

Choices and decision-making in conservation: The implications of conserving religious icons

Davina Kuh Jakobi
University College London

Abstract

The goal of conservation is to preserve cultural heritage for future generations. However, there are a wide variety of perspectives regarding the conservation of material cultural heritage. Differences of opinion stem from the materials and deterioration present, or the function and history of the object. From the degree of interventive treatment to the choice of materials that will be used during treatment, conservators often differ in opinion regarding the treatment of cultural heritage. But what do these different methods imply for the object? Is there actually a 'right' way? Using religious icons as the lens for this discussion, various conservation approaches will be explored. This paper will allow a glimpse of the variety of issues which must be considered during the conservation process, and will demonstrate that above all, that there are no easy answers and no shortage of conflicting opinions in the field of conservation.

Keywords: Conservation, Preservation, Restoration, Religious icons, Cultural heritage

The Unity/Disunity Conference has given an opportunity for students, academics, and professionals across a wide variety of fields to reflect upon not only the unifying goals of their respective fields, but also the numerous attitudes that result in different solutions to similar issues. Conservation is one such field

that employs different approaches to achieve its goal. Although conservation professionals are dedicated to the preservation of cultural heritage, there are a wide variety of perspectives and approaches, which vary from individual to individual, from the choice of material to the level of interventive treatment.

Often, differences of opinion about how the object should be conserved result from the materials which have been used in its construction, the deterioration which it faces, its current function and context, and the desires of the owner. Using religious icons painted on wooden panels as the primary lens for discussion, this paper will provide a critical understanding of the various aspects of conservation. Specifically, this paper will demonstrate its points using a *Twelve Feasts* icon that was brought in to the University College London Institute of Archaeology conservation lab during the 2012-2013 academic year.

To better understand the conservation process, a framework of other issues will be constructed and explored briefly, including an introduction to terms and context, the materials commonly used in the making of a wood-panel icon, common material deteriorations faced by religious icons, and approaches that are commonly considered during the conservation process. Although the goal of conserving the object is paramount, this paper will demonstrate that there are no easy answers and no shortage of conflicting opinions in the field of conservation.

Understanding Terms and Context

Conservation is a comprehensive term that, simply stated, encompasses all actions that will result in the preservation of cultural heritage for future generations (Clavir, 2002). This is usually accomplished by conservators, or conservation professionals, and may be achieved through both preventative and interventive measures, with the goal of ensuring that the object is both chemically and physically stable. Restoration is a term more associated with interventive measures as they relate to the aesthetics of an object.

Conservation is not just about preserving the integrity of the physical object, but the intangible qualities as well. The intangible qualities of religious icons are especially complex. Icons are religious images used as tools of worship, most commonly in the Orthodox Church (Harrison, 2007). The images depicted are derived from apostolic writings and filled with religious and symbolic meaning. Unlike paintings, religious icons are not imaginative creations of the iconographer, but have been made in accordance with models and formulas (Espinola, 1992). This applies to the materials used as well as the iconography. Therefore, conservators must be able to understand the significance and symbolism of the iconography, as well as the context of the object as a whole prior to conservation.

Materials and Manufacture

Just as icons can be found in different settings, there are many types of icons, crafted from a number of different substrates, including architectural structures,

wood, canvas, and metal. This paper will focus on those icons which have been painted on a wooden panel. Although this may seem straightforward, these icons are usually constructed of a variety of materials, each of which must be understood in relation to the others. It is important to know the materials from which an object is made to best understand their susceptibility to the causes of decay as well as their historical context (Gilroy and Godfrey, 1998).

Once a panel of wood has been selected, a gesso ground made of rabbit-skin glue, chalk, and water, is brushed onto the surface thinly. Often, more than ten layers of gesso are applied. At times, a thin linen canvas layer may be added to the wood prior to the application of the gesso.

Traditionally, the paints used (on Russian icons in particular) are egg tempera, which is made by mixing ground pigments in an egg yolk and water mixture. These are applied in multiple layers. It may be important to understand the particular technique of paint application or sequence of layering if restoration of the painted surface is necessary.

