



MARIA SOUSA ROQUETE

BSc in Conservation-Restoration

CULTURAL VALUES MANAGEMENT IN A PRIVATE CONSERVATION-RESTORATION STUDIO SPECIALIZED IN EASEL PAINTINGS

CURRICULAR INTERNSHIP REPORT

MASTER IN CONSERVATION-RESTORATION

NOVA University Lisbon

November 2021

CULTURAL VALUES MANAGEMENT IN A PRIVATE CONSERVATION-RESTORATION STUDIO SPECIALIZED IN EASEL PAINTINGS

CURRICULAR INTERNSHIP REPORT

MARIA SOUSA ROQUETE

Master/BSc in Conservation-Restoration

Adviser: José Mendes

Doctorate in Conservation Restoration and Professor, Curricular Internship

Co-adviser: Agnès Le Gac

Doctorate in Conservation Restoration and Full Professor, NOVA University Lisbon

Examination Committee:

Chair: Joana Lia Ferreira

Full Professor, FCT-NOVA

Rapporteurs:

Adviser: José Mendes

Doctorate in Conservation Restoration and Professor, Curricular Internship

Agnès Le Gac

Doctorate in Conservation Restoration and Full Professor, NOVA University Lisbon

Members:

Cultural values management in a private conservation-restoration studio specialized in easel paintings.

Copyright © Maria Sousa Roquete NOVA School of Science and Technology, NOVA University Lisbon.

The NOVA School of Science and Technology and the NOVA University Lisbon have the right, perpetual and without geographical boundaries, to file and publish this dissertation through printed copies reproduced on paper or on digital form, or by any other means known or that may be invented, and to disseminate through scientific repositories and admit its copying and distribution for non-commercial, educational or research purposes, as long as credit is given to the author and editor.

To my grandfather, Lourenço.

AGRADECIMENTOS

Agradeço:

Ao Professor Doutor José Mendes pela orientação, incentivo, transmissão de conhecimento e oportunidade de realização deste excelente estágio.

À Professora Doutora Agnès Le Gac pela orientação, apoio, disponibilidade e exigência durante a realização deste estágio e relatório.

Ao Departamento de Conservação e Restauro e à Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa pela oportunidade de realizar este trabalho.

Aos meus pais pelo apoio durante esta caminhada.

À minha irmã pela motivação e sorrisos.

Ao meu avô Lourenço pela constante demonstração de confiança e orgulho.

Ao Jorge pela ajuda incessante, pela presença e carinho.

À Raquel e ao Milton pelos risos diários, amizade e constante incentivo.

À Teresa Lança pela prezada ajuda e disponibilidade.

À Francisca da Gama e à Margarida Gomes pelo apoio.

À Alison pela inspiração.

Ao Albertino e à Elisa.

“Art is valuable, as it expresses the personality, activity and living perception of a great human soul.” (John Ruskin).

ABSTRACT

The goal of this report is to outline the work carried out, and the knowledge obtained during the curricular internship, in the private paintings' conservation-restoration studio, owned by Professor Doctor José Mendes in Lisbon, Portugal.

This studio has a limited number of resources, the main ones being space and budget. The conservation-restoration interventions are performed with surrounding pressures such as small timeframes and limited access to investigation tools and equipment. Besides, the management of cultural values attributed to multiple paintings, by multiple types of private owners, may be challenging.

Here, a categorization is made of the types of clients, which cultural values are most at play and how these are managed in conservation-restoration interventions. An analysis is then done on said interventions' methodologies, and their performance while facing the identified limitations and obstacles.

When working in such an environment, one adapts and uses other methods to restore a painting successfully and ethically. These methods involve heuristic mental models, a more personal communication approach between client and conservator and creativity in solving problems.

Keywords: Conservation-restoration of paintings, cultural values, easel paintings, heuristic mental model, intervention methodology, private studio.

RESUMO

O objetivo deste relatório é expor o trabalho realizado e os conhecimentos adquiridos durante o estágio curricular, no atelier privado de conservação-restauro de pinturas, propriedade do Professor Doutor José Mendes em Lisboa, Portugal.

Este atelier possui um número limitado de recursos, sendo os principais o espaço e verbas disponíveis. As intervenções de conservação e restauro são realizadas em circunstâncias nem sempre fáceis face a prazos de entrega reduzidos, limitações e acesso estrito a ferramentas e equipamentos de investigação. Além disso, a gestão de valores culturais atribuídos às pinturas por diversos tipos de proprietários privados pode ser um desafio.

Aqui, propõe-se uma categorização dos tipos de cliente. São também considerados quais os valores culturais presentes e como são geridos nas intervenções de conservação e restauro. Nessas intervenções, faz-se uma análise sobre as metodologias utilizadas e como estas são realizadas perante as limitações existentes.

Ao trabalhar neste tipo de ambiente, é necessário uma adaptação e utilização de outros métodos para intervir diretamente sobre uma pintura com sucesso e de forma ética. Esses métodos envolvem modelos mentais heurísticos, uma abordagem mais pessoal para a comunicação cliente e conservador e criatividade na resolução de problemas.

Palavas chave: Atelier privado, conservação e restauro de pintura, metodologia de intervenção, modelo mental heurístico, pinturas de cavalete, valores culturais.

CONTENTS

1	INTRODUCTION.....	1
2	A BRIEF HISTORY OF CULTURAL VALUES RECOGNITION	3
3	HEURISTIC DECISION-MAKING	6
4	WORKING IN A PRIVATE STUDIO OF CONSERVATION-RESTORATION.....	9
4.1	Work Pattern.....	10
4.2	Proposing a Treatment and Budget.....	11
4.3	Clientele	12
4.4	Private owners of art - communication and flexibility	13
5	ATTRIBUTION OF CULTURAL VALUES	15
6	COMPARISON WITH OTHER STUDIOS	19
7	INTERVENTION METHODOLOGIES.....	23
7.1	Unknown Portrait.....	23
7.1.1	Removal of old lining.....	25
7.1.2	Cleaning.....	27
7.1.3	Inpainting	30
7.2	Three Burnt Paintings	32
7.2.1	Removal of adhesive	34
7.2.2	Treating blisters	37
8	DISCUSSION.....	39
9	CONCLUSION	43
10	REFERENCES.....	44

APPENDIX A - CULTURAL VALUES	49
APPENDIX B - SURVEY RESULTS	56
APPENDIX C - PHOTOGRAPHS	64

LIST OF FIGURES

Figure 1 - Scheme representing the work pattern of this studio, alongside the phases where uncertain waiting times can occur.	10
Figure 2 - Quantification of each type of client present in Dr. Mende's private studio of conservation-restoration, private (left) and public (right) clients. Quantification based on the number of individuals between 2015 and 2020. The number of works each individual brings is not quantified here.	13
Figure 3 - Unknown Portrait. Oil on canvas. Unknown date. 66 cm x 54 cm. Front view of the painting.	23
Figure 4 - Unknown Portrait. UV light, 360 nm. The overpaints can be seen in the areas where there is no fluorescence. Old overpaints can be seen under the fluorescent varnish.	24
Figure 5 - Unknown Portrait. Starting point of the removal of the lining canvas on the painting.	26
Figure 6 - Unknown Portrait. After cleaning.	28
Figure 7 - Unknown Portrait. Before (left) and after (right) the cleaning intervention and chromatic inpainting. Detail of face, to point the removal of overpaints in the beard area of the figure.	30
Figure 8 - Unknown Portrait. Before (left) and after (right) conservation restoration intervention.	32
Figure 9 - Oil painting on canvas, nº1. 25,5 cm x 23 cm. Front of the painting. Before treatment.	33
Figure 10 - Oil painting on canvas, nº2. 25,5 cm x 23 cm. Front of the painting. Before treatment.	33
Figure 11 - Oil painting on wood, nº3. 23 cm x 30,5 cm. Front of the painting. Before treatment.	34
Figure 12 - Painting nº3. Detail. Removal of adhesive with white spirit.	34
Figure 13 - Painting nº3. During the removal of the adhesive.	36

Figure 14 - Painting nº 1. Blister treatment test results. Before test (left), and after test (right).	38
Figure 15 - Unknown Portrait. Oil on canvas. Unknown date. 66 cm x 54 cm. Front view of the painting.....	64
Figure 16 - Unknown Portrait. Oil on canvas. Unknown date. 66 cm x 54 cm. Back view of the painting.....	65
Figure 17 -Unknown Portrait. Inscription on the back of the stretcher. Reads '1913'.....	66
Figure 18 - Unknown Portrait. Inscription on the back of the stretcher. Reads '1913' (left) and 'Conde de Farrobo' (right).	66
Figure 19 - Unknown Portrait. Mapping of the front of the painting.	67
Figure 20 - Unknown Portrait. Front view of the painting. Raking light.	68
Figure 21 - Unknown Portrait. Detail of the reinforcement canvas bands. Adhered with BEVA® 371 film.	68
Figure 22 - Unknown Portrait. Front view. After conservation-restoration treatment.	69
Figure 23 - Oil painting on canvas, nº1. 25,5 cm x 23 cm. Front of the painting. Before treatment.	70
Figure 24 - Oil painting on canvas, nº2. 25,5 cm x 23 cm. Front of the painting. Before treatment.	70
Figure 25 - Oil painting on wood, nº3. 23 cm x 30,5 cm. Front of the painting. Before treatment.	70
Figure 26 - Painting nº3. Back view, while still adhered to the frame.	70
Figure 27 - Painting nº3. Detail of the back while still adhered to its frame.	70
Figure 28 - Painting nº2. Detail of the cleaning intervention. Right top corner.....	70
Figure 29 - Painting nº3. Detail of the cleaning intervention. Right bottom corner.....	70
Figure 30 - Painting nº1: after the cleaning intervention (top); after cleaning, lowering of the blisters, chromatic restoration and varnishing (bottom).	70
Figure 31 - Painting nº2: after the cleaning intervention (top); after cleaning, lowering of the blisters, chromatic restoration and varnishing (bottom).	70
Figure 32 - Painting nº3: after the cleaning intervention (top); after cleaning, lowering of the blisters, chromatic restoration and varnishing (bottom).	70

LIST OF TABLES

Table 1 - Cultural values most discussed and attributed in the privately owned studio of Dr. José Mendes in conservation-restoration of paintings	15
Table 2 - Most common cultural values attributed to paintings by different categories of clients (public and private), observed during the internship in the private conservation-restoration studio of Dr. José Mendes	16
Table 3 - Attempt at a subdivision of the sentimental value.....	18
Table 4 - Identification of the Unknown Portrait painting.....	23
Table 5 - Identification of painting nº1	33
Table 6 - Identification of painting nº2	33
Table 7 - Identification of painting nº3	34
Table 8 - Results for the solvent tests carried out on painting nº3 for the removal of the adhesive "hot glue"	36
Table 9 - Cultural values, with corresponding authors. For each, a broad description of their meaning is provided to aid the report.....	49
Table 10 - Results to surveys' question nº 1	56
Table 11 - Results to surveys' question nº 2	56
Table 12 - Results to surveys' question nº 3	57
Table 13 - Results to surveys' question nº 4	57
Table 14 - Results to surveys' question nº 5	57
Table 15 - Results to surveys' question nº 7	58
Table 16 - Results to surveys' question nº8	58
Table 17 - Results to surveys' question nº 9	59
Table 18 - Results to surveys' question nº 10	59
Table 19 - Results to surveys' question nº 11	60
Table 20 - Results to surveys' question nº 12	60
Table 21 - Results to surveys' question nº 13	61

Table 22 - Results to surveys' question n° 14	61
Table 23 - Results to surveys' question n° 15	61
Table 24 - Results to surveys' question n° 17	62

ABBREVIATIONS

ICOMOS	International Council of Monuments and Sites
UNESCO	United Nations, Scientific and Cultural Organization
UV	Ultraviolet
AD	Analytic Deliberative
nm	Nanometer
HMAs	Hot-Melt Adhesives

1 INTRODUCTION

Conservation-restoration is not an exact science. There is always a need for a subjective and cultural approach and it is constantly being subjected to pressures that influences it depending on political, institutional, cultural, social and economic contexts (Mangorrinha, 2003). This activity is possible due to knowledge in natural and human sciences, but also, socio-cultural and economic factors.

The complexities and intricacies of conservation-restoration interventions in a private studio is a theme not much explored. This can be explained for a few reasons: the conservator's need to protect their work ethic and expertise, and to protect the client's privacy; the insufficient funds and time frames to investigate, write and publish documentation (Scheper 2017). To better understand the conservation-restoration work performed in a privately owned studio, an internship was carried out in the private studio of conservation restoration of Professor José Mendes, PhD specialized in paintings.

The starting questions in this internship were: how the interventions are carried out under monetary and space limitations; in what way are the clients involved and what is the impact of their decisions in the interventions; and which decision-making mental model is most prevalent. At the same time, questions regarding how the attribution of cultural values by the clients impacts the intervention's objectives, needed to be answered. Questions such as: does the attribution of cultural values differ between categories of clients; do cultural values impact the intervention decisions; and which cultural values are the most discussed. Therefore, the main objectives were to understand how the conservation-restoration of privately owned art is performed under monetary and space restrictions, how this affects the artworks and how the cultural values affect the intervention processes.

To answer these questions, several interventions were carried out on diverse easel paintings where both theoretical and practical components of each intervention were approached. An understanding of how the private studio functions, regarding what categories of clients are present, how the dialogue between conservator-restorer and client takes place and how the clients operate regarding the attribution of cultural values. During the interventions, the decision-making mental model used was discussed and observed. With more limitations regarding funds comes a more restricting material list and lack of scientific analysis.

Moreover, regarding the need to have a heuristic approach when making decisions during an intervention, will be further discussed. Finally, a survey was sent to conservator-restorers who work or have worked in a private studio with questions regarding the aspects theorized on this report, to understand whether this work experience is shared or one sided.

Structurally this report covers a review on the history of definitions and theorization previously made on cultural values and on the heuristic decision-making mental model characteristics, to have a better understanding of these themes since these will be key issues in this analysis. A description of how this private studio owned by Professor José Mendes functions will follow: its work pattern, the proposal of treatment and budget, the clientele categorization and the management of communication between the conservator-restorer and the client. The analysis of the attribution of cultural values by the different types of clients is then assessed. A review of the survey results is finally presented.

Throughout the internship, many paintings were intervened. Nonetheless, many of those intervention processes were notably similar. For that reason, the case studies presented will be no more than two. The first one was chosen because it is a painting that underwent simple conservation-restoration processes, representative of those which were applied in many other paintings. These processes – cleaning, removal of an old lining, and further inpainting–, are commented upon considering the way these are performed within the aforementioned limitations. The second case study revolves around three paintings (two on a canvas support and one on a wooden support), that suffered extreme heat conditions. These have the worst damage observed, from all the paintings examined in this internship. The removal of a melted adhesive from severe blistered paint layers, was particularly challenging. These paintings have distinct types of owners, with different sets of cultural values and these parameters are also analyzed.

These interventions will be discussed further, regarding the methodologies used, the cultural values at stake and the use of the heuristic decision-making mental model approach. This approach will consider the pros and cons, to conclude if its use is appropriate in conservation-restoration interventions. A final consideration relates to the professional experience gained through this internship.

2 A BRIEF HISTORY OF CULTURAL VALUES RECOGNITION

To understand the cultural values mentioned in this report, one must understand their importance and history. Concerning with theory about what we value in a work of art and its impact in conservation arose in the 19th century (Rosas, 2005). These were expressed by architects, conservators, and engineers, mainly regarding built heritage, however the basis of each argument can be applied to all types of heritage. Some of the first main authors were Viollet-le-Duc (1814-1879), John Ruskin (1819-1900), and Camillo Boito (1836-1914). Viollet-le-Duc, in his noteworthy *Dictionnaire Raisonné de l'Architecture Française* published in 1868, states that restoration is a discipline that merges science of historical analysis with architecture. In other words, for the author, heritage serves an enormous educational and scientific purpose (Viollet-le-Duc, 1868). This author, however, defended the total re-establishment of a building if there was a need to do so. This meant sometimes the reconstruction of the unknown, aiming towards a stylistic restoration, creating a false historic. These somewhat radical views towards restoration disregard the historical dimension of heritage and its preservation, valuing only the reconstruction as a mean to achieve and give greater emphasis to a certain aesthetic look.

These ideas were contradicted by Ruskin, since the historic parameter is crucial for the author (Niglio, 2013). In his essay *The Seven Lamps of Architecture*, the author explains how the history, uniqueness, and every characteristic heritage contains in itself, will always be destroyed by restoration, without exception (Ruskin, 1989). Camillo Boito comes as the appeaser between both these radical views about restoration. With his work *Prima Carta del Restauro* (Boito, 1883), Boito launched a proposal to help resolve some of the conflicts in conservation, for example making the restoration visible to the observer. This restoration practice is to this day utilized and stated in the *Venice Charter* (Revez, 2016).

In the early 1900's, Alois Riegl (1858-1905) published his renowned work, *Der Moderne Denkmalkultus* ('The Modern Cult of Monuments'). This notable 1903 document is a set of reflections destined to serve as a basis to the practice of conservation of monuments and to motivate decision-making (Alves, 2014). Riegl (1903) categorized the cultural values attributed to heritage in two classes – remembrance and contemporaneity. A division is made between the many ways we presently value the past in heritage: intentional remembrance, non-intentional remembrance, age and historic values (see Appendix A). In the contemporaneity category, Riegl (1903) defends the existence of a newness value, however stating that the aspect of a freshly made product without traces of time passage, is rarely appreciated. The author was an

advocate for the identification of values by the "modern" human, in other words, the values we attribute to heritage, must come from a mindset of the present times and contemporary culture. The ideas of these authors formed a baseline for the continuing evolution of thought and consideration about cultural values, attributed to material heritage.

In 1964, *The Venice Charter* adopted by the International Council Monuments and Sites (ICOMOS) opened a pathway to understand the importance of the practice and theory of conservation-restoration (Schadler-Saub, 2019). This document was the foundation for all the following charters adopted by ICOMOS, for its clear formulations and ethical impact. The charter expressed that the aim of conservation practice was to preserve monuments as works of art and as evidence of the past history. To reach this objective, the conservator has to preserve both aesthetic and historical values of the monuments (La Torre, 2013). Much of its theory is based on Cesare Brandi's *Theory of Restoration* (Brandi, 1963; Schadler-Saub, 2019). Cesare Brandi, one of the most important names in conservation theory, does not abide by a vast set of values. The author defends that only the historic and aesthetic are crucial for the conservation process. *Theory of Restoration* is an extremely important work in conservation history but it is also deemed by some authors as somewhat incomplete and incapable of delineating and guiding conservation as it is currently understood (Revez, 2016; Muñoz-Viñas, 2015).

In 1979 the Australia ICOMOS issued *The Burra Charter*, with an updated set of values: aesthetic, historical, scientific, and social (Australia ICOMOS, 1979). The social value, being the newly introduced, gave power to the communities and cultural groups that attribute value to heritage, making them valid stakeholders in conservation projects. In the re-issue of *The Burra Charter* in 1999 (Australia ICOMOS, 1999), the spiritual value was introduced. This value would refer not only to the spiritual identity, traditions, art, and practices of a cultural group, but it can also be present in the intensity of impact upon experiencing emotional and aesthetic responses, that a certain site can inspire. This charter also includes technical tools to aid in an evaluation process of a values-based approach to intervention, acknowledging the importance of negotiation in conservation decision-making (Revez, 2016).

These charters, principles, and documents are devoted mostly to architectural and archaeological sites and not art objects or collections (Belishki, 2019). The ICOMOS *Principles for the preservation and conservation-restoration of wall paintings*, published in 2003 is an exception since it offers conservation-restoration principles for wall paintings (ICOMOS, 2003). Although the paintings are present in a building and are therefore integral, the values that such building possesses, may derive from the presence of the said painting, or vice versa. This enhances how the source of value can have very different and complex contexts (Belishki, 2019).

When moving away from charters, there are many authors that have published theories on the impact of cultural values in conservation-restoration since the 1980's. Some

examples include, Lipe in 1984, the first author to characterize and develop the economic value, present in works of art. He defended that the aesthetic and economic values cannot overshadow the symbolic and informational values (Lipe, 1984). In 2002, Mason provided an in-depth categorization of various cultural values, with a new subdivision of the economic value (Mason, 2002). A few years later in 2009, Russel & Winkworth with their work *Significance 2.0 – A Guide to Assessing the Significance of Collections*, offered a greater understanding of how the immaterial aspects of artworks impact conservation-restoration interventions (Russel & Winkworth, 2009). Barbara Appelbaum with her work, *Conservation Treatment Methodology*, offered information of greater value to the conservation-restoration profession, with decision-making strategies to successfully intervene on an artwork while still respecting and preserving its values (Appelbaum, 2010).

In general, the theorization over cultural values and their impact on conservation is quite restricted; however, other theories could be developed further in the future since values are highly subjective and are constantly evolving. For this reason, the manner in which the cultural values are managed in all conservation-restoration intervention reports is of greater importance as documentation for the future. The inherent subjectivity of this topic results in various definitions and arguments. Contradictive or similar, each author has a personal set of values and professional background that base their views and opinions on value-based conservation. With the study and acknowledgment of their theories, a broader mindset is being developed, which is vital when it comes to decision-making in conservation. Developing a one-sided set of values may also be valuable and help broaden the scope of the debate, as this will be further discussed, but guiding ourselves through a one-sided set of values or limiting ourselves to one side only will certainly lead us towards failure.

