

## **CONSERVATION AND RESTORATION OF FIGURATIVE TILES: FROM MANAGING EXPECTATIONS TO INTERVENTION CRITERIA**

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*Ânia Chasqueira*

Techn&Art - Centro de Tecnologia, Restauro e Valorização das Artes (Portugal)

Project funded by FCT - Foundation for Science and Technology with the reference: UI/BD/151231/2021

*Ricardo Triães*

Techn&Art - Centro de Tecnologia, Restauro e Valorização das Artes (Portugal)

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**Abstract:** In the context of the conservation and restoration of tile heritage, namely of the Figured theme, a set of different situations is presented that allow us to reflect on the ways of managing the expectations of the owner/guardian and other stakeholders, with the needs of conservation and restoration of each panel or set. During the activity of the Conservation and Restoration Laboratory of the Polytechnic Institute of Tomar, several Figured-themed panels were intervened, corresponding, in general, to the first half of the 18th century. These panels were studied and intervened in the context of a class, project or internship, with the participation of students in the decision-making process and implementation of methodologies. The intervention panels have different origins and owners (private individuals and linked to the Catholic Church or religious orders) and most of them have been displaced from their original location. In this very particular context, where training is also one of the aspects to consider, there is an increased responsibility in managing students' expectations (at different stages of their training) and the owners' wishes. But perhaps the most important is the ability to evaluate and decide on the best methodology for each case.

**Keywords:** Figured tiles; conservation and restoration; intervention criteria; stakeholder expectations.

## INTRODUCTION

When we refer to the conservation and restoration of a cultural asset, it is essential to reflect on the numerous factors that condition the intervention methodology. Conservation and restoration, namely of tiles, is an area where specific training is scarce (MENDES, 2015, p.72) and, as Jonathan Ashley-Smith says "There is a danger that the opportunities to learn and maintain the necessary skills for high-level hands-on conservation are diminishing" (ASHLEY-SMITH, 2016, p.119), it is therefore relevant to reflect, discuss and disseminate different intervention criteria and the subjective factors that condition them.

These are the constraints that oblige the conservator-restorer to treat each intervention differently. The need for a sustained diagnosis, on the nature of materials and techniques, on their state of conservation, the causes that contributed to their degradation or even on the stylistic and historical characteristics, are fundamental aspects for the definition of intervention criteria. .

Although the theoretical aspects underlying the intervention must be framed by the criteria defined in ECCO's professional guidelines (E.C.C.O., 2004), it is common, on the part of the owner, to desire an intervention that makes the damages unrecognizable, namely the most significant ones. This type of conservation and restoration intervention is justified by the fact that the owner or person responsible wants the goods to have the best appearance/readability, not only for themselves but also for visitors to a museum, palace, church or other (HENDERSON), NAKAMOTO, 2012, pp.67-68). In this context, some questions arise such as authenticity and the conviction that this type of intervention can fulfill this desire. Thus, it cannot be overstated that the decision that the conservator-restorer takes on the type of intervention must not be based on the idea of preserving authenticity. As Salvador Muñoz

Viñas says, this concept results from subjective choices and is not strong enough as it seems and must be treated with some care (MUÑOZ VIÑAS, 2020, p. 30). The understanding of this concept has been dynamic and the knowledge of the various particularities of the goods has been adding “layers” that, while not being strange and having a derogatory or harmful effect, must be preserved (MARÇAL, 2017, p.102-103).

This way, we intend to present a set of 5 interventions on tile panels, in situ and displaced, carried out in a learning context (classes, internships or projects) at the Conservation and Restoration Laboratory of the Polytechnic Institute of Tomar. All interventions are based on the context in which they are inserted (in the case of the displaced panels, how they arrived in that situation) and what the owners wish for them. In either case, the intervention proposals were presented to the owners/responsible and were accepted, although in some cases with reservations. Another very relevant aspect for the decision to intervene is the state of conservation of the panel and the needs it presents to continue fulfilling its function.

