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Sgraffito in Portugal:
a Contribution to its Study and Preservation

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Abstract This article intends to provide awareness to the particular value of sgraffito in architectonic surfaces and alert towards the need to safeguard its aesthetical and material authenticity. Recent research led to the discovery of an unknown and wide presence of sgraffiti in some urban and rural Portuguese ancient architecture; most of them are now at risk, since they are often forgotten or confused with other mural decorative techniques. One of the most important results of our research on sgraffito (developed under the scope of a PhD in architecture on the subject “Conservation of the architectural surfaces in Alentejo”) is the fact that the majority of the listed sgraffito ornaments have been painted over so many times, that today we can hardly identify its original aspect, its formal and chromatic value or its textures. We will describe the sgraffito’s concept, application techniques, the risks it faces, emphasizing the need to change intervention methodologies in order to promote its safeguard in urban areas and rural landscapes.

1 Introduction

Usually the technique of architectural ornament called sgraffito is seen as an exclusive manifestation of certain European regions, where it appears regularly. Italian renascence sgraffiti, as well as Prague, Segovia and Barcelona are well known.

In Portugal, there is also a growing recognition of the architectural heritage value of the sgraffito as decorative mural technique, mainly in the academic field and research (Figs. 1 and 2).

Although traditionally sgraffito is a very ancient technique it is not recognized and identified as a specific concept and it is commonly included in an
undistinguished group of architectural decorations, which includes stucco, decorative plasters, graffito or mural painting. Interventions practices are often carried out without having in mind the specificity of the sgraffito technique and the heritage value of this specific decoration.

Figs. 1 and 2 A black and white sgraffito in Quinta da Amoreira da Torre (Montemor-o-Novo) and Amieira do Tejo

Most of the existing sgraffito are currently spoilt or hidden by subsequent interventions. Many of them have not yet been identified or recognized as an element of identity or a heritage reference.

There are broad legal orientations for urban polices for preservation, although they are not specifically targeted to the conservation and restoration of the sgraffito.

Because we believe this situation is slowly changing, we would like to call the attention of all stakeholders (universities, municipalities, civil society, owners and building constructors) for the value and the at risk situation of this particularly inheritance, emphasizing the necessity of safeguarding its material authenticity.

2 Sgraffito at risk

Our research on graffiti in Alentejo has highlighted that the majority of the listed and studied sgrafﬁti ornaments have been painted over so many times, that today we can hardly identify its original aspect, its chromatic values or its textures (Figs. 3 and 4).

Like any architectural surface using lime mortars, sgrafﬁto has the ups and downs of this type of covering that, due to its own nature. Sgrafﬁto functions as a protective layer and, therefore, is more prone to repairs, surface alterations and changes in its aesthetic presentation. Especially outdoors, it is difficult to find a sgraffito that has not been repainted and that still maintains its original aspect and the decoration of façades is hardly perceptible (Fig. 5).
Many of these actions of painting corrupt and alter the image of the building and the urban set and transform, for example, the city of Évora into a white and ochre city, despising all its previous polychromatic wealth.

The unfamiliarity with the original technique of sgraffito by craftsman and by the public in general has contributed to this adulteration with the consequent loss of aesthetical and historical values of the building as well as its authenticity.

We can identify the causes of the non-recognition of the value of sgraffito, into four clusters:

1. a lack of expertise in maintaining or repairing sgraffito technique;
2. confusion or a poor knowledge of other decorative techniques similar to sgraffito like graffito, stucco or decorative plasters simulating stone or brick masonry;
3. a deficient legal protection and absence of preservation policies;
4. a gap between the academic conservation praxis and the world of construction.

Therefore, we begin by describing what a sgraffito is.

3 What is a sgraffito?

Sgraffito is a technique of incised mural decoration applied to beautify walls of buildings. It can also describe an incised decorative technique on pottery. In the context of this paper the term is applied to the decorative technique used in walls [2 - 4].

Sgraffito consists of scratching a design into plaster before it sets, using a fine point metal tool, in order to reveal the colour and texture of the underlying plaster. Once the top layer, usually white with a fine texture, is scratched out, the plaster layer beneath, usually of a different colour and texture, is revealed (Fig. 6). The bottom layer uses plaster tinted in contrasting colours, made through the addition of coal or burnt straw (for gray and black colour – Fig. 7), or brick powder to
make it reddish, or even by using different types of sand to achieve a yellowish coloration.

The colour of sgraffito stands out, especially, due the effects of light-dark obtained by different textures and shadows. The result is an expressive plastic game of “chiaroscuro”. This technique links both drawing and painting skills, and also requires a deep knowledge of plasters.

In order to clarify the concept of sgraffito it is important to understand its origin.

4 The origin of sgraffito - First applications

The origin of sgraffito is diffuse and at times mingled with the origin of graffito or, according to some authors, with drawing itself. Despite often unconfirmed, there are several thesis about the origin of sgraffito.