Gilding (most often water gilding) is usually performed on icons (either on the background, or to highlight divine details, such as halos), as they represent the light of God. This is done atop of an area of burnished bole, which is a mixture of finely-ground reddish-brown clay and rabbit-skin glue. Finally, a protective coating is applied to the surface of the finished icon to protect it from the wear of devotional practices. Traditionally, this varnish would have been made of vegetable oils such as linseed oil (*Linum usitatissimum*).

Other materials such as metal coverings, metal nails, and hanging implements may also be found on icons. These metal coverings are usually made of gold, silver, copper, or alloys of these. The metal coverings may also be decorated with materials such as pearls, precious and semi-precious stones, or glass.

Material Deterioration

Because icons are made from a diverse range of materials, individual icons are susceptible to deterioration mechanisms, both inherent and caused by external factors. The compound materials can provide added complications to the object as a whole, with the deterioration of one material causing the deterioration of others. Before conservation or restoration can occur on an object, it is important to consider not just how each material deteriorates, but the effect that this deterioration may, in turn, have on other materials.

Despite the seasoning process, wood never loses all of its moisture; as an organic material, it responds readily to changes in ambient temperature and humidity, absorbing and desorbing moisture as environmental conditions fluctuate (Plenderleith, 1962; The Getty Conservation Institute, 2011). Repeated cycles of swelling and shrinking, caused by the absorption and desorption of moisture, respectively, is a process which may occur over an extended period of time (The Getty Conservation Institute, 2011; Landrey, 2000; Mecklenburg *et al.*, 1994).

This may ultimately cause the panels to warp, twist, or split, causing movements that will inevitably have an effect on the gesso, painted layer, varnish, and gilding. Damage to the painted surface can include tenting and flaking, which often leads to flaking and loss. In the *Twelve Feasts* icon, a warp that caused the panel to bow forward with a displacement of up to 3.4 cm has placed stress on the painted surface, which has resulted in the formation of vertical cracks and flaking in the painted layer.

Changes in the optical qualities of the plant-based varnish layer include reduction in transparency, changes in gloss, and discolouration (most commonly yellowing or darkening). In the *Twelve Feasts* icon the varnish has darkened significantly, obscuring details and the original colours. Changes in the varnish layer greatly affect the aesthetics of the icon, and can obscure painted detail as well as alter the viewer's perception of the palette used. In instances of increased temperature it may swell and become tacky, therefore also becoming hygroscopic and attracting dust and dirt to its surface.

The most deleterious type of deterioration in metals is corrosion, which is the unwanted chemical change of a metal, often caused by its environment (Rivers and Umney, 2003). High relative humidity and/or pollutants, the main environmental factors that can cause corrosion, are therefore of great concern to any metal components present on the icon. The corrosion products may also affect other materials present on the icon, such as the paint layer, and cause other problems such as staining.

Causes of Deterioration

As previously mentioned, material damages may result from environmental contaminants, insect damage, or direct physical damage. These causes of deterioration may exacerbate each other. Environmental conditions and human factors are of special concern to icons, as they can create both chemical and physical damage.

Environmental conditions such as high relative humidity and temperature can often lead to mould growth or pest damage. The nature of damage depends on the type of infestation, which varies in different parts of the world (Plenderleith, 1962). Wood in particular is susceptible to biological deterioration, such as those caused by insect attacks and mould growth. These forms of deterioration may have serious consequences on the stability of the icon. For example, if an infestation is not dealt with at an early stage, the wood may be found to be riddled with insect channels and filled with a light-coloured powder and frass resembling fine sawdust, and the icon may eventually fall to pieces for lack of structural integrity (Plenderleith, 1962).

Traditionally, an oil lamp would have hung in front of the icons, burning at all times, which is symbolic of the attentive daily care faithful Christians should take over their souls. Smoke from these oil lamps as well as from candles would expose the icon to smoke, heat, and even sputtering wax, which may have

a deleterious effect on the icon, especially its varnish layer.

It is common practice for those who are part of the Orthodox Church to kiss and touch icons as part of their devotions. However, moisture, oils, acids, and the repeated physical nature of these actions may affect the metal covering, the varnish layer, the gilding, and/or the painted layers. Additionally, it is common for the icons to be removed from the church and otherwise handled during religious processions, the physical actions of which may increase the risk of an accident as well as damage over time.