3 HEURISTIC DECISION-MAKING

Every conservation decision process is time-consuming since it needs to be organized, structured, based on past information, while being comprehensive and respectful of the paintings materiality and values attributed and associated to it. In a private studio, some of these needs are not met due to limitations, therefore, decision-making will support itself on other factors. Henderson and Waller (2016), discussed two types of mental processes involved in decision-making: the heuristic method and the analytic-deliberative (AD) method. With this analysis, their intent was to increase the awareness in the conservation field on how these specific types of thinking have impact on the decision-making.

The main difference between these two methods is intuition. The heuristic mental model regards the making of decisions based on past experiences and a consequent adaptation of behavior. This decision method comes as intuitive and fast, and because of it, it may seem inappropriate for conservation, as it appears rushed and lacking judgment in professional literature. Intuitive methods require fast judgment, while a method like the analytic-deliberative are more reflective since it requires the analysis of results. To a professional in conservation, the latter may seem the most adequate method, because of its slow, supposedly more objective, controlled, effortful decision-making and pondering. Nevertheless, there is a base of knowledge in both models. The heuristic method tends to a discussion free of “data-rich analytical processes”, and this allows for a more engaging debate with terms everyone understands clearly, where emotions and senses can be involved (Henderson & Waller, 2016).

The analytic-deliberative process may seem more adequate in the context of professional literature, because of its conscious reasoning and reliance on data. The 'analytic' means 'involving systematic structure and evaluation of evidence by decomposing a question into components' (Henderson & Waller, 2016, 314). The 'deliberative' denotes as allowing diverse opinions and social values of multiple stakeholders to be expressed. Combining these two processes, we have the analytic-deliberative (AD). This mental model is used when scientific resources are available since the utilization of such a decision-making model calls for deep analysis and technical measurements (Henderson & Waller, 2016).

When working in conservation of artworks in a private studio, most decisions are based on the heuristic mental method. Due to factors previously mentioned about restrictions – the time frames imposed by clients and the limitation in scientific equipment - this method implies a more intuitive approach, using practical knowledge and past experiences. This method allows for a fast risk detection with little information - since the lack of scientific analysis calls for a faster judgement with little cues. In the conservation-restoration profession and

especially in a private studio where the risk of damage on a painting can be high, this ability to detect risk fast is of major importance. Nonetheless, this quick judgment comes with negative aspects, the heuristic approach can be “effective and accurate” or “quick but inaccurate”, and the reasons for the differences in outcomes exists in the person’s “knowledge, experience, and expertise” (Henderson & Waller, 2016).

4 WORKING IN A PRIVATE STUDIO OF CONSERVATION-RESTORATION

The private studio of conservator-restorer Professor José Mendes, PhD is an established conservation-restoration studio in Lisbon, that mainly focus on easel paintings, and occasionally sculptures and porcelain objects. Dr. Mendes has been actively working in the profession of conservation-restoration since 1996, and this studio opened in 2005. The management of a private studio of conservation-restoration involves a more hands-on and personal approach. This includes the supervision, control, trust towards the collaborators, the ability to manage the physical space of the studio, and a more direct communication with the clients.

Space and funds are the two main factors that lead to obstacles and limitations in resources. Due to the requirements for various materials, storage, artificial light sources, electrical cables, easels, tables, chairs - the existing space is barely enough. This limitation is worked out with flexibility and organization, of the collaborators of the studio, to make this space functional and safe. There is a recurring effort to improve working conditions, however, there is a budget limit which restricts what can be done.

Most times these factors do not create a barrier but turn somewhat fast simple tasks in time-consuming ones. One simple task that can sometimes become a hassle is the photography of paintings. Due to the requirement for extra space, this sometimes causes a break in the work being carried out by others to offer that same space. Some tasks during interventions of conservation-restoration on a painting, would take less time if some tools were available (e.g., a heated suction table). The budget for the work carried out being limited, induces a lack of scientific resources and certain tools. These negative factors do not hinder the work from being ethical and professional, however, it can highly increase the risk of damage associated to an intervention.

Taking the lack of resources and the obstacles into consideration, this studio still works in an orderly manner. This happens because the staff is used to this environment and knows how to manage the most adequate ways to prevent risk in the most professional and ethical way possible, under the aforesaid circumstances. The reduced space does not prevent the necessary procedures from being carried out since solutions are implemented considering the

limitations. All tasks performed are taken to their maximum potential with the resources available.

4.1 Work Pattern

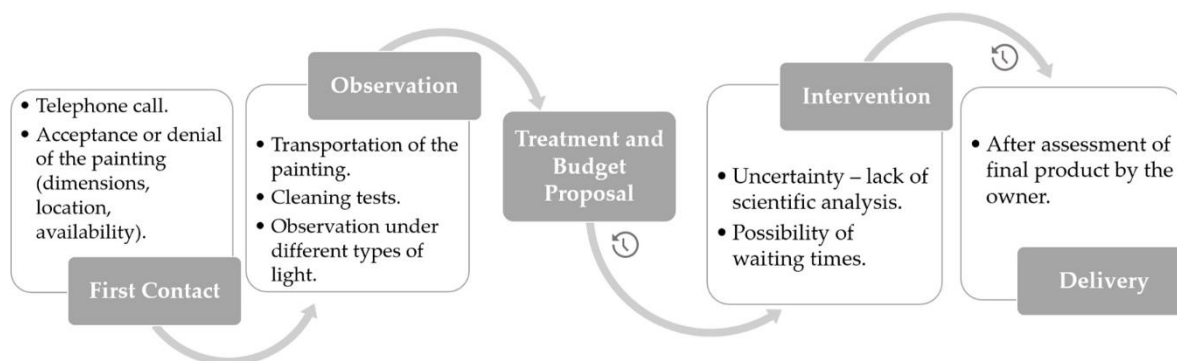


Figure 1 - Scheme representing the work pattern of this studio, alongside the phases where uncertain waiting times can occur.

To understand how interventions are performed in this studio, one should understand its rhythm and pattern of work. With this purpose in view, a scheme was elaborated based on most interventions made in this private studio (Figure 1).

Most interventions in this studio start with a first line of communication made through a phone call. Here, the decision is made whether this conservation-restoration work fits the other deadlines and present space in the studio. This decision is based on the physical dimensions of the painting, its location and space availability. If the painting is accepted for a conservation-restoration intervention there are two ways in which the next observation step can occur. Either through a visit to the location of the painting (this is done usually when the painting is of bigger dimensions), or the painting is brought to the studio. The latter is the most preferred due to better analysis conditions.

The analysis of a painting is done through reduced peripheral cleaning tests and observation under different types of light (visible, raking, transmitted, UV and infra-red). Then, a treatment and budget proposal is done and sent to the owner. In case an uncertain waiting period occurs, Dr. Mendes plays an active role in the search for an answer. It is given a two-week maximum waiting period to obtain a response. If the client accepts the proposal, the intervention starts. The intervention itself is the one with the most uncertain waiting periods and possible unexpected turn of events. Due to lack of prior scientific analysis, there may be some factors that cannot be foreseen (e.g., the existing of old restorations that did not appear under UV light or the presence of superimposed compositions on the same support).

After the intervention the client is contacted and informed about the completion of the work. The painting is only packed when the client visits the studio to assess the final product. Unhappy clients happen rarely, nonetheless, some distastes may arise when it comes to the observation of the painting by the owner. At times, small details derived from the natural aging of the painting gain more visibility after conservation-restoration treatment. Those small details can be non-significant to the conservator-restorer while being unpleasant for the owner. When this happens, solutions are talked through with the client to reach a consensus.

4.2 Proposing a Treatment and Budget

The production method of the treatment proposal is one aspect that differs greatly between conservator-restorers. In this studio a big effort is placed upon this document since it is the first portion of work the clients see and this will influence their decision to accept the conservation-restoration intervention. Therefore, professionalism and perfectionism are key. Despite clashing with small timeframes, the treatment proposal is always taken to its maximum potential. This is particularly reflected in the attempt to obtain photographs of the highest quality possible.

Some aspects of the treatment proposal may differ from an academic point of view. This is noted on the description of the proposed treatment. An explanation is provided on every practical step that will be performed. However, an omission always concerns the solvents to be used. This serves as a form of safety – for the clients, the paintings and the conservator – so that the treatment proposed is not used by the client on other paintings as a standard procedure, and to protect the conservator-restorer's work. Also, for these reasons and mainly lack of time, final documentation and reports about treatment results are not conducted for majority of the paintings intervened in this studio.

The proposed budget is also carefully managed. The budget prediction is based on the materials used, the time spent (predicted by past experience on similar paintings and types of damage present on a document shared between collaborators of this studio), the studio's maintenance expenses and insurance. This prediction tries to include all scenarios that may arise. That way there are no surprises regarding how much it will cost to the conservator-restorer or the client. This proposed budget is very exceptionally altered, only in extreme cases (e.g., a new painting is discovered behind the original).

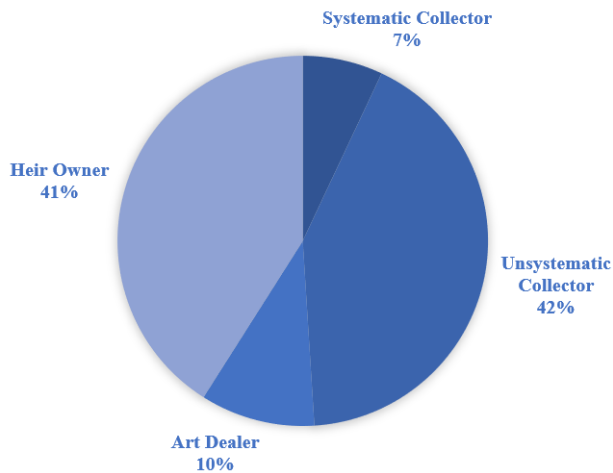
4.3 Clientele

The terminology described below serves as a suggestion. These categories were created during the internship with the help of Dr. Mendes and colleague Milton Raimundo. It serves to understand the range of clients that exist in this specific studio. By assessing the types of clients, it is easier to understand the objectives and the cultural values the clients defend in most interventions. This is made in a generalized sense since these can vary greatly between individuals.

- Collector: An individual who collects works of art for personal pleasure. The subdivision can be made between systematic and unsystematic collectors. However, it is possible for the collectors to fit into both of these categories throughout their lives.
 - The systematic collector continuously follows the same pattern of collecting (e.g., a specific style or artist).
 - The unsystematic collector occasionally collects various cherished objects, without following a pattern.
- Art Dealer: The individual who buys works of art with the main intent of its future sale.
- Heir Owner: Individuals who own works of art through family heritage. These paintings may have a family reference; belonged to a family collection; produced by family members; depict family emblems (e.g., coat of arms); portraits of people belonging to their lineage.
- Occasional Buyer: The individual who buys an artwork, with a nonspecific nor descriptive objective, in a certain time space.

By quantifying the percentage of each client type in this studio between 2015 and 2020, it is possible to perceive the cultural values that come across the most. Within this atelier, there are private (88%) and public (12%) clients. Here, almost half of the private clients correspond to collectors (49%) subdivided into unsystematic (42%) and systematic (7%). With a lower percentage: the heir owners (41%) and art dealers (10%). The latter, despite having the lowest number of individual clients, they are the ones to bring the largest number of paintings for conservation-restoration work per individual. In the studio under study, the occasional buyer is not accounted for since it is not possible to understand this client in much detail. After analysis of the few occasional buyers encountered in this studio, there was no pattern that could be defined since the possessing of an artwork is the outcome of a casual situation. Therefore, everything about this individual depended greatly and can only be a supposition.

Quantification of each type of private client in a private studio of conservation-restoration.



Quantification of each type of public client in a private studio of conservation-restoration.

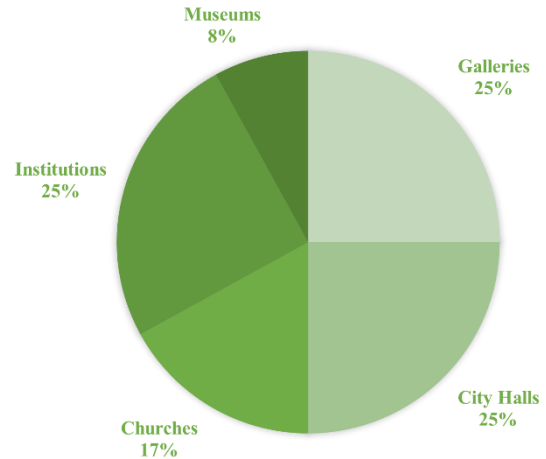


Figure 2 - Quantification of each type of client present in Dr. Mende's private studio of conservation-restoration, private (left) and public (right) clients. Quantification based on the number of individuals between 2015 and 2020. The number of works each individual brings is not quantified here.

As for public clients (12%), they are considerably less in quantity, however, it is customary for these to deliver a higher number of paintings for intervention at once. Within these, three types with the same percentage are considered: galleries, city halls, and institutions (25%). The public clients with the lowest percentage are museums (8%).

4.4 Private owners of art - communication and flexibility

Good communication is a critical step for successful conservation-restoration interventions, especially in a private studio. It is through personal connections with clients that a base of trust and professionalism is built. This is also important to achieve since opinions of the studio will pass on by word of mouth, and be extremely influential and decisive. A connection with a private owner needs to be nourished, to achieve a sense of trust and respect, that goes both ways. The client gains this towards the conservator-restorer when the interactions are professional and there is an openness and honesty in the line of communication prior to and during the intervention. The conservator-restorer also needs to trust and respect the client: regarding payments, availability to discuss intervention decision-making, competence when scheduling visits, and honesty.

The conservator-restorer must be able to manifest the knowledge and expertise he has in preserving culturally significant artifacts, so the client trusts this professional as a good source of opinions. Bearing this in mind, the client's views on the intervention, although most

times can lack professional experience, must be acknowledged and documented (Nakamoto & Henderson, 2016). The client's views are always accounted for in this studio.

Maintaining a client is a very crucial aspect when working independently. When the client has goals towards an intervention that are not in agreement with the conservator-restorer's ethics, a discussion must ensue to arrive at middle ground while respecting the painting's materiality, authenticity and cultural values and the owner's objectives. In this studio some issues like these happen from time to time and can be difficult and take time to solve. For example, a situation is currently being managed where a private owner has a large painting, that was cut down from a larger one depicting the *LAST SUPPER*. The client wants to make it seem like it is an individual painting and suggested to cut it in the areas where the image seemed to have a continuation. However, Dr. Mendes refuses to cut the painting. Someone will have to compromise in this dialogue, to reach a solution. The compromise will have to take the conservator-restorer's personal and professional ethics into account while respecting the paintings present and future conservation and the owner's objectives.

When consulting with private owners of art, a multitude of questions can be left unanswered. A professional custodian of art usually is able to provide information about the object, references to publications about it, and other sources related to it. However, Appelbaum in 2010 states that a private owner may not be able to supply such information, which is confirmed in this studio. When information is in fact offered by the owner, occasionally it is not accurate, due to a lack of knowledge about the painting's past. The private owner is commonly more knowledgeable about the future of the object especially if the treatment required is the preparation intended for sale. Due to such circumstances, accurate information about the painting can be difficult to find, and usually requires other sources and help from other professionals (Appelbaum, 2010).

Dedication to a client is key in this studio. There is a needed adjustability to respect every client's needs, time, and objectives. This is verified in the scheduling of visits to the studio, where there is a substantial flexibility of Dr. Mendes to fit the requirements of clients (e.g., scheduling discussions and visits out of normal working hours). These small adaptations, make clients trust the conservator-restorer not only as a person, but his professionalism. Factors like these are crucial to create a good and respectful line of communication in a private studio of conservation-restoration.

5 ATTRIBUTION OF CULTURAL VALUES

After having studied the various cultural values theorized in the past, during the course of this internship it was notable that the attribution of these varied between categories of clients. The prior study regarded the theorization and definitions of each cultural value thus far, by different authors and also charters. A list was made of every cultural value studied and that could be applied to interventions made in this studio, with each corresponding author that theorized on them (Appendix A.1.). However, the cultural values most discussed in the private studio of Dr. José Mendes were the ones presented below (see Table 1). The definitions chosen are the ones that can be applied to the context of conservation-restoration of paintings in a private setting (movable heritage) (Revez, 2016).

Table 1 - Cultural values most discussed and attributed in the privately owned studio of Dr. José Mendes in conservation-restoration of paintings

Sentimental	Appelbaum (2010)	Value which springs from individuals direct personal experience with artworks.
Aesthetic	Lipe (1984); Mason (2002); Russel & Winkworth (2008); Appelbaum (2010)	Value which is by itself a personal one. When an object is valued by what it looks like. Beauty in the broad sense of visual appeal.
Monetary	Frey (1997); Appelbaum (2010)	Value which depends not only on an object's intrinsic qualities but on many extrinsic factors as well. It shifts over time. Can be determinant in certain treatment choices.
Historic	Riegl (1903); Mason (2002); Russel & Winkworth (2008); Appelbaum (2010)	Value which is present when heritage objects are associated with a specific historic event; This value recognizes objects as bearers of information about history.
Age	Riegl (1903); Appelbaum (2010)	Value linked to the artwork's appearance, when it is old or looks old and when the viewer feels that it enhances the appeal of the object rather than detracting from it.
Newness	Riegl (1903); Appelbaum (2010)	Value connected to the artistic and aesthetic taste of the times; When an object looks new besides being old, to revive the 'original' image, like when it has just been made. The object does not have to be new for newness value to apply.
Associative	Lipe (1984); Appelbaum (2010)	Value which has connections to a person with a considerable amount of fame.

Economic	Lipe (1984); Mason (2002);	Value attributed to an artwork, when it has other values as a basis, for example aesthetic, utilitarian and associative. The public's interest in culture will enhance this value (e.g., tourism).
Social	Mason (2002); Russel & Winkworth (2008)	Value linked to a particular community or cultural group and the social or cultural meanings that the artwork holds for them.
Spiritual	Mason (2002); Russel & Winkworth (2008)	Intangible values and meanings embodied in or evoked by heritage objects. Can arise from beliefs and teachings related to a religion but may also be related to experiences of wonder or admiration.
Artistic	Mason (2002)	Value based on the artwork being unique, being the best, being a good example of the production of a particular artist.

The cultural values most discussed during the internship were the sentimental, aesthetic and monetary values. These were attributed by private clients since these were the most prevalent and recurring during the internship. The attribution of values by public clients was also possible to discuss, but in a smaller scale, since these are not the most numerous clients in this studio. The cultural values attribution was different between public and private clients (see Table 2). With public clients (e.g., churches and museums), depending on where the painting is from, the main value attributed to it varies. A painting belonging to a church has a high spiritual value, however its artistic and aesthetic values are still strongly attributed. It is through the worship of the paintings' image that the spiritual connection is obtained. A museum can attribute economic and social values to a painting. Most times when a museum requires conservation-restoration interventions on paintings, these will be exhibited in the future. Depending on the purpose of the exhibition, the paintings can have a social value when these have a theme that bring a community together (e.g., paintings depicting a location). An exhibition can also have an economic purpose (e.g., tourism).

Table 2 - Most common cultural values attributed to paintings by different categories of clients (public and private), observed during the internship in the private conservation-restoration studio of Dr. José Mendes

<i>Public Clients</i>		<i>Private Clients</i>		
Church	Museum	Heir Owner	Collector	Art Dealer
Spiritual	Social	Sentimental	Aesthetic	Monetary
Aesthetic	Economic	Associative	Artistic	Aesthetic
Historic	Historic	Historic	Historic	Historic
...	...	...	...	...

The relation between a painting and private owner oftentimes had a stronger sense of praise and adoration than the ones with public clients, observed during the dialogue between

conservator-restorer and clients. This was especially notable in heir owners and collectors - since they attribute stronger sentimental, historic, age and aesthetic values than public clients. With the heir owners, the preservation of the historic, age, aesthetic and other values are contributing for the enhancement of the main value: the sentimental. For the collector, the main value that is meant to be enhanced by the preservation of others can vary greatly, but in this internship the values most attributed by collectors was the aesthetic. The art dealer, may attribute various cultural values to a painting, but the preservation of these is only a means to increase its monetary value. The intention of most art dealers, is the fast and somewhat cheap betterment of the image, for profit. Therefore, there is minimal regard towards the painting's material and historical authenticity, and the painting as an historic document.

Taking Riegl's ideas into consideration, the age and newness values explained by this author are still very valuable to this conversation, even hundred years after his work (Riegl, 1903). The contemporaneity value is present when there is a preference for the absence of ageing traces. Contrary to this, some might attribute an age¹ value to these traces, seeing these as aesthetically pleasing and important to the object's history. With private owners of art, the preferred value weighs more towards the contemporaneity value, especially by collectors and art dealers. This preference is based on present cultural tastes and personal, professional, technical or aesthetic choices (Muñoz-Viñas, 2002). Private owners tend to prefer an image without many visible traces of ageing, however, no intervention made in this studio removes every ageing detail. This is due to both the inherent aging characteristics of the materials and the professional ethics of Dr. José Mendes.

With the heir owner, some of the values expressed during the dialogue with the conservator did not fit into definitions previously studied. For example, while a painting belonged to the owner's mother, it clearly has a strong sentimental value, but an associative value also. The associative value, however, is only stated to be present in objects that have direct connections with their owner, user or creator, and this person has to have some sort of recognition, for the value to be present (Lipe, 1984; Appelbaum, 2010).

