# Architecture surfaces conservation: (re)discovering sgraffito in Portugal

#### Sofia Salema

Architect, Master in Conservation of Architectonic Heritage, PhD student with a scholarship from FCT (Foundation for Science and Technology), CHAIA-UE (Research Center of Art and Artist Research - University of Évora), Portugal, ss.pg@gmail.com.

#### José Aguiar

Associate Professor at the Faculty of Architecture of the Technical University of Lisbon, Portugal, aguiar@fa.utl.pt

#### SUMMARY:

This paper shows the particular value of sgraffito as an architectonic surface. The recent discovery of an unknown and wide presence of sgraffito in some urban and rural Portuguese architecture, the risks it faces today, forgotten or confused with other mural decorative techniques, led us to alert to the need to safeguard its material authenticity.

Although the current culture of conservation and restoration assumes as a sine qua non condition the conservation of the substance as a cultural value, interventions in sgraffiti ornaments often use criteria adapted from industrial building techniques rather than conservation. Unfortunately, unfamiliarity to its particular technique is usually the case, resulting in an inadequate "restoration" or "recovery" process. An example is the application of painting layers over sgraffiti ornaments, causing serious loss of authenticity and value in historical buildings.

In this paper, we present some recent results of our research, showing unknown presence of sgraffito in historical architecture, describing the general concept of its application and the particular techniques of Portuguese sgraffito. The panorama of corpus of sgraffito in Alentejo, is compared with other national and international cases. Examples where the technique of sgraffito was subverted are included in order to demonstrate the dangers it is facing. Finally we put forward some recommendations to improve the quality of restoration and urban rehabilitation operations, towards a more sustainable, comprehensive and integrated management of this cultural heritage.

KEY-WORDS: Architecture surfaces; conservation; restoration, sgraffito

## INTRODUCTION

The recognition of architectonic surfaces as an important dimension of architectural heritage and as an integrated and inseparable part of material authenticity in buildings is a recent development, both in the practical discipline of heritage conservation as in history of art and architecture.

The choice of texture, colour, existence or absence of ornaments reflects a coherent relation with the building conception. It is, both, the most direct and recognizable expression within an architectonic and urban image. Knowing and identifying these architectonic surfaces is

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relevant for understanding and reading architecture and the city, both from an historical and artistic point of view and as witness of its aesthetic and technological evolution.

## SGRAFFITO TECNIQUE<sup>1</sup>

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 conference the term is applied to the decorative technique used in walls.

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. The bottom layer uses plaster tinted in contrasting colors, made through the addition from coal or burnt straw (for gray and black colour), or by the use of brick powder to make it reddish, or by using different types of sand to make a yellowish coloration.

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

# SGRAFFITO IN PORTUGAL

## An overview

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



Foto: Rome, Florence and Segóvia (Spain).

In Portugal, the recognition of the architectural heritage value of the sgraffito as decorative mural technique is relatively recent. Generally most of the existing sgraffito are currently spoilt or hidden by subsequent interventions. Many have not yet been identified or recognized as an element of identity or a heritage reference. Because we believe that this situation is being slowly changed, we would like, with this article, to call the attention of all responsible and of the public in general for the value and for the at risk situation of this inheritance, emphasizing the necessity of safeguarding its material authenticity.

In the following we present a brief panorama of the existing sgraffito in Portugal that demonstrates the existence and the permanence of this decorative technique. The geographic diversity of the examples included shows the successful usage of sgraffito all over the country, with a particular enphasys in the south region, in both popular compositions and in more erudite ones.

Although Évora has been one of the few cities in Portugal that were the value of its sgraffito has already been mentioned, this technique is not exclusive to this historic centre<sup>2</sup>. Our research has shown that other urban centres should be referred to. This is the case of the Moura, Montemor-o-Novo, Vidigueira and Coimbra, were sgraffito are quite often unrecognised and consequently unvalued.