In the case of interventions carried out in a learning context, it is important to understand and reflect on the requirements of the future conservator-restorator (HUTCHINGS, CORR, 2011, p.441), which go much further than their manual skills. It is important to develop skills such as “(...) relevant knowledge, self-confidence, understanding of context, and the ability to consider options and make autonomous decisions in the face of complexity.” (ASHLEY-SMITH, 2016, pp.120-121). In this context, it is very important that the intervention proposal is objective and easily adopted by the group of students, being possible to guarantee a certain homogeneity. To ensure the quality of the interventions, the choice of materials or their preparation must

be clear and provide for the demonstration of some tasks.

## STUDY CASES

### TILE SET FROM: QUINTA DA CARDIGA, GOLEGÃ

#### *Context*

Quinta da Cardiga, located in the village of Golegã (Santarém, Portugal), is an old palace with a housing complex and other outbuildings. The oldest buildings date back to the 12th century and is classified as a Property of Public Interest (Decree n.º 38 673, DG, I Série, n.º 57, of 12-03-1952). It is known that in the area called Quinta da Cardiga there was the castle of Cardiga and which, in 1169, D. Afonso Henriques donated to the Templar order. From that time until the end of the century. In the 20th century, the complex underwent several transformations that are related to the acquisition of land and according to the needs of the owners (RODRIGUES, 2015, pp.23-26).

The tile has a considerable presence in the palace, accounting for 64549 tiles. Due to the continuous use over the centuries and the various transformations, this palace preserves an illustrative set of the technological and stylistic evolution of the tile in Portugal (Figure 1 and 2) (RODRIGUES, 2015, pp.51-52). However, the application of some sets in the palace is not always the original, they are reapplications of tiles from other contexts. At the end of the century In the 19th century, the Quinta was acquired by Luís Sommer, undergoing major transformations, namely in the application of patterned tiles from the 19th century. XVII coming from other contexts (RODRIGUES, 2015, p. 26-27) among other types of pieces, some of Italian origin (PEREIRA ET AL., 2020, p.135).



Figure 1 - Example of one of the panels with gallant scenes in the Living Room.



Figure 2 - Tile panel on the main facade.

### ***Intervention criteria***

In order to understand the general context of the state of conservation of the Palácio da Quinta da Cardiga, a risk chart was created. This consisted in the elaboration of a diagnosis form, being collected and processed the possible information, with the final objective of a maintenance plan, “where the owner will be able to have the exact notion of the places in which he must act” (RODRIGUES, 2015, p. 81).

By completing these forms, it was possible to make a statistical evaluation of the results, concluding that the set, which has been vacant for several years, presents several problems in the building as well as in the integrated heritage, such as the tiles. From the assessment of the state of conservation carried out on the 94 spaces of the building, 18% are in a state of disrepair, 50% in a bad state, 31% in a reasonable state and only 1% in a good state of conservation (RODRIGUES, 2015, pp. 79-81).

Considering that the tile sets of the Palácio da Quinta da Cardiga cover the building both

inside and outside, its state of conservation is largely due to the action of climatic agents. The panels located on the outside show more damage due to these causes, namely, the loss of tile units, the development of microorganisms and some more punctual damages such as the loss of glaze. Inside, namely in the rooms on the ground floor, it is common to find large areas with efflorescence. They result from the presence and circulation of water in the support and in the ceramic body and which, in the future, will give rise to the detachment of the glaze and the weakening of the ceramic body. In general, it can be said that the tile sets have several damages, a little throughout the building, with in many cases material loss, namely in the large courtyard, in the small courtyard and outside the palace (RODRIGUES, 2015, pp. .103-130).

The fact that there is no decision as to the future of the building makes the contribution to its study and maintenance very relevant, thus minimizing its degradation. The intervention proposal would go through a phased work plan, acting on the main degradation agents.

However, the fact that there are a large number of tiles in different states of conservation, the initial option, according to the owners, would be to solve the main problems, namely in the areas of missing tiles, in order to avoid the fall. of more units or even theft. However, the lack of any kind of registration of the panels forced attention to this problem. As this is a work inserted in the context of a Master’s internship, the intervention that seemed reasonable to carry out at this stage was the documentation and photographic record, as well as the mapping of the damage of each panel. This is a fundamental preventive conservation process for a set with origins in the 19th century. XII, with tiles from the century. XVI to century XX and that, as it is uninhabited, the risk of loss is significant. For example, in the event of

theft or partial ruin, the absence of a record of the stolen or destroyed panels would make their recovery very difficult.