When dealing with paintings of private owners this recognition or fame is very rare. The paintings are usually owned or produced by regular individuals but that does not exclude their importance. There is a need to look at the cultural values in a smaller scope. The sentimental value an individual attributes to an artwork can be the sole reason for the need of a conservation-restoration intervention. The sentimental value is based on these associations (e.g., the mother of the owner had this painting). The associative value is present even though it is not related to a famous individual.

¹ The age value is not present in the freshly made product. It is present in the object where it is easily perceptible that it was created in the past - those traces and characteristics transmit that age value (Riegl, 1903).

For these reasons, the main cultural values noted to be very broad and subjective were the sentimental and associative. The associative was always connected to the sentimental value. One that is very common and present in the majority of the interventions carried out on paintings belonging to private owners, namely heir owners and collectors (the majority of clients in this private studio). There is a special more personal and intricate connection with the artworks that needs to be respected. Taking this peculiarity into consideration, an attempt was made to create a subdivision of the sentimental value (see Table 3).

Table 3 - Attempt at a subdivision of the sentimental value

Sentimental		
By Association	By Depiction	By Remembrance
The previous ownership, use or manufacturing of an artwork by someone close to the owner (e.g., a painting that a family member owned or made).	A clear depiction of someone or something through an artwork, that causes a sentimental feeling (e.g. a portrait of a family member).	An artwork that serves as a reminder of someone or something. This connection between object and remembrance, does not need a direct association or depiction (e.g., a type of painting a family member would enjoy).

This division serves as a suggestion. Categorizing and identifying values with this subdivision seemed clearer and less empty when speaking of sentimental values. During the internship a lot of paintings with sentimental by association and depiction values were encountered. Classifying them in the same category, both having simply sentimental values, seemed incomplete since the origin of that value could differ greatly from the person attributing it.

6 COMPARISON WITH OTHER STUDIOS

Throughout this internship, a need surged to understand if the attribution of cultural values, communication with clients and overall experience in conservation-restoration in a private studio was specific to Dr. José Mende's studio, or shared with others. For that reason, a survey was sent to other conservation-restoration professionals that currently work in a private studio or have worked in one in the past. This survey (Appendix B for the results) was sent to twenty-five professionals working in Lisbon. It was available for three months and the totality of answers were fourteen. A sum of the questionees worked in both private and institutional settings, and this was important to understand personal opinions regarding the differences between these.

The survey was divided into six categories: (i) information about the questionees profession and private studio of conservation-restoration they work(ed) on; (ii) the limitations faced; (iii) typologies of clients; (iv) cultural values; (v) decision-making; (vi) personal opinions between the public and private sectors (Appendix B for the results).

i. Information about the profession and the experience on a private studio

The majority of answers were given by professionals of painting, sculpture, furniture and wood conservation-restoration (42,9%). The publicization of the private studios in question were all mostly done through word of mouth and third parties (100%). Here the importance of maintaining a good public image is notable, since this was selected by every single person as the most important way the studio is divulged. Only after that came social media (78,6%), website (64,3%) and advertisements (7,1%).

ii. Limitations and obstacles

Concerning limitations, the majority stated that the studio is almost complete. The scientific tools or equipment chosen by the conservator-restorers, that would facilitate the work performed, were mainly practical tools (e.g., heated suction table, lathe) and scientific equipment (e.g., X-Ray Fluorescence Spectrometer, Raman Spectrometer, Fourier-Transform Infrared Spectrometer).

When asked about how uncertain conservation-restoration interventions become without access to scientific equipment, half stated that it makes the interventions somewhat uncertain. However, there were visible differences in the answers. One person stated that it does not make it uncertain, while another claimed extreme uncertainty. Complete opposite opinions between two questionees. These opposites could be due to a previous reliance on scientific analysis, making the interventions seem extremely uncertain in comparison.

While the contrary opinion is unexpected, since no intervention is completely certain, even when scientific equipment is available.

The general opinion is shared within this studio. The lack of scientific analysis affects the intervention (especially the analysis of the paint layers stratigraphy and their particular chemical nature), making it higher in risk and sometimes time-consuming, but does not hinder it from happening correctly.

iii. Typologies of clients

When asked about the categorization created for private clients presented in Chapter 2.3., majority claimed the categories applied to their experience. The missing category that was noted was 'auction houses'. The next question asked which type of client was most common in their establishment. Majority claimed the heir owner (71,4%) to be the most common. After that came the collectors (35,7%) and lastly art dealers and occasional buyers (21,4%). This is also shared with this studio (see Chapter 2.3.).

Almost every single questionee states that every client asks for conservation-restoration interventions, and very rarely will they ask for a preservation diagnostic only, or just conservation or restoration separately.

iv. Cultural Values

The question was made about which are the cultural values most common attributed to the artworks by the owners. The option was given to select every cultural value that applied. Majority stated that the sentimental and age values are generally the most attributed (64,3%), closely followed by the aesthetic value (57,1%); associative and use values (42,9%); artistic, rarity, associative, information, commemorative, educational, symbolic values (21,4%); historic, monetary, spiritual, religious, social, scientific values (14,3%); newness, political, art values (7,1%).

These results shared similarities, and some divergences with the experience in this studio. The sentimental and aesthetic values are also in the most attributed group and most of the values mentioned are attributed with the same importance rate. However, the age value is not the most appraised usually, seeing that when private clients seek conservation-restoration interventions, preserving the aged look of the painting is not the main intention. The monetary, historic and spiritual values are in the lowest accounted for by the questionees, and this is the opposite of what is found in this studio. As stated in chapter 2.3., the art dealers, besides being less in number of individual clients, they bring a big portion of conservation-restoration work. This explains, the vast presence of the monetary value in interventions made in this studio. The spiritual and historic values are also more prominently present in this studio due to the importance of both to most collector clients, and the many interventions done on paintings belonging to churches and museums.

This shows how the attribution of cultural values can be very different between individuals and how the perceptions and interpretations of these attributions can differ between conservators. In this studio, the aesthetic, sentimental and monetary belong in the most common values accounted for by the owners.

v. Decision-Making

With regard to the communication between the conservator-restorer and the client, the majority stated that during the intervention, their initiative to establish contact with the client, as well as the client's initiative to start a conversation, occur only when necessary (78,6%). Some stated this initiative is present only in the beginning and the end of the intervention (28,6%), others maintain a constant line of communication (14,3%). When asked about the number of situations where disagreement happens, the majority of answers were inclined towards a very little amount of conflict circumstances (78,6%). Even some stating no situations of disagreement (14,3%), which is not shared with this studio. When these occur, majority chose a personal visit as the preferred line of communication to solve the issue (78,6%). These answers match since if there is a majority of little amount of conflict circumstances, makes sense that communication occurs only when necessary - as it does in this studio, depending on the client. Some clients require a constant line of communication, while others do not.

The next open question inquired what reasons make the conservator-restorers refuse working with a certain client or perform a certain intervention. These reasons involved the irreversibility of some tasks asked by the client; when there are no conditions or equipment available; if it implies the alteration of the cultural values attributed to the artwork by the client; or if it already has been a target for multiple poor quality restoration interventions. These reasons are shared by the ethical principles of Dr. José Mende's studio.

vi. Differences between working in a private studio or a public institution

The main differences expressed focused on the methods in which interventions occur. In a public institution one has more stability, the paintings encountered are less likely to have been subjected to irresponsible treatments, and scientific equipment is available.

However, there is a major focus on the hassle of bureaucracies, the delays that happen during an intervention, and the dependency on others to complete a simple task. The factors that these professionals consider positive in working in a private studio are the independence, the greater contact with the client, the freedom of choice, the diversity of works encountered that provide a constant learning. The negatives relate to the lack of documentation of the majority of artworks, the uncertainty of the job due to income instability, the resource limitations, the excessive workload, small timeframes and a big pressure to meet the demand.

These personal opinions reflect the big difference between the professional experience in both these sectors. The negatives of working in a private studio can be plenty, and difficult to deal with. The income instability, excessive workload, and pressure to meet the demand as mentioned before, but also the need for a full availability towards the clients can begin to interfere with the professional's private life.

7 INTERVENTION METHODOLOGIES

7.1 Unknown Portrait

Table 4 - Identification of the Unknown Portrait painting

Title	No title
Designated name	'Unknown Portrait'
Owner	Private collector
Super-category	Art
Category	Painting
Authorship	Unknown
Date	Unknown
Support	Canvas
Technique	Oil
Dimensions	66 cm x 54 cm

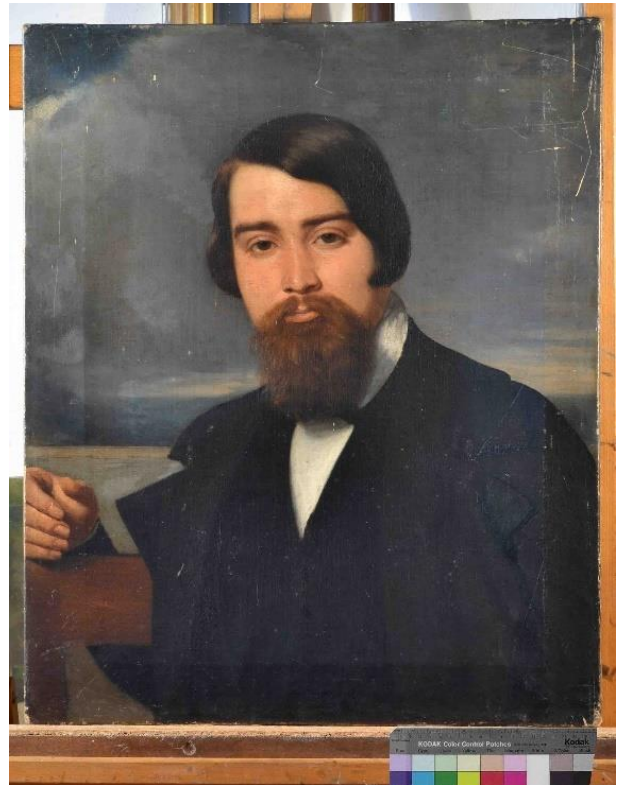


Figure 3 - Unknown Portrait. Oil on canvas. Unknown date. 66 cm x 54 cm. Front view of the painting.

This oil easel painting belongs to a private collector and portraits an unknown individual. The aspects of its production are also unknown such as the date and authorship. There are two inscriptions on the back of the stretcher, reading 'Conde Farrobo' and '1913' (Appendix C.1., Figure 17 and 18). These can act as a hint towards the individual depicted in the portrait, its owner or author and its date, however, there are no clear indications of who wrote these inscriptions, their reasoning and when it was written. The owner of this painting attributed aesthetic values (specifically in the imagery) and historic values (present in the inscriptions, and in the possibility that the painting belongs to the Romantic artistic period in Portugal²).

² If the date in the inscriptions of the back of the stretcher is correct ('1913') this painting could insert itself in the end of the Romantic period in Portugal (ending of the 19th century, beginning of the 20th century) (Duarte 2006).

This painting had severe structural damage. The canvas was very rigid, wavy and had been marked on the edges by its stretcher (Appendix C.1., Figure 19 and 20). It was assumed the painting could have been lined with resin wax, which made the canvas rigid and hydrophobic. Also, the surface of the paint was yellowed due to the aging of the varnish and it had various visible overpainted areas (Appendix C.1., Figure 19). It was visible that this painting had suffered two other past restoration interventions. Thus, areas where overpaints were visible were detected under the layer of aged varnish, and others over it. This was examined with the help of an UV light source, where the most recent overpaints were darker and the older ones appeared to be under the aged varnish (Figure 4).

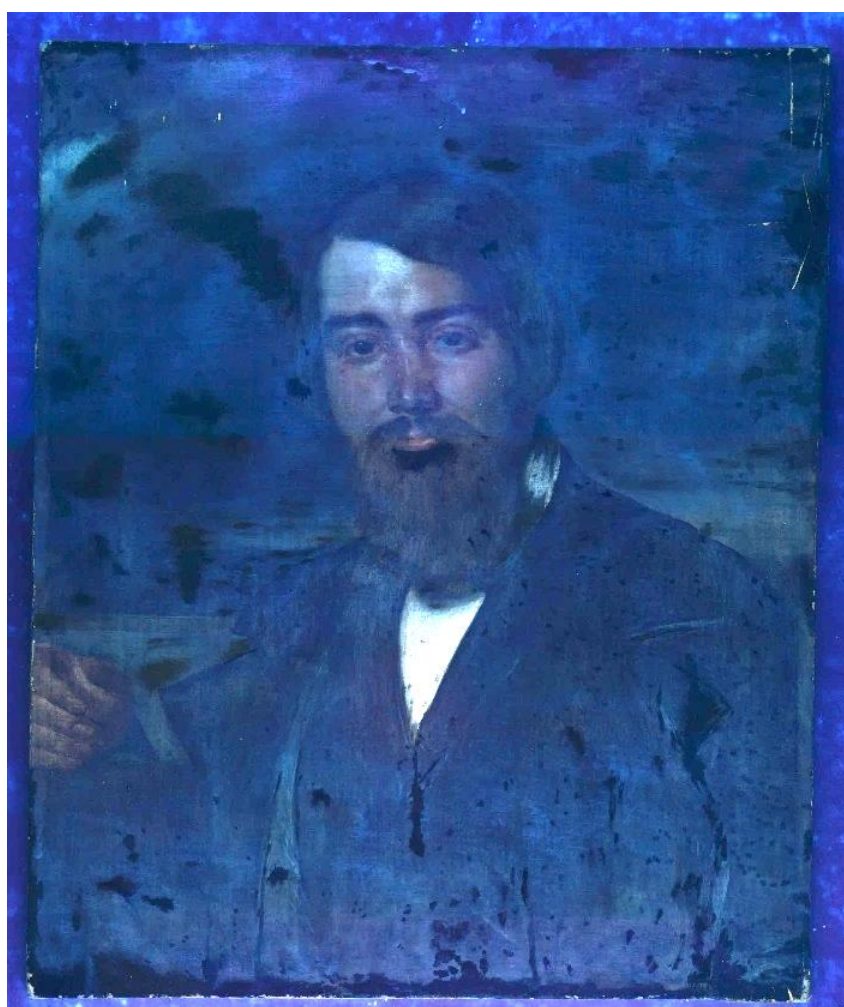


Figure 4 - Unknown Portrait. UV light, 360 nm. The overpaints can be seen in the areas where there is no fluorescence. Old overpaints can be seen under the fluorescent varnish.

However, the most renowned artists of this period insert themselves between the years 1850 till 1870 (e.g., Francisco Augusto Metrass 1825-1861, Tomás da Anunciação 1818-1879) (Saldanha 2017) .

7.1.1 Removal of old lining

Most canvas paintings, are bound to have been lined. This is made by adhering a piece of fabric to the back of the painting to stabilize it (Nicolaus, 1998). Lining and consolidation together were seen as one treatment. In 1974, lining as a practice started to be reconsidered. This was the year that the *Greenwich Comparative Lining Conference* happened, where papers were presented, explaining recipes for glue-paste lining and synthetic adhesives such as BEVA® 371 and descriptions of different procedures, materials and equipment (Villers, 2003; Hackney, 2012). Gustav Berger refuted the use of wax-resin for lining purposes, defending that its use is not a sound conservation practice, since it impacts the canvas and paint greatly, alongside questions about its aging process, removability and added weight (Berger & Zeliger, 1975).

The 'Unknown Portrait' had somewhat advanced deformations of the canvas, due to the previous canvas applied as a lining. This previous lining was adhered with the aforementioned wax-resin³, and this was noted due to its orange-brown coloration, the high rigidity of the canvas and the fact that it was hydrophobic. The identification of this adhesive was based on a visual observation of its characteristics, its behavior when interacting with solvents and previous knowledge on working with this adhesive.

There was pondering on whether this lining canvas should be maintained or if it was important to remove it. Since simply flattening the deformations would not solve the issue, and it would probably occur again in the future, the decision was to remove it. This decision was based on the past experience in treating paintings in similar states of preservation, therefore being able to predict the outcome - so the heuristic approach prevailed. To carry out this procedure without damaging the pictorial layer a facing was applied to the front of the painting. Facings in this studio are usually done with Japanese tissue paper - for the consolidation of the paint layers, and with Reemay® polyester fabric - to protect the paint layers while the intervention is carried out on the back of the canvas. For this reason, this particular facing was done with Reemay® polyester fabric and rabbit skin glue. This process was prior to the removal of the varnish, to prevent damage on the paint layers.

The Reemay® polyester fabric was used due to its high resistance and protection of the pictorial layer. This material performs well in reducing the stress exerted on the paint layers, however it can have a poor adaptability to the substrate, which could limit the adhesion strength of the facing (Alba et al., 2019). The rabbit skin glue was chosen due to being

³ This adhesive was created by the artist and restorer Nicolaas Hopman (1794-1870), and was created out of a conservation necessity - to combat the damage of paintings due to the high humidity of the Dutch climate (Marvelde, 2012). The use of this adhesive had conservation intentions for paintings however, it actually led to their abuse, which even led to questioning the need for linings overall (Marvelde, 2012).

reversible, a strong adhesive and because it is more compatible with the original binders of coloring materials and inks, than synthetic adhesives. However, this choice can affect the stability of the painting in its future, since this material can dissolve the top layer of a composite paint layer film, or cause reticulation by introducing heat (Vitale et al., 1987). Remains of this adhesive on the paint layers, can affect the future conservation of the painting. The impregnation of this hygroscopic material, can support mold growth in high relative humidity conditions, attract insects, and has a fast degradation rate (Von Endt et al., 1984; Vitale et al., 1987).

After the facing was applied, the canvas was removed from its stretcher, and laid face down on the protected and clean table. The removal of the lining canvas was performed through heat induction (hair dryer) and mechanical force. This is a somewhat high-risk method task to perform. The canvas was removed from one of the corners (Figure 5), and it was slowly pulled in the opposite direction, diagonally, as flat as possible so not to pull the painting upwards. It was removed in three strips, the top first, the center and finally the bottom. Although the heat reactivates the wax-resin adhesive, which makes it easier to remove the canvas without need for strength, this method could be altered to make it less risky. Removing the lining canvas in a larger number of strips with about 3 to 5 cm, would have lowered the overall risk of the operation. However, this method would be much more time consuming.



Figure 5 - Unknown Portrait. Starting point of the removal of the lining canvas on the painting.

After the removal the edges of the original canvas are too weak to be mounted on its stretcher and need extra support. For that, the application of reinforcement canvas bands was

performed. This process is commonly done in this studio to paintings where the old lining is removed. This involves the application of strips of a new canvas adhered to the perimeter of the original canvas (Appendix C.1., Figure 21). The adhesive used was the thermoplastic *BEVA® 371* film. Before applying this adhesive, the wax-resin removal was performed to its maximum potential - through heat and mechanical force -, so that the *BEVA® 371* film could penetrate the canvas and adhere to it. This adhesive is suitable for this specific process since it provides great adhesion power, while also having elasticity. It is also reversible, which is a crucial factor for ethical interventions - something that is highly demanded in this studio. This reversibility could be reached through heat (at 65°C) or solvents (mild hydrocarbon solvents) (Berger, 1970).

A way to improve this process would be to change the application method of the same adhesive (*BEVA® 371*). Applying it through a spray ('flocking'), compared with film application, has a higher adherence performance, and also reduces the overall amount of adhesive used (Bianco et al., 2015). This method is not as invasive for the painting and is cheaper, however, it is an option that can create a more toxic environment in this small workspace.

7.1.2 Cleaning

The cleaning of paintings and the implications it may have is a controversial topic with differing opinions. Conservators, restorers and historians such as Cesare Brandi (1906-1988) and René Huyghe (1906-1997) for example, defend minimal intervention as a means to respect the paintings past (Huyghe, 1950; Brandi, 1963). These authors recognize the importance of cleaning interventions; however, these are irreversible acts that have definite effects on the historic and aesthetic values of a painting (Martínez, 1999). With most of the paintings that pass through this studio, the main objective required by the clients is to revive the 'original' image, remove the old varnish and any alterations done to it in the past (e.g., retouching or overpaint). This 'original' image will never be achieved since the original materials have suffered many chemical and physical changes. In this studio, the objective of the cleaning process is centered around uncovering the image that is closest to the supposed original.

In 1947, The National Gallery was heavily criticized for this matter. Specifically, the cleaning of three particular paintings⁴, where there were claims of radical cleaning interventions (Martínez, 1999). The criticized interventions made in this museum, consisted of the removal of dirt, varnish and overpaints, with the posterior mimetic chromatic restoration, which

⁴ The paintings in question were *Portrait of Philip IV of Spain* by Diego Velázquez (c.1656), *The Battle of San Romano* by Paolo Uccello (c. 1438-40) and *Portrait of Margaretha de Geer, Wife of Jacob Trip* by Rembrandt (c.1661). (Martínez, 1999)

is, with the respectful and current inpainting process, the usual methodology accepted in this studio. The National Gallery defended their conservation-restoration work, regarding the removal of overpaints, stating that any additions made to the painting in the past, are falsifications, and can damage the painting in the future (Martínez, 1999). The point of view of this museum is shared within this studio, nonetheless, the latter defense stated that the interventions were supported by vast documentation and scientific analysis. In this studio, the documentation is lacking most times and scientific analysis is null (Martínez, 1999).

