doorsteps to Paradise. Furthermore, that this is demonstrated in a medieval T-O map, such as the *mappae mundi* from Hereford. Its location gave it heavenly and “otherworldly” qualities (Bucklow 2009: 46, 138 and 2014: 57).

Lapis lazuli was sold through the pharmacies and used for medicinal purposes. The polished stone could be used to treat eye conditions and powdered to cure snakebites, fever and headaches. It was even suggested that it had the ability to work on the mind, as the stone could induce tranquillity and dispelled melancholy. For this to work physical interaction was not necessary: the mere gazing upon it could create visions (Bucklow 2014: 57). Contemplating on the blue backgrounds in the wall paintings in Fornåsa and Skönberga, or the blue loincloth of a crucifix, could for the believer contribute to heal physical and mental health in addition to lead the mind towards the divine mysteries.

CONCLUDING REMARKS

Unadulterated bright colours and lustrous precious metals communicated the divine light to the medieval onlooker. But the human senses are limited and therefore the role of the tangible object is subordinate and earth bound. Certain divine truths wholly surpass the human intellect. Knowledge of the divine can therefore not be found in the tangible object itself, but such items can lead the viewer towards the revelation of such truths. The choice of materials and their application were carefully crafted to guide the associations of the worshipper in the search for the Divine revelations. In this process the viewers own competence would direct their perception. A lack of familiarity in the modern spectator has caused serious misconceptions in the past. The aim of this research is to regain the knowledge lost in the meeting with these medieval works of art. A better understanding of their materiality, role and context is important in order to

best preserve the delicate surfaces to facilitate a meaningful reading of them for the modern audience.

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NOTES

- 1 The painting techniques are identical in panel painting and three-dimensional sculpture. Both will therefore be referred to here. These objects are early examples of mature northern European oil painting, demonstrating sophisticated use of the oil as binder, with high quality results. See Kollandsrud 2002 for a statistical overview of sculpture in Norway.
- 2 For the material preserved in Norway the work of Unn Plahter on the medieval technologies and painting techniques is seminal. For the Swedish material it is Peter Tångberg.
- 3 "Det har vært som en lov her hjemme til for nylig, at treskjærerarbeide burde være farveløst."
- 4 Richter refers to the early discourse from the 1880's on the polychromy in Greek sculpture; with literature references. According to Geijer (1947, n.10), a Swedish account on the matter was made already in 1893 by Henrik Schück in a small publication on "Färgad skulptur".
- 5 "La restauration, avant de devenir un problème technique, est d'abord un problème culturel, et que le premier n'est que la conséquence du second."
- 6 The central role of light, its nature, propagation and mediation through the polychrome is discussed more fully in the author's forthcoming article (Kollandsrud in print).
- 7 In the Munsell model the hues are organized in a circle divided by one hundred evenly spaced points, but selects from them five principal and five intermediate hues. Munsell Color Company, *The Munsell Book of Color*, Baltimore 1929: 12–13.
- 8 Fleming and Ithoff (2005) discusses the complex role of highlights, colour, object size, contrast, blur, and lighting direction in the perception of translucency; Wills et al. (2009) describe how part of their computer manipulation of data involves to correlate and interpolate nine gloss dimensions to fitted parameters of seven analytical bidirectional reflectance distribution functions and a perceptual parameterization of Ward's model.
- 9 The original oak head is from a Virgin from Lomen, Valdres, Oppland. There are no traces of the original polychrome. The recreation is therefore fictive, but based on a paint scheme typical of the thirteenth century. The white head is the plaster cast that the other reconstructions are made from.
- 10 Lapis lazuli was identified through microscopy of cross-sections in Fornåsa, and according to Henningsson (2015) the presence of what is most probably lapis lazuli was also identified in Skönberga through visual examination of the surfaces in situ with microscope (190x) and UV fluorescence. The blue is applied onto a Veneda layer in both paintings.
- 11 Lazuli/ ultramarine is the main colour of the loincloths of crucifixes in the "painted style" that predates the second quarter of the twelfth century. Norwegian examples are Grindaker (c. 1100–50), Urnes (c. 1150–75) and Rennebu (c. 1175–1200). Swedish examples dating from the late twelfth and early thirteenth century is Anga, Buttle, Hall, Linde and Stenkumla. In the golden Hemse crucifix (c. 1175) the middle of the cross was this rich lapis bound in oil speckled with circles in gold (Tångeberg, 1989).

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