Ramon Nonat Comas’s [4] research on Barcelona's sgraffito formulates the hypothesis that sgraffito technique is as old as the genesis of all the arts. If the word engrave etymologically means marking or ornamenting surfaces with incised instruments, it is very likely that sgraffito’s origin is the same of the oldest arts, as drawing, painting and modelling.

However, such hypothesis is refuted by the architect Jaume Espuga Bellafont [5] in his PhD's thesis about sgraffito and plaster. According to this author, notwithstanding the fact that the technique of sgraffito uses the basic idea of drawing, one cannot claim that wood engraving is sgraffito.

Since the sharp tool used in graffito’s technique (Fig. 8), when pressed against the surface causes a furrow with a certain depth and, consequently, produces waste material that is removed, makes this technique resembled to sgraffito. If the wasted material resultant from both processes is valued as the predominant feature, both techniques turn out to be very similar, namely when its origins is in question.
On the other hand, if we stress the fact that in sgraffito the removal of the outer layer of plaster, while is still fresh, intends to reveal the coloration of the plaster underneath, as an aesthetic perception (Fig. 6), then both techniques have distinct evolutionary paths. In this sense, sgraffito can only be tracked in Roman Empire while graffito is surely pre-historic.

Nevertheless, according to Bruno Gandola [6], the two-coloured sgraffito is dated earlier, since such technique was found in pre-roman pottery. In this case the sgraffito decoration was produced by immersing of the ceramic artefact in a liquid soil with a different and contrastive colour. Afterwards, this layer was removed with a thin and sharp knife, stiletto, made of metal, wood or ivory. This incisive decoration produced “beautiful artefacts in Greek art, with fine figures obtained by a single furrow, whose lines perfectly define the folding of the costumes, embroidery, jewellery, armoured helmets and footwear” [7, p 20].

Others hypothesis are questioned about the origin of sgraffito: if sgraffito is a decorative technique that reveals great simplicity, isn't it possible that there could be more than a single origin?

Leopoldo Torres Baldás [8] relates the Moorish “yeserias” (gypsum plasterwork) work with the concept developed in Sassanid Persia. In both cases the works made from gypsum, when not produced by moulding, were manufactured with fresco technique. In this sense, the gypsum was cut with a bevel or chisel in order to carve a relief decoration. The similarities between this technique and sgraffito are clear although “yeserias” allow a more complex decoration (Figs. 9 and 10).

![Fig. 8 An example of graffito technique produce by vandalism; Figs 9 and 10 Yeserias in Alhambra, Granada, Spain.](image)

Such resemblances allows us to question whether sgraffito origin can or cannot be traced as a technique which had its origin in the Andalusian “yeserias”, made in fresh (fresco) and “in situ”. Curiously, one of the oldest Hispanic-Moorish sgraffito (with double-layer) was revealed in Elvira's Medina (Granada). Underneath the wall's plaster a geometric decoration was found: composed with lines, squares and circles, in dark red-coloured plaster over a white background. Rafael Ruiz Alonso [9, 10] reinforces this hypothesis with archaeological
discoveries revealing the previous existence of a double-layer sgraffito before the great Segovian sgraffito productions.

Another hypothesis, traditionally formulated by Segovian scholars, is that sgraffito is the result of the evolution of plaster work on joints on masonry walls. This joint work (with distinct aspects whether it was salient, plain or re-entrant) is named in Castilian as “rejuntado ou encitado”, meaning the effects of joints in non-plastered masonry - jointed or seamed (Fig. 10). Such definition is used for the portion of mortar which seals and fills spaces in brickwork or masonry joints. This mortar has functional purposes; however, it can also be ornamental, for instance, when it is modelled in high-relief.

Another aspect that led us to the same conclusion is the fact that, in many joints, a bit of mineral slag is applied on the mortar while it is still fresh (Figs. 11 and 13). Such operation diminishes the risk of cracked mortar in these joints. Visually, there are many resemblances between this technique and those found in primitive Segovian sgraffiti, where the use of a slag can be seen today.

According to the idea that sgraffito might have its origin in the sealing of the masonry joints, we may presume that probably it could have evolved into two distinguished techniques: the single-layer (Fig. 12) and the doubled-layer sgraffito (Fig. 13).

Single-layer sgraffito technique may have its origin when mortars cover the entire masonry leaving the more salient stones unsealed. Afterwards, the render was partially scratched, leaving de mortar joints flat with relatively regular outlines.

On the other hand, the masonry's “encintado” (Fig. 11) might gradually become into a more salient joint and later into a doubled-layer chiselled or bevelled sgraffito (Fig. 13).

This theory is also questioned, in Portugal, by Correia de Campos [11], who, based on Torre Balbas's theories, suggests that this kind of decoration has an Arabic origin.
In spite of these evidences, it is after the 14th century that sgraffito is widespread in Italy, especially in Tuscany and it is only after the Italian Renaissance that sgraffito became acknowledged as an art. It became a real fashion in decoration facades in Rome, during the 16th century (Fig. 14).

In Portugal sgraffito did not reach the splendour of the Italian Renaissance. Although the majority of sgraffito’s works are anonymous, there are cases worthy of classification (Figs. 15 and 16).

