

# Re-evaluating the roles of the cleaning process in the conservation of paintings

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**Abstract:** At a time when defining the conservation of cultural heritage is undergoing important changes, it is necessary to rethink the roles of the cleaning process applied to paintings. Throughout the nineteenth and the twentieth century, the cleaning of paintings was the subject of continuous controversy which developed both in the academic field and in the pages of newspapers. In general, attempts have been made to define, one way or another, exactly what the role of cleaning should be. Four of these roles have been (and still are): cleaning as a conservation procedure, as revelation (of the original work or of the artist's intent), as aesthetic presentation, and as a way of improving legibility. This article reviews these roles, their limitations and also raises a number of questions and issues in order to re-evaluate cleaning, taking into account contributions by the new theories of conservation.

**Key words:** cleaning, aesthetics, legibility, painting, methodology, theory of conservation.

## Re-evaluando los roles del proceso de limpieza en la conservación de pinturas

**Resumen:** En un momento en el que se están produciendo importantes cambios en la forma de definir la conservación del patrimonio cultural, es necesario reconsiderar los roles de la limpieza de pinturas. Durante los siglos XIX y XX, la limpieza de pinturas fue motivo de continuas controversias, tanto en el campo académico como en las páginas de los diarios. Se han realizado algunos intentos de definir, de una forma u otra, cuál debe ser la función de la limpieza. Cuatro de esos roles han sido (y todavía son): la limpieza como conservación, como revelación (de la obra original o de la intención del artista), como presentación estética y como forma de mejorar la legibilidad. Este artículo revisa estos roles, sus limitaciones y también presenta una serie de cuestiones con el objetivo de reconsiderar la limpieza, teniendo en cuenta las aportaciones de las nuevas teorías de la restauración.

**Palabras clave:** limpieza, estética, legibilidad, pintura, metodología, teoría de la restauración.

## Reavaliando as funções do processo de limpeza na conservação de pinturas

**Resumo:** Num momento em que estão a acontecer importantes alterações na forma de definir a conservação do património cultural, é necessário reconsiderar as funções da limpeza de pinturas. Durante os séculos XIX e XX, a limpeza de pinturas foi motivo de controvérsias contínuas, tanto no campo académico como nas páginas dos jornais. Fizeram-se algumas tentativas para definir, de uma forma ou de outra, qual deve ser a função da limpeza. Quatro dessas funções foram (e ainda são): a limpeza como conservação, como revelação (da obra original ou da intenção do artista), como apresentação estética e como forma de melhorar a legibilidade. Este artigo revê estas funções, as suas limitações e também apresenta uma série de questões, com o objectivo de reconsiderar a limpeza, tendo em conta os contributos das novas teorias do restauro.

**Palavras-chave:** limpeza, estética, legibilidade, pintura, metodologia, teoria do restauro.

## Introduction

Within the field of cleaning paintings some very important changes have been observed since the 1980s, with Wolbers' introduction of new cleaning systems and a new view on how to approach cleaning. The door opened by Wolbers (2000) has led to an increase in interest concerning the design of new cleaning systems and the effects of chemical agents on the pictorial structure. However, little or nothing has been done to define what cleaning is (or should be), what its aims are (or should be). Texts dealing with this issue during the last twenty years are, indeed, few.

During the twentieth-century, theoretical approaches towards cleaning have split into two main groups formed during the *Cleaning Controversy*: one point of view which we could call objective (which in practice is expressed through complete cleaning) and another point of view which we could call *critical* (in practice shown in partial and selective cleaning). For several decades, since the exhibition *Cleaned Pictures* in 1947 in the National Gallery, London, conservators belonged to either one group or the other, in a kind of endless confrontation. These debates ended up by provoking a lack of interest in the meditation on the cleaning of paintings (conceptual and philosophical issues), for fear of falling into old disputes, old utopias, and old arguments. However, cleaning continues to provoke important controversy. A recent example can be found at the Louvre, with the cleaning of *The Virgin and Child with Saint Anne* by Leonardo da Vinci (Sciolino 2012).

Much controversy is related to the technical and chemical aspects of cleaning. For example, if the mechanical cleaning can have negative consequences, if the solvents used are too aggressive, if they cause leaching or if certain chemical agents can leave harmful residues on the pictorial structure (solvent gels, chelating agents, surfactants, high boiling point solvents, etc.). However, without a doubt, the most heated debates arise concerning decision-making; whether certain non-original layers should or should not be removed, for example, varnish layers (if the varnish is original, making decisions can be even more difficult), overpaints or aged inpaintings. In other words, what exactly is the purpose of removing non-original layers? What is the role of cleaning?

This paper is divided into two main parts. The first one deals with the traditional roles of cleaning. Although, to start with, cleaning can be defined quite simply (the removal of non-original layers), a variety of different roles can be aimed at, according to the results the conservator wishes to attain. The study of specialized literature shows that the opinions and theories concerned with cleaning fall into four main groups, four different points of view on what the role of cleaning should be: cleaning as conservation, as revelation of the artist's intent, as aesthetic presentation, and as a way of bettering legibility. These

main points of view concerning the purpose of cleaning will be discussed. Obviously, this revision is partial, as the arguments have many nuances and there is much interplay between the different roles, which would require a longer, fuller text. The revision's purpose is just to provide a foundation in order to explain how cleaning could be re-evaluated. In the second part, "Beyond cleaning", some ideas are put forward in order to offer a starting point for further discussion. The aim is not to provide definitive answers but to highlight and suggest some lines of work which indeed seem promising with regard to making headway in the construction of a much more comprehensive cleaning methodology.

