

## Stained Glass Workshop Heritage in Portugal with more than 100 Years

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### Abstract

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In 1906, a workshop heritage predominantly dedicated to stained glass opened in the city of Porto, Portugal. A family production that has passed from father to son, from grandfather to grandson. Various famous Portuguese artists have worked with this workshop heritage in a close relationship with the craftsman that executed the stained glass windows and the painting of grisaille. The production made in this workshop is vast and for more than a century it has been operational, being one of the oldest workshops in Europe that remains in operation. The works produced are not just related to ecclesiastical entities, but also courts of justice, town halls, hospitals and private residences and collections. The stained glass windows are displayed all over Portugal and also abroad. The workshop heritage also did conservation and restoration on significant stained glass. This paper will focus on the production of this workshop heritage, showing some significant examples of the work produced by the three generations, elaborating colorful windows with grisaille paintings presenting the changes that happen during the XX and XXI centuries. The works assets would now be recognized with the opening of a stained glass museum (Museu do Vitral) adjacent to Porto Cathedral in 2021.

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**Keywords:** stained glass, workshop heritage, production, museum, collection.

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### 1. Stained glass production

Portugal has a history regarding the production of stained glass and workshops heritage, however not as vast as can be found in production in France, England or Germany. According to the historian Pedro Redol, the first example of a stained glass window in Portugal dates from the 15<sup>th</sup> century and are on display in Santa Maria de Vitória Monastery in Batalha. (Redol, 2003) However, it is in the 20<sup>th</sup> century that there is a development of this art, with countless works of artistic quality done by famous Portuguese artists and the emergence of stained glass studios.

The stained glass technique refers to pieces of colored or painted glass that are arranged to form a picture or patterns by strips of lead and supported in a rigid frame. In the early days of the stained glass manufacture the technology only allowed the production of small sizes of colored glass, but today with technological progress the sizes increase. Colored glass can transform the light intensity inside the building and change the interior space. The light intensity changes through the day, shadows project on the floor and wall have several variations according with the light intensity. It is a mosaic of colors. This is an ability that no other material and medium could boast.

Making a stained glass window is still a complex and costly process, as the artist needs to make the composition and after a craftsman makes the production. First sketches are created and then draw the design to the full scale of the window, after the cartoon is made.

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Sometimes in the cartoons the reference of the color is displayed on the numbered glass divisions. Then the craftsman process commences with cutting individual pieces from large color sheets of glass. The glass cut is done with extreme accuracy. After the glass is cut the painting process begins.

Painters add the details with *grisailles*. This is a paint made with oxides metals, painted with a brush to the glass sheet using gum Arabic as a fixing agent and then fired in a kiln. (Machado et al 2019) Enamels can also be applied and the temperature range varies from 500°C-680°C depending on the kiln used. Some glass has second firings as the paint needs several layers until the desired result is achieved. Finally, the pieces are assembled and joined together with narrow leads strips. At this process stage, Bray calls it the glazing of the windows. (Bray, 2001) Once this process is completed the joins are soldered on both sides.

Stained glass is normally commissioned and related to a specific given place. Robert Sowers writes, “it is declared to be hopelessly compromised from the outset”. (Sowers, 1979, 55) It is common that some artists only make the drawing/composition, after which they go to a studio to make the cartoons and produce the stained glass, this was the case for several works made in the Antunes workshop. According to Moor (1989) the interpretation of another artist’s design requires a special understanding of the medium, great technical ability and a sensitivity of the artist’s requirements. All these aspects constitute a special talent itself.

The craftsman in the studio has a very important role on the elaboration of the stained glass piece. Shales refers to the labor of craft glass saying it looks easy even when actually it is not (Shales, 2017). The craftsmanship of the stained glass production is a very meticulous process and the craftsman needs to control how to paint with the *grisaille*, knowing the technical boundaries of the material.

Craft is in constant need of direction and control and nourishment of all kinds from art: from painting, sculpture, and architecture. It seldom gets it. When it does, fine stained glass can happen; when it doesn’t, ordinary “commercial glass” – just another window – is added to the ghastly, vast existing stock. (Piper, 1979, 61)

The methods of assembling the stained glass used in the Antunes workshop heritage are still the same techniques used as in the earliest times and areas described above.