There are also darker, human-related causes of physical damage to icons. Iconoclasm, or the deliberate destruction of religious icons is a widespread practice that has occurred throughout history during times of political and religious turmoil. The period during and after the Russian Revolution is one such example of wide-spread iconoclasm. In addition to this, smuggling of icons has been a large problem since the chaos that followed the Russian Revolution, despite the fact that the exportation of historical religious icons is strictly controlled in Russia.

Understanding Conservation Approaches and Goals

Although originally created for devotional purposes, icons can be found in a variety of places; religious icons are not only found in churches, but also in the homes of the devoted, and of private collectors, as well as within commercial galleries, museums, and other institutions. Icons may be in need of conservation due to the aforementioned deterioration caused by its materials, the environment, and/or human factors. Often, there are compound deterioration mechanisms at work, which lead to different types of damage within one icon. The value placed on it may be similarly complex, and it may have multiple values relating to its functionality and use-life, where it originated, how old and unique an example it is, who had previously owned it, or personal and sentimental attachment.

Therefore, while the conservator must be able to consider the overarching goal of conservation, that is, the preservation of the icon for future generations, nuanced goals may require different approaches. Three different and often-considered conservation approaches may typify and define the goals of the treatment. These are commonly understood as the materials-based conservation approach, the values-based conservation approach, and the peoples-based conservation approach. However, the applied approach of the treatment utilised is not so straightforward. Often, two or even all three conservation approaches may be applied throughout the course of a single conservation treatment.

A materials-based conservation approach results from the fact that the object needs conservation because its materials are damaged. This damage is often on-going, or will cause the potential for more problems in the future.

Values-based conservation goals often focus on the intangible importance of the icon. In this approach, a cultural, religious, or personal value must be reclaimed, retained, maintained, or enhanced. Because the functionality

of icons is dependent upon recognition of the imagery, paint loss which renders the image unrecognizable would be unacceptable for veneration. Another example would be that of an icon without eyes, which would not be able to 'see' and therefore could not be used for devotional purposes until its eyes were restored and the icon blessed again (Espinola, 1992).

Peoples-based conservation indicates that the conservation goals may only focus on the relationship to, or involvement in, the conservation process by stakeholders. This is often the case with larger-scale projects, such as the conservation of multiple religious icons or an entire religious site. This method of approach often utilises local workers or involves the local community. The benefit of this approach lies within the sense of ownership and responsibility that direct involvement encourages.

In the case of icons which are continuously used for devotional purposes, a values-based approach may be chosen, and those who restore the icon may be clergy or artists who have been trained to write and bless icons because they understand the iconography and theology of the icon (Espinola, 1992). These restorations are usually undertaken with the goal of physical stabilisation and aesthetic restoration, where the icon is cleaned, repainted, and revarnished as necessary.

However, in an institutional setting, the icon is typically no longer actively being used in devotional practices. In these situations, the historical, regional, religious, and educational significance of the icon may therefore be valued as an intrinsic part of the icon. As such, the goal may be to preserve the wear from its use-life with minimal intervention, and traditional or restorative approaches may be undertaken with a greater degree of caution, if they are undertaken at all. In these cases, a materials approach might be most commonly considered, especially if the deterioration is actively causing or has the potential to actively cause damage or further loss. In our example, the *Twelve Feasts* icon had initially been considered for conservation by the owner because the paint layer was actively flaking. Because it has not been and would not be used in traditional worship practices by the owner, a materials-based approach was applied, which aimed for stabilisation and minimal restoration to reintegrate its aesthetic features.

Conservation of an icon

There are almost as many methods and philosophies regarding conservation as there are conservators (Landrey, 2000). Treatments performed by conservators differ in each case, according to the state of preservation of the work. Therefore it is very important for conservators to understand an object's materials and methods of deterioration before any interventive conservation takes place (Serck-Dewaide, 1994). In addition, the significance and current context of the icon must be considered, as must the collection from which it originates and the desires of the owner.

