

Portuguese tiles (16th-18th century)

Introduction

One of Portugal's most impressive ceramic production were tiles. Although a floor tile production is known in medieval times, wall tiles were only manufactured since mid-16th century. These are square ceramic plaques – although other shapes are known – the majority of times produced with light buff fabrics, covered with glazes and creating patterns or a scene with the objective of covering walls. From geometric motifs, which are combined to create patterns, to figurative tiles telling stories this is one of the most important architectonic feature in early modern Portugal. The earliest known production site in Portugal is in south bank of the River Tagus in Santo António da Charneca producing in mid-16th century. At the same time Lisbon was also producing tiles. By early 17th century the production was already spread to other parts of the country namely Coimbra and Vila Nova (Porto). Although tiles are a very generalized production they were used essentially in the decoration of the inner walls of churches, convents and palaces and occasionally fountains and gardens.

No floor tile production kiln or workshop is known in Portugal so far. However a research project about medieval floor tiles with archaeometric analysis concluded that the tiles in Alcobaça were in fact produced in Portugal (Trindade, 2018). These followed the style of the Cistercian tile, a European tendency developed during the life of Bernard Claraval (Cothren, 1982). In Alcobaça in the second half of the 13th century there are white and turquoise blue floor tiles as well as incised decorations (Trindade, 1998). This is the period when other church and palace floors are also covered with similar tiles such as the ones found in the National palace of Sintra (King Dinis palace), the chapel of Estevão Domingues and his wife (1305) in Lisbon cathedral, as well as in the king João I palace in Cpimbra dated from late 13th century (Trindade, 2007). In the National Palace of Sintra the floor of a room built in the late 14th century (where later in the 17th century former king Afonso VI is going to be imprisoned) reveals a different pattern and probably already a transition to a *mudejar* taste (Silva, 1995). The late 14th century is the moment when floor tiles start to be used in walls (Trindade, 2007), something that continued in the 15th century. It is quite likely that tile makers existed in Lisbon during the middle ages however it is only in late 15th century that documents attest the presence of a tile maker

with a Moorish name *Alle Azuleiro*, possibly producing similar objects to the ones imported from southern Spain (Trindade, 2007).

Arista, *corda-seca* and historiated tiles (16th century)

Medieval 13th and 14th century building had impressive tile floors, however during the late 15th and 16th century a general taste of covering the walls of important buildings with tiles develops in Portugal, mostly inspired by Islamic traditions still surviving in southern Iberia. The majority of the tiles used in Portugal in early 16th century seem to have been made in Seville and at least three surviving documents support their origin. The tiles found in Portugal and made in southern Spain correspond essentially to *cuerdaseca* or arista tiles.

This second technique, supposedly invented by Niculoso Pisano, an Italian potter settled in Seville (Pleguezuelo Hernandez, 2007) is going to be rather successful allowing for a huge increase in production. If in the first type a mixture of grease and manganese was used as an outline of drawings to separate colours, in the second case wooden moulds with carved drawings would be used as matrixes to produce hundreds of similar tiles. The reliefs impressed in the clay would avoid that different glazes mixed. These were painted with lead or tin glazes. Their production technique developed a standardized product with the manufacture of thousands of similar objects (Pleguezuelo Hernandez, 2007, 365)

The import of such tiles was so frequent that this could have been the reason which made Portuguese potters start to produce tiles using the similar techniques.

It is difficult to define when was this tile production made for the first time in Portugal, however the oldest archaeological evidence was found in a mid 16th century workshop found in Santo António da Charneca, in the south bank of the river Tagus.

The excavation discovered a kiln and some wasters where the tiles, in biscuit and already glazed were found (Cardoso et al., 1997). This was in fact a big novelty since these type of tiles, although some researchers already suspected a Portuguese production (Trindade, 2007), had no hard evidence and the majority of tiles was suspected to have been made in Seville and imported into Portugal.