## The traditional roles of cleaning

### *Cleaning as a conservation procedure*

The least problematic way of understanding cleaning is as an act of conservation. Cleaning can be essential for an object's stability and to prevent later, more serious damage. In this sense, cleaning would be considered an act of remedial conservation (ICOM-CC 2008).

In the case of paintings, cleaning as remedial conservation nowadays is usually understood to be the systematic removal of dirt deposited on the objects we wish to preserve. We understand dirt to be made up of a wide variety of materials which have been deposited accidentally onto an object, which implies the need for a continual removal to avoid an excessive accumulation (which would mean, among other things, more difficulty in cleaning). Lloyd, Brimblecombe, and Lithgow (2007) have shown in a most enlightening way the problem of deposition of dust on objects preserved in historic houses and the huge economic cost of cleaning.

Some authors have tried to apply this concept of cleaning as remedial conservation in general, to all processes of cleaning paintings. A good example would be Bradley Jr.'s opinion. In pointing out the four purposes of cleaning, he emphasizes first and foremost the prevention of damage in the original paint layers due to the contraction of varnish: "The most important purpose of cleaning is to prevent such damage, not to improve the appearance of the picture" (Bradley Jr. 1950: 2.01).

The aim of cleaning can also be to allow other conservation procedures to be carried out, as noted by Ruhemann ([1968] 1982: 189): "In some cases [...] most of the varnish has first to be gently removed to make a proper penetration by a fixing adhesive possible [...]. In many cases, before lining operations are begun, old retouchings and putty fillings have to be eliminated". Removing some of the layers (varnish, overpaints, fillers) may be the only way of gaining access to the original pictorial structure and subsequently being able to carry out the necessary procedures for the painting's conservation.

So, cleaning may be carried out to prevent damage or to enable other conservation procedures to be put into practice. However, the most usual reasons, and also the most controversial ones, are cleaning as revelation, as aesthetic presentation and as improvement of legibility.

#### *Cleaning as revelation*

Cleaning can be understood as revelation, “to reveal its original form at some point in its past” (Caple 2000: 33). Baudrillard has indicated that “there are two distinctive features of the mythology of the antique object that need to be pointed out: the nostalgia for origins and the obsession with authenticity” ([1968] 2005: 80). Regarding authenticity, this is manifest in a series of obsessions: the work’s origin, the date of its creation, the name, and traces of the author.

From this point of view, cleaning is a way of revealing, of recovering the authentic work of art, the original state. But it can also be understood as a way to recover the artist’s intent, an extremely complex issue which has been studied by many scholars (Carrier 1994; Dykstra 1996; Phillips 1997; Livingston 2003; Hill Stoner 2009; Scott 2015). Without going into the numerous ways of understanding the problem of the artist’s intent, it can be expressed as a search for a cleaning criterion which could be considered objective. In its most dogmatic form it has appeared as *complete cleaning*, that is, as the recovery of the original paint layer completely stripped of later deposits. Several authors have expressed this kind of approach, such as, for example, MacLaren and Werner (1950) or Ruhemann ([1968] 1982). These authors have defended that in showing the creator’s traces (brush strokes, texture, etc.) the work is seen as it really is, authentic.

Hedley has brilliantly pointed out that, in fact, the three schools of cleaning (complete, partial, and selective cleaning) “defends its practice in terms of closeness to the artist’s intent. [...] Everyone wishes to have God, or at least an Old Master, on his or her side” (1990: 11). Defenders of partial and selective cleaning affirm that while it is no longer possible to recover the artist’s intent in a pictorial structure which may have suffered severe chromatic modifications, a recovery of the lost harmony is possible by means of a “glaze effect” (Del Serra 1993: 59) through the layer of varnish. In some way, the restorer is able to compensate, during cleaning, the alterations of the paint layer and restore some of the original harmony of colours to the work of art, by means of partial or selective cleaning (Philippot 1966; Del Serra 1993). The old varnish, although it may not be original, could, according to this theory, harmonize the colours, balancing chromatic alterations, and allowing a partial recovery of the artist’s intent. However, it must be remembered that it may not always be possible to carry out a partial or selective cleaning correctly. The coatings of shellac are a good example of this kind of situation, where, usually, it is only possible

to carry out a complete cleaning (Bergeon, 1990).

Criticism roused by the idea of restoration as the recovery of authenticity or of the artist’s intent will not be developed here. There are several notable works (Hedley 1985, 1990; Dykstra 1996; Muñoz Viñas 2005, 2009) which have clearly shown that these concepts cannot be considered objective grounds in conservation. The artist’s intent cannot be considered a criterion by itself; it is, rather, a partial guide (Carrier 1994). It can be a more determinant criterion if the painter is alive or if he has left clear instructions as to how his works should be preserved. However, even with knowledge of those intentions, compliance with that will as sole criterion is not always possible: “Knowing the artist’s wishes and intention, however, does not automatically mean that the restorer’s interventions should be in line with them. Consequently, one is inclined to conclude that restoration has a certain autonomy independent, to some extent, from the artist’s intentions” (Van de Wetering [1989] 1996: 196). It is not always possible to recover, by means of cleaning, the appearance of the painting, as intended by its author.