## **2. The workshop heritage**

Located in a historical center of Porto, this workshop heritage remains a family business, and is now in its third generation with the present artist João Aquino Antunes. The workshop changed locations several times within Porto city, first at Rua da Fabrica (Factory Street), Santa Teresa, Conde de Vizela, Ponte da Pedra and finally in Rua do Vilar (Vilar Street) near to the Jardins do Palácio de Cristal (the Crystal Palace and gardens), where it is still operating from today (Figure 1). The manufacture created in this workshop is immense and for more than a century it has been operational, being one of the oldest workshops in Portugal that remains in open today. (Almeida, 2011) In a close relationship with the craftsman, several internationally renowned Portuguese artists have collaborated with this studio. The works produced related to ecclesiastical entities, and also justice courts, town halls, hospitals and private residences. The production can be seen across Portugal, with a high concentration of examples in the north of the country, nonetheless this studio has also completed work abroad.

The interior of the workshop and studio remains with the concept of the beginning of the XX century. Small drawers where color glass pieces are kept, light boxes for painting the *grisaille* and a table to assemble the stained glass (Figure 2). In the adjacent room is the kiln and the large table to prepare the cartoons. Upstairs is the studio, the place of creativity where the cartoons and first sketches are made.



**Figure 1** Facade of the studio at Rua do Vilar (Vilar Street). Photography by the authors.

**Figure 2** Inside of the studio. Photography by the authors.

### 2.1. First generation: Plácido António Antunes

Plácido António Antunes (1886- 1950) is the founder of the workshop heritage in Porto that opened in 1906 under the name 'Vidraria Antunes'. It soon began to have many commissioned works for stained glass windows, not only for public places but also for private houses across the country. Various famous Portuguese artists, such as the painter António Carneiro and Manuel de Oliveira, produced cartoons that were executed here with exceptional technical skills. The initial works were of small dimensions with painting on glass, and 'Assumption of the Virgin' (1906/07) was the first made with the collaboration of António Carneiro for a private residency.

One of the primary works made by Plácido António Antunes was for the *Casa de Saúde* of Boavista in Porto. It was made in two phases, four panels in 1918 and two panels in 1933. In 1924, he made three stained glass works in the Art Nouveau style for the *Palacio de Cristal* (Crystal Palace) in Porto. The English architect Thomas Dillen Jones designed the building that was constructed in 1865, but it was demolished in 1951. Regarding the stained glass, one was destroyed but two were acquired by a private collector. However, the most significant work done by this artist was for the church Santo António dos Congregados in Porto, commissioned in 1925 and finished 1927. (*Jornal de Notícias e Século: 1927*) Composed of three windows, these stained glass were recently restored by his grandson. The grisaille painting in the religious composition shows a singularity in the figures of the Virgin represented in all windows. We can see the Virgin in three stages of time and spirituality. First young, surrounded by angels with a white vest and a blue mantle. In the middle window she is a mother, with young Jesus and her husband. The expression of her face is one of calm (Figure 3). In the third window she is in agony dressed in purple - the color of mourning.



**Figure 3** Stained glass of the church *Santo António dos Congregadas*, Plácido António Antunes, 1927. Photography by the authors.

## 2.2. Second generation: João Baptista Antunes

João Baptista Antunes (1914- 1994) with a degree in drawing and painting from the School of Applied Arts of Porto started to work with his father in 1936. (Vieira, 2003) In 1928, still at an early age and with the help of his father he made a stained glass for the Portuguese Colonial Exhibition. He took over the production of the workshop heritage after the death of his father in 1950, but since 1939 had started to be responsible for all of the workshop. (Vitorino, 2008)

Like his father, João Baptista Antunes made the cartoons of famous artists such as Guilherme Camarinha, Júlio Resende, Augusto Gomes, Coelho Figueiredo, Amândio Silva, Isolino Vaz, Luis Demée, António Lino. During this period the workshop received numerous commissions, employing several workers, where every craftsman would be specialized in a specific function. Figures 4 and 5 demonstrate the workshop atmosphere at the time. It is possible to visualize a collaborative work that required skill and workmanship, as the leading was done or the preparation of placing painted glass in the kiln (Figure 5).



**Figures 4 and 5** Craftsmen working at the workshop in the 1950's. Photography of the collection of João Dias - Antunes Workshop.

<sup>3</sup> Reference given in the interview with the artist João Aquino Antunes.