FOTO: Évora, Montemor-o-novo and Coimbra

In other smaller urban centers, such as Juromenha, Monsaraz or in the North of Portugal in Montesinho region (near Bragança), there are examples of buildings with smaller decorative areas, usually in friezes and over windows, decorated with sgraffiti. Many of those are naïve but they are nevertheless important as cultural testimonies, since they are often the result of interpretation, development and local improvement of more erudite themes such as grotesques, common to other areas of painting. Even if the floral thematic prevails in these popular cases, other themes, such as geometrics, are also recurring. The motif that interprets flower petals is visible, both in the civil and the religious architecture, in Quinta da Amoreira da Torre, in S. Bento de Castris, in Évora, and in S. Clara do Sabugueiro, em Arraiolos.

The recently restored circle based geometric composition in Casa da Inquisição (Monsaraz) is far less usual. These themes have always been used, both in erudite and in popular examples, for a vey long time, and thus are not characteristic of a particular period or artistic style.



FOTO: Juromenha, Montesinho and Monsaraz

The sgraffito technique is very commonly used to simulate stone masonry with raised joints, (for example the Church of S. Francisco, in Évora), with fake pilasters (as we see in Albufeira, Paderne, Silves, Faro or Tavira) or fake brick masonry (like in Sintra). This applications, eminently related to an architectonic lexicon (defining rhythms of the joints and of different materials), are the most common applications in the south of Portugal.

Sgraffiti are also found in the periphery of urban centres, such as the Church of Santa Cruz, in Almodovar, the parochial church of Vale de Vargo, in Serpa, inside which red and white sgraffiti were recently identified. These compositions, covered with layers of lime, were found in a small inscription on the main façade and in the lateral façade, as an embellishment to a 17<sup>th</sup> century outdoors chapel (with some 18<sup>th</sup> additions).

In the civil architecture, in the gardens of Quinta da Amoreira da Torre, near Montemor-o-Novo, there is a curious architectural remembrance known as the Queen's Fountain. Triangular in form, with three small columns, in *Manuelino* style, attributed to master Francisco de Arruda, this fountain is covered in black-and-white sgraffiti, dated from the 16<sup>th</sup> century by Tulio Espanca<sup>3</sup>. The decorative program accompanies and values the architectural form, and the motives resort to naturalist, geometrical and symbolic elements. The crosses of Christ, Avis and Santiago are also depicted in the sgraffiti.

In posterior façade of the Paço da Sempre Noiva, near Arraiolos, it was possible to see a sgraffito decoration with wide bars, with styled foliage, embellishing chimneys, windows and cornices. The background is sand coloured and the motifs are white coloured. In 1997, we could recognize the sgraffiti, among other masonry simulation techniques. This façade provided a lot of historic information on the technique and the making of this type of mortars with limestone decorations.



FOTO: Vale de Vargo (Serpa), Quinta da Amoreira da Torre (Montemor-o-Novo) and Safara (Moura)

In religious architecture, a case worth a reference is the decoration of the façade of the Safara church in Moura, where sgraffiti appear coupled with works in stucco. This late sixteenth century church is an excellent example of the erudite mannerist architecture of the Alentejo, the lexicon of which is clearly visible both in the architecture (that obeys the model of the church-hall) and in the excellent lime mortal ornaments. The sgraffiti and the estucos appear in compositions in white and sand colours, with small notes in black. What makes this decoration still more extraordinary is the use in the decoration of more than two colours. The size of the monument, the extension of the decoration, the excellent technical quality of execution, as well as the fact that it maintains its original surface (that is not covered with lime and/or paint) all confirm the urgent need for a conservation project and special measures of protection. In the year of two thousand and one ore two 2001/2002, it was carried out general conservation works, including white lime washing of the main

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facade. Today it is no longer possible to see the pre-existing decoration, which was visible in earlier photographs.