This production is not only confirmed by the archaeological record but also by archaeometric analysis (Fig. 1) (Ferreira, et al., 2013). The tiles found in this excavation are

decorated with floral and geometric patterns and glazed painted with white, green, brown, and yellow, creating patterns. As for the *corda-seca*, although no tiles were ever found associated to production sites, once again archaeometric analysis made in tiles found in the Monastery of Santa Clara a Velha, in Coimbra, and their technical differences when compared with Seville and Toledo products, suggest that these were also made in Portugal (Coentro et al, 2014). The investigation concerning these Portuguese production is still scarce and most of the tiles found in archaeological contexts are still usually characterized as Spanish although that assumption might need some revision in the near future (Fig. 1).

In spite of this evidence arista and *corda-seca* tiles were seldom produced and in fact the majority of tiles continued to be imported until late 16th century.

This type of tiles known as *hispano-mourisco* or *mudejar* is going to get direct influences from the still surviving influences of centuries of Islamic presence in southern Iberia with geometric and phytomorphic motifs creating geometric symmetries. Many buildings in Portugal had their walls covered with these tiles. Some of the most outstanding examples can be found in the National Sintra Palace. Originally built in medieval times this building is going to be highly refurbished in early 16th century and a large portion of its inner rooms decorated with *corda-seca* and arista tiles. These have many different decorations ranging from the traditional floral and geometric pattern combined in large compositions to tiles with the arms of king Manuel, a royal demand to decorate the palace. One of the largest archaeological collections of hispano-mourisco tiles ever found was also associated to a palace, owned by the Penafiel Counts in Lisbon, where hundreds of these tiles were found and believed to form the decoration of the first floor (Bargão et al, 2017). Although the authors sustain, based on style, that these tiles were all imported from Seville, this attribution cannot be certain without further work. Other places are known although only occasionally published (Casimiro and Sequeira, 2018) Churches and monasteries were also large consumers of these arista tiles. In Portugal some of the most iconic religious building as tiles are concerned is located in Coimbra where the Cathedral still conserve part of its walls covered with this decorative solution, mostly likely of Seville production based on a large quantity of tiles bough from that Spanish city in 1503 (Goulão, 1986), although a large portion of the tiles in this building were removed in the 20th century.

This type of tiles was in fact the most recurrent in Portugal, although certainly not the only production. Following the Italian, Flemish and Spanish style some tile producers are going to paint *historiados*. This type of polychromous panels uses colours such as green, yellow, brown and blue on a white background to actually tell a story, most of the times inspired by classic legends or biblical tales. The technique is the same as tin glaze production which paints a colourful scene over a white tin glaze layer.

Some of the most well known examples are conserved in Quinta da Bacalhoa, a large estate owned in the 16th century by Brás de Albuquerque, an important figure of Portuguese nobility and an admirer of Renaissance styles and architecture. The most famous panels are a representation of Susana and the Elderly and Europe's kidnapping. (Fig. 2), possibly made by a Flemish tile maker settled in Seville named Frans Andries (Pais et al. 2015). However other examples are known in the Lisbon area such as a panel in one of the São Roque church chapels. These tiles were clearly being made in Lisbon and two of the most distinguishable craftsmen were Marçal de Matos and Francisco de Matos, probably relatives, who must have been active somewhere between 1560 and 1590 and actually signed and dated a few of their panels (Fig. 2). Some other tile craftsmen are known such as the Flemish João de Gois and Filipe de Gois, possibly relatives. Until recently they were known from written documents however a few years ago a panel in Graça Church has a signature recognized as the initials of João de Gois (Pais et al. 2015) revealing how multicultural was tile production in Lisbon in the late 16th century. The style of these tiles can in fact be followed all the way into Italy where ceramic artists were painting such scenes in walls and smaller objects such as ceramic vessels.

Pattern tiles (17th century)

If the 16th century combines different styles and decorations, the 17th century is going to be dominated by pattern tiles, sometimes also called repetition or 'carpet tiles'. These are replication tiles permeated by decorative influences from the Arabic, Flemish and far eastern traditions which were meant to cover a large surface in a relatively cheap and easy way. They follow the tradition of the *hispano-mourisco* tiles from the previous centuries, with its symmetry, geometry and rhythm.