### **TILE SETS FROM: QUINTA NOVA, TORRES VEDRAS**

Quinta Nova is located in the former parish of Matacães, in Torres Vedras, and is classified as a property of municipal interest by decree-law nº 2/96, of the Diário da República nº 56, of March 6, 1996. It is an architectural ensemble that shows evidence of 18th century refurbishment, not only because of the remains found in the building, but also because of the tile heritage that covers its rooms, from the patterned tiles, known as “Pombaline” and in the D. Maria style (ESTEVEES, 2011, pp. 5-6).

However, in the 1960s, During the 20th century, during new remodeling work on the building, in a very careless intervention, most of the tiles were removed, which led to the irreparable loss of many of the panels (TRIÃES, CHASQUEIRA, MELO, 2018, p. 314).

#### ***Figurative garden themed panel: Quinta Nova***

##### *Context*

The Quinta Nova garden panel is decorated in blue and white with a double-bar frame (Figure 3 and 4) and a mythological theme composed of three scenes. The first two, the myth of “Perseus and Andromeda” and that of “Apollo and Daphne”, form a single panel, and the last scene represents the myth of “Pyramus and Thisbe”, a smaller panel (ESTEVEES, 2011, pp. 3-4).

Although the authorship and dating are unknown, the panel in the Quinta Nova garden shows similarities with other existing tile sets in Matacães, particularly those in the Nossa Senhora da Oliveira Church, which are dated and signed. These are by Bartolomeu Antunes and date from 1734, as part of

the great “Joanina” production. Since the similarities are evident between them, they are considered contemporary, and there is even the possibility that they were produced in the same workshop or by the same author (ESTEVEES, 2011, pp. 6-10).



Figure 3 – Panel before the intervention



Figure 4 - Panel before the intervention

#### *Intervention criteria*

The Quinta Nova garden panel was placed in an area currently abandoned, on the edge of the property. Covered by dense vegetation and microorganisms, they contributed to the detachment of the glaze, quite accentuated in some areas. As a result of the loss of the bonding function of the laying mortars, the panel had some tiles missing, which contributed to the weakening of the surrounding tiles and to the loss of reading.

As a result of the state of conservation and the risk situation in which it found itself,

namely the accelerated degradation of the set and its vulnerability in the face of a possible theft attempt, a proposal was presented for the removal of the panel, conservation and future placement in another space, as per owner's wishes.

Considering these criteria and considering their removal, bearing in mind that their non-intervention would imply the worsening of the degradation and loss of reading of the panel. This work was carried out in a classroom context, and since the work that preceded the removal of the panel, tasks were distributed to the students, such as photographic registration, mapping of pathologies, labeling, application of facing in the most unstable areas, opening of joints and tile removal. The conservation and restoration works were carried out in a laboratory context, including cleaning and material stabilization tasks.

Due to the very heterogeneous state of conservation between the tiles and the fact that the owner wanted a solution to improve the reading of the whole, it was decided to fill in gaps and cold glaze detachments and their chromatic reintegration.

This intervention criterion motivated the selection of a filling material that would guarantee the same type of application for any student as well as paints in chromatic reintegration. In the areas of missing tiles (in the bar area) it was decided to fill in the gaps with new tiles, slightly differentiating their tonality. This situation was possible given the symmetry in the bar that allowed the redoing of the design. The panel was applied on an acrylic support and fixed in a new location.

### ***“Panel 10” of the Figuretiva theme of the “Quinta Nova”***

#### *Context*

With a similar origin, that is, also from Quinta Nova, although the original place of application is not specifically known, another

panel with a Figuretiva theme was intervened. From a stylistic point of view, this panel belongs to the second quarter of the 18th century, in the period called the “Great Production” or “Joanine” period (CARVALHO, 2012, p. 316). The panel is composed of a frame that frames the scene, composed of a central motif, consisting of a source with three Figures; on the left, in a closer plane, a couple walking; on the right, in a more distant plane, two male Figures appear, one playing the violin and the other holding a monocle (Figure 6) (TRIÃES, CHASQUEIRA, MELO, 2018, pp. 317).