When dealing with paintings previously owned by individuals intending to sell these for profit, an urgency exists in making these aesthetically pleasing to the eye of the consumer, in a fast and cheap manner. As is the case of this painting, it had multiple areas where the original paint suffered abrasion, and these were painted over for a possible fast betterment of the overall appearance of the painting. These overpaints probably due to the aging of the pigments, became visible and disturbing to the observer.



Figure 6 - Unknown Portrait. After cleaning.

The intention of the client was the removal of the overpaints and varnish with a cleaning intervention and posterior chromatic restoration. These objectives are presented to revive the aesthetic value the owner attributes to the painting, a subjective personal taste of what the painting should look like according to the owner. Even when valuing the historic, there is a clear preference for the elimination of certain materials where this historic dimension is encapsulated (lining canvas and varnish). However, the aesthetic preferences seem to prevail over these historic components, and a form of newness too. The objective was accepted by Dr. Mendes as it was an ethical intervention to undergo. The clients' intention and budget plays an important role here. Depending on the budget the client may decide on different options, either to remove the overpaint, simply tone it for a better match or do a partial cleaning⁵. The partial cleaning is not a common practice in this studio, it is only used when the client is indecisive about the artistic quality of the painting. When the darkened varnish prevents from such appeal, a partial cleaning is done, until the client - usually an art dealer - can assess the monetary value of the painting.

During the cleaning process of this painting the varnish and overpainted areas were removed to uncover the original (Figure 6). The repaints extended considerably far from areas with paint loss and were presenting a change of the image. The overall background became more coherent and some facial areas were uncovered, which consequently, modified the appearance of the individual depicted (Figure 7). This process was made using the solvent mixtures: Shellsol A ® + Ethanol (1:1), and Isoctane + Isopropanol (1:1) for more sensible areas. The choice for these solvents were based on their effectiveness for the removal of varnish and dirt, safety for the pictorial layer and the efficiency of removal of the wax resin which remains impregnated on the canvas from the previous lining (regarding the Shellsol A ® + Ethanol mixture).

⁵ A partial cleaning where some areas are cleaned and others are not in order to achieve some sense of harmony, can be seen as a damaging method. A discolored painting by means of normal processes of aging is well understood by conservation professionals, while a partially cleaned painting is not. This can cause a difficult task to future conservators (Ruhemann, 1969; Martínez, 1999).



Figure 7 - Unknown Portrait. Before (left) and after (right) the cleaning intervention and chromatic inpainting. Detail of face, to point the removal of overpaints in the beard area of the figure.

7.1.3 Inpainting

The last step in this intervention, prior to the application of the final varnish (*Laropal A81®*), was the chromatic restoration. This process must be critically evaluated to understand which method to use. Above all, the inpainting process in general, should not have the objective to raise the newness value, but to restore its harmony, while valuing and respecting its traces of aging (Digney-Peer, et al. 2012). There are several options and techniques for an inpainting and the chosen method will always depend on each case. These different methods are based on what is most valued in the work, its destination, the amount and extent of paint loss it has and its function (Bailão, 2011). Initially there are two basic stands that can be taken: non-intervention and intervention.

Prominent conservator-restorers, critics and art historians, such as Helmut Ruhemann (1891-1973), Max Jakob Friedlander (1867-1958) and Cesare Brandi (1906-1988), argue that the conservator-restorer's position should not be drastic by completely denying one of the options. They argue that for each case there is a solution capable of satisfying the aesthetic quality of the work, its historical documentation and the public, and it is necessary to take a critical attitude for each case (Brandi, 1963; Muir, 2009; Bailão, 2011).

When the decision is directed to restoration, there are different techniques of inpainting that can be applied solely or together. These techniques are divided between mimetic reintegration and possible methods within visible or differentiated reintegration (Bergeon, 1990). Mimetic reintegration boils down to the reintegration of the color, shape and texture of the gaps in order to mimic the surrounding areas, with the aim of becoming invisible (Muir, 2009; Bailão, 2011). This technique has supporters and opponents of its use since it is closely linked to counterfeits and the creation of a forgery. The fact that they are not easily visible and distinct from the original is interpreted as "favoring a falsification of history and the artistic" (Bailão, 2011). However, it is argued that a forgery is not created when it respects the original material of the work by circumscribing the reintegration only to the gap, when materials differ from the original and are reversible and when the chromatic information surrounding it is truthful (Bergeon, 1990; Muir, 2009).

The differentiated reintegration aims at restoring the ability to read and observe the painting while honestly showing the deteriorations that the artwork suffered. This technique is advocated by Brandi who argues that reintegration should be easily identifiable and readable with respect to the original elements of the work. Within this type of reintegration there are several methods to accomplish it: neutral tone, subtone, fragmentary reintegration, *tratteggio*, chromatic selection, chromatic abstraction, pointillism and gold effect (Brandi, 1963; Bergeon, 1990; Bailão, 2011; Stoner & Rushfield, 2012).

The future of this specific painting will be its display in the owner's house, so this restoration intervention is intended to raise its aesthetic component. For this purpose, the chromatic restoration method took a different direction depending on the location and size of each gap and the surrounding area. In the smaller areas (around 4/5 mm), a mimetic approach was taken with the intention of covering it with a color equal to the surrounding color. In the larger ones (up to 8cm), there was a need to take a closer approach to *tratteggio* to replicate the glaze used originally. This technique was made through a mixture of vertical fine lines with the underlying colors of its surroundings to achieve a harmonious inpainting, unnoticed from a distance. This intervention considered the authenticity of the work by maintaining the inpainting visible, inside the margins of the gap with reversible and compatible materials that will not negatively compromise the paintings preservation state in the future. When looking close to this painting one can differentiate the inpainted areas from the original ones.



Figure 8 - Unknown Portrait. Before (left) and after (right) conservation restoration intervention.

7.2 Three Burnt Paintings

This case is part of a collection that suffered a fire, belonging to a private heir owner. The paintings were a total of three and all of them depicted landscapes. The history of these paintings was passed to Dr. Mendes by the owner but cannot be divulged to respect the client's privacy. One of the paintings painted on wood and the other two on canvas. They all had the surface severely darkened due to soot and blisters evenly distributed throughout the painting (Appendix C.2., Figure 23-25). The paint layers were immensely fragile.

The private heir owner attributed associative and historic values, due to the fact that these paintings belonged to a renown historic figure. The sentimental value was also attributed by the owner. The reasoning behind this attribution was asked to be kept private.

Table 5 - Identification of painting n°1

Title	No title
Designated name	'N°1'
Owner	Heir Owner
Super-category	Art
Category	Painting
Authorship	Unknown
Date	Unknown
Support	Canvas
Technique	Oil
Dimensions	25,5 cm x 23 cm



Figure 9 - Oil painting on canvas, n°1. 25,5 cm x 23 cm. Front of the painting. Before treatment.

Table 6 - Identification of painting n°2

Title	No title
Designated name	'N°2'
Owner	Heir Owner
Super-category	Art
Category	Painting
Authorship	Unknown
Date	Unknown
Support	Canvas
Technique	Oil
Dimensions	25,5 cm x 23 cm



Figure 10 - Oil painting on canvas, n°2. 25,5 cm x 23 cm. Front of the painting. Before treatment.

Table 7 - Identification of painting n°3

Title	No title
Designated name	'N°3'
Owner	Heir Owner
Super-category	Art
Category	Painting
Authorship	Unknown
Date	Unknown
Support	Wood
Technique	Oil
Dimensions	23 cm x 30,5 cm



Figure 11 - Oil painting on wood, n°3. 23 cm x 30,5 cm. Front of the painting. Before treatment.

7.2.1 Removal of adhesive

The painting with a wooden support (n°3) had been attached to its frame with a synthetic adhesive commonly known as "hot glue" (Appendix C.2., Figure 26 and 27). Hot glue is characterized as a hot-melt adhesive (HMA). These adhesives are 100% solid and melt to a liquid phase in temperatures of 80°-200°C, solidifying to form bonding when cooled (Glawe et al., 2003). With the heat from the fire this adhesive melted onto the paint surface. The top half of this painting besides being blistered was also covered with this adhesive. To remove it without causing more damage to the blistered paint surface was a challenge. A lot of tests and research



Figure 12 - Painting n°3. Detail. Removal of adhesive with white spirit.

was made previously to understand which solvents and materials were used in similar cases. There was a need to understand how to dissolve the glue slowly but effectively whilst maintaining control of the process.

The most appropriate method to remove this adhesive safely would be by making mockups of this paintings' condition and testing the most successful way to remove the hot glue and lower the blisters. In that way, the safety of the painting's remaining fragile paint layers would be assured. In this studio there is little reliance on mockups or scientific analysis. Some materials are tested on different surfaces to understand their strength or retraction power (e.g., testing filling materials for wooden supports, on other wooden surfaces, or testing adhesives' strength on fingers). Nonetheless, most decisions made are based on previous professional experience and knowledge - the aforementioned heuristic approach. The overall rhythm of this private studio is fast paced, these paintings had a smaller timeframe which called for a strong heuristic approach towards this challenge. However, this intervention process called for previous research and more pondering than usual.

The first solvent tests were performed in the back of the painting where adhesive was also present since the support was adhered to the frame. After testing on this location and choosing the most effective solvent, it was tested peripherally on the front of the painting to understand its reaction with the pictorial layer. The adhesive occupied a large area of the surface of the painting making it more difficult to understand the impact of the solvents on the paint layer below.

The primary objective with this intervention was to soften the thick layer of adhesive with a paint brush and appropriate solvent. In the thickest parts, when softened, the excess would be removed with a scalpel. Like this, the excess would be removed without interfering with the paint layer. Then with a thin layer of adhesive, better control of the process is obtained since the effect on the paint layer below can be seen more clearly.

The solvents tested were ethanol, *Shellsol® A* and White Spirit (Table 6). White Spirit was the only solvent that was able to establish the intended control of the process. By breaking its chemical bonds slowly, the adhesive detached completely from the pictorial layer (Figure 13). In regard to the paint layer, it was the only one that did not remove the varnish, only the soot on the surface. This implied that while the removal of the adhesive was ongoing if the solvent protruded through the air bubbles it would not damage the surface.

Table 8 - Results for the solvent tests carried out on painting n°3 for the removal of the adhesive "hot glue"

Results	<i>Ethanol</i>	<i>ShellSol® A</i>	<i>White Spirit</i>
Adhesive Layer	Dissolved the adhesive very slowly.	Dissolved the adhesive fast. Process more difficult to control.	Dissolves the adhesive at a controllable speed. The reaction is visible - as the chains of the adhesive break, the air bubbles trapped in it start to visibly break.
Paint Layer	Removed soot and varnish fast.		Removed soot, but not varnish.

The first part of the adhesive to be removed was the area that adhered the painting to the frame. After the separation from its frame with White Spirit, the removal process of the "hot glue" on the surface of the painting began with this solvent. This process took approximately sixteen hours. Whilst removing the solvent it was apparent that small paint layer pieces were trapped inside the melted adhesive. It is possible that during the extreme heat conditions the paint cracked inside the glue as it cooled down. These fragments were not retrievable for their small size and entrapment in the adhesive.



Figure 13 - Painting n°3. During the removal of the adhesive.

7.2.2 Treating blisters

The blisters were flattened individually with a heating spatula and silicone paper. There was no need for the application of an adhesive since the canvas paintings were lined. Reactivating the adhesive from this lining impregnated on the canvas support was enough to adhere them back in place. The adhesive present in the canvas paintings was suspected to be wax resin for the same reason mentioned in the previous chapter. According to Boissonas (1963), the way of approaching a blistered painting, is to treat each blister individually with a heating spatula, gently inducing enough heat to mold the blisters back in place (Boissonas, 1963). Heat blisters are formed due to excessive heating, at about 75°C, this causes a thermo-plastic softening of the varnish and paint layers (Nicolaus, 1998). To be able to mold the blisters back in place that softening point must be reached again, so there is a need to achieve those temperatures on each blister in a highly controlled manner.

Before testing this method there was a need to remove the varnish and soot off the paintings surface (Appendix C.2., Figure 28 and 29). Due to the extreme heat conditions, the varnish encapsulated the soot, so it was necessary to remove both first. This cleaning process prevent the fusion of the varnish and soot with the paint layers by the induction of heat. This process was scrupulous and took a long time to complete, for the paint layers were extremely fragile, and the cleaning process had to be performed gently and slowly. After the cleaning process was completed the lowering of each blister was tested with the heating spatula at about 70°C. The heat was introduced slowly and increasingly on a single blister, making it soften and slowly flatten until the desired place without taking away the paint's texture. The same method was used to the three paintings successfully.

The results were positive, considering the high-risk method (Appendix C.2., Figure 30-32). However, with the larger blisters, it was difficult to perfectly flattened them, since these expanded a more substantial surface area of paint (Figure 14). The access to a heated suction table would have saved a great deal of time and would have performed better. A research and effort was made to find a smaller sized heated suction table to fit the space of the studio. However, the prices were too high and the date of delivery would have passed the paintings timeframe. An agreement could be done with a conservation-restoration laboratory where this equipment is available. However, this option can increase the risk of the intervention and its budget. The risks center around the transportation of the painting and possible damage away from the studio which could lead to the loss of a client and an undoing of the studio's reputation.

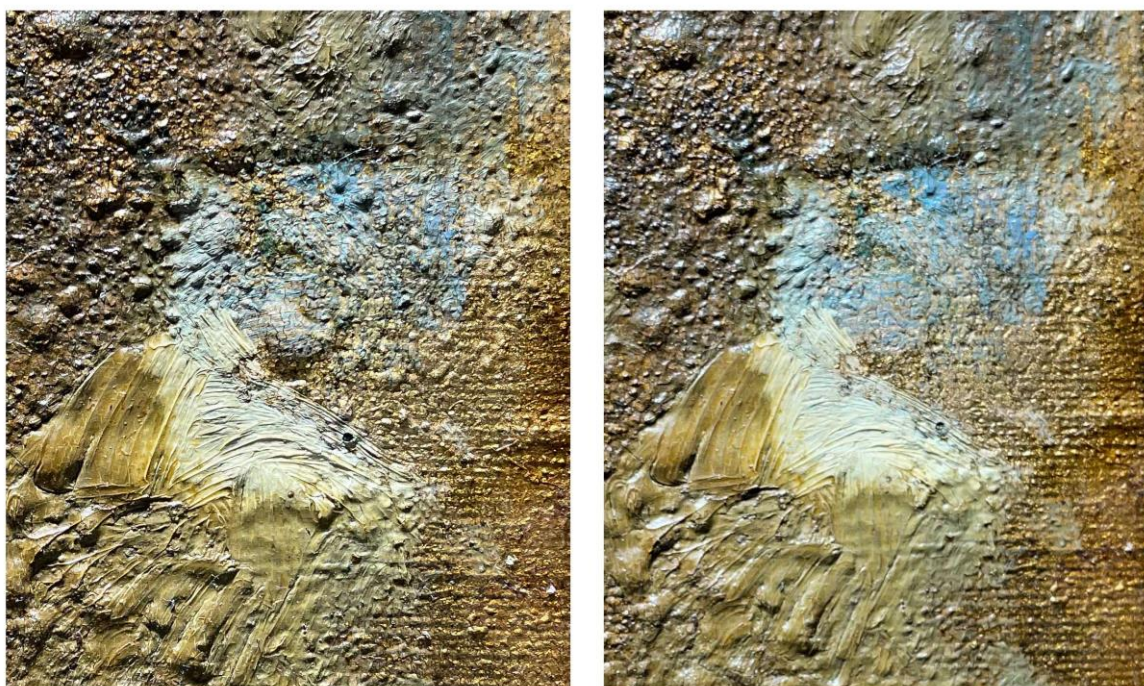


Figure 14 - Painting n° 1. Blister treatment test results. Before test (left), and after test (right).

8 DISCUSSION

'The duty of the conservator-restorer is to preserve or reveal authenticity' (Muñoz-Viñas, 2002, 26). Defining the term "authenticity" applied to conservation-restoration has been a challenge over the years. To simplify, the term itself means 'the quality of being true or what somebody claims it is' (Oxford, 2021). This definition, still very broad, raises other questions when considered in the world of art and conservation-restoration: what is considered "true"? One can make the direct relation between what is true and what is original. However, this trueness may be approached in two different senses: when the original material can be seen as the one that conveys the artist's first intention or when the same materials plus their aging characteristics are observed in the present.

Defining what is authentic in a painting that has overpaints from a restoration performed in the 19th century by various unknown painters, is subjective (Muñoz-Viñas, 2002). In this private studio, the historic dimension of past restorations or additions is unknown and removed depending on its preservation state and disruption it causes on the painting, whether it be visual or structural. In this private studio there is a lack of documentation provided by the owner, associated with their paintings, and produced by the conservator-restorer. The documentation of most paintings intervened in this studio is transmitted mostly verbally and only includes information about how they were acquired and suppositions about their past.

Sometimes, information about a painting is provided to the owner by the conservator-restorer when there is the possibility to obtain other professionals' intake about its possible author, date and thematic. Documentation with this information is done when required and paid by the client. However, this transmission of information to the owner is usually done verbally and it is a chance to captivate the client while satisfying the conservator-restorer's curiosity as well. This absence of physical documentation goes against conservation practices but it results due to lack of time, and privacy. This makes the image depicted on the paintings and their structural components have an increased importance since they are the only source of documentation. Their historic value is encapsulated in the painting's materials, details and aging traces.

Although there is a preference on the owner's part towards the contemporaneity value rather than the age value, the restoration interventions performed in this studio do not eliminate all signs of the passage of time. A painting does not need to contain all damage it suffered over time to possess an "old" appearance. Riegl (1903) said, "(...) *the cult of antiquity works in*

favor of its own destruction.". However, a work of art should not be valued just because it is old, this value must be attributed within a range of other values.

The collector who owned the 'Unknown Portrait', had objectives towards the enhancement of its aesthetic value. As this painting was to be displayed in his home, the preferred aesthetic clashed with the state in which the painting presented itself before treatment. The aesthetic value is a very subjective one and fluctuates greatly between individuals. For this owner, the preferred aesthetic was the closer to the "original" without major aging traces or overpaints visible. This implied the removal of components which may be original. Some overpaints could have been applied by the artist (e.g., the beard overpaint). These components were part of the historic dimension of the painting. However, attention was given to the preservation of the inscriptions on the stretcher of the painting, where the owner attributed historic value. These were of utmost importance since they are the only written documentation about this painting.

With regard to the chromatic restoration, a decision to not intervene is rarely taken in this studio. By not intervening there is a high risk of losing a client. A painting may be a perfect historical document but not correspond to its initial artistic intention and to its aesthetic potential (Ruhemann, 1969). The method used in 'Unknown Portrait' - a differentiated reintegration - respects both historical and aesthetic values. Mimetic inpainting, however, is the technique most chosen by private owners, collectors and art dealers since the appreciation of the aesthetic aspect overlaps with the historical due to the monetary intention of selling the work.

The choice to permanently remove components from a painting (original or previous restorations) is based on their disruption of the image and structure. When previous structure repairs are physically functional and retouching or overpaints are extensive, still visually coherent and do not compromise the integrity of the painting, these are not removed. When there is documentation regarding certain overpaints with historic value - made in special contexts or relevant artists -, these are preserved. The final result of these interventions did not aim to make the paintings look new, some aging traces were respected and not concealed (e.g., craquelure), since the contrary would go against Dr. José Mendes' professional ethics.

Regarding the interventions made on the three burnt paintings, these have a specific characteristic that others do not. They suffered extreme momentaneous damage that completely altered them with no chance of understanding their previous states. The only source of documentation is the verbal information that the owner can provide. Because of this, there was no reference to what the colors and images were on each painting which made the cleaning process one of discovery as well. With treatment, the associative value was clearly enhanced due to a betterment of their close to the "original" image. However, the historic value became somewhat diminished due to the need to remove or severely alter some of their

components due to the effects of extreme heat. The sentimental value (specifically sentimental by association) attributed by the heir owner was also revived, since their image does not represent a tragedy and destruction anymore, but the paintings appearance is the closest as possible to their previous state. Nonetheless, these paintings went through major structural changes, and the way in which these were observed will never be the same.

The importance of the immaterial aspects of a painting was very noted through interventions and by hearing the objectives and attribution of cultural values by the clients. The recurring sentimental, monetary and aesthetic values dominated the objectives of most interventions. These three values seemed to be the trifecta of values attributed to most works of art that passed through this studio. Especially the importance of the aesthetic as means to enhance others. The importance of the beauty and the harmonious image is very highlighted in the objective of most clients to the detriment of other cultural values that may be present, because collectors want to surround themselves with beautiful objects and not historical documents (Marijnissen, 1967).

The heuristic approach is the only reliance in a private studio with scientific analysis limitations. It was noted how past experience and knowledge ruled decision-making in the interventions observed. This approach has negative and positive sides. With this method the interventions become overall higher in risk due to scientific uncertainty. A tendency sets to rely on certain familiar materials such as solvents and adhesives seeing that past knowledge and experience are connected to these materials, and change would be of high risk. This approach also restricts a major opportunity for more research and knowledge about each painting. It would have been of great importance to analyze the stratigraphy of each painting before intervening. The knowledge on the buildup and organization of the pictorial layers would provide a better understanding of the materials present (observing with UV light as well), the painting techniques used and references regarding their potential chronological application over time. This analysis would serve as critical understanding of the painting since it would be a basis for various intervention decisions - e.g., understanding the impregnation level of the wax-resin adhesive on the pictorial layer of the "Unknow Portrait" would help assess the stability of the pictorial layer. But this is simply unrealistic to perform under restrictions of budget and space.