If only one production centre is securely known for earlier periods, from early 17th century onwards there are three production centres, namely Lisbon, Coimbra and Vila Nova de Gaia (on the south bank of the Douro River, opposite Oporto). These are the same centres which produced tin glazed wares (Portuguese faience), since these two productions shared similar techniques and, thus, were fired in the same kilns and possibly made in the same workshops. In Coimbra this production is still not archaeologically attested, although tin glaze wares are documented there since 1603 and in Vila Nova de Gaia since 1605 (Gomes et al., 2013).

There are some differences between tiles from these three locations, allowing a more or less accurate macroscopic distinction. Lisbon tiles are slightly larger, with 14 cm in side while the others show 13 or 13.5 cm. On the other hand the colours are darker in Vila Nova de Gaia (particularly the yellow tones, which are more brown than golden, as some yellows are meant to represent gold or other metals (Pais 2012b)) and Coimbra but only Lisbon uses green and manganese purple. Given that both tiles and faience were produced with the same 'recipes' for glazes and fabrics glaze Coimbra has a rougher appearance and a yellowish tone. (Meco, 1989) (Figs 3 and 4).

There are different types of patterns, depending on how many tiles it takes to create the repetition element 2x2/1, 2x2/2, 4x4/2, 4x4/4, 6x6 and 12x12. The simplest patterns (2x2) are obtained through the rotation of one tile. The decoration of the tiles is as if unfinished and contains continuity elements, creating a design through the continuous interconnection of ornaments. By adding tiles, the pattern can be extended infinitely, adapting to the size of each wall (Meco 1989; Simões 1997).

The larger patterns were meant to occupy wider areas. The most frequent ones are the smaller patterns of 2x2, which are also the most numerous, the larger patterns have a smaller variation of designs but their simplicity makes them quite common. The largest pattern conceived by the Lisbon workshops displays 12 tiles on each side, so with 144 tiles per module, called "Marvila" pattern (Meco 1989; Simões 1997; Pais 2012).

Patterns are always limited by tile frames which follow the same rules. There are three types – *Friso* (frieze), *Cercadura* (frame) and *Barra* (bar) – with half, one and two tiles in height, respectively. These could be used alone or together, often following an arrangement with all three, from smaller to larger. To obtain a *friso* a normal sized tile is produced, with two similar designs subsequently cut in half. *Cercaduras*, with one tile

in height, have two clear horizontal edges, often dissimilar, to limit the decoration. *Barras* also present edges, and by having two tiles in height, they present an internal horizontal axis where the upper tile mirrors the other. These last two types both present corner and countercorner elements (Simões 1997).

The colours are mainly blue, yellow and white, with some details in green and orange until the third quarter of the 17th century and only in blue and white until the end of the use of patterns something which occurs in the first decades of the 18th century. Purple was introduced in the second half of 1600s and was mainly used on figurative compositions.

As for decorations, we can generically group patterns into “families”, with an evolution over the century. The first ones appear still in the last decade of the 16th century and go on until around 1630, they follow the older “*caixilho*” simpler monochrome geometrical compositions and add polychromous tiles in the places once occupied by white elements, these did not permit lateral decoration connections, with only one tile or four tiles with only one rotation axis. The most famous pattern of this period is called “*ponta de diamante*” (diamond heads), where the lateral designs are intricate geometrical designs which frame the central motif.

A second period, from around 1630 to 1650, sees a proliferation of patterns, with influences from the Sevillians tiles, Italian and Flemish decorations and far eastern textiles and tapestries. This period, which roughly corresponds to the last decade of the Iberian Union and the first one of the Restoration, is marked by a difficult economic juncture which partially explains the popularity and spread of pattern tiles, since they are cheaper and easier to apply. It is also the period when the cobalt used to create the colour blue is more diluted since it was very expensive (Pais, 2012). Patterns can be grouped into “families” where a recurrent central popular theme is altered but maintains an element of recognition, the most popular ones being corncobs; camellias/roses; vine/acanthus leaves; palmettes and ropes/lacework. Each had multiple variations though the first two where especially prolific.

A third period, from approximately 1650 to 1680, which roughly comprises the reign of king Afonso VI, is marked by the definite end of the war and the beginning of an economic recovery, as well as the rise of a new nobility which felt the need to assert their power and influence. This period is characterized by more intricate new designs,

with less occurrences, sometimes only made for specific orders, which coexist alongside the older designs with new variations. The colour orange disappears, and the manganese purple arises, along with a tendency towards a whiter background. Flower elements emerge in the wake of other emergent decorative styles: single figure and altar fronts.