The large set of tiles removed from the Quinta Nova house, resulting from a careless intervention, resulted in different situations, from entire tiles to small fragments, from patterned tiles (17th and 18th centuries), white tiles, tiles painted in blue, resulting of bars, borders and Figuretive motifs. In this sense, the entire tiles were sorted in order to divide them by panel, through the marks on the back. It was possible to identify about two dozen different brands, some with only two or three tiles. However, another group of tiles, stylistically very similar, as well as in the marks on the back, it was possible to identify, in addition to the panel with the number 10, the numbers, 4, 5, 7 and 9. The “panel 10” would be originally made up of 128 tiles, with only 91 remaining, some of which are just small fragments. This is the panel that, although with many tiles missing, is more complete. In addition to the significant number of missing tiles, there are several fractured tiles, some with significant gaps, glaze detachment, superficial deposits, mortar remains and biological colonization

#### *Intervention criteria*

Although it was the owner's wish to recover this and other panels, the fact that they were very incomplete made that wish unfeasible. Even so, progress was made with

the intervention in “panel 10”, aware that the methodology, in this case, would have to be different from the panel in the Quinta Nova garden. The missing tiles corresponded to about 30% of the total, some of which were just fragments. The missing tile areas corresponded to Figurative elements, such as the characters’ bodies and faces (Figure 5).

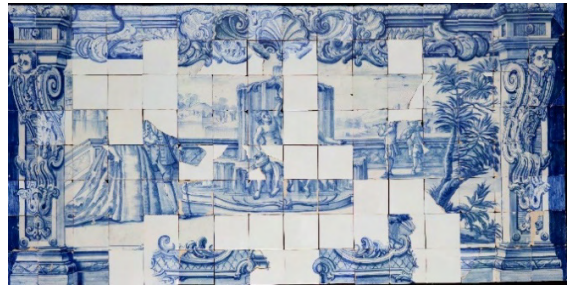


Figure 6 – “Panel 10” of Quinta Nova after the intervention.



Figure 5 – “Panel 10” of Quinta Nova before the intervention.



Figure 7 – “Panel 10” of Quinta Nova after some more fragments and tiles were found.

In this sense, and in order to improve the possible reading of the panel, it was decided to create new tiles in the frame. Given the symmetry of the frame, it was possible to reproduce a part of the design, and in the remaining areas of gaps, the filling was done with new tiles only with the tone of the glaze (Figure 6). In the case of tiles with gaps, the hot restoration technique was chosen. The fact that the owner’s estate is quite vast, is poorly packaged, stored in different places and it is possible to find more fragments of the set, it was considered that this intervention methodology would be the best and least invasive. The panel’s intervention was completed in 2018 and since then it has been possible to recover some more tiles and fragments that have been integrated into the panel (Figure 7, 8 and 9).



Figure 8 – Detail “Panel 10” of Quinta Nova after the intervention.



Figure 9 – Detail “Panel 10” of Quinta Nova after some more fragments and tiles were found.

## CHAPEL TILE SET: CAPELA DE SANTA QUITÉRIA NO CARRIL, TORRES NOVAS

### *Context*

The chapel of Santa Quitéria dates from the mid-18th century and is a building of plain architecture, with a longitudinal plan and a porch on the façade. Inside there is an altarpiece, located in the chancel, in the Neoclassical style and an ashlar of tiles throughout the body of the nave, in the Rococo style. According to J. M. dos Santos Simões, it is a “9-high ashlar in Figuredo blue tile panels, common shell framing, typical of around 1760” (SIMÕES, 1979) (Figures 10 and 11).