Although the sgraffito is a rendering and, as such, a sacrificial layer, with limited duration and very often renewed, in the interior of buildings, usually religious, they are sgraffiti worthy of reference. In these cases, the iconographic field is larger and different from those in the remaining urbane buildings,

In the S. João Baptista church, near the Castle, in Amieira, a notable, grotesque, black and white sgraffito, in mannerist style inspired in learned models, covers the ceiling. In this sgraffito where the floral motives predominate, anthropomorphic and animal figures are used in complex compositions, although with a certain naive aspect.

The similarities between the sgraffito of the Amieira and those in Crato church are obvious: the same hierarchy of the space and way of distribution iconography, the black and white decoration and the existence of identical figures. This same hybrid figures (partly human, partly floral) also are present in the chapel of Nossa Senhora da Redonda, in Alpalhão or in the chapel of Nossa Senhora do Rosário, in Idanha-a-Velha. Given these similarities we strongly believe that these compositions made use of the same engravings, thus reinforcing "the theory of circulation of drawings between several focuses of artistic production"<sup>4</sup>. The grotesque figures that appear in Amieira were used for such a long time that it is difficult to date them conclusively.

In the Chapel of Nossa Senhora da Redonda, in Alpalhão, the sgraffito, from 1564, appear together with a mural painting, with subjects of fantastic animals, cherubim, figures half humane half floral. These sgraffito have some similarities, in the iconographic program, as well as in the technique, (both with sand mortar in the background), with the sgraffito, from 1593, with that decorates the covering in shell of the Chapel of Nossa Senhora do Rosário, in the called "Cathedral" of Idanha-a-Velha, with geometric motifs that border the date and a more figurative motifs (zoomorphic, cruciform, and angel heads) in the wall above the shell covering of the Chapel of Nossa Senhora do Rosário, in the so called "cathedral" of Idanha-a-Velha.



FOTO: S. João Batipsta (Amieira), Nossa Senhora da Redonda (Alpalhão) and Nossa Senhora do Rosário (Idanha-a-Velha).

Finally we would like to refer to an unusual sgraffiti in the church of the Espirito Santo, in Arronches, that is being the object of an intervention of conservation. The decoration in white and sand colour sgraffito covers the totality of the internal walls, with floral and grotesque motives, showing a clear renaissance affiliation. This decoration exceeds the usual small decorative note and stretches out to the whole inner surface, from floor to ceiling. The coherence of the whole decorative program is quite clear. The fact that sgraffiti are used to

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simulate pilasters, make this case a singular example of the technique, worthy of protection. The fact that this decoration has stood innumerable changes in the decoration of the church proves that sgraffito was a well known and tested technique in the south of Portugal.



FOTO: Espirito Santo (Arronches)

## The technique and colour

Although, the majority of the sgraffiti are in the cornices and openings, where it is difficult to identify and distinguish the different techniques, the sgraffito in the former Cathedral of Elvas, the Church of Nossa Senhora da Assunção, is a different and unusual in Portugal. According to some authors<sup>5</sup> the original technique of the sgraffito, used in the 13<sup>Th</sup> century, in Italy, was simpler than the one adopted later, during the renaissance. Originally, the sgraffito was executed using only one layer of mortar, hence its decorative effect was monochromatic and not bichromatic. During an intervention of conservation in the 16<sup>th</sup> century sgraffiti apparently monochromatic, with a single mortar layer without added pigments. On this smooth surface using a pointed instrument, with extreme skill, a drawing was scratched, providing texture. This decoration explores the slight differences of tone, between the rough and the smooth plaster.

In a small division, near the high chorus of the former Cathedral of Elvas, there is a beautiful decoration in renaissance sgraffito, with a curious dark outline of the figures and a dark stipple limiting the drawing. At first one could think this was an unfinished work, still showing the process of transferring the drawing to the surface. However, one could imagine these dark lines as an intention of the artist to emphasize the whole ornament, giving more contrast to this specific sgraffito that has a very thin finish layer. We believe that this dark outline can be a technical and stylistic option, similar to the examples observed in Mondovì, in Piemonte, representative of the descriptions by Vasari

However, the most frequent case in Portuguese sgraffito is the one with the use of mortar without pigment in the background, colored through the selection of sand, where a whitish painting or a fine mortar made with lime putty and white stone powder (in portuguese "guarnecimento" or "barramento") is applied and later removed to produce a strong chromatic contrast in the ornamentation. The preference for the use of the colour of sand for the background can be justified, perhaps, in the origins of the technique, as well as in that of other techniques of revetment and finish of architectural surfaces, which derive from the need to imitate nobler materials.