The lack of specific measures and legal protection of this decorative technique is due to the non recognition of its heritage value and to the adulteration of the sgraffito technique.

5 Heritage value of graffito

Since sgraffito in facades is a decorative technique made with external plaster, some of its values, as the dual colour variation and the aesthetical tension given by different textures and colours, which are intrinsic to the nature of this mural covering, must be preserved.

The choice of texture, colour, existence or absence of ornaments reflects a coherent relation with the building conception. These are the most direct and recognizable expression within an architectonic and urban image. Knowing and identifying these architectonic and decorative surfaces is relevant for understanding and reading architecture and the city, both from an historical and artistic point of view, as a witness of its aesthetic and technological evolution.

Although the current conservation culture assumes as a sine qua non condition, the conservation of the substance as a cultural certification, interventions in sgraffito, tend to use solutions derived from industrial building techniques rather than from preservation criteria. Quite often sgraffiti are inadequately recovered because there is a strong unfamiliarity to its particular values and to its specific manufacturing techniques. These are due to the lack of professional specific training of workmen and architects, to the over-valuation of economic compared
to cultural heritage values, to the undervaluation of sgraffiti and to the insensibility of players. The application of (re)painting layers invert the syntax’s (what was dark becomes whitish, what was whitish becomes a new and often stronger coloured) causing loss of the building aesthetical and historical values and, ultimately, loss of authenticity (Figs. 17 and 18).

In Portugal, the protection of Cultural Heritage is defined by Law 107/2001 of September 8, and other legal regulations. According to its particular cultural value a building can be classified into one of three categories: national monument, building of public interest and building of municipal interest.

According to this national Law any restoration, conservation, consolidation, modification, reintegration or demolition work in any classified building or in the surroundings needs: a project (made by an architect) that has to apply for a binding evaluation by the Portuguese Institute for the Architectural Heritage (IGESPAR and DRCultura).

Moreover all intervention in buildings needs to be in agreement with municipal management plans that might define specific rules for the preservation of architectonic surfaces.

We could conclude that the protection and conservation of all architectural surfaces, decorated or not, are safeguarded by law and regulation. But this it is not the case, since there are always exceptions.

For example in Évora if the building is in bad conditions of conservation with the risk of collapsing, regulations may allow demolition and rebuilding of the whole façade. Moreover, in case of intervention on the protective layer of a façade, painting is often proposed as a solution, instead of a lime wash. This solution is also applied to sgraffito and other decoration plasters (Figs. 17 and 18).

The Historic Centre of Évora was inscribed on the World Heritage List in 1985. In 2004, our research [3] showed that 80% of sgraffiti were painted or covered by painting. This solution, which has been applied for more than 25 years, has no theoretical support and ignores completely the authenticity value, expressed in recommendations such as the Venice Charter (1964), the European Charter of Architectural Heritage (1975), the International Charter on the Protection of

Recently, the situation seems to be slowly changing, though sometimes depending on city municipality individual policies. Initiatives such as the photogrammetric survey of the facades (in progress), the very recent conservation of architectural surfaces project, funded by the Tourism Fund (intending to replicated the good praxis carry out in a street named “Rua 5 de Outubro”), the replacement of all air infrastructures, like cables, pipes and fittings (fixed on the facades) for buried piping in order to preserve the urban image, and the continuation of the financing program *Lime wash facade* (Casa Caiada), are welcomed, but have not been sufficient to contribute to the preservation of sgraffito (Figs. 19 and 20).

### 6 How to preserve?

Heritage conservation is a cultural choice and action depending on the reflection and understanding of heritage values. Fernando Henriques, in a meeting on conservation in 1994, highlights the importance of this idea with the sentence "heritage conservation is a cultural activity with technical implications and not a technical work with cultural implications" [12, p.70].

To stress the concept that any action in heritage should be based on knowledge, it is urgently required to change this "fashion" of painting sgraffiti and to value the authenticity of the material. In sgraffito it is important to safeguard the notion of material authenticity whilst preserving the different layers. It requires respect for the historical value of the surface, its stratification, its aesthetic aspect, as well as of the technology used to produce it (Fig. 21).

Since the result of interventions on sgraffito depends not only on academic expertise and on previous studies (conservation project) but also on the culture of policies, programs, town planners, operators and designers and should involve all the stakeholders in the community. Plans to manage and monitor existing sgraffito and other lime decorated surfaces need to be implemented; funds to safeguard would surely have impact on local economy, like cultural tourism. Professional qualification and certification should be required for any intervention on decorated surfaces.

Campaigns, workshops, awards, partnerships with schools or curriculum designers in order to change and promote preservation of sgraffito should be developed in the whole community.
To conclude we would say that the cultural value of the sgraffito, such as the dual colour variation and the aesthetical tension, given by different textures and colours which are intrinsic to the nature of this mural covering, must not be forgotten. It is also important to promote a “conservation culture” to take care of sgraffito, restoring, preserving the historical and material authenticity.

The conservation sgraffito in Alentejo is not only, obviously, a big conservation problem but also a great - scientific, technical, economic - opportunity!

7 References

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