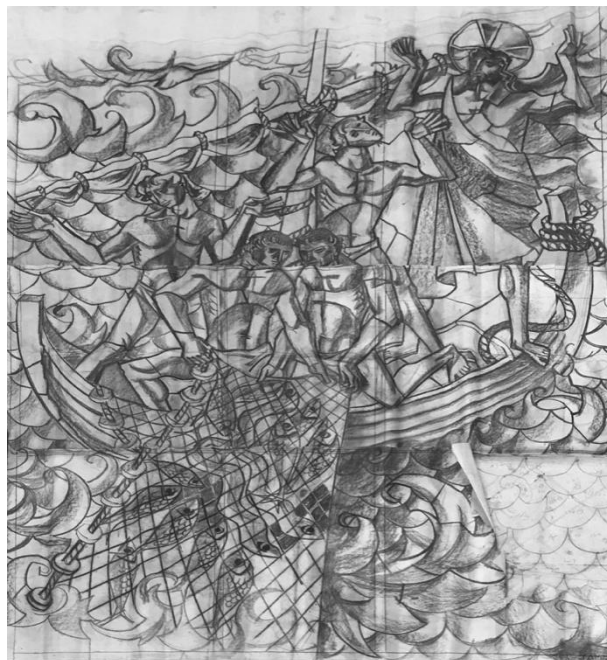
João Baptista Antunes worked with his team in a cooperative manner. We can note from the photographs that document his work that he appears in all to be examining all the works being produced by the team in the workshop. In figure 6 we see the 'painting room', where painting was carried out both horizontally and vertically. Antunes holds a glass fragment inspecting the painting work. His gave remarkable attention to detail on all the work produced.



**Figure6** João Baptista Antunes working at the workshop in the 1950's. Photography of the collection of João Dias - Antunes Workshop.

In 1956, his son João Aquino Antunes started to help him in the production (Vieira, 2003), mainly with the painting of the grisaille.

*Seca do Bacalhau* (Dry Cod) made in 1962 of the painter Guilherme Camarinha (figure 7) is just one example of the works produced. Guilherme Camarinha developed much of his artistic expression in tapestry. This artist sought to translate his plastic subtlety into stained glass, a deep atmosphere with a certain poetry and an understanding of the luminosity of the color in glass. The stained glass windows characterize the allegorical spirituality of Christianity and the essence of the divine universe. The theme is related to the local and a very traditional Portuguese industry regarding the drying of cod, that is used in the regional gastronomy.



**Figure7** Drawing (black and white) of *Seca do Bacalhau* (Dry Cod) Guilherme Camarinha, 1962. Photography by the authors.

Another example of cartoons made by other artist is the work of the artist António Coelho Figueiredo in the court house of Fafe, 1968 (Figure 8). The work can be found at the entrance of the building, in the first stairwell. The themes represented are characterized by figures alluding to justice. They are slender female figures, painted with gray hair, with a striking stature. It is majestic for the contemplation of those who see it. In these works, we see the technique of painting with gray hairs well executed, in the draperies, in the faces of the young women, faces that seem absent from space and time possessing a serenity and sometimes a certain melancholy. Cold and neutral colors dominate the formal composition of the set of stained glass. (Almeida, 2011)

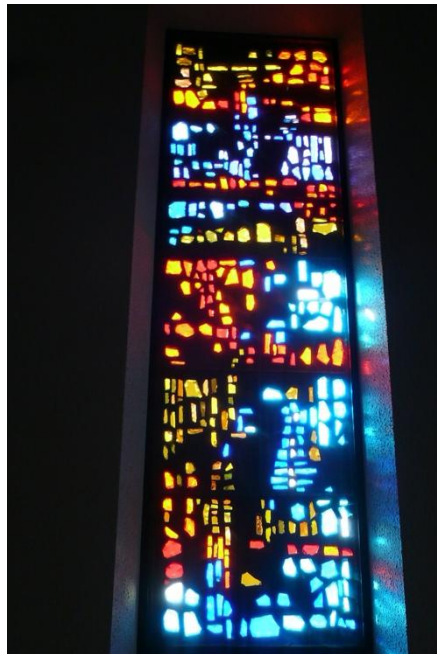
João Baptista Antunes did not only make an extensive contribution of other artists works. He made numerous personal works, such as: five stained glass for the home of Franciscan *Irmas Hospitaleiras* in Santo Tirso, in 1955-56; Convent of Friars (*capuchinhos*) *São Mamede de Infesta* in the 1950's; Mondim de Basto, church S. Nicolão in 1957-58. In the beginning of the 1960's, he made 14 stained glass for Romeu in Macedo de Cavaleiro; *Santuário do Alivio* in the 1960's; and the church *Igreja Matriz* in Ponte de Lima 1963/64. According to his son, this last example is one of the greatest works the artist made.