In Portugal, it is, still, very frequent, finding renders simulating masonry, in all types of architectures, from the most monumental to the most modest. The careful selection of different colored sands and inert in the mortar allows a better simulation of the material to mimic. The use of local sand, through the colour and the vibration of the mortar, used with sgrafitti technique, simulates the local masonry.

For example, in the tower of Mourão Castle is visible a sgraffito frieze faking a diagonal coil (similar to the sgraffito in Casa da Inquisição, in Monsaraz). The body of the tower conserves a covering mimicking masonry, in the side extension of the existing corner masonry.

The frequent use of two colour (white and sand) sgraffiti in may also justified by the simplification of the technique. It allows the reduction of some of the execution phase: the application of the pigmented mortar, which enables the application of the slide bar straight on the roughcast. Possibly this variant is an evolution of the technique of the single layer sgraffito, used in the 13<sup>th</sup> century in Italy, and visible in the Cathedral of Elvas.



FOTO: Nossa Senhora da Assunção (Elvas)

## The sgraffito and the urban image

However, in Portugal, it is during the 18<sup>th</sup> and 19<sup>th</sup> centuries, in the "height of the urbane culture, that the technique of sgraffiting is used, in the learned and popular form, to explore all its communication potential, to express an aesthetic urbane intention of visual presentation and architectural communication <sup>6</sup>. This urbane culture integrated, assimilated and adapted decorative elements, techniques and earlier construction practices, (re)applying and (re)interpreting previously used drawings, such as the winged horses in the Palace of the Condes de Soure and in the Rua Vítor Pereira do Monte, in Evora, of the lily flower in the Rua do Menino Jesus, and the fish with coils in the Rua dos Três Senhores, also in Évora.



FOTO: Condes de Soure Palace, Luís de Camões Square and 5th de Outubro Street, in Évora

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The map presents an unknown image of the city of Évora, in which there few places that have not or had not this characteristic note of decoration and of colour. Sgraffiti predominate in the main road axes that, still today, maintain their function of accessibility and of commerce.

The association of this cartographical image, with the fact that most of the Évora's sgraffiti are contemporary with the concepts of architectural communication, visual and aesthetic presentation of the 18<sup>th</sup> and 19<sup>th</sup> century, allows to confirm the use of this decorative technique during the process of urbane transformation during this period. In fact "the way of living was considered in the 19<sup>th</sup> century one of the best forms of externalization of wealth and acquired status"<sup>7</sup>. From the middle of this century many noble houses were subject to profound changes, with furniture and inner space renewal. Outdoors the eclecticism marks these transformations.

Looking at the map it is easy to understand the aspect of this cultural urbane phenomenon that sees, in the decoration of the fronts, the constant transposition of the, typically romantically, taste of valuing the urbane space.

From the examples provided we may conclude that sgraffiti show up both in all types of buildings, from the modest to the ones, from the religious to the civil, from the periphery to the urban centers. We have been able to identify the importance of sgraffiti in urban culture and its heterogeneity as far as its usage, both covering the whole surface and in small decorative patches, the nature of its themes, both erudite and popular and the use of materials and colours, even if the use of white and sand sgraffiti prevails.

# THE SUBVERSION OF THE TECHNIQUE<sup>8</sup>

One of the most important results of our research on sgraffiti in the Alentejo is the fact that the majority of the listed sgraffiti have been painted over so many times, that today we can hardly identify its original aspect, its chromatic values or its textures.