This approach includes positives as well. Decision-making based on knowledge and professional experience results in a more fast-paced intervention process, which is required in this studio due to the smaller timeframes imposed by owners. Within this fast-paced rhythm, the ability to detect risk based on a small number of factors makes for fast adjustments in behavior. Past experience working with some materials creates a quick judgment assessment on whether it presents the right physical characteristics to perform correctly for its intended

purpose. This quick discernment sometimes equipped with basic tests, is effective due to the conservator-restorer's past education and vast experience in the conservation-restoration field.

The heuristic approach can be “effective and accurate” or “quick but inaccurate”, and the reasons for the differences in outcomes are based in the person’s “knowledge, experience, and expertise” (Henderson & Waller, 2016). The goal to any conservation-restoration intervention would be combining both analytic-deliberative and heuristic mental models. The use of solely one surges out of need and not choice. Without scientific equipment conservation-restoration interventions can be successful and this heuristic approach is validated through the good quality of the work here performed. On the other hand, the analytic-deliberative method may be considered poorly sustainable, while considered as a compulsory and exhaustive procedure to be performed. So, the scientific legitimacy of such an approach will greatly depend on the number of scientific methods (exams and analysis) to be applied to the object and the balance between the cost involved versus the values of the object to be preserved or intentionally enhanced.

Through the survey it was notable how each private studio of conservation-restoration works in their own manner, with their principles, strategies and methods. However, it showed how most of them are similar in some respects. They face the same limitations as the lack of scientific equipment and analysis, tools and overall budget restrictions. The professional ethics between them were similar since all the personal reasons presented to refuse an intervention followed the same standards of conservation-restoration ethics. Concerning the experience with clients, the categories created to fit the privately owned studio of Professor José Mendes were seen as accurate and applicable to the other professionals. The quantification of these categories was also the same in other studios. The factor that differed was the attribution of cultural values; this can be explain due to their subjective nature. However, the relevancy of the sentimental cultural value attribution in privately owned objects was validated within the answers of this survey.

9 CONCLUSION

This report documents a reality scarcely studied regarding conservation-restoration interventions in a privately owned studio. The heuristic mental model is the base of decision-making in every intervention performed in the private studio of Dr. José Mendes. The classification of the clients (collectors, art dealers and heir owners), created on purpose in this study to characterize part of the human factor evolved in this studio, helped demonstrate, through the survey addressed to other professionals shared with other private studios. The insights over the attribution of cultural values by the private owners show that there is a duality, if not paradox, over the valorization of historic values while allowing for the removal of historic material components in order to revive the also attributed aesthetic values of their paintings.

This internship offered the opportunity to apply the theory, practice, and all-round knowledge acquired during the bachelor and master's degree. It also provided professional experience which can differ from the academic experience, as mentioned in this report. Some ideas were not performed due to lack of time. However, in the future it would be interesting to study and compare two interventions made on paintings in similar states of preservation: one performed in a private studio and the other in an institutional conservation-restoration laboratory; in a way to understand the impact of scientific analysis limitations more accurately on the interventions of paintings. Also, a new survey could be conducted towards the different types of owners of paintings to better understand them and their objectives towards restoration, and how these are accounted for by the conservator-restorer.

10 REFERENCES

- Alba, Paola, Susana Martín-Rey, e María Teresa Doménech-Carbó. "Analysis of facing materials used as remoistenable temporary supports for facing on canvas paintings." 2019. <https://doi.org/10.4000/ceroart.6532> (acedido em 12 de January de 2021).
- Alves, A. "Os Valores dos Monumentos: a Importância de Riegl no Passado e no Presente." *Faculdade de Belas-Artes da Universidade de Lisboa/CIEBA. Encontro Patrimonialização e Sustentabilidade do Património: Reflexão e Perspetiva, Instituto de História Contemporânea.*, 2014.
- Antonopoulou-Athera, N., E. Chatzitheodoridis, M. Doulgerides, Ch. Evangelatos, A. Serafetinides, e A. Terlixi. "Laser Cleaning Treatment of Burnt Paintings." *18th International School on Quantum Electronics: Laser Physics and Applications, Vol. 9447, International Society for Optics and Photonics*, 2015: 284-291.
- Appelbaum, B. *Conservation Treatment Methodology*. Oxford: Butterworth-Heinmann/Elsevier, 2010.
- Australia ICOMOS. "The Australia ICOMOS Guidelines for the Conservation of Places of Cultural Significance ("Burra Charter")." 1979.
- . "The Burra Charter." 1999.
- Australia ICOMOS. "The Burra Charter." *Australia ICOMOS, International Council on Monuments and Sites*, 2013.
- Bailão, A. "As Técnicas de Reintegração Cromática na Pintura: revisão historiográfica." *Ge-conservación*, nº2, 2011: 45-63.
- Belishki, S. & Corr, S. "Reflection on conservation-restoration practice today. A European perspective. ." *Protection of Cultural Heritage*, 8., 2019.
- Bergeon, Ségolène. 'Science et patience' ou la restauration des peintures. Paris: Editions de la Réunion des musées nationaux., 1990.
- Berger, Gustav A. "A new adhesive for the consolidation of paintings, drawings or textiles." *Bulletin of the American Group. International Institute for Conservation of Historic and Artistic Works*. 11, nº 1 (1970): 36-38.
- Berger, Gustav A., e Harold I. Zeliger. "Detrimental and irreversible effects of wax impregnation on easel paintings." *ICOM Committee for Conservation, 4th Triennial Meeting*. Venice: International Council of Museums, 1975. 13-18.
- Bianco, Lisa, Massimiliano Avalor, Alessandro Scattina, Paola Croveri, Cesare Pagliero, e Oscar Chiantore. "A study on reversibility of BEVA®371 in the lining of paintings." *Journal of Cultural Heritage*, 2015: 479-485.

- Boissonas, A. G. "The Treatment of Fire-Blistered Oil Paintings." *International Institute for Conservation of Historic and Artistic Works (ICC). Studies in Conservation*, Vol. 8, nº2., 1963: 55-66.
- Boito, Camillo. "Carta del Restauro." *3º Congresso degli Ingegneri e Architetti Italiani tenutosi a Roma*, 1883.
- Brandi, C. *Teoria do Restauro*. pp. 85-90: Edições Orion (2006), 1963.
- . *Teoria do Restauro*. pp. 85-90: Edições Orion, 1963.
- Digney-Peer, Shawn, Karen Thomas, Roy Perry, Joyce Townsend, e Stephen Gritt. "The imitative retouching of easel paintings." Em *Conservation of Easel Paintings*, de Joyce Hill Stoner e Rebecca Rushfield, 607. Routledge, 2012.
- Duarte, Eduardo Manuel Alves. *Desenho Romântico Português - Cinco Artistas Desenham em Sintra*. Tese de Doutoramento em História de Arte, Lisboa: Faculdade de Belas-Artes, Universidade de Lisboa, 2006.
- DuPont, Cornelius. "Further developments in the treatment of fire-Blistered oil ." *Studies in Conservation*, Vol. 11, nº 1, 1966: 31-36.
- Glawe, Andrea, Regina Reuscher, Regina Koppe, e Thomas Kolbusch. "Hot-melt Application for Functional Compounds on Technical Textiles." *Journal of Industrial Textiles*, October de 2003: 85-92.
- Hackney, Stephen. "Lining Easel Paintings." Em *Conservation of Easel Paintings*, de Joyce Hill Stoner e Rebecca Rushfield, 415-432. London & New York: Routledge, 2012.
- Henderson, J., e R. Waller. "Effective preservation decision strategies." *Studies in Conservation*, 2016: 308-323.
- Huyghe, René. "Le nettoyage et la restauration des peintures anciennes. Position du problème." *Alumni*, XIX, 1950: 252-261.
- ICOMOS. "Principles for the Preservation and Conservation/Restoration of Wall Paintings. ." *Monumenta I, International Principles and Guidelines of Conservation*, 2003: 188-197.
- La Torre, M. "Values and Heritage Conservation." *Heritage & Society*, 6:2, 2013: 155-166.
- Lipe, W. D. "Value and meaning in cultural resources." Em *Approaches to the Archaeological Heritage*, de Press Syndicate of the University of Cambridge, 1-12. Great Britain, Cambridge, 1984.
- Mangorrinha, Maria Angelina. "Que critérios de intervenção, que metodologias? Para que objectos artísticos? Contributos para uma reflexão." *3º Encontro Científico do IPCH, Metodologias de Diagnóstico e de Intervenção no Património.*, 2003: 39-43.
- Marijnissen, R. H. *Degradation, conservation et restauration de l'oeuvre d'art I*. Bruxelas: Arcade, 1967.

- Martínez, Ascensión Hernández. *Documentos para la Historia de la Restauración*. Universidad de Zaragoza. Departamento de Historia del Arte., 1999.
- Marvelde, Mireille te. "Wax-resin lining." Em *Conservation of Easel Paintings*, de Joyce Hill Stoner e Rebecca Rushfield, 424-425. London & New York: Routledge, 2012.
- Mason, Randall. "Assesing Values in Conservation Planning: Methodological Issues and Choices." *Assessing the Values of Cultural Heritage, The Getty Conservation Institute*, 2002: 5-20.
- Mayer, Ralph. *Materiales y técnicas del arte*. . Madrid: Akal, 1993.
- Mayerne, Theodore De. *Le Manuscript de Turquet de Mayerne: 1620-1646*. Lyon: Audin Imprimeurs, 1967.
- Muir, K. "Approaches to the reintegration of paint loss: theory and practice in the conservation of easel paintings." *The International Institute for Conservation of Historic and Artistic Works (IIC). Reviews in Conservation*, nº 10., 2009: 19-25.
- Muñoz-Viñas, S. "Contemporary Theory of Conservation." *Studies in Conservation*, 47:sup1., 2002: 25-34.
- Muñoz-Viñas, Salvador. "Who is Afraid of Cesare Brandi? Personal Reflections on the Teoria del restauro." *CeROArt. Conservation, exposition, Restauration d'Objets d'Art*. 2015. Retrieved from <http://ceroart.revues.org/4653>.
- Nakamoto, T., e J. Henderson. "Dialogue in Conservation Decision-Making." *Studies in Conservation*, 61., 2016: 67-78.
- Nicolaus, K. *The Restauration of Paintings*. Konnemann, 1998.
- Niglio, Olimpia. "John Ruskin The Conservation of the Cultural Heritage." *Kyoto University, Graduate School of Human and Environmental Studies*, 23 de May de 2013: 5-8.
- Oxford. "Authenticity". 2021. <https://www.oxfordlearnersdictionaries.com/definition/english/authenticity?q=authenticity>.
- Revez, Maria João. "Compatibility matters: Assessing the risks of built heritage cleaning." *Dissertação de doutoramento em Conservação e Restauro do Património, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa*, 2016: 5-22, 159-185.
- Riegl, A. *O Culto Moderno dos Monumentos e outros ensaios estéticos*. Lisboa: Edições 70, 2013, 1903.
- Robles-Andreu, Adrián, Susana Martín-Rey, María Castell-Agustí, Vicente Guerola-Blay, e Cristina Robles-de la Cruz. "Evaluación de métodos de consolidación de estratos pictóricos afectados por procesos exotérmicos extremos: estudio comparativo y testado de materiales." *ph investigación [en línea]*, nº2, junio de 2014: 97-110.

- Rosas, Lúcia Maria Cardoso. "The Restoration of Historic Buildings Between 1835 and 1929: the Portuguese Taste." *e-journal of Portuguese History*, 2005: 3-8, 10, 11.
- Ruhemann, H. "The Cleaning of Paintings - Problems and Potentialities." *Review by Keck, S. Studies in Conservation*, Vol. 14, nº1, 1969: 44-46.
- Ruskin, John. *The Seven Lamps of Architecture*. Dover Publications, 1989.
- Russel, Roslyn, e Kylie Winkworth. *Significance 2.0, A Guide to Assessing the Significance of Collections*. 2009.
- Rutledge, Sharon K., Bruce A. Banks, Mark Forkapa, Thomas Stueber, Edward Sechkar, e Kevin Malinowski. "Atomic Oxygen Treatment as a Method of Recovering Smoke-Damaged Paintings." *Journal of the American Institute for Conservation*, 2000: 65-74.
- Saldanha, Nuno. "Francisco Metrass (1825-1861). Melancolia, Eros e Tanatos." *Arte, Cultura e Património do Romantismo. Actas do 1º Colóquio "Saudade Perpétua"*, 2017: 770, 778.
- Schadler-Saub, U. "Conservation ethics today: are our conservation-restoration theories and practice ready for the twenty-first century? Introductory notes to some central issues." *Protection of Cultural Heritage*, 8., 2019.
- Scheper, Karin. "Hands-on Research - Its Place in Conservation Training, in Practice, and the Need for us to Write about it." *Journal of Paper Conservation*, 2017: 112.
- Stoner, Joyce Hill. "Whistler's views on the restoration and display of his paintings." *Studies in Conservation*, 1997: 107-114.
- Stoner, Joyce Hill, e R Rushfield. *Conservation of Easel Paintings*. pp. 208-212: Routledge, 2012.
- UNESCO. "The NARA Document." *Lemaire, R. & Stovel, H., eds. 1994.*
- van der Reyden, Dianne L., Timothy J. Vitale, e et al. "Consolidation, Fixing, Facing." Em *Paper Conservation Catalog, Fourth Edition*, 3-18. American Institute for Conservation, 1987.
- Villarquide, A. *La pintura sobre tela II: Alteraciones, materiales y tratamientos de restauración*. . San Sebastián: Nerea, 2005.
- Villers, Caroline. "Lining Paintings: Papers from the Greenwich Conference on Comparative Lining Techniques." *cited in 2004, Villers, C. "Post Minimal Intervention". The Conservator* 28 (1). 2003. 3-10.
- Viollet-le-Duc, Eugène. *Dictionnaire Raisonné de l'Architecture Française du XI au XVIème siècle*. Paris, vol. 8: S./v. Restauration, 1868.
- Von Endt, D. W., e C. L. Rose. "Protein Chemistry for Conservators." *Pre-Conference seminar publication sponsored by the Objects Specialty Group of the AIC. published by the AIC*, 1984.

APPENDIX A - CULTURAL VALUES

A.1 Important Definitions

The definitions presented in the table below are not the only existing ones towards each cultural value. The ones presented in this chart are the ones that apply or can be applied to movable heritage (Revez, 2016). The cultural values that are most discussed in a private studio were already presented in Chapter 5, Table 1. This table does not aim at collecting every definition given to every cultural value, since this exercise was already notably done (Revez, 2016). Table 9 - Cultural values, with corresponding authors. For each, a broad description of their meaning is provided to aid the report

Cultural Value	Authors	Description
Non-Intentional Remembrance	Riegl (1903)	Value present in heritage monuments that are interpreted in distinct manners over the centuries. They are valued in different ways from the moment of creation to present times.
Age	Riegl (1903); Appelbaum (2010)	The marks that symbolize the passage of time are here valued. When an artwork is old, looks old and we like that is has this appearance. When the viewer feels that it enhances the appeal of the object rather than detracting from it.
Historic	Riegl (1903); Mason (2002); Russel & Winkworth (2008); Appelbaum (2010)	This value is present when heritage objects are associated with a specific historic event; This value recognizes objects as bearers of information about history.
Use	Riegl (1903); Appelbaum (2010)	Heritage objects that are valued for their usability. Only physical function. Irrelevant in most collections, even if the objects were originally functional.
Art	Riegl (1903); Appelbaum (2010)	Riegl (1903) states that art value is present, if it can correspond, to the newness or the relative art values; Objects with no intended use value, they occupy a central position in the category of things we call 'art'. These objects have other attributes such as aesthetic or the creator's intent is for it to be art. The aesthetic is the center of this value.
Newness	Riegl (1903); Appelbaum (2010)	Value connected with the artistic and aesthetic taste of the times; When an object looks new and we like that it looks

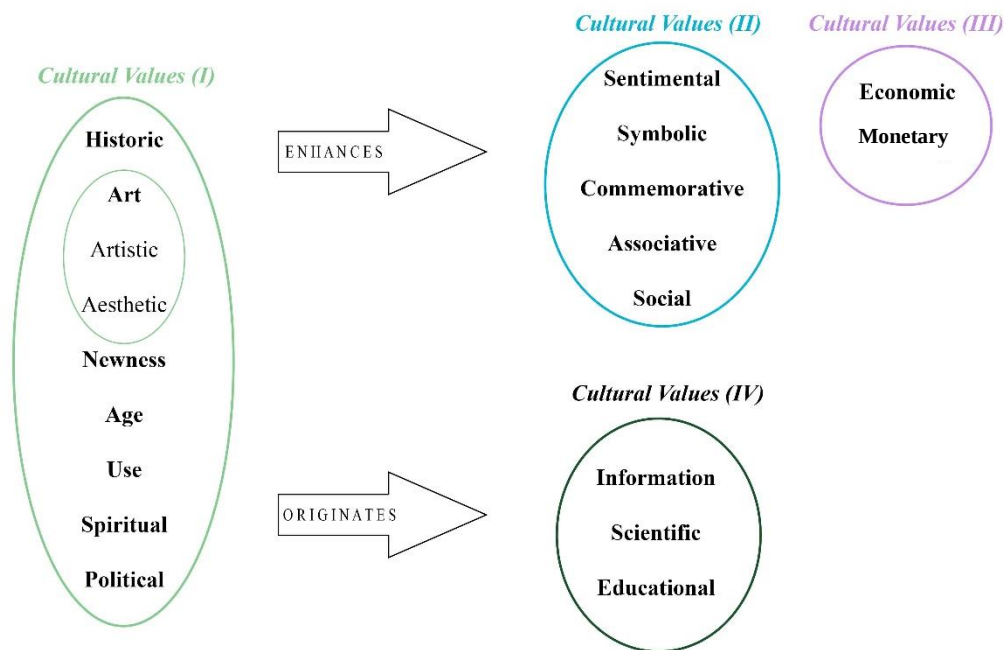
		new. It does not have to be new for newness value to apply.
Relative Art	Riegl (1903)	The contrary of an absolute art value. The valorization of art is always subjective, it varies with personal likings and tastes, which can be educated or not in the characteristics of the past artistic evolution. This valorization by the spectator in the present can be distinct from the original.
Aesthetic	Lipe (1984); Mason (2002); Russel & Winkworth (2008); Appelbaum (2010);	This value by itself is a personal one. When an object is valued by what it looks like. Beauty in the broad sense of visual appeal.
Research/ Scientific	Mason (2002); Russel & Winkworth (2008); Appelbaum (2010)	When an artwork contains information known or yet to discover about events or processes that it has gone through.
Educational	Lipe (1984); Appelbaum (2010);	When the artwork transmits information about its design, construction or mode of operation.
Sentimental	Appelbaum (2010)	This value springs from individuals direct personal experience with artworks.
Monetary	Appelbaum (2010)	This value depends not only on an object's intrinsic qualities but on many extrinsic factors as well. It shifts over time. Can be a determinant of certain treatment choices.
Economic	Lipe (1984); Mason (2002)	Value that is attributed to an artwork, when it has others as a basis, for example aesthetic, utilitarian and associative. The public's interest in culture will enhance this value (e.g. tourism).
Associative	Lipe (1984); Appelbaum (2010)	Artworks with associative value, have connections to a person with a considerable amount of fame.
Intentional Remembrance/ Commemorative	Riegl (1903); Lipe (1984); Appelbaum (2010)	Artworks that keep past events in our memories for as long as possible.
Rarity	Russel & Winkworth (2008); Appelbaum (2010)	Non-material aspect of artworks that involves physical fact, since it is based on the number of similar objects in existence.
Social	Mason (2002); Russel & Winkworth (2008)	Refers to the associations that artworks have for a particular community or cultural group and the social or cultural meanings that it holds for them.
Religious / Spiritual	Mason (2002); Russel & Winkworth (2008)	Refers to the intangible values and meanings embodied in or evoked by heritage objects. Can arise from beliefs and teachings related to a religion but may also be related to experiences of wonder or admiration.
Artistic	Mason (2002)	Value based on the artwork being unique, being the best, being a good example of the work of a particular artist.
Political	Mason (2002);	Artworks used to build or sustain civil relations, governmental legitimacy, protest, or ideological causes.
Symbolic	Lipe (1984); Mason (2002);	Refers to shared meanings associated with heritage objects that are not, strictly speaking, historic.
Existence	Mason (2002);	Valuing an artwork for its mere existence.

Option	Mason (2002);	The wish to preserve the possibility (the option) that someone might consume the heritage's services at some future time.
Bequest	Mason (2002);	Usefulness of the possibility of transmitting a certain piece of the heritage object to future generations.
Information	Lipe (1984);	This value arises when more advanced research is possible and necessary – in the fields of archaeology and art history for example.