The fourth and last period of pattern tiles took place from 1680-1700, approximately the reign of king Pedro II, when the peace with Spain was completely set. The economic environment and the newly established nobility were favourable to the consumption of foreign luxury goods, such as Dutch tiles and Chinese porcelains, with their aesthetic that deeply influenced the Portuguese ceramic production. Pattern tiles were reduced to a blue and white palette, although with the same designs and a dominance of the larger patterns of 4x4 and 6x6 (Monteiro 2007; Pais 2012).

Small panels with religious symbols complement the pattern tiles in churches, being particularly common from 1645 to 1670 and usually presenting an inscription with the name of the donor and a religious quotation. One of the most usual composition shows a central monstrance surrounded by two praying angels, often holding thuribles. Other symbols are also usual, such as the emblems of religious orders or allegories.

There are also panels depicting saints, the most common of which are the Virgin Mary, John the Baptist, the Holy Family and Saint Anthony. Other less popular saints were also painted (Pais 2007; Monteiro 2012).

Also found in churches decorated with pattern tiles are altar fronts (Fig. 5). As the name suggests, these were meant to cover the part of the altars which faces the congregation and replaced the rich and intricate textile altar cloths, although heavily influenced by them and often copying them, as clearly indicated by the golden painted fringes on the edges of the compositions, and mingling the decorative influences of far eastern models with catholic imagery. As for chronology, these compositions were created from approximately 1650 until 1680.

The iconography of these panels comprises a strip of land on the bottom with animals (deer, gazelles, lions, etc.) and vegetation (palm trees, rose bushes and various undefined others) which branch out into an upper level representing the sky or paradise, filled with fruits, flowers and birds (eagles, peacocks, swallows and diverse birds of

paradise). Sometimes the centre presents emblems from religious orders or coats of arms (Meco 1989; Curvelo 2012).

As for non-religious tile panels from the 17th century, they were less numerous and the ones who still survive came from the nobles houses around Lisbon. These panels are polychromous and fall mainly into three categories: nature, mythology/allegories and social representation. The first, much like the decoration of altar fronts, present vegetation and wild animals inspired by far eastern textiles, as well as animals from the Americas (mainly exuberant birds) and Africa (such as camels or leopards).

The second theme comprises mythological depictions, which will continue to exist throughout the centuries. Classical gods, muses and other characters are featured and most of these compositions were based on engravings by foreign authors, mainly Italians at this stage. As for allegories, we find depiction of the zodiac signs, months, seasons or continents. There was also what is usually called *macacaria* or *singerie*, which has a clear satirical nature and places animals in human costumes and situations with a moral undertone, much like with fables. The most famous of these compositions is called 'the chicken marriage', now in the National Tile Museum, where a chicken is transported in a carriage with a parade of music playing monkeys. Indeed, the monkeys are constant feature of this genre and it is where it takes its name from, since monkey= macaco (pt.) =singe (fr.).

The third category comprises scenes that range from everyday life and/or court compositions, such as hunting or dining, to battles of the Portuguese Restoration War. The best example of tile panels in civil architecture with non-religious themes comes from the Marquises of Fronteira Palace in Lisbon, where the estate and gardens are profusely decorated with tiles depicting the family's lineage, detailed accounts of the battles of the Restoration War, as well as gallant and hunting scenes. Portuguese and Dutch tiles stand side by side in this palace, in a display of wealth and status for a noble family who rose to power in the wake of that conflict.

One very popular design, inspired by Flemish compositions, called *Albarrada*, comprises a large decorated vase filled with flowers surrounded by birds (the most common are parrots or peacocks) (Fig. 6). The first examples, date from the late 17th century, are larger than their 18th century counterparts and started out as colourful, following the overall chromatic tendencies. The designs became more stereotyped, smaller and

repeated horizontally, occasionally with angels holding the vases, now sometimes baskets and the birds might become dolphins or dragons. The use of *Albarradas* almost disappears in the Rococo period, with sporadic appearances with a much simpler design after 1755 which can be found until the 19th century (Meco 1989).