Iconographically, the panel presents representations of bucolic and palatial scenes and some religious scenes interpreted by a Franciscan friar. However, this type of theme is not common in religious spaces, where as a rule there is a religious iconography. According to oral testimony, it is assumed that the set came from a palace in Lisbon, although it is not possible to confirm this information. During the intervention, it was possible to notice some inconsistencies in the application, which seems to confirm the information that the panel was not originally produced for this chapel (TRIÃES, 2013, p. 1-2).



Figure 10 - General appearance of the panels before the intervention.



Figure 11 - General appearance of the panels before the intervention. One of the main problems observed corresponded to the disturbance in the reading of the scenes caused by the use of changed tiles..

### *Intervention criteria*

The intervention carried out in the chapel began with the resolution of problems at the level of the roof and later extended to the integrated heritage, namely the altarpiece and the ashlar of tiles. The main problems identified were associated with the support or laying mortars. Several areas of plaster affected by the crystallization of soluble salts (efflorescence) were visible, being also visible on the tiles, accompanied by the occasional detachment of glaze in the joint areas. Part of the tiles had poor adhesion to the support, which could cause them to fall as a result of a simple mechanical stress. Another problem that compromised the reading of the set was the use of tiles on the panel out of their original position.

The intervention for the conservation and restoration of the panels, carried out in situ, aimed to respond to the main problems identified: poor reading due to changed tiles; loss of glaze by crystallization of soluble salts; missing tiles; and risk of part of the tiles falling. The intervention had the presence of a permanent team on site that was complemented weekly with the participation of master's students in the tile specialty.

The main methodological challenge was



related to the fact that the conservation and restoration intervention proposed to solve a problem of reading the panel, without a reference to it. Expectations within the community about the global intervention in the chapel were high. This fact generated some discussion about the criteria to be adopted in this specific case. We opted for the production of new tiles, based on the principle that one of the missing areas corresponded to the frame and that it was symmetrical. The remaining areas of gaps were also filled in with new tiles, suggesting only a few lines of continuity in the design and leaving some areas in the shade of the glaze. This solution allowed the panel to be read back, albeit partially and adopting a different shade of blue, lighter, the intervention being obvious (Figures 12 and 13).



Figure 12 – Wall prepared to receive the new tiles.



Figure 13 Panel after application of new tiles and reintegration.

This methodological option also involved the involvement of the community. During

the conservation and restoration work of the chapel's integrated heritage, a session was held, open to the community, so that they could follow the intervention, and where the problems and solutions adopted in the intervention were presented. This proximity established with the community, through their participation, contributed decisively to a better understanding of the intervention carried out.

### **TILE ENSEMBLE OF THE CHAPEL OF THE THIRD OF THE CHURCH: IGREJA DO CONVENTO DE SÃO FRANCISCO, LEIRIA**

#### ***Context***

The beginning of the construction of the Convento de São Francisco dates from the 13th century, although it has undergone several transformations over the years. Around the year 1719, there were a number of very significant renovations in the building. From these it will be possible to frame the new façade of the church, the Capela dos Terceiros and a building that runs perpendicular to the façade and would have been used by the Third Order of Saint Francis. It is exactly in this building, with a longitudinal plan, consisting of three rooms, and which is connected to the Capela dos Terceiros, that a set of tile ashlars will have been applied (FERNANDES, 2019) (SILVA, 2019).

This set consists of nine Figural panels that, for the most part, represent passages in the life of São Francisco, but also of Saint Anthony. Although the authorship or date of production has not been identified, from a stylistic point of view the panels belong to the Baroque period, more specifically to the so-called “Masters Cycle” period (CARVALHO, 2012, p.18). The panels were applied in two of the rooms, and it is possible to perceive some differences between the tiles of these two spaces. It is possible to be the same

author or workshop, keeping the same type of composition although it is possible to recognize a technological evolution (Figure 14).



Figure 14 – Panel XIII.

### *Intervention methodology*

With the extinction of the religious orders, in 1834, the convent closed and the church was in the possession of the Franciscan Third Order of Leiria. The church and its dependencies were degraded and, in the middle of the century. XX, was eventually closed. In this process, it was possible to perceive that those responsible for the Franciscan Third Order of Leiria tried to get the state to recognize the value of the church by requesting its classification as a national monument. Through the exchange of correspondence, this recognition was always denied and, faced with the imminent ruin of some spaces, in 1963, the tiles were removed with a view to a future reapplication. Only in 1984 was the church classified as a Property of Public Interest, by Decree no. 29/84, DR, 1st series, no. 145 of 25 June 1984 (FERNANDES, 2019, p. 4).