A.2 Influence and Connection between Cultural Values

During the study of the various cultural values, an attempt was made to schematize them⁶. This study regarded the evolution in definitions of each cultural value thus far, by different authors and also charters. When examining each value, a need surged to understand if there could be a categorization as well as a correlation between them. The starting point was through the obvious impact some caused in others, for instance, the aesthetic value will certainly enhance the monetary one - however, the contrary is not true. Through analyzing every cultural value this way, a scheme was made that shows the correlation between them (see Scheme 1). A division is made with categories from (I) to (IV) of cultural values. Each division encapsulates values with the same power of impact and theme.

⁶ This attempt presented below at a correlation scheme was done at the beginning of my study as a way to help the conceptualization of cultural values during the interventions performed. By doing this, a bigger knowledge was obtained on what cultural values attributed to a work are affected by each step of the intervention. This made it somewhat easier to understand. However, after the study and the overall internship, some flaws were seen in this scheme. Theorizing over these cultural values without attributing them to an object or case study makes this theorization too vague and unclear. Making a almost hierarchy and correlation is not correct, since the scheme presents an attempt at categories of values enhancing others, but this will always depend since the cultural values on category (II) can be enhancing of category (I). However, again, this theorization without case studies becomes empty. This will show a first attempt at an axiological scheme.



Scheme 1 - Correlation between cultural values.

Cultural Values (I)

The first category - cultural values (I) - are the values that when attributed to an object, can be the most impactful on the rest. Here, the historic value is the first one introduced. This value, when attributed to an object, will increase if the object has been connected with notorious historic events or figures. The historic value can increase the others attributed in a great way. An object that encapsulates in itself a vast intricate history, and therefore can be attributed an historic value, is going to elevate the other values that may be added to its standard.

The second value presented is the art value. This one has a subdivision that encompasses in itself the artistic and aesthetic values. These are three different values with individual definitions, although some consider them the same (Riegl, 1903). For that reason, these are joined within the same category. The art value is present in any object we consider to be art, and in the center of this consideration, the aesthetic and artistic values are the main ones evaluated. These three cultural values will enhance greatly the consequent categories - e.g., the aesthetic value can enhance the sentimental, associative or monetary while the artistic can enhance the social, information or economic (depending on who attributes these).

The newness and age values, however contrary to each other, also belong to the main category. The overall aspect of the object - in this case paintings - will enhance every other category and cannot be influenced by other cultural values. Both are related to personal taste.

If the observer values the aged look of an object, the age value is present, otherwise, it is not. The newness value regards the untouched look of the object. The object is old but looks new.

The use value regards the practical usability of an object in the present moment. When referring to the usability of an object, between the present and past, there is a great interest in the way the object was used. However, a difference should be made between built heritage, landscapes, and objects. The usability of built heritage has greater power in the overall experience of the place. In paintings, however, the use we give to these objects is observational. For a painting that has no use, or any object in that regard, it is not valuable. This value as a whole can have a lot of ramifications and intricacies, perhaps that is the reason why the authors restrict it to only practical usability.

The spiritual or religious value, refers to spiritual feeling gained from experiencing a heritage object, place or building. This can encapsulate a specific religion or not. This spiritual aspect, when present in paintings will enhance plenty of other values, especially the sentimental, symbolic, and social. This one belongs in the main section of cultural values due to its inability to be influenced by others. The political value also cannot be influenced by other values, only it will influence and enhance. For when a painting has a political theme or is associated with a political event, it will only increase the other values. These refer to a specific cultural event or figure, that gives the whole meaning to the painting, which combined with the others from the first category will enhance even greatly the consequent ones.

Cultural Values (II)/(III)

In these two categories – cultural values (II) and (III) – we have the cultural values that are greatly enhanced by the first category. In the second category, we have the cultural values that appeal to a sense of emotion whether it is personal or communal. These are created by the first category of cultural values (I), and can also be related to each other inside the same category (II). The personal ones that depend greatly on situation and between individuals, are the sentimental and the symbolic values. The commemorative, associative, and social are connected to more objective aspects. Starting with the sentimental value, this one is truly personal and can drastically change from person to person regarding the same object. The symbolic one has a meaning towards a communal feeling. The object has an enormous meaning or symbolism for a community, and this can be for various reasons. These reasons can be other values it possesses from categories (I), or from the same category (II), like for example the commemorative or associative.

The commemorative value can relate more to built heritage (e.g., statues), but it can relate to paintings. Taking Riegl's definition, (named by the author 'intentional remembrance'), this is a value that is present when a monument was built with the intention of keeping the memory of an event alive (Riegl, 1903). This can apply to paintings, in cases where a battle or

a historical event is portrayed for example. When taking Appelbaum's' definition of the same value, a relation with paintings is harder to make. The author says the '*(...) value rests in the appearance of newness rather than period authenticity (...)*', giving the example of a plaque that if damaged, it can be replaced since that does not destroy value, but enhances it (Appelbaum, 2010). The main focus of a painting should not be its newness value since this can lead to excessive restorations. This can eliminate other existing values, such as age and aesthetic values.

The associative value is present in objects that have direct connections with their owner, user, or creator, as discussed in chapter 3. This value is strictly tied to the historical value since it needs the passage of time for the association to be created. It will majorly enhance all of the other cultural values adjacent to the object. Regarding the social value, this one tends to have a bigger association with built heritage and landscapes. This one encapsulates other values since it '*(...) refers to the associations a place for a particular community or cultural group and the social or cultural meanings that it holds for them.*' (Australia ICOMOS, 2013). When looking at Mason's definition of this value, the author states that the social values might include the use of a site for social gatherings or when a place strengthens '*(...) social cohesion, community identity or other feelings of affiliation (...)*' (Mason, 2002). Here, the only reasons paintings can have this value are if they are classified as national heritage or if exhibitions are considered social gatherings that strengthen our sense of community. When thinking of exhibitions where the theme regards depictions and imagery of a certain place, that allude to a '*place attachment*, the paintings here serve as a means for a social gathering that strengthens a community.

In the third category, only two values are present, the economic and monetary. These are influenced greatly by the first and second categories, since the more of these values an item possesses, the more the economic and monetary value will rise. One is usually valued by public institutions (economic) and the other by private owners (monetary). Starting with the economic value, it is propelled by public interest. Money is the instrument used by the public to access the symbolic, and the aesthetic of objects of cultural value, and that all decisions to preserve, study or restore, will have an economic dimension (Lipe, 1984). So, the economic value of an artwork is an indicator of public support and a tool for conservation-restoration interventions, however, it will not be the only standard, because it cannot stand alone (Lipe, 1984).

In order to better understand the gap between the monetary and economic value, Mason theorized over the division between these two values (Mason, 2002). There is a separation of private/market values and public/nonmarket values. In the market value section, he describes a 'use value', which refers to heritage objects that are 'most easily assigned a price' and gives the example of the admission fees for a historic site. In the nonmarket value section, a

'non-use value' is explained as '*(...) the economic values that are not traded in or captured by markets and are (...) difficult to express in terms of price.*', and gives the example of the socio-cultural values an artwork possesses. Inside the latter section, the author makes a subdivision of three categories, the *option* value, the *existence* value, and the *bequest* value. The first one being the value in '*someone's wish to preserve the possibility(...) that [they] might consume the heritage's services at some future time*'. The existence value is solely valuing the fact it exists, and the bequest value, being the usefulness in the possibility of transmitting the piece of heritage to future generations.

The economic (non-use) and monetary (use) values, are not both attributed in a private studio, seeing that the economic value is not needed in this work environment. When looking at both these definitions, it is clear that the monetary value of a painting is a big factor for private owners to seek restoration. This is especially true in works from art dealers, where the monetary value is sometimes the sole purpose of the restoration. The monetary/market value of paintings will be enhanced by a conservation-restoration treatment.

Cultural Values (IV)

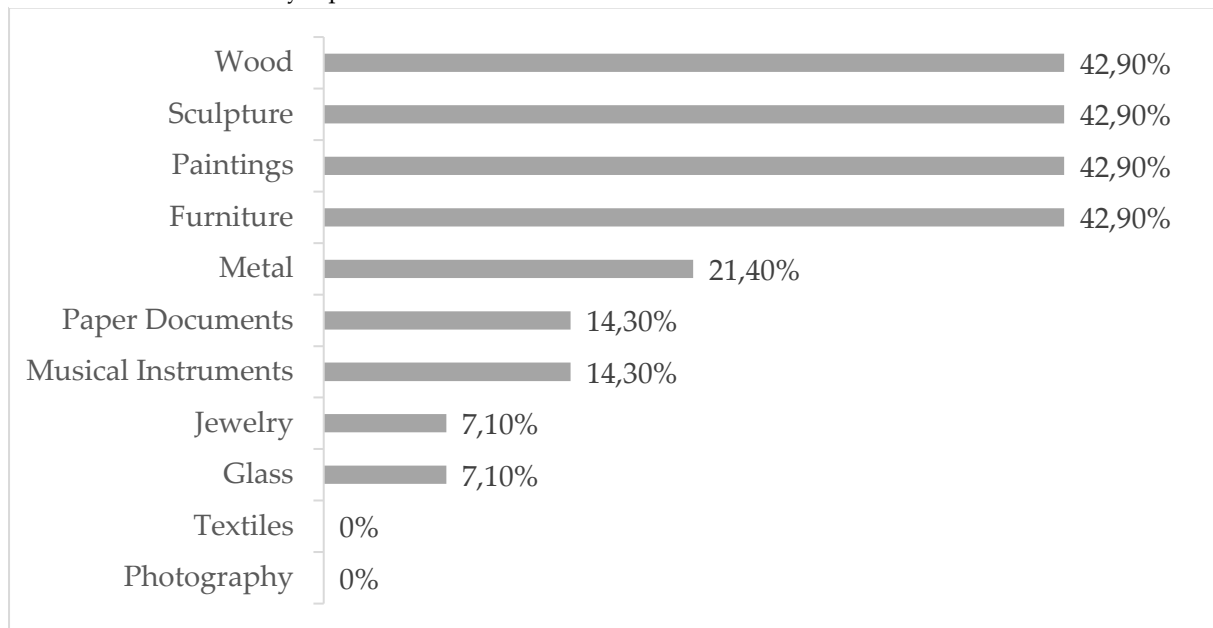
These cultural values are practical and pedagogic. The information, scientific and educational values would certainly not exist without the previous categories. Starting with the information value, this one relates more to the imagery of the painting, and what it can teach us. It is known that some of our world history is based on imagery from the past, and what we can perceive from it. This is informational value. The scientific and educational values are more practical ones and they can relate to the support, canvas, the artist's technique, pigments, the paintings creation, or previous restorations. The educational value is present when the object is able to transmit information about its design construction or mode of operation (Appelbaum, 2010). It can be said, that this one is present in majority of paintings, if not all, since every aspect of a painting can show how it was constructed. Starting with the type of support and canvas used, and other specific characteristics that tells us how the creator must have painted. The previous restorations seen on paintings also contribute majorly towards conservation-restoration history, and therefore, can be seen as educational.

The scientific (or research) value, will depend on '*the data involved, on its rarity, quality or representativeness (...)*' and on the ability of the object to contribute to further substantial information (Australia ICOMOS, The Burra Charter, 1999). This cultural value can be present in any object. All objects contain information about their history, and the deterioration it may have sustained can also be of scientific interest. In private practice of conservation-restoration, these three cultural values are present. The latter, however, can be present in a painting, but scientific research may not be executed due to lack of resources.

APPENDIX B - SURVEY RESULTS

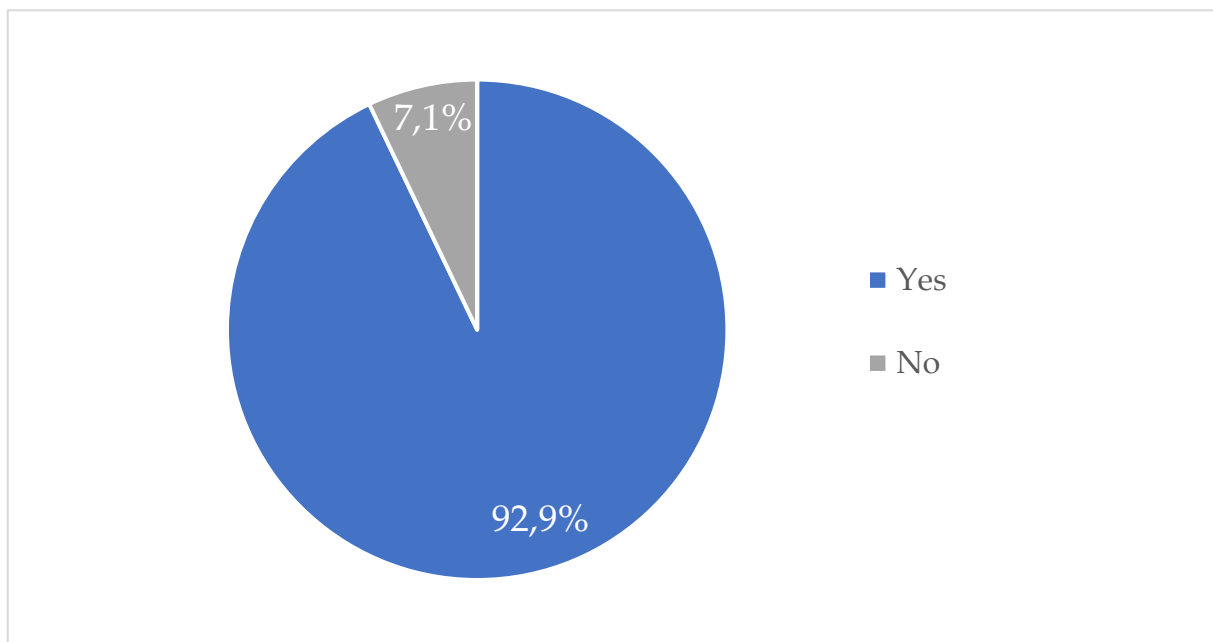
Question 1 - On which typology of objects is your work based on? (Multiple possible answers)

Table 10 - Results to surveys' question n° 1



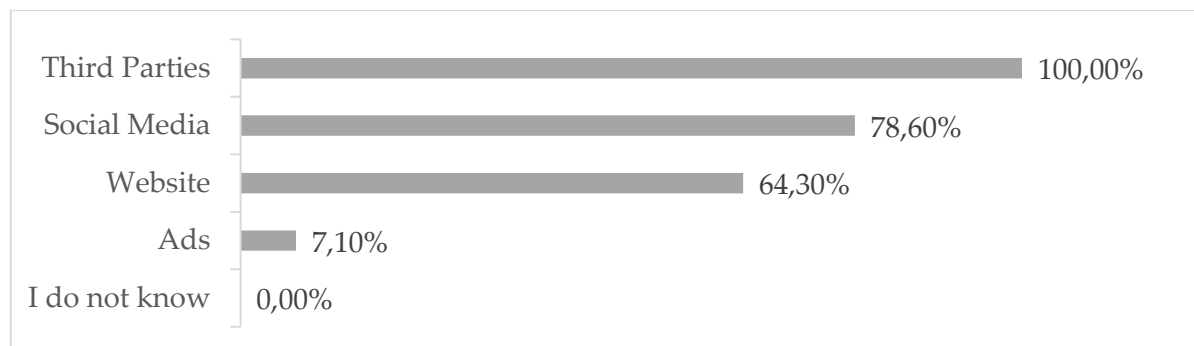
Question 2 - Is the private studio you work(ed) on publicized?

Table 11 - Results to surveys' question n° 2



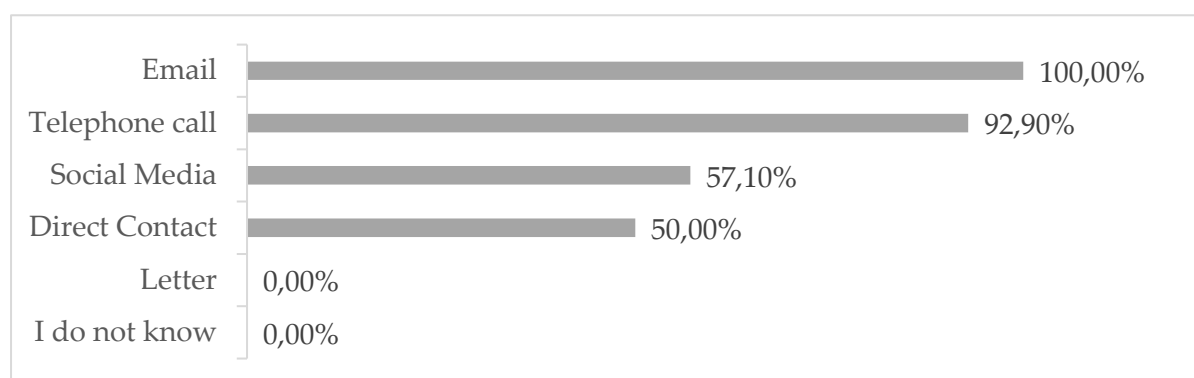
Question 3 - Through which method is the conservation-restoration studio publicized? (Multiple possible answers)

Table 12 - Results to surveys' question n° 3



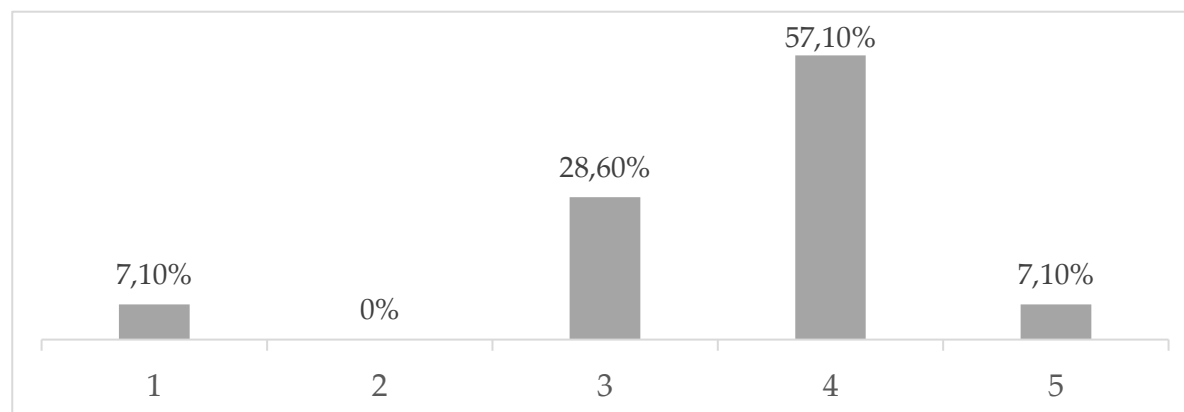
Question 4 - How is the first contact between conservator and client made? (Multiple possible answers)

Table 13 - Results to surveys' question n° 4



Question 5 - On a scale of 1 to 5, how would you classify the private studio of conservation-restoration you work(ed) on, in terms of limitations. (1- very limited; 5- no limitations)

Table 14 - Results to surveys' question n° 5

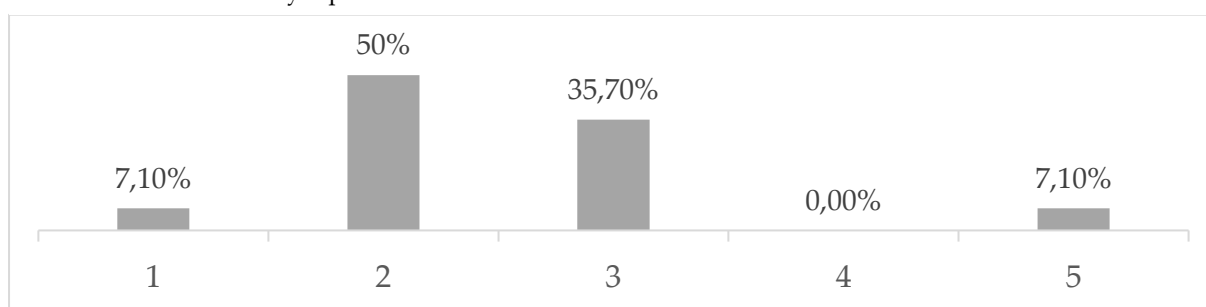


Question 6 - If it were possible to have access to any scientific tools or equipment that would greatly facilitate your work, which would you choose?