**Figure 8** António Coelho Figueiredo stained glass in the Court of Fafe, 1968. Photography by the authors.

### 2.3 Third generation: João Aquino Antunes

The artist João Aquino Antunes (1939 - present) started to work with his father in the workshop heritage in the 1950s and both undertook cartoons for many famous artists, such as António Coelho Figueiredo, António Lino, Isolino Vaz, Guilherme Camarinha, de Francesco. João Aquino Antunes obtained a degree in 1970 in the Faculty of Fine Arts of Porto University where he became professor of stained glass and mosaic in 1973 until 2008. In Portugal, the teaching of stained glass has been taught in the Schools of Fine Arts of Porto and Lisbon since 1957, however before the appointment of João Aquino Antunes the practical elements were concerned more with the drawing and composition of a stained glass window. Antunes acquired the first kiln for the faculty that would allow the students to make grisaille painting. He studied at École National Supérieur des Arts Métier D'Arts, Paris and Ravenna Academy of Fine Arts. When João Aquino took possession of the workshop heritage in 1976 (Vitorino, 2008), the stained glasses became more focused on his work rather than works by (collaborations) other artists. He even started making his own work before taking over the leadership. In 1969, he did the first abstract stained glass for a religious construction in Portugal at *Colégio das Escravas do Sagrado Coração de Jesus* in Porto, using the *dalle de verre* technique (Figure 9). *Dalle de Verre* is a technique applied in architectural glass, consisting of "thick pieces of glass set into concrete blocks". (Neiswander, Swash, 2005, p 274) The small color pieces of glass of about one inch (22mm) thick were chipped and shaped with a tungsten hammer. In the blue glass we can discern the shape of a figure. The light produced by this window extends into the interior of the building providing a mystical and idyllic atmosphere, a sense of calm and well-being, as a soothing light that falls on the souls of believers while they are in their place of worship. (Almeida, 2011) This was the first work made in this technique from Aquino Antunes, the craft of making required research that he did abroad in one of his many trips.



**Figure 9** Sainted Glass of Colégio das Escravas do Sagrado Coração de Jesus in Porto, João Aquino Antunes, 1969. Photography by the authors.

In 1971, Júlio Resende (1917-2011) worked with João Aquino Antunes and made a stained glass for the Justice Court in Vagos. Lead is used here as a structuring element in the composition, much more than a simple separator of unevenly colored glasses.

During this period Resende told Aquino that their heritage in drawings, cartoons, stained glass that existed in their studio resulting of 75 years of activity, no longer belonged to him as a private collection, because of the quality and importance in the history of Portuguese painting, it must become public displayed heritage<sup>4</sup>.

Resende is one of the greatest Portuguese artists. According to Laura Castro “Mural art has been constant throughout Júlio Resende’s career”. (Castro, 1998) In fact, this artist has a vast and considerable body of work regarding in frescos, mosaics, stained glass with a greater emphasis on ceramics. For him the knowledge and practice of technologies beyond painting on canvas is important. When in 1958 he became professor at FBAUP (the Faculty of Fine Arts of Porto University) he taught mosaic, stained glass and ceramics. (Castro, 1998) Resende was a great influence to João Aquino, first as an artist of reference and then as a friend.

In the 1980s this artist came into contact with the German faculty and the works of artists such as: Georg Meisterman, Johannes Schreiter, Ludwig Schaffrath, Joachim Klos. This fascination with the masters of Germany is also expressed in the works of the artist, such as the large composition, *Landscape (Paisagem)* 1988. A colorful blue stained glass window installation with artificial light that was submitted for the title of Fellow Professor, which was conferred by School of Fine Arts, University of Porto. Achieving this title was demanding. The Jury gave five themes and João Aquino selected one to make first, a sketch of what would be the “large composition”, in his case landscape was the selected from, city, interior, messenger and Earth. After this the candidate has sixty sessions with eight hours each to make the work. Also, another work needs to be made, a figure model in ten sessions with four hours each. “Nude” was performed in a clear glass with an etched figure. Posteriorly to the practical works two lessons had to be given. The first is a selection from fifteen themes, the candidature withdrawn one, the second is a theme chosen by João Aquino who elected “analysis of the causes for the emergence of contemporary stained glass”.