Before the intervention, the tile set was boxed and arranged in a small dependency of the Church. The tiles were in large boxes, 21 of which were large (with around 100 tiles each) and 15 smaller (with around 60 tiles each). At the beginning of the intervention, neither the themes nor the number of panels were known. Only with the assembly of the panels it was realized that the set consisted

of 9 different panels, and the original place of its application. The panels had been marked before the intervention with black paint on the glaze itself, which facilitated the first assembly of the panels. The main problems detected were related to the removal of the tiles, which caused several fractures and loss of glaze.

The work was carried out in the context of training, with students in the area of tile conservation and restoration, and two master's interns who followed the intervention process from start to finish.

With the definition of the ensemble, it was then possible to establish the intervention criteria that allowed the return of the tiles to the church space, according to the intention of the Franciscan Third Order of Leiria, owner of this heritage. Given the extension of the set and the significant differences in the state of conservation between panels, a conservation intervention was chosen. The main damage stems from the lifting of the tiles itself, and not from the marked degradation of the building. However, it was this fact that motivated the classification requests and that, in its absence, an appeal solution was sought. The intervention criteria adopted somehow try to preserve this context without hiding the damage, that is, without a restoration intervention. This conservative solution was chosen since the reading or original function was not compromised and the continuity of future works is not compromised. The panels were placed on an acrylic support and replaced in their original locations, albeit with a few exceptions. In some cases, the recent renovation works on the building made this relocation unfeasible, namely due to the opening of the original spans and the rise of the floor. In cases where it was not possible to replace them in the original location, the panels were integrated into the Third Chapel, adjacent to these rooms.

## FINAL CONSIDERATIONS

During the interventions presented, the management of the different actors was a fundamental aspect, from the owners, to the students in training and to the community where the assets are located. Another fundamental aspect, which interconnects with the previous ones, is the management of the Conservation and Restoration (E.C.C.O.) criteria, in order to establish the most appropriate intervention methodology for each case. We believe that the fact of maintaining dialogue between the parties involved in the intervention and its inclusion in the decision-making on the intervention criteria, allows us to create appropriate methodologies within the code of ethics of the profession. This way, it is possible to: 1. manage the expectations of students in training, who need to create bases of thought and technical and theoretical skills for a good exercise of the profession; 2. manage the expectations of owners and communities in order to achieve a satisfactory intervention, and avoid that the assets go through an overly invasive and unsustainable process.

Considering that each set has its own particularities, it is intended, through the different case studies, to reflect and demonstrate that there are many criteria that we can adopt with the final objective of conserving Figurative tile sets. It is considered important to develop the critical thinking of students in training as well as of the owners themselves for more conscious and sustainable conservation and restoration interventions, where “doing nothing” is sometimes the best conservation option (ASHLEY-SMITH, 2018, p.14), as we can see in the intervention at Quinta da Cardiga where, at that time, the best contribution to the preservation of tile coverings was their inventory and registration. However, in the case of Figurative panels with large areas of gaps, it is essential to restore the reading of the goods. Managing expectations,

whether of the owner or the community, is not always easy. The chromatic reintegration options as we can see in the Monastery of Grijó, in Porto (ARAÚJO, 2019) or in a panel, of unknown origin, belonging to the Museu Nacional do Azulejo (COUTINHO, BAILÃO and VIEIRA, 2018), where the reconstructions were made by comparison with other panels and engravings of the time, while meeting the expectations of the owners, they can be too invasive. Regardless of the intervention criteria, the option for solutions such as those presented, both in the case of the panels of Quinta Nova and the church of São Francisco in Leiria, where the reading is returned, prioritizing conservation actions. Another relevant aspect is the attempt to maintain and respect the marks of time, maintaining some of the aspects of their alteration and degradation, contributing to their authenticity when it benefits their understanding.

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