The 17th century also marked the expansion of Portuguese tiles throughout the world, even though there were already late 16th century Portuguese arista tiles and geometric compositions in the Atlantic islands of Azores, Madeira and Cape Verde (Meco 1998; Evans *et all.* 2017). The tiles were taken to the Portuguese territories of Africa and America, with smaller sets in places such as Cape Verde (Richter 2011), the city of Goa in India (Curvelo 2012b), Macao (Meco 1998).

Brazil holds an impressive amount of Portuguese tiles, second only to Portugal itself, with more than 136 sets for the 17th and 18th centuries (Simões, 1965). For that reason, Brazil deserves a special mention due to the high number of cases. There are no pattern tiles prior to 1630-40, the penetration of which began in the northern states like Bahia, the Rio de Janeiro region began using them around 1660 onwards while the southern states and the São Paulo area only received tiles from 1680-90, reflecting the settlement and type of occupation of the Brazilian territory. There were no special patterns created specifically for the Brazilian market, nor did all of the ones used in Portugal were used, the polychromous compositions are scarce and so are altar fronts (Simões 1965). Even though there was not a special production being manufactures only for this colony, there certainly was a Brazilian taste, explaining the presence, absence and preference of certain motifs and types of tiles (Senos 2012).

As also happens with pattern tiles, the other 17th century compositions were polychromous and became blue on white around 1670, although maintaining for the most part a manganese purple outline until 1680-90. Around that time other changes occur, the blue pigment began being diluted, creating gradients in order to suggest depth, the contour becomes thinner and also blue (Meco 1989).

The cycle of masters (18th century)

One of the first productions entirely with one colour is called single figure (Fig 7). These were directly inspired by Dutch single figure tiles, although without their minutia and detail, since they were considered a lesser job and performed mostly by apprentices.

The Portuguese production began in the third quarter of the 17th century and had a round edge to the central motif, afterwards that is lost and by the beginning of the 18th century they gain their characteristic corner element, a stylized and simplified flower. Single figure tiles show only one design at the centre, with wide brush strokes. The decorations are stylized, fairly simple and highly repetitive, falling into some main themes: animals (birds and mammals), flowers and fruits, boats and buildings, landscapes, angels, humans and sarcastic images (such as large breasted women or drunken monks) (Simões 2010; Castro and Sebastian 2003). Although these type of tiles was also used in churches, as the case of São João de Tarouca where many single figure tiles were retrieved from the archaeological intervention (Castro Sebastian 2003), they were mainly used in kitchens and infirmaries prior to the 1755 earthquake and afterwards were placed in secondary spaces such as corridors or passages (Meco 1989). In the last decade of the 17th century Gabriel del Barco (1648-1703?) began its career as a tile painter after years as ceiling painter and would become a reference in a transition period which would pave the way to the “The cycle of the masters”. His works were much larger than previously, with a progressive complexity of the compositions but keeping the relatively straightforward one or two tile frames. (Meco 1989).

Soon after other names joined him, with a scholarly artistic formation, able to compete with Dutch tiles and thus fulfilling a market failure. The most famous were Manuel dos Santos (active between 1702-1730), António de Oliveira Bernardes (1660?-1732) and the unnamed painter known as P.M.P. (active between 1717-1730). They brought the baroque aesthetic to the compositions, with large scenic depictions, expressive actions and characters, they also overcame the previous problems of scale and perspective in order to create optical illusions and Trompe-l'œil, which did not exist before.

All of the masters produced large figurative panels, with interconnected scenes in order to create a coherent narrative (Figs. 8 and 9). The commissions were mainly for religious environments and, therefore, with religious themes, the exception comes from P.M.P., the one with the largest secular body of work in palaces and noble houses throughout the Lisbon area.

The most famous panel of this period is the panel known as the ‘Great Panorama of Lisbon’, with 1376 tiles in total, which belonged to the Palace of the Counts of Tentúgal, Lisbon, and is now a part of the Museu Nacional do Azulejo collection. It was probably

painted by Gabriel del Barco, albeit with contributions from other painters, around 1698-99. This view of the city from the river, as if the observer is partaking on a cruise downstream, is quite rigorous in the depiction of the main buildings and water front, but somewhat more stylized in the urban neighbourhoods. It spans almost 14 km, from the Jamor Valley in the west, to Xabregas on the east side (Meco 1985; Flor et al. 2014). The work of these painters was very individualized, sometimes enabling an identification when not signed, which at this point was rare, unlike the 17th century where all production is anonymous.