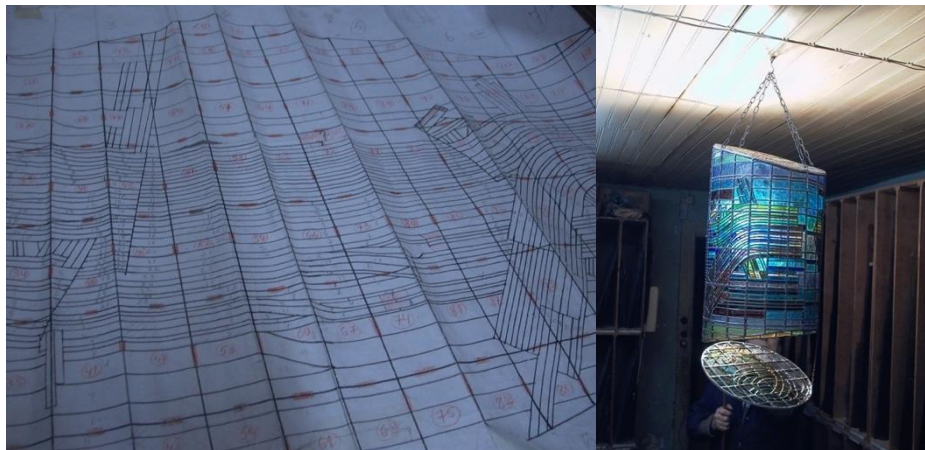
We can also mention other works where the influence of the German school is visible: stained glass for chapel (a tomb) in the cemetery of São Martinho do Campo. (Almeida, 2011) Also, in the 1980s this artist made one of his greatest works for the church in Famalicão, near Porto.

<sup>4</sup>Reference given in the interview with the artist João Aquino Antunes



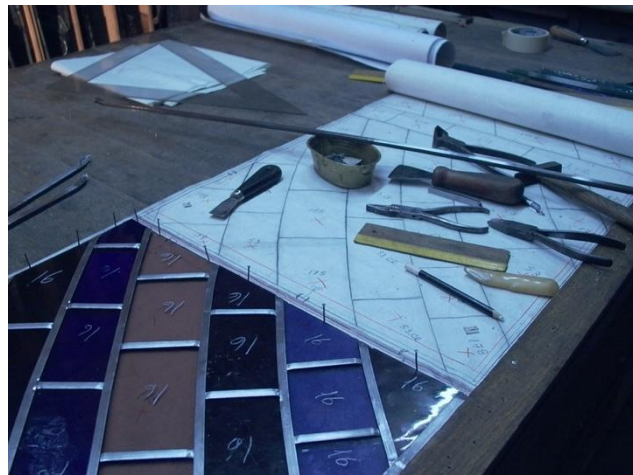
For João Aquino Antunes speaking about stained glass is speaking about mural painting. It is to state the rule that the artists have in the society through the existence communication on his works. He says that when making a stained glass you should have in attention three factors; first, using your imagination for a better sensibilization of the monumental scales; second, communicate with the architects and engineers and third, be aware of the new techniques and technologies that are been made towards glass technology and could be used in the work.(Mendes, 1994)

In 2007, he made a monumental stained glass dome, five meters in diameter and eight feet high for the clinical center of Coimbra. Abstract forms defined by the integration of the leads are used to compose this stunning piece. Groundbreaking work not only for the medium; a large dome that is characterized by cylinder that crosses the architectural structure. The composition is abstract, circling the structure where the horizontal rhythm is dominant having a slanting form. When doing a stained glass, Aquino Antunes always made a model (maquette) in order to visualize how it is going to be in the final piece (Figure 10 and 11). It was a complex form made at the studio with the help of the craftsmen, José Oliveira and Jorge Magalhães, who worked in the studio from a very young age (Figure 12). All of it is made with colored glass; the *grisaille* was only used on the artist's signature.



**Figure 10** Maquette of the final model. Photography by the authors.

**Figure 11** Completed model. Photography by the authors.



**Figure 12** Assembling the stained glass. Photography by the authors.

João Aquino's works are found all over the world, in countries as far as Thailand, USA, Angola, Timor, Venezuela, Australia and South Africa. His work is recognized abroad, and he won a prestigious award in 1980 in the 2<sup>nd</sup> international exhibition of stained glass in Chartres, France. He is responsible for the conception of the stained glass museum – Museu do Vitral.