#### *Cleaning as aesthetic presentation*

The cleaning of paintings has been (and still is) closely related to aesthetics. There are several ways of approaching cleaning from this relationship, but only two, which can be considered representative, will be dealt with here.

The first is that the cleaning of paintings, like all aspects of restoration, should be based on what makes a work of art be a work of art. Perhaps Brandi is the best representative of this point of view. One of the central ideas in his theories is that “the practice of restoration itself must rigorously be derived from the maxim which makes it inseparable from aesthetics” (Brandi 1950: 11). Although he subsequently goes on to give this forceful assertion more subtle nuances, the centre of his thought can be found in the artistic nature of painting. It is impossible to do justice here to the richness of Brandi’s theories and to the diverse range of shadings which enrich possible interpretations of his texts each time they are read. However, such theoretical wealth does not actually allow a methodology with which to approach cleaning, in all its complexity, to be articulated. Although the painting may have, in particular, an aesthetic dimension, it can also possess other values (religious, ethnographic, documentary, etc.) which have no place in Brandi’s theories. He is only concerned with historical and aesthetic values, although the singularity, the essence of the painting, is always aesthetic. The historical dimension is seen (in relation to cleaning) only vaguely, directly linked to a very ambiguous definition of *patina*, which symbolizes the passage of time and, at the same time, materializes it. Furthermore, this concept also introduces a degree of confusion regarding other concepts. In some cases, Brandi refers to patina, although with a certain lack of precision, as the natural ageing of the materials. In other cases, the

word patina is used to mean *pigmented varnishes or glazes* (Hedley 1985; Barros García 2005).

Moreover, the presence of historical traces on the work of art itself can pose a problem, as they do not actually form part of the work, understood as an artistic creation. The preservation of these traces must be subject to the requirements of the aesthetic nature of paintings: "Whenever the condition of a work of art is found to require the sacrifice of part of its material, the sacrifice, or any other treatment, must be performed from the viewpoint of what the aesthetic requires" (Brandi [1949] 2005: 48). In any case, Brandi aims at resolving the difficult balance between aesthetic and historical values, as in the case of patina, from a theoretical approach which would allow decisions to be made without basing them on taste or subjective opinion.

If the search for certain objectivity is obvious in Brandi's thought (obviously of a very different kind to that defended by authors such as Ruhemann), there is a second way of approaching the relationship between cleaning and aesthetics which, to a great extent, renounces this aim. This option recognizes the cardinal importance of subjectivity in the process of restoration, its relationship with obtaining a response, of pleasure or displeasure, or with what the viewer considers to be visually correct (aesthetically coherent). It is a point of view based on the viewer's emotional response, on a personal aesthetic judgment: "Subjective assessment of elements in a picture is of vital importance. [...] I feel that in the cleaning of pictures the sensual effects created by application of pigment should be given special attention" (Leigh 1975: n.p.).

Hedley (1985) carried out a magnificent work when he linked the three approaches to cleaning (complete, partial, and selective) to the different ways of viewing the artist's intent. But it also showed how different in importance certain elements of the aesthetic experience were for each approach. To put it simply, recovering chromatic intensity was of maximum importance in complete cleaning whereas the harmony of colours was the fundamental value for selective cleaning. In the case of partial cleaning, a great importance was given to chromatic balance and also to the permanence of a certain sense of the passage of time. Hedley considered that these approaches to cleaning "are parallel ways of constructing a new relationship to the artist's intent and the passage of time" (1990: 11). This construction had as its aim the establishment of a new pictorial unity from the principle of aesthetic coherence.

The great importance given to the aesthetic consequences of restoration, and the different options available, have placed cleaning under a relativist viewpoint, as something which is linked exclusively to changes in taste: "There are no absolutes any more in the aesthetics of restoring paintings, only relativities -no objective truths, only subjective ones. Provided ethical principles have

been observed, whether or not a particular restoration is acceptable is a matter for individual taste and judgment" (Bomford 1994: 39).

Moreover, cleaning also needs a structured methodology, which would lack clarity if the sole aim were, above all, subjective. The purpose of cleaning cannot be reduced to just bettering an aesthetic presentation although, obviously, all cleaning has important and unavoidable aesthetic consequences.