This period lasted until approximately 1725, paving the way to the next generation of tile painters collectively known as the 'Great Joanine Production' which lasted roughly until 1755, named after king John V (r. 1706-1750).

This period is marked by the incoming flow of gold and gemstones from Brazil, first discovered in 1697, and the increase of grandeur and sumptuous lifestyle of the king and court. Lavish new buildings were being constructed, decorated with a combination of tiles and gilded woodcarving.

The demand for tiles created a production of serial figurative compositions, most of them based on French or Dutch engravings, putting an end to the previous individualism. The important features of this period's taste were the theatricality and the amount of decoration on each panel. The backgrounds and landscapes also receive a great deal of detail, with the correct representation of shading and proportions of trees, fountains or buildings. The cobalt blue is now watered down to create multiple shades and multiple brush strokes are overlapped to achieve a deeper tone, creating a dynamic effect.

The frames of figurative compositions suffered an evolution in the 1730's, with the inclusion of baroque motifs and style, with seraphs in tunics, the illusions of architecture and stage settings given by valances, fringes, flying cherubs and pilasters, greatly influenced by the Italian opera.

Despite the standardization characteristic of this period, particularly in its beginning, which lead one author to call it the 'period of the anonymous workshops' (Simões, 2010), some painters are known for their individual work, since they kept signing their compositions. The most prolific and famous were Teotónio dos Santos (1688-?), Valentim de Almeida (1692 - 1779), Policarpo de Oliveira Bernardes (1695 – 1778, son

of the previously mentioned António de Oliveira Bernardes), and Nicolau de Freitas (1703 - 1765).

The best examples from this period can be found in the Convent of São Vicente de Fora, Lisbon, the Colégio do Espírito Santo, Évora, (formerly a Jesuit seminar and now the University of Évora) or the cloisters of the Porto cathedral.

The themes displayed are vast, and therefore hard to catalogue. They range from religious depictions of the lives of saints, Jesus and the Virgin Mary, scenes from the Old Testament, classical mythology and more worldly themes such as landscapes, banquets, parties, hunting and leisure scenes, placed on the palaces of the nobility. Most panels were painted after published foreign engravings, spanning all mentioned themes (Simões 2010).

This period also sees the beginning of a typically Portuguese type of tiles called invitation figures, which spanned chronologically until the 19th century. These are full scale cut around compositions showing male human characters placed at the entrance of great halls or meeting rooms but so that they were not seen from the outside. The first invitation figures were made by master PMP and were placed outside the chapter house of the University of Évora, a former Jesuit college, and until the reign of João V were restricted to the palaces of the top nobility and clergy. The characters depicted were firstly doormen or servants dressed in livery and halberdiers guarding the rooms, all portrayed with expressions and actions indicating an invite to come in, reflecting the baroque ceremonials and theatricality, both religious and profane. After that period, invitation figures spread to the houses of the rich bourgeoisie and a second order of nobility. These have a more elaborate composition, frequently with a trompe l'oeil or an optical illusion, found in other spaces like staircases and hallways. Other characters are introduced at this stage, such as equipped soldiers, women, Turkish soldiers and gentlemen, musicians were hosted later on the 19th century. Invitation figures followed the tile aesthetic of each period (Arruda 1993; Arruda 2014).

A new introduction of colour, with the emergence of the Rococo aesthetic, takes place around 1745, and becomes more widespread from the 1755 earthquake onwards, coexisting with blue and white compositions for the next few decades. Yellow was the first colour to be reintroduced, with notes in the compositions to create the illusion of gold, metal or the sun, and the others followed suit. Manganese, since it can be diluted

in water, started being used to create multiple shades of purple and the main part of the composition. It should be noted that the use of polychromy was restricted to the edges and ornaments which surround the main arrangement, frequently these continued to present *trompe-l'oeil* illusions to resemble stone architectural elements as well as metal decorations. The centre continued to be painted only with one colour, blue or purple, creating a contrast between them (Meco 1989).