Prior to the conservation of an icon, the construction, previous treatments, condition, the owner's desires for the icon, and the environment to which the icon will be returned must also be investigated and taken into account. Additional tests, such as solubility tests or tests to determine the exact nature of the materials present may also be helpful. Considering all of this will help inform the goals of the treatment. Only then can a methodology be selected to aid the process of interventive conservation.

The choice of materials used during conservation is another area in which decisions must be made. For example, the choice between using natural or synthetic materials is one such issue that must be resolved before treatment can proceed. The long-term aging processes of natural materials are much better understood than those of synthetic materials, and future deterioration processes will likely be similar to those experienced by the original materials. However, synthetic materials will be easily distinguished from original materials in chemical composition. Exposure to ultraviolet (UV) light, for example, could reveal differences between original materials and those used during conservation. This might be especially helpful if records become disassociated over time.

In the case of the *Twelve Feasts* icon, I chose to use natural materials as a consolidant, since aging would correspond with the rest of the icon and due to the fact that I am familiar and comfortable with these materials. Using the application of heat to relax and resettle the paint layer, I used a low concentration of Isinglass (which is made from dried fish swim bladder) in water to consolidate and re-adhere any flakes. After filling the losses to surface level, I used acrylic paints to inpaint the loss. I chose acrylic paints as they matched the glossiness of the surface (as we ultimately decided not to remove the varnish layer) and could later be readily identified using UV light. Now that conservation treatment is complete, the icon is in physically stable condition and the painted surface is integrated to minimise visual distractions (see figure 1). However, other conservators may have used different materials or methods for the conservation of this icon.

Conclusions: A Unified Approach?

Above all, this paper illustrates that there are no easy answers and no single methodology in the conservation of religious icons. Icons may present different conditions and materials, conservators may prefer different approaches and materials, institutions may have different missions, and owners may desire different outcomes. Therefore, as with many other forms of cultural heritage, differing approaches will inevitably be taken during a conservation campaign.

While the variety of approaches testifies to disunity in the field of conservation, what unifies all these approaches is that the overall goal of conservation must be remembered when prolonging the life of a cultural heritage. Conservators must carefully assess and inspect the materials of the object, its deterioration and current condition, its history and significance, and the desires of their client or institution. The conservator must be able to consider these, identify the intended

goals of their treatment, justify their actions when creating a treatment proposal, and devise a sensitive yet practical conservation approach before interventive conservation treatment can proceed.

DAVINA
KUH
JAKOBI

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Biography

Davina Kuh Jakobi is currently working towards her MSc in Conservation for Archaeology and Museums at University College London's Institute of Archaeology. She holds an MA in Principles of Conservation from UCL and a BA in Art Conservation and Art History from University of Delaware. She has a wide variety of research interests, which includes the implications of the conservation of material cultural heritage, especially within the realms of sports heritage, religious iconography, and street art.

List of Figures (caption under image)

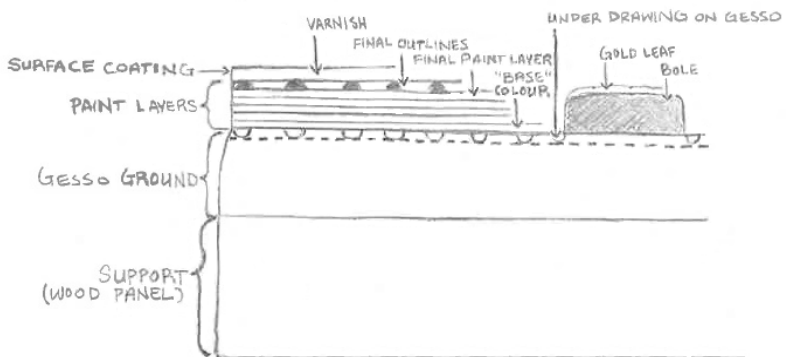


Figure 1: This schematic representation provides a common example of the stratigraphy which may be found within a Russian icon with a wooden substrate. Illustration by Davina Kuh Jakobi, after Plenderleith (1962).



Figure 2: In the *Twelve Feasts* icon, the wooden panel substrate has bowed towards the painted surface. This shows the warping from the bottom of the icon, with its painted surface facing up. Image courtesy of Bee Keyzer, owner.