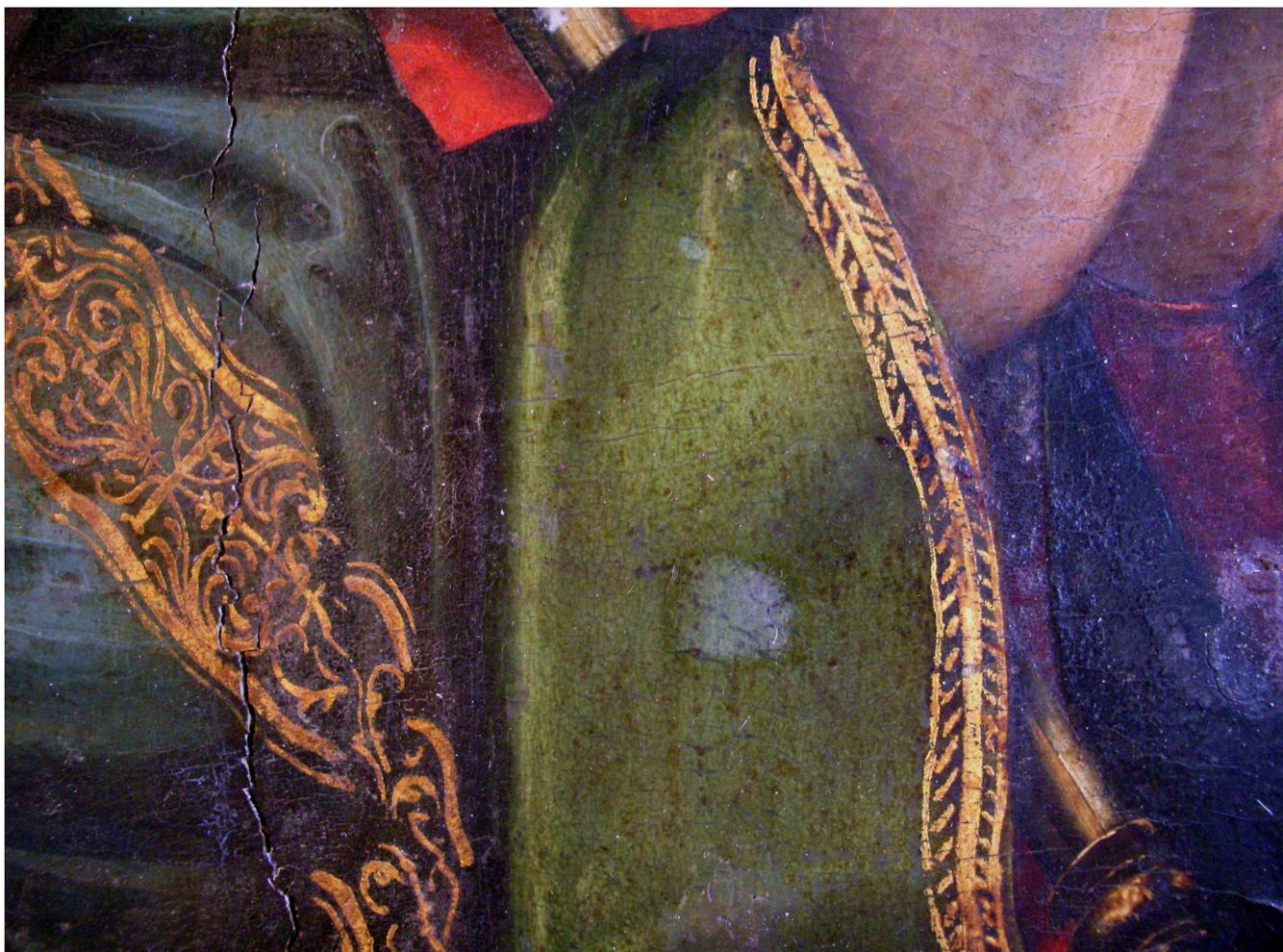
#### *Cleaning as improvement of legibility*

Another important concept in the discussion concerning conservation criteria (and especially cleaning criteria) is that of legibility: "the ability of an object to be correctly comprehended or 'read' by the observer" (Muñoz Viñas 2005: 99). The idea of legibility in restoration can be related to the aim of improving "perception, appreciation and understanding" of damaged cultural heritage (ECCO 2002). This is a concept which has been pointed out as an aim in cleaning (NorMal 1995), as a more subtle and elegant idea which partially substitutes the aesthetic approach, and the one relative to recovering the artist's intent. It is a concept related to the subjectivist aesthetic approach, insofar as both focus on the viewer. It is also a concept which can be linked to that of author's intent, as the work can be considered legible if the result is in keeping with the painter's intentions.

A very interesting discussion was started in the first few years of this century in the Italian magazine *Kermes* concerning legibility as a criterion for restoration. Especially noteworthy are some of the arguments put forward by Paolucci where he shows that, in fact, the restorer reveals exactly that which is sought in a given moment in history: "The 'legibility' is the way in which we, here and now, believe a given artist should be contemplated and enjoyed [...] the most skillful restorer would therefore be capable of producing those results most in tune with the public's expectations at a certain moment in time" (2002: 16). Paolucci and other authors (Muñoz Viñas 2005; Favre-Félix 2009) have shown that the pretensions of objectivity, and of a solid methodological foundation that this concept has, are not acceptable. In the end, restoring in search of greater legibility means having to choose from among different options, conditioned by the point of view held when the restoration is carried out (in much the same way as occurred with the aesthetic approach). In many cases, it can also simply be a way of justifying the results obtained, as often happens under the pretension of recovering the artist's intent.