### 3. The museum



In 2008, Aquino Antunes gave several interviews to leading national newspapers where (Belém, 2008; Vitorino 2008) he spoke about the realization and the vision of his museum that would have a collection that would comprise the workshop heritage's set of cartoons manufactured over the past 100 years. Firstly, the museum has planned to be in front of the workshop heritage, but it changes its location to Rua Dom Hugo next to Porto Cathedral (Figure 13). According with historian and author Neill Lochery:

is a wonderful reminder of the traditional art of the production of stained glass that graces many of the holy buildings in the city of Porto. Having alluded to the beautiful stained glass in Livraria Lello and in select churches, what better location to house a museum in honour of one of its best exponents than next to the cathedral. Museu do Vitral houses works and collections from the Atelier Vidraria Antunes, the oldest stained-glass workshop in the city. (Lochery, 2020, 243)



**Figure 13** Museu do Vitral with white building facade next to Porto Cathedral. Photography by the authors.

### 3.1. Curating the Collection

The curation and development of the collection for the exhibition was undertaken and completed during an 18-month period prior to the opening of the museum. An initial selection of 14 pieces had been taken by the artist some 10 years earlier and included the production of a number of original works specifically designated for display in the museum. During the early stages the curator made a selection of a further 15 pieces to expand the catalogue of stained glass works. This would include the loan, as mentioned previously, of a large stained glass installation 'Landscape' (*Paisagem*) from the Collection of the Faculty of Fine Arts of Porto University that had been produced by Joao Aquino Antunes in 1988. An extensive investigation of the storage and archive at the present day workshop at Rua do Vilar resulted in identifying and matching many of the original supporting sketches and maquettes to the majority of stained glass pieces, a total of 135 items were identified for the museum display.

### 3.2. Collection research and conservation

Since the 1960s a prolific production took place, with some 500 works being created for religious installations as well as public institutions and private residences in Portugal and overseas. The artist kept a meticulous record of all productions with a corresponding sequencing of supporting sketches (cartoons). Overtime and with the retirement of the artist it required an element of 'investigative digging' through the workshop store areas. The curator was able to uncover additional maquettes and identify sketches, cartoons and drawings that would match to the final works. These original works along with items, such as tools and fragments of colored glass samples from the workshop, would be used to enhance the display and support the explanation of the entire creative process and timeline involved in making a stained glass window from artistic concept through production, to installation.

Of particular note was the location of the original designs by artists Júlio Resende (stained glass work for the Justice Tribunal at Vagos, 1971) (Figure 14), Guilherme Camarinha (stained glass work for the chapel of Seca da Bacalhau, 1962) and Antonio Coelho Figuerido (stained glass work for the Sanctuary of Alivio, 1967), as well as the location of corresponding sketches and maps. Despite exterior wrapping deterioration (caused by dust and damp from generally poor storage conditions) all the drawings were in a good state of preservation having been sealed under aging plastic covering and the sketches having never been opened since archival filing.



**Figure 14** View of the museum interior. A detail of Júlio de Resend cartoon. Photography by the authors.

The stained glass panels required conservation attention, with the majority of glass coated with accumulated dust, particularly against the edges of the lead *calmes* as well as some small surface water marking on a couple of the works. The curator conducted a condition review of each panel and undertook the careful removal of the dust by cleaning with tepid water and cotton cloth and removal of excess water with a microfiber cloth before drying. Of particular note, was the stained glass work ‘Tiffany’ (1972). Having been out on display in the artist studio supported on a wooden frame and easel, the interior of the panel had bowed over time.

Whilst none of the glass fragments had broken, it was noted that the most likely due to the density of the leading to consistent areas of the panel of less than 2cm and the panel itself displayed on an angle (inclination), had resulted in a crater type of bowing to the center of the work. The panel was removed and laid down on a foam sheet of plastazote for cushioning. With no weight applied, in 1 week the panel flattened. The maquettes, sketches and cartoons were also cleaned. Where damp was present on the paper surfaces they were air dried between two layers (one above and below) of conservation grade acid-free tissue. Consideration for the ongoing preservation of the drawings for display, the curator elected to have all items sealed between archival quality DibondMount sheeting - that would form a humidity/thermal barrier – and UV-filtered, anti-reflective museum glass.