- Scientific equipment: “XRF, RAMAN” (2); “FTIR, Microscopy”; “SEM”
- Tools: “Band saw”; “Binocular magnifying glass”; “Heat suction table” (2); “Lathe” (2)

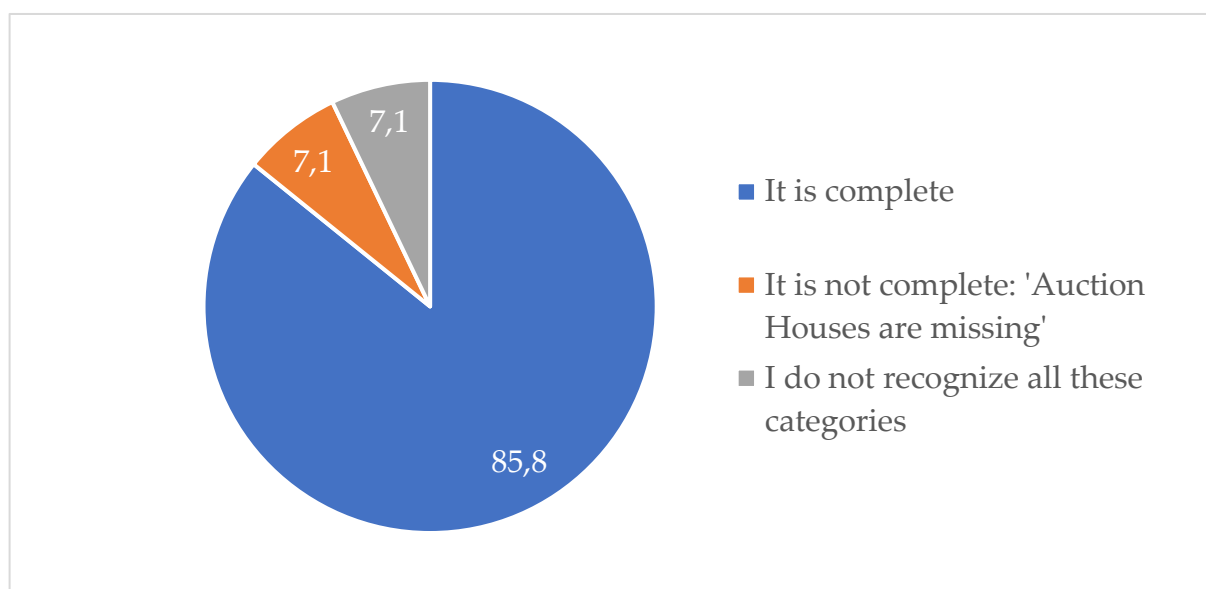
Question 7- On a scale of 1 to 5, how uncertain would you say conservation and restoration treatment becomes without access to scientific analysis equipment? (1- not uncertain at all, 5- extremely uncertain).

Table 15 - Results to surveys' question n° 7



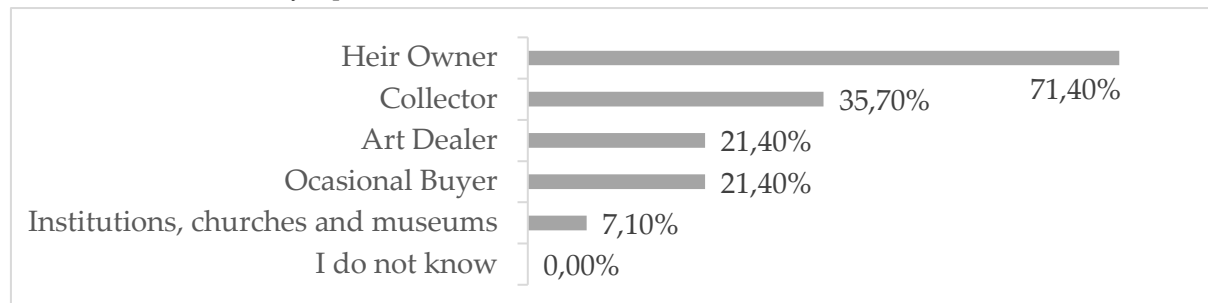
Question 8 - According to your personal professional experience, do you recognize these categories of clients in the establishment you work or worked in?

Table 16 - Results to surveys' question n°8



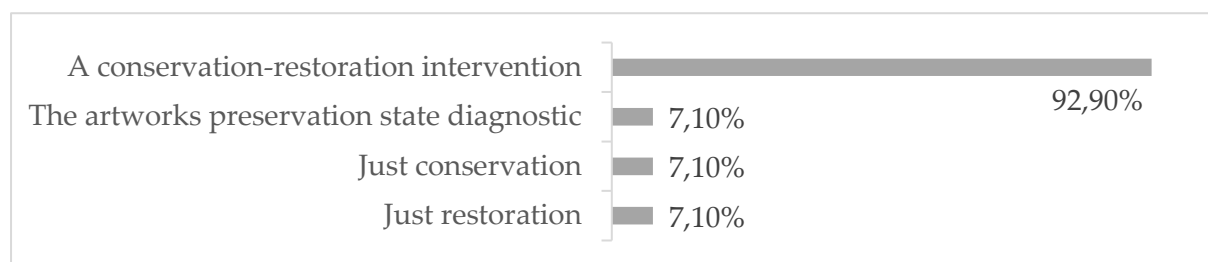
Question 9 - According to your personal professional experience, what type of client would you say is most common in your establishment? (Multiple possible answers)

Table 17 - Results to surveys' question n° 9



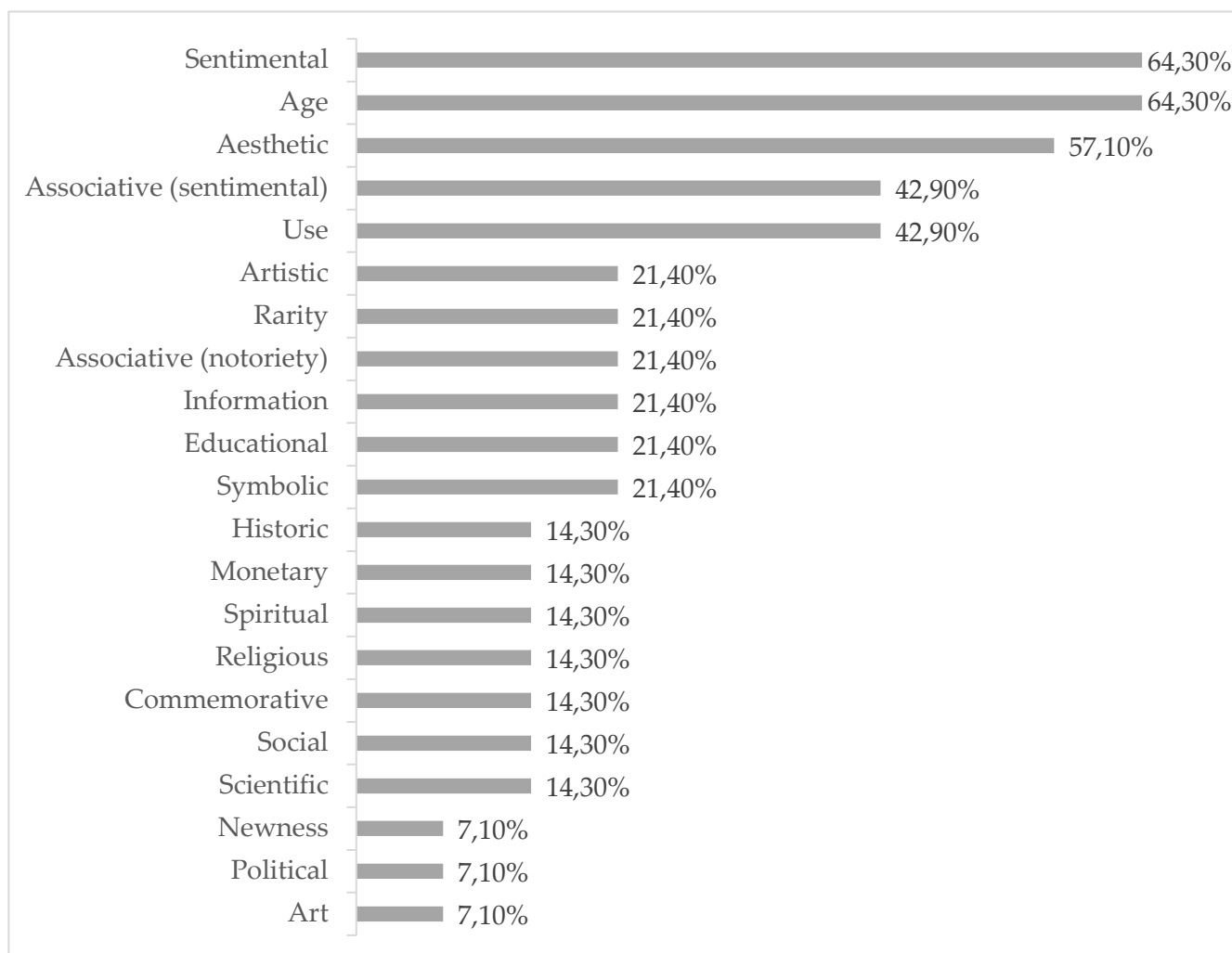
Question 10 - The clients usually ask for: (Multiple possible answers)

Table 18 - Results to surveys' question n° 10



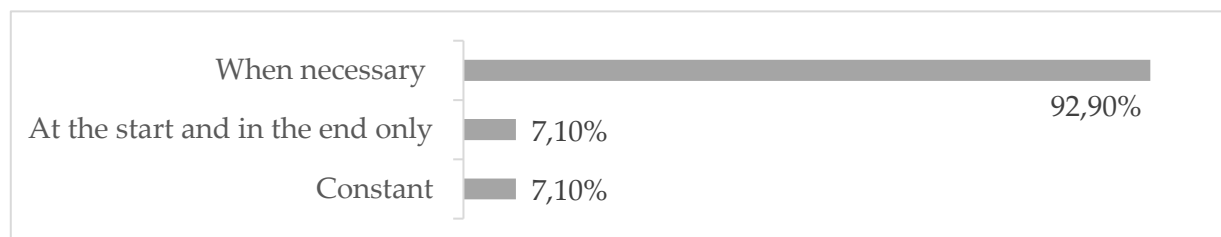
Question 11 - In general, what is more valued by your clients when they search a conservation-restoration intervention for their artworks? (Multiple possible answers) (These were accompanied with the same definitions in the cultural values chart in Appendix A.1.)

Table 19 - Results to surveys' question n° 11



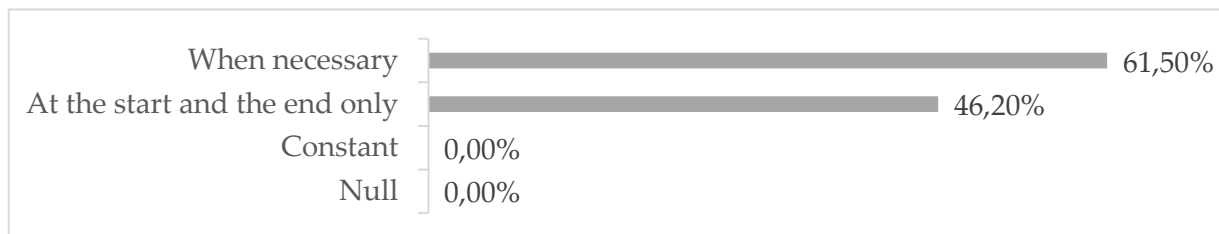
Question 12 - During the intervention of conservation-restoration how would you describe your initiative in establishing contact with the client? (Multiple possible answers)

Table 20 - Results to surveys' question n° 12



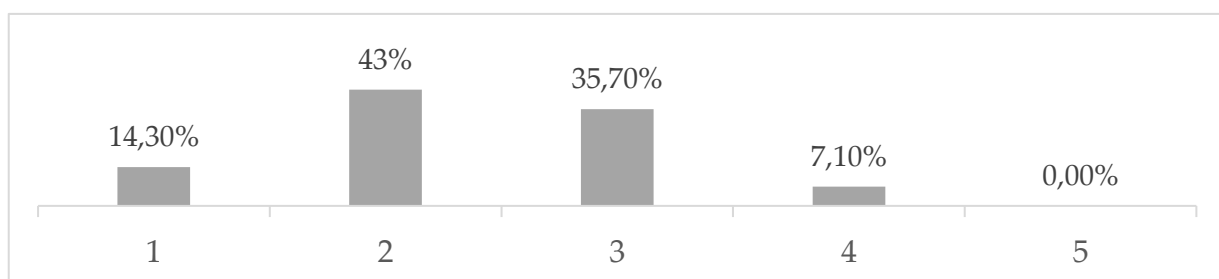
Question 13 - During a conservation and restoration intervention, how would you describe the client's initiative to establish contact?

Table 21 - Results to surveys' question n° 13



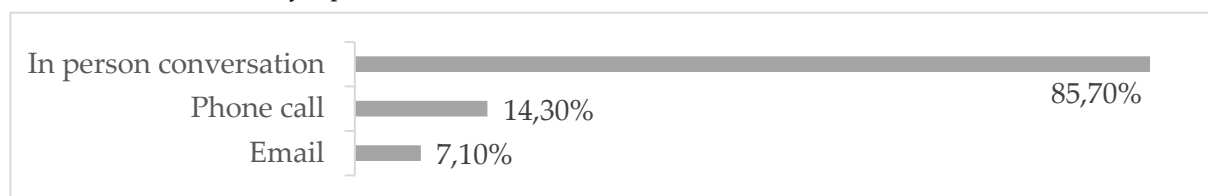
Question 14. From 1 to 5, would you say that you find many situations of disagreement, in which the owner's request goes against your ethics and professionalism? (1 – no situation of disagreement, 5- multiple situations of disagreement)

Table 22 - Results to surveys' question n° 14



Question 15 - Which mean of communication is more efficient when trying to reach a compromise with a client? (Multiple possible answers)

Table 23 - Results to surveys' question n° 15



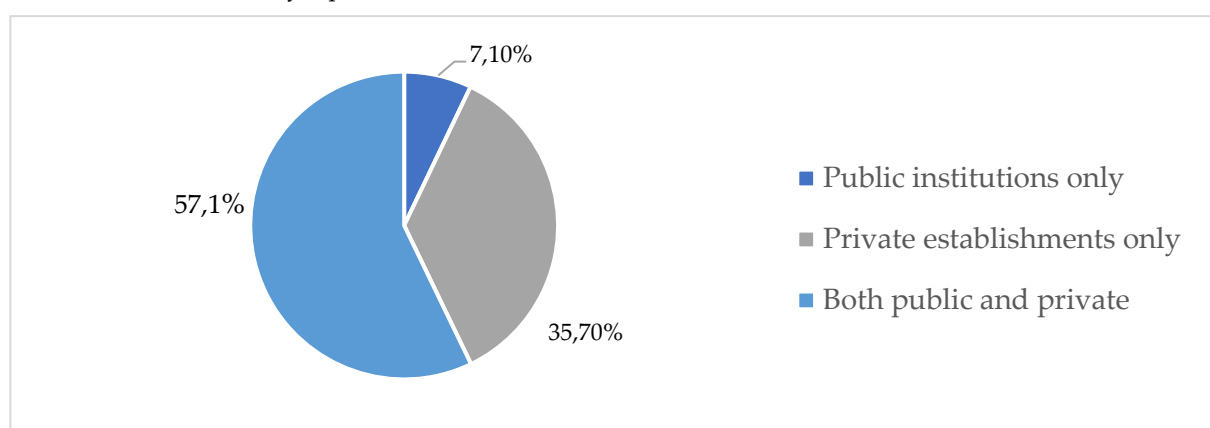
Question 16 - What factors would make you refuse to conserve and/or restore a work? (Free written answers)

- "The obligation to go beyond the code of ethics for conservation and restoration: disrespecting the work, misrepresenting or altering the original work; carry out treatments that jeopardize the future conservation of the work."
- "When what is asked of me goes against my ethics, but especially when I don't have the conditions, availability or equipment to do it and I recommend another professional"
- "Any that implied the irreversible destruction of the most important values associated with the work"

- “In an intervention that changes the piece's identity” (2)
- “A piece that has already been the target of multiple poor quality restoration interventions.”
- “Just in case you weren't able to deal with a part or reasons related to the seriousness of the client itself.”
- “Irreversibility” (3)
- “If it were against ethical and deontological principles. For example, delete or repaint the original”

Question 17 - Please indicate the sectors in which you have worked in the conservation-restoration profession.

Table 24 - Results to surveys' question n° 17



Question 18 - What do you think are the biggest differences between both sectors (public and private) in the exercise of your profession? Answer only if you worked in both sectors. (Free written answers)

- “In the public sector, as a rule, the works are less likely to have been subjected to irresponsible conservation and restoration treatments”.
- “Public institutions: more bureaucracy, less supervision, less freedom of time, difficulty in acquiring financing, materials, resources and very dependent on the political calendar. Private institutions: more supervised, therefore more legally prepared. Easier to find resources and materials, more freedom of schedules, and to choose partners, colleagues and clients. More charges and expenses, and risk of future and uncertain work”.
- “Intervention delays: Decision by hierarchy, and acquisition of materials”.
- “Public: easy access to diagnostic tools and easy contact with professionals from other areas of expertise; longer delivery times; more time for research and collection of ancillary information”.
- “The biggest difference is just bureaucratic issues”.
- “The pressure in relation to the time of work, that is, in the public, there is no such direct relationship between the hours of work and the money earned. The availability of technical

and scientific resources is lower in the private sector However, when there is money in the private sector, it is faster to acquire these resources because in the public there is a lot of bureaucracy involved”.

- “In public institutions, there is generally greater knowledge of the historical value of the pieces”.
- “Professional stability”.

Question 19 - As a conservation and restoration professional who works or worked in a private studio, what aspects do you consider **positive** in your day-to-day work? (Free written answers)

- “Independence”.
- “Personal management (schedules, values, resources, etc.)”.
- “No bureaucracies”.
- “Greater contact with client”.
- “No routines”.
- “Autonomy”.
- “Freedom of choice”.
- “Challenges and constant adaptation to each work”.
- “Diversity of works, and interventions”.
- “Increase in productivity”.
- “Constant learning”.

Question 20 - As a conservation and restoration professional who works or worked in a private studio, what aspects do you consider **negative** in your day-to-day work? (Free written answers)

- “The possible lack of historical and scientific support for a better understanding of the work to be restored”.
- “The uncertainty and anxiety of not knowing if I will continue to have work in the future and not being able to pay the expenses”.
- “The difficulty in acquiring materials”.
- “Income irregularity and the lack of a credible state structure for the independent worker”.
- “Excessive workload”.
- “Lack of opinions exchanged with colleagues due to working alone”.
- “Lack of resources and instability”.
- “Budgets are often low and there is pressure to carry out interventions fairly quickly”.
- “The pressure to meet demand is great. It starts to interfere a lot with private life”.

APPENDIX C - PHOTOGRAPHS

C.1. 'Unknown Portrait'

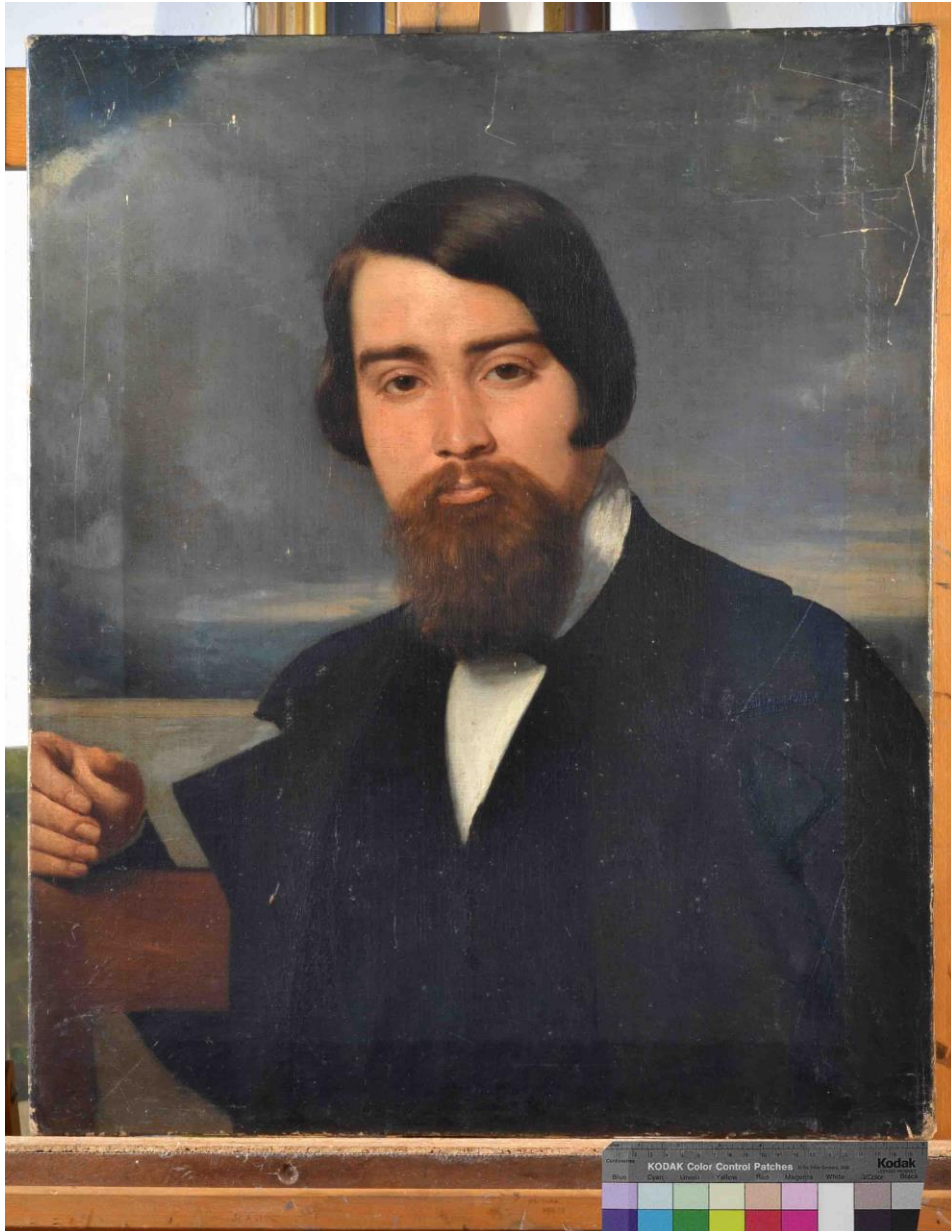


Figure 15 - Unknown Portrait. Oil on canvas. Unknown date. 66 cm x 54 cm. Front view of the painting.