#### **Beyond cleaning**

More often than not, the traditional roles of cleaning are based on recovering something which was lost but who-



**Figura 1.** Detail of the cleaning. St. Matthias and St. Philip. Attributed to Paolo da San Leocadio (c. 1445-c. 1514). Private collection (Madrid).

se retrieval is desirable: the original appearance of the work, the artist's intention, an adequate aesthetic presentation or a correct legibility. However, it is impossible to create a methodology of effective criteria for all cases of cleaning from those wishes, no matter how legitimate they may be. All attempts in this line have led to a blind alley.

Although nowadays, these traditional roles can be criticised (or even ignored), no alternatives have been put forward; no new theories to enable a clear definition of what cleaning objective(s) should be. Some issues which are key in this re-evaluation are set out below. This paper does seek to suggest some ideas which could serve as a starting point when thinking about whether it is, in fact, possible to go beyond that which, at present, is defined as "cleaning."

#### *Functions of non-original layers*

The original layers applied on a painting support can be classified according to function, that is, by means of stu-

dying what the objective was in applying that stratum. Thus the strata can be labelled, for example, as ground, priming or original pictorial layer, according to data such as composition and location within the stratigraphic structure. Non-original strata (deliberate deposits, that is, excluding dirt) have also been applied, and with a function, although their application took place *after* the original pictorial structure was created. The main aims of these strata can differ greatly although for the most part their purpose is to reinterpret the work, changing its formal elements; altering its stylistic or iconographic content; to mask the presence of missing areas of colour; to achieve the protection of surface and more saturated colours; to modify gloss or to consolidate a detached pictorial structure.

Two of the main reasons which prompt the decision to remove a non-original layer are either, because it is not considered to carry out a correct function (for example, an overpaint hiding the original image or a varnish which is too glossy) or, because it no longer fulfills its function (for example, a cracked filler or a varnish which has darkened). However, it is also possible to find non-original

strata whose former function would perhaps, now, not be considered correct, but which may serve a new purpose(s). Some modesty-motivated overpaints are accepted nowadays because they provide valuable historical data (Bergeon 1990).

In other cases, the non-original strata are preserved because a new work has been created which cannot, by any means, be restored to a similar-to-original state. This is the case with some paintings which have suffered important transformations, such as, for example, the central panel of *San Domenico Altarpiece* (San Domenico, Fiesole) by Fra Angelico (Baldini 1982), or *The Feast of the Gods*, painted by Giovanni Bellini in 1514 and later modified by Dosso Dossi and Titian (Plesters 1993). In these cases, it is impossible to speak of original and non-original strata, as all the pictorial strata together, create a new painting, different from the first, original, painting.

There are no studies whatsoever concerned with how to evaluate the possible functions non-original layers may have today. As Cremonesi (2010) so rightly pointed out, a possible starting point could be to think of the strata we find in a painting as part of what that work is today, regardless of whether they are original strata or not.

#### *Re-evaluation of damage*

Cleaning a painting starts in response to what stakeholders consider to be a damage: darkening due to deposits of dirt, yellowing of a varnish coating, etc. However, the yellowing of a layer of varnish may be seen as damage in one context but not in another. A religious painting covered in darkened varnish may be more valuable if it is not cleaned when the sacred image is meaningful for the faithful precisely due to its darkened appearance (Ruhemann 1982: 46). However, if the same varnish hinders its liturgical use, that transformation would be considered to be negative. As Ashley-Smith has pointed out "In general, the term "damage" should be used where there is a permanent and noticeable loss in value or potential" (1999: 101).

Several authors have studied the topic of values and have shown the decisive influence of these on how culturally significant objects are conserved (Muñoz Viñas 2005). Hoeniger (1999) has contributed some very interesting examples which show how different ways of assessing a painting can influence the decisions concerning the cleaning of that particular painting. According to Hoeniger the evaluation during the nineteenth century, and most of the twentieth century, of early Italian painting as "primitive" (lower status of the images regarding those produced during the High Renaissance), by part of the art-history and museum communities, has affected the way these works are cleaned. For example, the purist radical cleanings of the 1950s and 1960 removed all areas deemed to be later additions and repaints, although only

a few traces could be recovered of the original painting, which was practically destroyed. In these cases it was considered more important to recover the fragments of original painting than to maintain the unity and coherence of the image. To put it as clearly and simply as possible: "Cleaning decisions attempt to maximize what is most valued about an object" (Rhyne 2006: 169).

Obviously, a number of questions arise at this point. How can we accurately assess "damage"? Although there are a lot of cases which are clear enough, there are many others which can give rise to important doubts. How can the state of conservation of the non-original strata be evaluated? For example, what degree of yellowing makes it necessary to remove a varnish layer? Furthermore, How can we determine which values are being altered by non-original strata? In order to answer all these questions, it is perhaps necessary to take the previously mentioned idea as a starting point: the strata (original and non-original) found in a painting form part of what a given work is today. This implies that the function(s) of the non-original strata must be studied, considering whether the strata can be thought of as damage and how they can affect values which are deemed necessary to preserve.