Because of the ups and downs of this type of covering that, by its own nature, works like a sacrificial layer, it is difficult to find especial an outdoors sgraffito that has not been painted, that maintains the original aspect. In most cases sgraffiti were subject to so many actions of painting that, today, the decoration of façades is hardly perceptible.

Many of these actions of painting corrupt and alter the image of the building and of the urbane set and transformed, for example, the city of Evora into a white and ochre city, despising all his previous chromatic wealth.



FOTO: before and after the intervention

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 and, consequently, of the technique of the sgraffito.

Given the widespread of the fashion it is necessary to act, both at the urban level and of its implication in the image of the city, as well as at the level of the object.

# HOW TO PRESERVE?

In the case of sgraffiti it is important to safeguard the notion of material authenticity and the preservation of the different layers. Material authenticity requires respect for the historical value of the surface, of its stratification, of its aesthetic aspect, as well as of the technology to produce it.

Currently, interventions that opt for the painting of the sgraffito, due to inexperience and to impromptu are no longer acceptable. In Évora, even after the outstanding intervention in the street 5 de Outubro, inappropriate actions continue, with the destruction sgraffiti. These are due to the lack of professional specific training of workmen and architects, to the overvaluation of economic values compared to cultural heritage values; to the undervaluation of sgraffiti and to the insensitivity of the players.

Since the result of the interventions on sgraffiti depends not only on the prior knowledge of the object and on the depth of previous studies (conservation project) but also on the culture of the operators, designers and of the town planners, a through approach should involve all the players and the population in general. To improve interventions in sgraffiti, it is essential not only to motivate several agents but, also, to demand the professional qualification to execute them.

Due the value of the sgraffiti, for the image of the historical city and the inevitable value what its preservation brings to cultural Tourism, a plan to manage and monitor sgraffiti and other lime decorated surfaces, together with funds to safeguard of the Architectural Surfaces is urgently required.

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 sgrafitti, restoring, preserving the historical and material authenticity, and using adequate – compatible – techniques, derived from the very similar field of the restoration of mural painting

# NOTES

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<sup>&</sup>lt;sup>1</sup> These definitions where previously used by the authors, in *Sgrafitto and Colour in Alentejo*, communication presented at the International Conference: Colour 2008, waiting for publishing.

<sup>&</sup>lt;sup>2</sup> Sofia Salema- As Superfícies Arquitectónicas de Évora. O Esgrafito: Contributos para a sua Salvaguarda, Degree thesis (Master), Universidade de Évora, 2005.

<sup>&</sup>lt;sup>3</sup> Túlio Espanca, *Inventário Artístico de Portugal, Distrito de Évora*, co-edition de ANBA e IPPAR, 2000 (CD Rom version)

<sup>&</sup>lt;sup>4</sup> Patrícia Alexandra Monteiro - A Capela de S. João Batista do Castelo de Amieira do Tejo. In Castelo de Amieira do Tejo, coord. Pedro Cid, unpublished, 2004, p. 17.

<sup>5</sup> Maria Errico, La "moda" di decorare le facciate a Roma: origini del fenomeno, iconografia e tecniche esecutive. In Bollettino d' arte, 1985, p. 57-58.

<sup>6</sup> Sofia Salema, A Salvaguarda das superfícies arquitectónicas. O exemplo dos esgrafitos em Évora. In 3º ENCORE, Encontro sobre Conservação e Reabilitação de Edifícios, 2003, p. 199

<sup>7</sup> To known more about the transformation process of Évora see Maria da Conceição Fernandes, *Os "restauros" e a memória da cidade de Évora (1836-1986)*, Degree thesis (Master), Universidade de Évora ,1998 and *Évora, memoria e "restauros"*. In Évora história e imaginário, 1997, p. 67-76.

<sup>8</sup> About this subject see Sofia Salema - *Cor e esgrafito. Saber ver para proteger*. In Construção Magazine. Revista técnico-científica engenharia civil, n°25, Maio/Junho 2008, p. 27-33.

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