Figure 16 - Unknown Portrait. Oil on canvas. Unknown date. 66 cm x 54 cm. Back view of the painting.

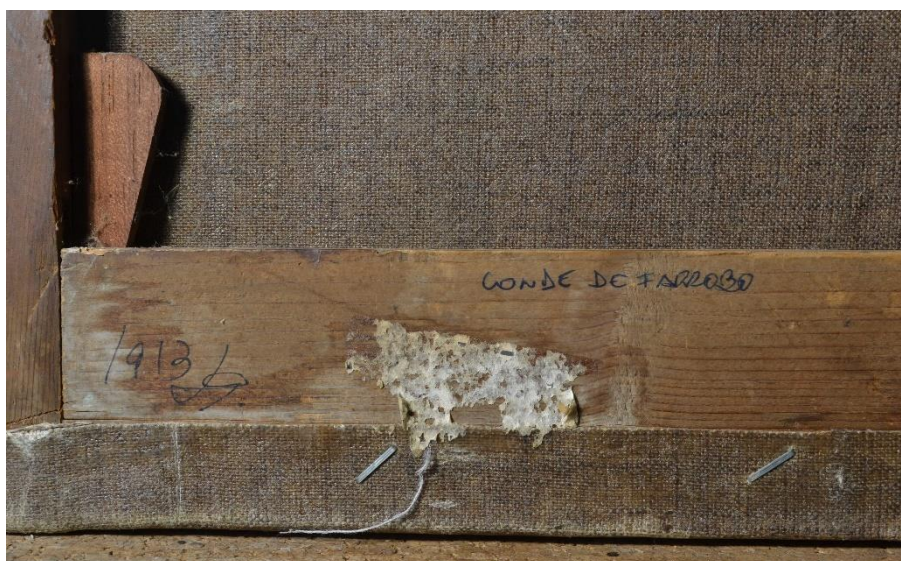


Figure 18 - Unknown Portrait. Inscription on the back of the stretcher. Reads '1913' (left) and 'Conde de Farrobo' (right).



Figure 17 -Unknown Portrait. Inscription on the back of the stretcher. Reads '1913'.

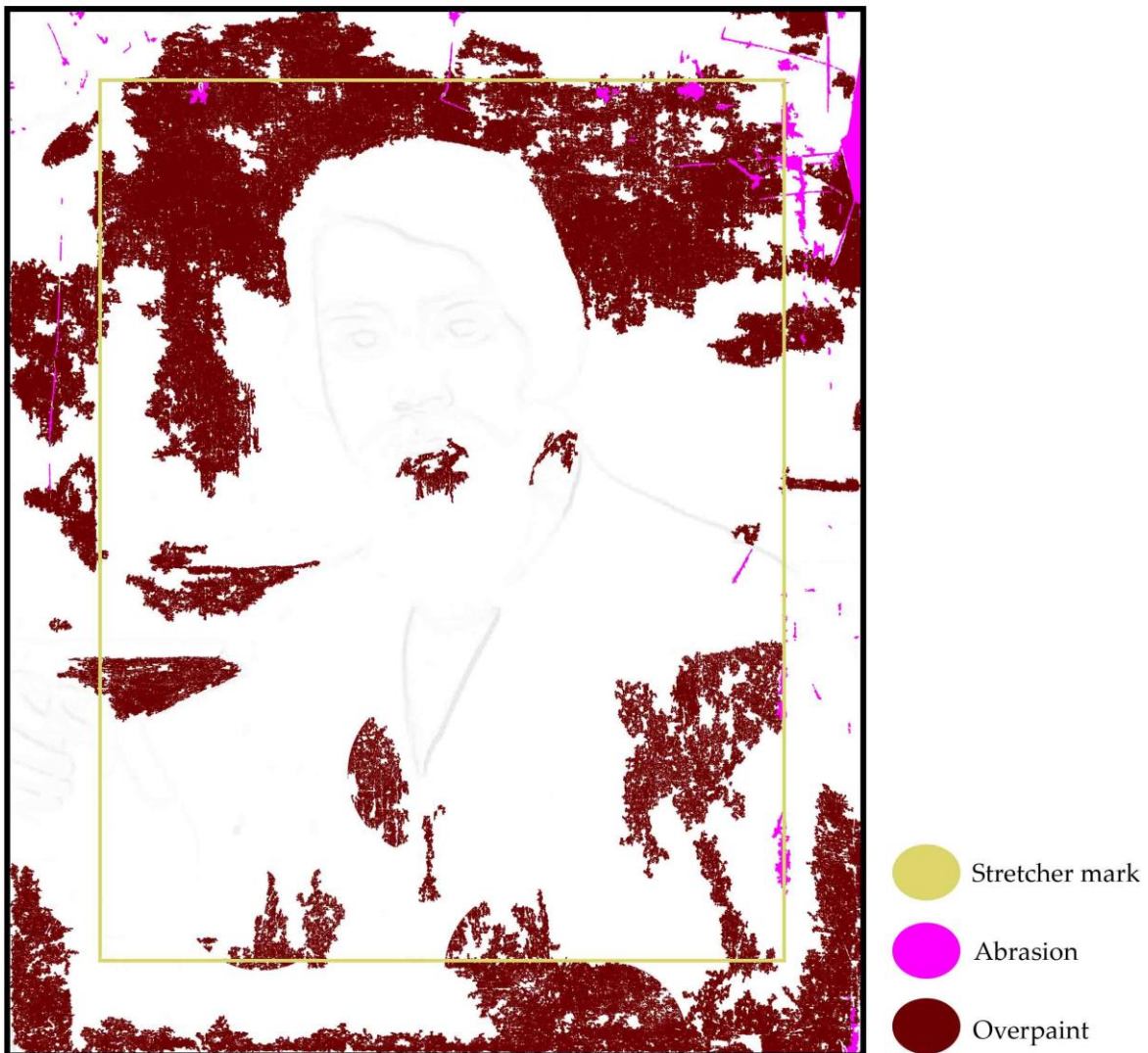


Figure 19 - Unknown Portrait. Mapping of the front of the painting.



Figure 20 - Unknown Portrait. Front view of the painting. Raking light.

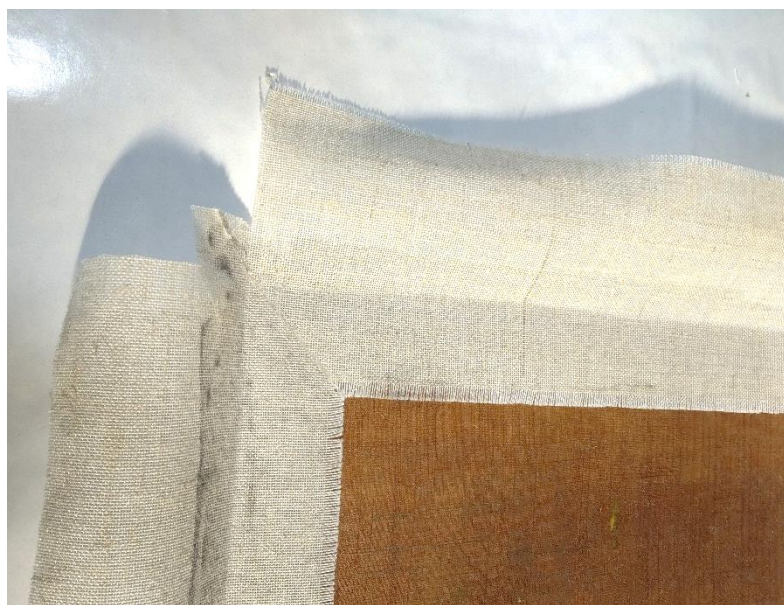


Figure 21 - Unknown Portrait. Detail of the reinforcement canvas bands. Adhered with *BEVA*® 371 film.



Figure 22 - Unknown Portrait. Front view. After conservation-restoration treatment.

C.2. Burnt Paintings



Figure 23 - Oil painting on canvas, n°1. 25,5 cm x 23 cm. Front of the painting. Before treatment.



Figure 24 - Oil painting on canvas, n°2. 25,5 cm x 23 cm. Front of the painting. Before treatment.



Figure 25 - Oil painting on wood, nº3. 23 cm x 30,5 cm. Front of the painting. Before treatment.

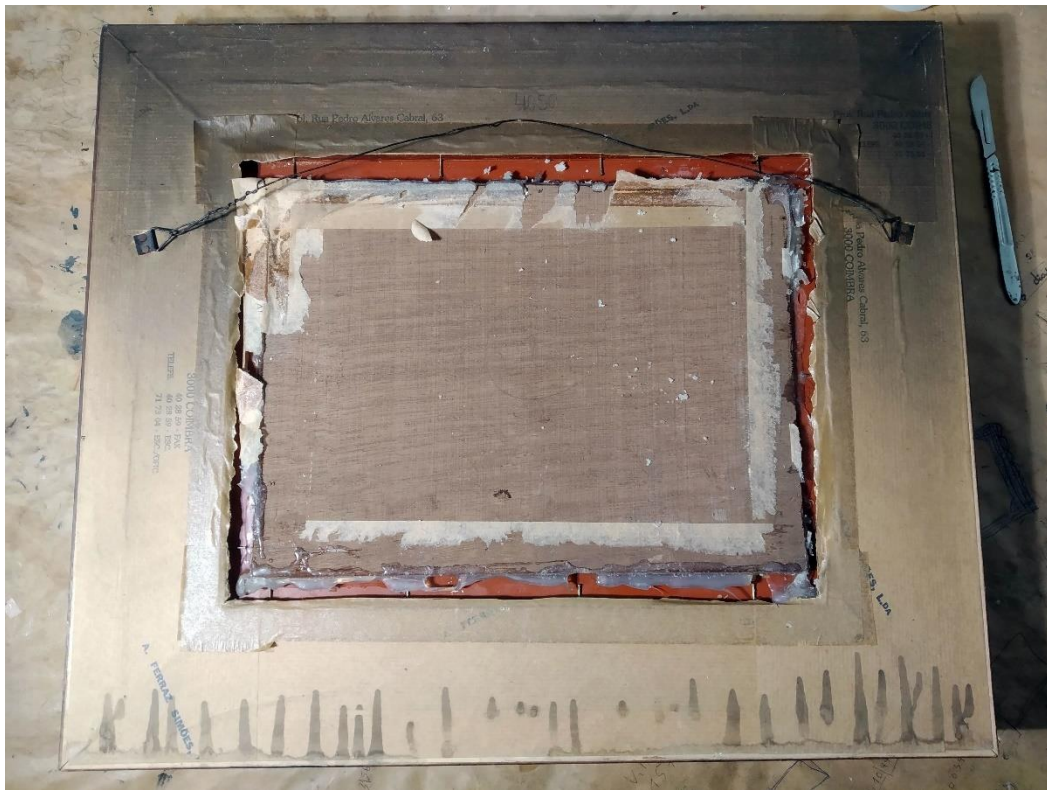


Figure 26 - Painting n°3. Back view, while still adhered to the frame.



Figure 27 - Painting n°3. Detail of the back while still adhered to its frame.



Figure 29 - Painting n°3. Detail of the cleaning intervention. Right bottom corner.



Figure 28 - Painting n°2. Detail of the cleaning intervention. Right top corner.

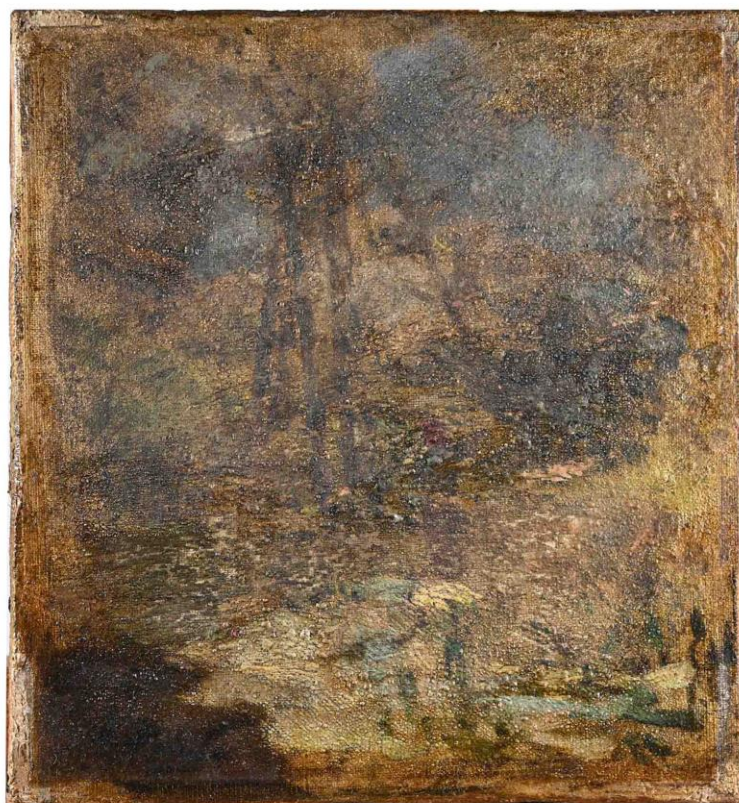


Figure 30 - Painting n°1: after the cleaning intervention (top); after cleaning, lowering of the blisters, chromatic restoration and varnishing (bottom).

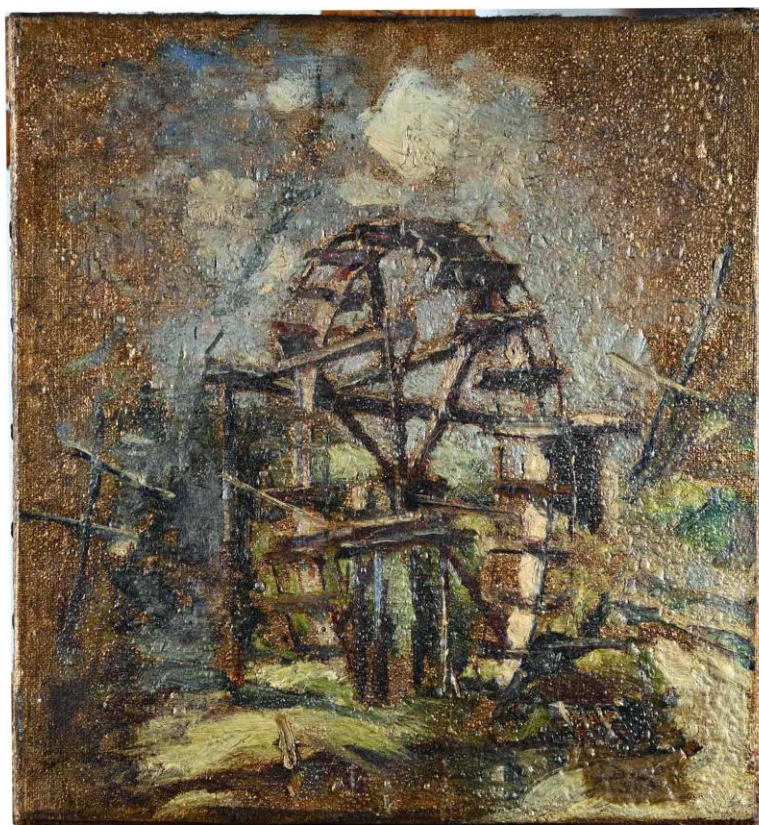


Figure 31 - Painting n°2: after the cleaning intervention (top); after cleaning, lowering of the blisters, chromatic restoration and varnishing (bottom).

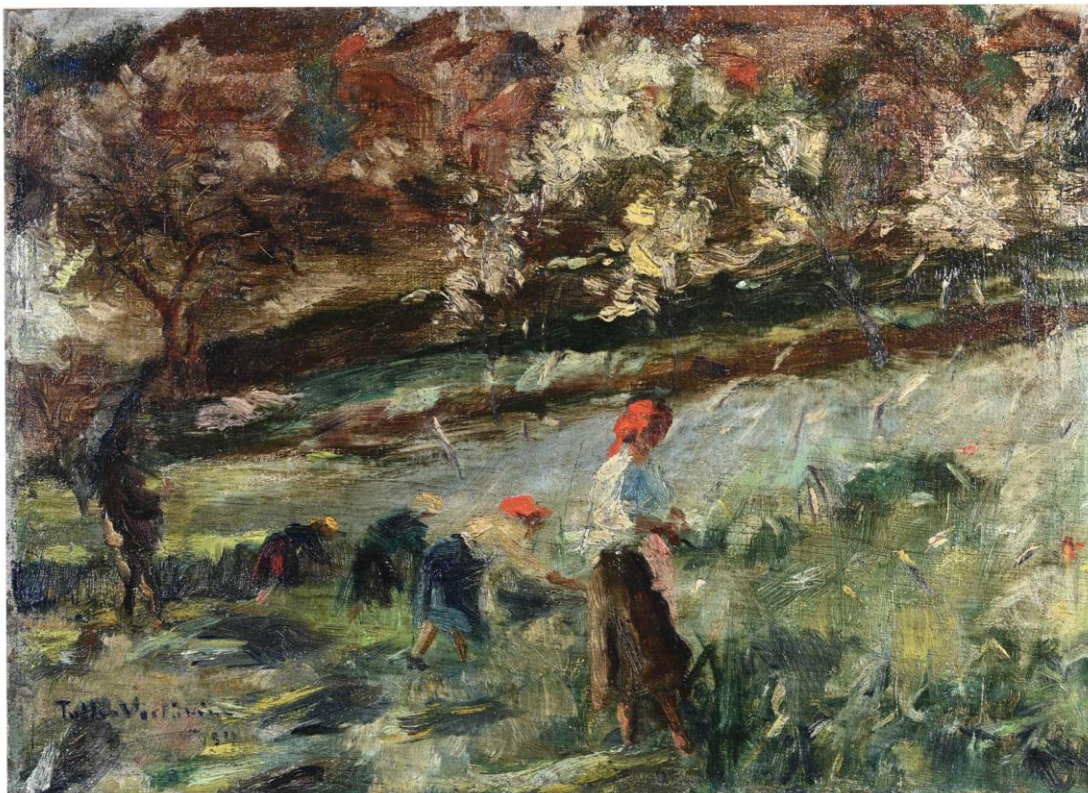
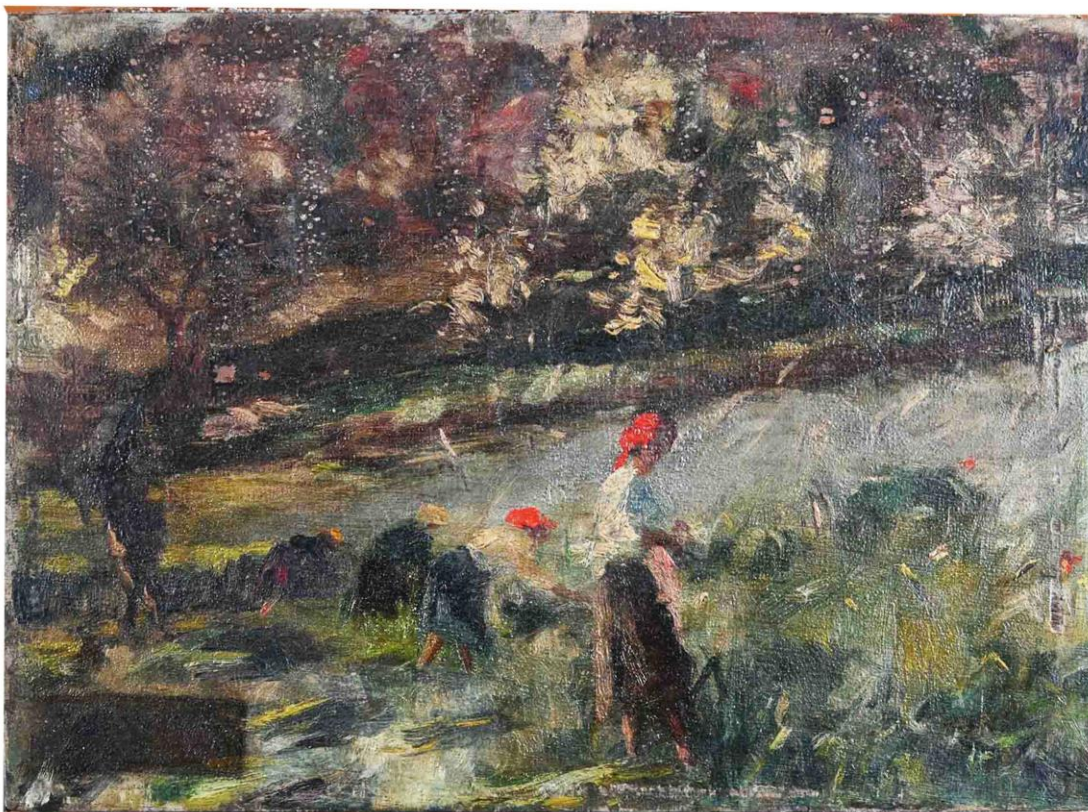


Figure 32 - Painting n°3: after the cleaning intervention (top); after cleaning, lowering of the blisters, chromatic restoration and varnishing (bottom).



2021 MARIA SOUSA ROQUETE

CULTURAL VALUES MANAGEMENT IN A PRIVATE CONSERVATION-RESTORATION
STUDIO SPECIALIZED IN EASEL PAINTINGS