Figure 3: Due to the warping of the wooden panel substrate (as seen in Figure 2), vertical cracks have formed through the paint layer on the *Twelve Feasts* icon. On the bottom half of the icon (nearest to the area depicted in Figure 2), this has caused the painted layer to actively flake away from the gesso layer. Image courtesy of Bee Keyzer, owner.

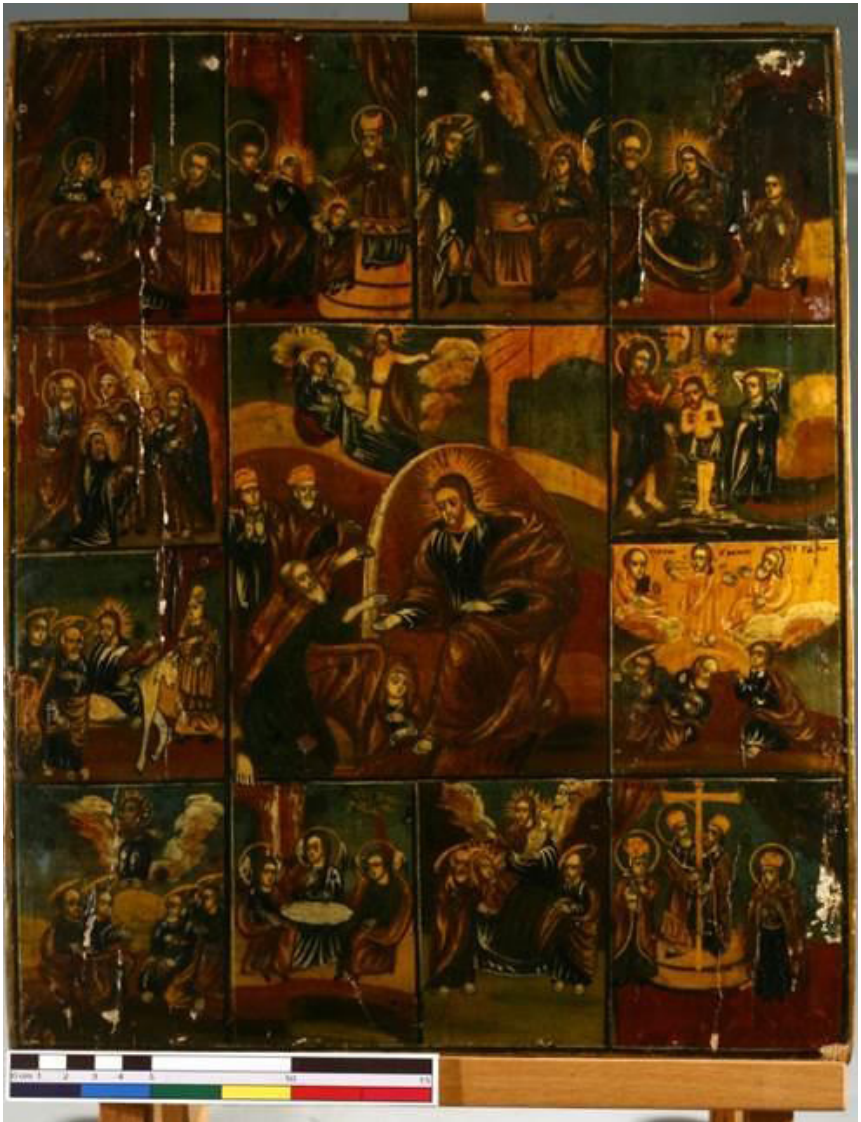


Figure 4: This is the *Twelve Feasts* icon before conservation treatment. As can be seen by the colour scale underneath the object, the varnish on the *Twelve Feasts* icon has darkened significantly, obscuring details and the original colours. Also note the loss of paint throughout the surface, which reveals the white gesso layer underneath. Some of this is caused by flaking of the paint layer (as seen in Figure 3). Image courtesy of Bee Keyzer, owner.



Figure 5: This is the *Twelve Feasts* icon once conservation treatment was completed. As a result of consolidation during treatment, the *Twelve Feasts* icon is now physically stable. In addition, visual distractions have been minimised through filling and inpainting. As a result, the surface of the icon appears aesthetically integrated. Image courtesy of Bee Keyzer, owner