#### *Documentation and dissemination*

At present, the process of documentation can be considered the cornerstone of the different tasks within the field of conservation and restoration of cultural heritage. However, there is a need for greater dissemination of the documentation pertinent to cleaning processes and stratigraphic data. The information published is usually insufficient to help develop research in the field of cleaning. Many museums only publish monographs which are not easy to obtain and, only too often, the information concerning cleaning is not sufficiently detailed. Cleaning is a process which is essentially concerned with subtle details: very thin strata which are hardly visible, numerous sensitive decisions made throughout the whole process, etc. All this information is fundamental for conservators-restorers when working on other paintings and it can also be very useful for many researchers. The information which is usually published is just not enough in order to understand how the intervention was carried out, so there is a need for standardized systems which allow a great deal of information to be gathered more accurately and disseminated with ease (Barros García and Guillén Juan 2012).

One way of obtaining a standardized system for recording cleaning is to adapt the tools used in stratigraphic archaeology. The main tool is the "stratigraphic unit (SU) recording sheet" which enables all the information regarding a SU (for example, an overpaint) to be gathered together: its description, composition, location, stratigraphic relationships, and in the case of its having been removed, the techniques which were used (Barros García

2009). The other tool used in recording is the stratigraphic diagram or “matrix”, a flow chart which allows complex three-dimensional stratigraphic structures to be translated into a two-dimensional format. The diagram describes the chronological relationships among the layers (original and non-original). When a layer is recognized, its number is registered (the layers are represented as numbered rectangles) and then it is situated on the diagram, according to its stratigraphic position. The relationships are drawn as lines and the position of the connected rectangles describe different types of relation between units. This capacity to gather in a single diagram all of the SU which could otherwise only be visualized through a great number of sections, along with the possibility of processing that information through software programs, make this kind of diagram an extremely useful resource (Barros García 2004; Barros García, Reina de la Torre and Pérez Marín 2014).

Complete and accurate documentation enables a better understanding of the whole decision-making process in such a complex operation. All the data gathered will facilitate knowledge concerning how the non-original layers were arranged prior to cleaning and exactly how the cleaning was carried out, how strata were valued, what hypotheses decisions were based on. The whole process will be recorded in a way which will allow a better and greater control over the decisions made, and the results obtained. In short, it means being able to expand the possibility of innovation, of advancing in a field of research in which there is still a great deal to do if we indeed aspire to attain something we can call, with propriety, “cleaning methodology” (Barros García 2014).

#### *Conservation project*

One very usual way of understanding cleaning is to think that it just consists in designing a cleaning system to remove a target stratum without damaging neither chemically nor physically the other strata underneath. Undoubtedly, this is a key issue. However, cleaning is not just a physico-chemical problem. Cleaning must be understood within the larger context of a conservation project (Cremonesi 2010), where a great many different issues must be taken into account. Two of these aspects are very important, although they are not always paid as much attention as they deserve. One is the relationship between cleaning and all the other procedures (treatment of support, filling, etc.). The other has to do with all those preventive conservation issues which could reduce the need for future cleaning: avoiding residues from conservation procedures, reducing darkening of varnish (UV filters, etc.), avoiding accumulation of dirt, etc., to name but a few.

In addition to these technical problems, other issues, which are directly related to the role of cleaning, must be taken into account. One of these is the audience’s point

of view, the point of view of a visitor to a museum, for example. Would it be convenient to carry out an approximation to the cleaning from the point of view of its impact on the audience? This is the subject of an interesting study by Nicosia (2010), which offers some results, although clearly, the topic needs further research.

In other fields, such as the management of archaeological sites and cultural heritage places, many projects of great interest are being developed, for example “Heritage Values, Stakeholders and Consensus Building” (Getty Conservation Institute). The main aim is “[...] to advance the ability of heritage professionals to constructively engage with stakeholders by bridging conservation and public dispute resolution practices through a program of research, application, and dissemination” (GCI 2010).

If the works are to be exhibited in a museum for visitors to enjoy and study, their points of view should be taken into account. The usual argument against this is that non-specialists do not have the necessary technical knowledge and are therefore unable to judge whether a painting should be cleaned or not, or how it should be cleaned. The idea that only technicians, conservators should be concerned with cleaning is, indeed, a mistake. While it is true that most visitors do not possess knowledge about conservation, it is the museum’s duty to enlighten its visitors, not just organize mega-exhibitions conceived as spectacular shows. A layperson may not be able to choose which solvent should be used in a cleaning process but he/she certainly may have an opinion concerning, for example, the state of a painting in comparison to others by the same author, style or period. If visitors are given comprehensive information before a conservation process is carried out, they will be able to participate in the decision-making process.

An example is the project *Change or damage?*, carried out in the collection at Kenwood House (north London), studying changes to veneer and marquetry furniture. One of the objectives is “to allow visitors to share their opinions on aesthetic damage to marquetry” (Luxford and Thickett 2013: 68). Allowing the participation of museum visitors in the research “help understand how damage is perceived by the public and different groups of heritage professionals” (Luxford and Thickett 2013: 74). These views will be taken into account in order to define damage and determine conservation treatments.

This would be, in short, *negotiatory* conservation (Muñoz Viñas 2005), a strategy which can really help a museum become part of cultural life and let works of art be perceived as belonging to the community.

#### **Conclusion**

This is a key moment in the conservation of cultural heritage. A huge amount of information is available con-

cerning the materials and techniques used by painters, the physico-chemical processes involved in the aging of paintings, and about materials and techniques for conservation purposes. However, the aims of conservation processes are not always clearly defined, and this is especially true in the case of cleaning.