It should be noted that in the locality of Porto, northern Portugal, the city sits between the river Douro and the Atlantic Ocean and experiences high relative humidity (RH) throughout the year. Coupled with the main structure of the museum building being of granite with a north facing façade and shadowed by Porto Cathedral the interior RH measured at 65%. These challenges to the ongoing preservation of the collection and stability of the interior environment were all taken into consideration by the curator during construction, the setting and function of the ventilation system and selection of interior walls being used to display items of the collection that had been produced by the artist on more sensitive materials, such as tracing paper or absorbent art paper.

### 3.3. Historical narrative and museum installation

The curator worked on creating the narrative for the museum display with a vision to educate the visitor in an accessible and engaging manner on the art form of stained glass as well as explaining the craftsmanship behind how a stained glass window is made. Investigation on how other stained glass museums referenced works – included The Stained Glass Museum (Ely Cathedral, UK) and The Corning Museum of Glass and The Met in the United States.

The history of the family studio, the evolution of stained glass and the process of how a stained glass window is made (from start to finish) was well researched and formed the foundations of the narrative. To help disseminate how a stained glass window is made alongside the textual information a video was produced, using both original footage filmed at the workshop on Rua do Vilar in Porto with additional video content from “Stained Glass: A Documentary” kindly provided by the University of Northwestern (United States).

The layout and installation of the museum overcame several challenges. The museum was a former private residence set over multiple levels with a series of rooms (of different sizes), floor load bearing, natural light, design of display structures, and as covered above – conservation.

The display layout would be developed as several interconnected dialogues, a) between the collection and the building, b) the collection and the artist and c) the artists and the history of the city. What became evident from research in to the potential visitor segments (both domestic and foreign tourism) to the city was that the museum needed to engage the visitor beyond the general recognition of stained glass in religious installation (in a place of worship) but also to broaden recognition that stained glass works are widely used to record historical events (in public buildings or private residences) and are also produced as works of art.

Through reading newspaper articles and interviews conducted with the artist, the curator designed the installation along the theme of “painting with light”. The windows would allow natural light to flood the exhibition spaces and the light perception would change with the seasons and time of day. Display structures were then designed with LED diffuser lighting to illuminate each stained glass from the rear with a front information panel back lit with another LED diffuser. Natural light through windows and consistent light passed through stained glass.

To the ground floor, the textual introduction to the museum concept, about the workshop and a short history of the artist family. To the lower ground exhibition gallery and side rooms were set to display text and video information on the making of a stained glass window. The upper floors were allocated to display of the stained glass works and were divided into three sections; religious, decorative and artistic forms. The curator added two further aspects in to the narrative; the cultural interpretation of how we perceive color – developed in a small section on the symbolism of color - and incorporating direct quotes from the artist within the wall content that would connect each section. The museum layout has an open flow (the museum can be viewed from any point of access), with long vista distances, and key information written in an accessible style and tone to allow visitors with a varied range of knowledge on the subject to learn and take in the works at their own pace and desired level of engagement.

#### **4. Conclusion**

It is important to preserve this workshop heritage, open for more than 100 years and still in business. It is a rare example of the ancient tradition being carried into the modern day not only in the Portuguese artistic panorama but also in the European arena. The prolific quantity of work completed by the three generations of artist, Plácido Antonio Antunes, João Baptista Antunes, João Aquino Antunes is of great importance and adds to the existing body of knowledge of the art of stained glass. The quality and skill of the craft to produce the works is of significant value, and this is one of the core reasons that the stained glass museum was built, not only to show the craftsmanship but also to highlight the pieces elaborated from the studio. These works should perpetuate in art history and provide a major contribution to the further understanding of Portuguese art history.

Since 1906 the workshop produced over 500 works, many of which are installed in historically important national monuments and places of worship. A further research project is also now being undertaken to identify more works and designs completed by many of the artists who worked alongside the workshop heritage. An initial selection of 25 stained glass works and more than 130 supporting materials – including sketches, paintings and cartoons have been curated into a museum dedicated to the life and work of the Antunes family of glass artists. The museum project has been funded by a sole investment of the present day artist Joao Aquino Antunes in a significant cultural project realised between 2016-2020. The Museu do Vitral opened to the public in Porto, Portugal in the summer of 2021.

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