After the earthquake of 1755 the demand for construction materials signified an increase of tile production as the new houses were rebuild and refurbished. A new period started with that natural event that lasted until approximately 1780, usually called *Pombalino*, after the Marquis of Pombal (1699-1782), minister to king Joseph I (r. 1750-1777) and the main actor of the reconstruction of Lisbon. The Rococo tendencies continued, with the polychromy on the edges and blue or purple in the central composition, side by side with blue only panels. New decorative elements and techniques were introduced at this stage, shell like and bat-wing like decorations lined the edges of the compositions which are now somewhat asymmetric. As for techniques, sponges soaked with paint and applied over the tile were used, either to create the effect of clouds or tree tops, or covering the entire tile and used as fringes to fill gaps between the tiles and other elements, another new effect was introduced, with large erratic brushstrokes in one or two colours, creating a marbled look (Meco 1989).

The themes displayed in figurative tiles remained roughly the same, with two distinct spheres: religious depictions of the old and new testaments and profane tiles with serial subject matters such as the four seasons, the elements, the months or the star signs, as well as scenes presenting hunting, social gatherings and intimacy, dancing and music playing and landscapes (Simões 2010; Câmara 2005). The new introduction are the compositions called *chinoiserie*, popular on the second half of the 18th century, so-called because they used far eastern and Chinese motifs such as landscapes and Asian daily life scenes, which fulfilled an European curiosity with the exotic east, mostly fuelled by engravings published by Jesuits priests (Câmara 2005; Correia 2013).

A religious type of tile called *registos*, which already existed approximately since the 1740's in low numbers, but gained a new dimension as a consequence of the climate of fear and religious fervour experienced in the wake of the 1755 earthquake and can be seen in the most affected cities like Lisbon, Setúbal or Santarem and continued until the

definite establishment of liberalism. These reflect a popular devotion to saints' protectors of the house and family, as well as those who offer protection against forces of nature. These can be divided into two categories: Family protector saints – The Virgin Mary, Holy Family and Saint Anthony (1195-1231) – and the saints that protect against natural disasters – Saint Martial (3rd century) and Saint Francis Borgia (1510-1572). Although we can make this distinction of intentions, these elements can be combined in the same *registo*. The *registos* are usually placed on the façade, over the door or windows after the reconstruction. Non habitable structures such as mills, fountains, bridges and cemeteries were also covered with protection (Meco 1989).

Usually these panels are indented, varying in size, with compositions of a single saint or two and more, sometimes one of them being put in a prominent place. Many times a votive inscription or a date is painted (Simões 2010).

Another type of *registo*, a more naïve arrangement, is the *Alminhas*, which can complement bigger compositions like the basis of a Cross of large dimensions. These can be composed of several tiles but the majority are single tiles. These are a more modest demonstrations of faith and devotion, since most are of one or four tiles only. The number of souls in these representations may vary but are usually two – a man and a woman. They are placed in the centre of the composition, emerging from the flames of Purgatory (Simões 2010) with their hands raised in worship. Only painted in blue, with a highlight of orange/yellow in the flames, these compositions usually have no frame or it consists on a straight simple line and occupies the entire area of the tile (Meco 1989). The great majority of *alminhas* have a caption, usually only the initials to save space. PNAM – *Padre Nosso Ave Maria* - PA – *Pelas Almas* and OPN – *Ora Pro Nobis*.

Pattern tiles made a comeback in the late 1740's, slowly at first and only in the Lisbon region, gaining a more widespread use after 1755 since there was a huge demand for tiles at that point. These new patterns follow the same logic of lateral connections and rotation axes as their 17th century counterparts, but they are slender in design, with a pronounced white background, combining small flowers and other phytomorphs with geometric elements, they have a suggestion of shading given by darker tones to the colours in use and a diagonal flow to the overall scheme. The colours used were blue and purple at first, but polychromy was afterwards the staple and the frames used with them are frequently a variation of the main theme and follow the same colour scheme.

These patterns were an early manifestation of the neoclassical taste and thus continued to be used throughout the 18th and into the 19th century (Meco 1989).