It is not so much a case of asserting that traditional roles of cleaning are wrong, but more a case of considering them insufficient with regard to shaping the criteria to be followed. The study of non-original strata, their function in the construction of the current image and its physico-chemical relations with the original layers, are some aspects which must be studied in greater depth. In addition, there are two issues which are essential in order to advance beyond what is considered to be "cleaning" nowadays. The first of these is the use of more complete and accurate recording systems together with their dissemination so that conservators and researchers around the world can have much more information made available to them. The second is to bear in mind that cleaning does not only affect the material nature of the work, but also the values as perceived by the visitors: aesthetic, symbolic or historic values. This means that the audience should be considered as an active element which can also intervene in the decision-making process, which would mean a very important change.

Cleaning is an extremely complex process and may have different aims. It can be considered a conservation procedure as well as a restoration procedure, and even as part of the process of study of a work. During cleaning it is possible to obtain data of great value regarding the stratigraphic relationships among the different layers (varnish, overpaints, etc.) and about the history and conservation conditions of the polychrome work. All the aforementioned implies it is necessary to stop and think. And, in order to arrive at the correct answers, first and foremost, the right questions must be asked.

## References

- ASHLEY-SMITH, J. (1999). *Risk assessment for object conservation*. Oxford: Butterworth-Heinemann.
- BALDINI, U. (1982). *Teoría del Restauro e unità di metodologia*. Firenze: Nardini Editore.
- BARROS GARCÍA, J. M. (2004). "The use of the Harris Matrix to document the layers removed during the cleaning of painted surfaces", *Studies in Conservation*, 49(4): 245-258.
- BARROS GARCÍA, J. M. (2005). *Imágenes y sedimentos. La limpieza en la conservación del patrimonio pictórico*. Valencia: Institución Alfonso el Magnánimo.
- BARROS GARCÍA, J. M. (2009). "Recording stratigraphic relationships among non-original deposits on a 16th century painting", *Journal of Cultural Heritage*, 10(3): 338-346.
- BARROS GARCÍA, J. M. (2014). "Cleaning areas: the location of tests in the cleaning of paintings", *International Journal of Conservation Science*, 5(3): 283-294. <http://www.ijcs.uaic.ro/public/IJCS-14-26-Barros.pdf>. [accessed 10 March 2015].
- BARROS GARCÍA, J.M. and GUILLÉN JUAN, C.M. (2012). "Cleaning pictorial heritage: management and dissemination of cleaning records and stratigraphic data", *International Journal of Heritage in the Digital Era*, 1 (supplement 1): 159-164. <http://multi-science.metapress.com/content/c4g2121725850677/fulltext.pdf>. [accessed 20 January 2015].
- BARROS GARCÍA, J.M., REINA DE LA TORRE, A. and PÉREZ MARRÍN, E. (2014). "The combined use of cross-section analysis and other stratigraphic recording systems in the cleaning of two panel paintings from the fifteenth- and sixteenth-century", *Studies in Conservation* [published online]. <http://dx.doi.org/10.1179/2047058414Y.0000000128> [accessed 24 January 2015].
- BAUDRILLARD, J. (2005). *The system of objects*, trans. by J. Benedict, 1st ed. 1968. London: Verso.
- BERGEON, S. (1990). *Science et patience» ou la restauration des peintures*. Paris: Editions de la Réunion des musées nationaux.
- BOMFORD, D. (1994). "Changing taste in the restoration of paintings". In *Restoration: Is it acceptable?*, Oddy, A. (ed.). London: British Museum, 34-40.
- BRADLEY Jr., M.C. (1950). *The Treatment of Pictures*. Cambridge, Mass.: Art Technology.
- BRANDI, C. (2005). *Theory of restoration*, trans. by C. Rockwell, 1st ed. 1949. Firenze: Nardini Editore - Istituto Centrale per il Restauro.
- BRANDI, C. (1950). "Il fondamento teorico del restauro", *Bollettino dell'Istituto Centrale del Restauro*, 1: 5-12.
- CAPLE, C. (2000). *Conservation skills. Judgement, method and decision making*. New York: Routledge.
- CARRIER, D. (1994). "Restoration as interpretation: a philosopher's viewpoint". In *Altered states. Conservation, analysis and the interpretation of works of art*, Watson, W. M. (ed.). South Hadley, Mass.: Mount Holyoke College Art Museum, 19-27.
- CREMONESI, P. (2010). "L'amaro caso del Dimetilsolfossido.... Ovvero, dove sta andando l'opera d'arte, la sua conservazione, la ricerca scientifica che la riguarda?", *Ge-conservación*, 1: 9-36. <http://www.ge-iic.com/ojs/index.php/revista/article/view/5/8>. [accessed 20 January 2015].
- DEL SERRA, A. (1993). "La pulitura di riduzione nei dipinti antichi", *OPD Restauro*, 5: 58-61.

- DYKSTRA, S. W. (1996). "The artist's intention and the intentional fallacy in fine arts conservation", *Journal of the American Institute for Conservation*, 35(3): 197-218.
- ECCO (2002). *ECCO professional guidelines (I). The profession*. <http://www.ecco-eu.org/about-e.c.c.o./professional-guidelines.html>. [accessed 20 January 2015].
- FAVRE-FÉLIX, M. (2009). "Ambigüités, erreurs et conséquences: «Rendre l'œuvre lisible»", *CeROArt*, 3. <http://ceroart.revues.org/1140>. [accessed 18 January 2015].
- GCI (2010), "Heritage Values, Stakeholders and Consensus Building", The Getty Conservation Institute. [http://www.getty.edu/conservation/our\\_projects/field\\_projects/heritage/](http://www.getty.edu/conservation/our_projects/field_projects/heritage/). [accessed 10 March 2015].
- HEDLEY, G. (1985). On humanism, aesthetics and the cleaning of paintings. Unpublished lecture text. Ottawa: Canadian Conservation Institute.
- HEDLEY, G. (1990). "Long lost relations and new found relatives: issues in the cleaning of paintings". In *Appearance, opinion, change: evaluating the look of paintings*. London: United Kingdom Institute for Conservation and the Association of Art Historians, 8-13.
- HILL STONER, J. (2009). "Degrees of authenticity in the discourse between the original artist and the viewer". In *Art, conservation and authenticities. Material, concept, context*, Hermens, E. and Fiske, F. (eds.). London: Archetype Publications, 13-21.
- HOENIGER, C. (1999). "The restoration of the early Italian "primitives" during the 20th century: valuing art and its consequences", *Journal of the American Institute for Conservation*, 38(2): 144-161.
- ICOM-CC (2008). Terminology to characterize the conservation of tangible cultural heritage. <http://www.icom-cc.org/242/about-icom-cc/what-is-conservation/#.Uu1LwbSoTgE>. [accessed 18 January 2015].
- LEIGH, V. T. (1975). "Some thoughts on aesthetic aspects of picture cleaning". In *ICOM Committee for Conservation. 4th Triennial Meeting*. Venice: ICOM, n.p.
- LIVINGSTON, P. (2003). "Intention in art". In *The Oxford Handbook of Aesthetics*, Levison, J. (ed.). Oxford: Oxford University Press, 275-290.
- LLOYD, H., BRIMBLECOMBE, P. and LITHGOW, K. (2007). "Economics of dust", *Studies in conservation*, 52(2): 135-146.
- LUXFORD, N. and THICKETT, D. (2013), "Change or damage? Using dissemination to encourage public involvement in conservation research". In *The public face of conservation*, Williams, E. (ed.). London: Archetype Publications, 66-75.
- MACLAREN, N. and WERNER, A. (1950). "Some factual observations on varnishes and glazes", *The Burlington Magazine*, 92: 189-192.
- MUÑOZ VIÑAS, S. (2005). *Contemporary theory of conservation*. Oxford: Elsevier Butterworth-Heinemann.
- MUÑOZ VIÑAS, S. (2009). "Beyond authenticity". In *Art, conservation and authenticities. Material, concept, context*, Hermens, E. and Fiske, F. (eds.). London: Archetype Publications, 33-38.
- NICOSIA, G. (2010). "Le vernis des apparences", *CeROArt*, 5. <http://ceroart.revues.org/1483>. [accessed 18 January 2015].
- NORMAL (1995). "Il capitolato speciale tipo per il restauro dei dipinti su tavola", *Kermes*, 22: 58-65.
- PAOLUCCI, A. (2002). "La leggibilità dell'opera d'arte antica", *Kermes*, 46: 15-16.
- PHILIPPOT, P. (1966). "La notion de patine et le nettoyage des peintures" *Bulletin de l'Institut Royal du Patrimoine Artistique*, 9: 138-148.
- PLESTERS, J. (1993). "Examination of Giovanni Bellini's Feast of the Gods: a summary and interpretation of the results", *Studies in the History of Art*, 45: 374-391.
- PHILLIPS, D. (1997). *Exhibiting authenticity*. Manchester: Manchester University Press.
- RHYNE, C. S. (2006). "Clean art?", *Journal of the American Institute for Conservation*, 45(3): 165-170.
- RUHEMANN, H. (1982). *The Cleaning of Paintings*, 1st ed. 1968. New York: Hacker Art Books.
- SCIOLINO, E. (2012). "Leonardo painting's restoration bitterly divides art experts", *The New York Times*, January 3. <http://www.nytimes.com/2012/01/04/arts/design/clash-over-restoration-of-leonardos-virgin-and-child.html?pagewanted=all>. [accessed 18 January 2015].
- SCOTT, D.A. (2015). "Conservation and authenticity: Interactions and enquiries", *Studies in Conservation* [published online]. <http://dx.doi.org/10.1179/2047058414Y.0000000159> [accessed 19 February 2015].
- VAN DE WETERING, E. (1996). "The autonomy of restoration: ethical considerations in relation to artistic concepts". In *Historical and philosophical issues in the conservation of cultural heritage*, Stanley Price, N., Kirby Talley Jr., M. and Melucco Vaccaro, A. (eds.). Los Angeles: The Getty Conservation Institute, 193-199.
- WOLBERS, R. (2000). *Cleaning painted surfaces. Aqueous methods*. London: Archetype Publications.

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