The 1770's see yet another change in taste and tile decoration, with the neoclassical style, which would last until the first decades of the 19th century. The new period marked the definite end of the blue only tradition and the complete establishment of polychromy, although the central composition of figurative tile panels remained only in blue or purple.

Neoclassical tiles were heavily influenced by the Luis XVI style and the discovery of Pompey and its wall paintings. The central compositions became increasingly small, encapsulated in round, oval or square medallions, some of which even looking like cameos. The decoration has an intense polychromy, with a prominent white background and sometimes imitating wallpaper. The new iconographic repertoire includes plumes, flying birds, peacock feathers, branches, ribbons and urns. The painting is less dense, with the loss of heavy looking volumes, seeking a watercolour effect, with scrapings particularly in the yellow colour to convey a sense of lightness (Meco 1989; Pereira 1998; Câmara 2005).

At this point tiles were integrated in a wider decoration scheme which involved painting, elaborated plaster works and frescos, so they would sometimes not be the main focus. Chronologically, this style comprises the reigns of queen Mary I (r. 1777-1816) and the early reign of John VI (r. 1816-1822), and since he assumed the regency in 1792 the period is also known as Regency Style. Geographically the Lisbon area was the one with the most tiles, still in the wake of the reconstruction effort, with the best example being the tile panels of the Royal Palace of Queluz. Brazil also holds important examples, especially since the Portuguese court moved to Rio de Janeiro in 1807 following the French invasions (Pereira 1998).

Adding to the Lisbon centered distribution of these tiles is the establishment of the first pottery factory by the marquis of Pombal in 1767, the Real Fábrica de Louça do Rato (eng. Royal Factory of Rato). Its production was not prolific in tiles in a first stage until 1771 when the management fell on Sebastião de Almeida, son of Valentim de Almeida the tile painter we have already mentioned. For the most part, the factory produced the pattern tiles mentioned above. It is very hard to distinguish between the early factory tiles and the traditionally made ones since the technique and technology were roughly

the same, with the names of Francisco de Paula e Oliveira and Francisco Jorge da Costa as the most prolific and important tile painters of the period (Meco 1989; Câmara 2005).

Conclusion

The first tile production context ever found in Portugal can be dated from mid 16th century and although this paper focusses exclusively on 16th to 18th century productions tile production started much earlier in the 13th century and is going to subsist until today. Tiles are decorated during this period with different styles and despite the chronological organization a new tendency does not annul the previous immediately and we assist to a progressive change of style. However older tiles are frequently replaced by newer ones and this is one of the reasons why it is difficult to find well preserved 16th century tiles. The expansion of the type of building decoration followed the Portuguese around the globe and, as aforementioned, they are everywhere to be found in Portuguese former colonies such as Cape Verde and Brazil. However there are documental and archaeological evidence that these were exported to other countries such as England. London port books reveal the entrance of tiles from Lisbon, Vila Nova and Coimbra during the 17th century revealing that these were in fact appreciated, although it is impossible to actually know what type of decoration was appreciated. The only Portuguese tile found in this country is a pattern tile.

These were frequent decorative solutions in Palaces, Churches and Convents, however they could have been used in smaller houses as well, although archaeological evidence is not enough to conclude to what extent was a middle-class house decorated. How did people react to them when they entered a building with all the walls covered by pattern polychromous or a tale told in blue on white figures? Understanding the impact these tiles had in the daily life of Portuguese populations in Portugal and abroad is the next step.

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Captions

Fig. 1 – Arista tiles manufactured in Santo António da Charneca

Fig. 2 – *Historiada* tiles with the biblical tale of Susana and the Elderly from Quinta da Bacalhoa

Fig. 3 – Pattern tiles. Campo de Santana Convent, Lisbon.

Fig. 4 – Pattern tiles. Campo de Santana Convent, Lisbon.

Fig. 5 – Altar front panel, - Quinta do Bairro, Vila Nova de Famalicão.

Fig. 6 – Albarrada. Campo de Santana Convent, Lisbon.

Fig. 7 – Single figure tiles Quinta de Santo António (Vila Franca de Xira, Portugal)

Fig. 8 – São Vicente de Fora Monastery, Lisbon.

Fig. 9 – São Lourenço church, Almancil.