MEMORIES OF THE PRODUCTION OF AZULEJO
AT THE CONSTÂNCIA CERAMIC FACTORY
MEMÓRIAS DO FAZER AZULEJO NA FÁBRICA CONSTÂNCIA

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ABSTRACT
This article discusses the craftsmanship involved in the tasks associated with the production/creation of azulejo. In this article the socio-technical memory of those who made them is therefore specially considered. The verbal testimonies of former workers of the Constância Factory – that was located in Lisbon and operated between 1836 and 2001 – are the empirical references that support the reflection throughout this article. This work dwells upon: (1) the interest in studying the azulejo production from the socio-technical perspective; (2) the activity of the Constância Factory regarding the production of azulejo; (3) and the learning, expertise and flexibility that the technical/creative processes and specialities involve.

KEYWORDS
Socio-technical Memory | Production processes | Azulejo artists and artisans
Constância Factory | Ceramics

RESUMO
O artigo discute os ofícios e as tarefas executadas nos processos fabris de produção/criação do azulejo. É conferida especial atenção à memória socio-técnica de quem faz e cria o azulejo. Os testemunhos orais de antigos trabalhadores da Fábrica Constância (1836-2001), sita em Lisboa, são então a referência empírica que sustenta a reflexão. A discussão reflete sobre: (1) o interesse em relevar a experiência com o azulejo a partir da memória socio-técnica.; (2) a atividade da Fábrica Constância, nomeadamente no que concerne à produção de azulejo; (3) a aprendizagem, especialização e a maleabilidade técnico-profissional que envolve os processos e especialidades técnico-criativas, comentada a partir de dois testemunhos de antigos trabalhadores da fábrica.

PALAVRAS-CHAVE
Memória sociotécnica | Processos produtivos | Artistas e artesãos de azulejo
Fábrica Constância | Cerâmica
1. CREATING SOURCES ABOUT AZULEJO PRODUCTION IN A LISBON FACTORY

In Portugal the actions of performing, transmitting and organizing the technical-creative tasks associated with azulejo production do not usually rely in clear systems or easily disseminated, interpreted or reproducible records. Even if some facts about azulejo production are being unveiled through historical research, others remain unknown. This may partly be explained by dealing with knowledge and processes usually apprehended orally and through observation, imitation, repetition and mimicking, and due to the continuous creative/invention procedures that are not subject to pre-established standards, neither are they usually recorded. In order to register this type of knowledge it is necessary to complement the historic research with other information sources such as the narratives of those who produced the tiles.

Our task as researchers is to register rigorously the oral expressions — to observe its “literal sense” — determining how “the oral evidence stands when assessed and evaluated exactly in the same way as all other types of historical evidence are evaluated” (Thompson, 2002: 138). This is because the oral source/narrative is a source-technique-method that enables us to create information (Alberti, 2004). The narrated experience becomes therefore a tangible dimension of social aspects. Here the narrative becomes a living document since “the memory is so alive, so present, that it’s transformed in the desire to repeat the gesture and teach the art to who listens” (Bosi, 1979: 474). Or, as referred by Walter Benjamin (1994: 211), “The narrator withdraws from the experience what he tells – his own experience or the one reported by others. And incorporates the things narrated to the experience of its listeners”.

The study of the memories associated with the execution of a task contributes, through words and gestures, to retrieve measurements, materials, tools, drawings, knowledge and ways of doing. It finally aids to provide meaning, value and power of action to the experiences lived and stored in the performers memory. However, the oral evidences that report to traditional production know-how associated with azulejo may have already disappeared, or in the process of. This is the case of socio-technical memories of the Constância Factory workers, subject that we will be dwelling about in this article.

This article aims to contribute in making the narratives of tile producers — as part of a more extensive research — in sources of scientific knowledge. It aims to recover from the oral sources the azulejo production know-how in accordance with the narrative of those who made them.

2. THE CONSTÂNCIA FACTORY: BRIEF OVERVIEW

The factory was originally created with the name “Companhia Fabril de Louça” (1836) and had Ignácio Augusto da Silva as its first manager (Domingues, 2009). In 1842 it was renamed “Companhia Constância”. The factory was “(...) also known as “Fábrica dos Marianos” or “Fábrica das Janelas Verdes”, for taking up the fence of the convent of the Marian friars and be located at the Janelas Verdes Street, door n.º 48” (Queirós, 1907). It operated inside the former convent “Convento de Nossa Senhora dos Remédios”/“Convento dos Religiosos Carmelitas Descalços” commonly named “Convento dos Marianos”, at Lapa, Lisbon, that was closed in 1834 as all other Portuguese male convents and monasteries.

1. From the several names the factory had it was chosen to use Constância Factory “Fábrica Constância” in our text. In the citations from the factory workers interviews it is used their factory denomination commonly “Cerâmica Constância”.
The factory operated there until the end of November 2001, when it went bankrupt and was closed.

It is estimated that from around 1860 the factory recognition has been driven by its relation to the work of Wenceslau Cifka (1811-1884). Cifka was a photographer, artistic counsellor and the ceramicist of king D. Fernando II (Baldin, 2014) who produced his ceramic works at the factory. His artistic production was recognized internationally through participation in several fairs, such as the World Fair of 1878 (Paris) and the Portuguese Exhibition of 1879 in Rio de Janeiro. The contoured tiles used at the Pena Palace in Sintra, as well as the neo-hispano-moresque stencil tiles that cover one of its façades, are attributed to him.

It is known that in 1867 a large kiln was built at the factory. And José Queirós (1907) also mentions that by that time, a painter named J. S. Roberto and a kiln operator “Forneiro” named João Maluco who also painted ceramic ware inspired by Wenceslau Cifka, where working at the factory.

In 1881 the factory, then with 40 workers, went on to be managed by the firm Sequeira & Freire and was renamed “Fábrica Constância” (Domingues, 2009). Between 1885 and 1896 it was owned by Mr. Miguel José Sequeira that among other creations initiated the production of the “pó de pedra” (white body) ceramics using clay from Leiria, and ceramic ware of “pasta preta rija” (hard black paste) marked “F. N. Janelas Verdes”² (Queirós, 1907).

At the first edition of José Queirós’ book (1907) the main reported productions were ceramic ware and tiles. The painting of ceramic ware and azulejo was in charge of José António Jorge Pinto (1876-1945) – painter who excelled in the Art Nouveau azulejo – and who was working at the Factory between 1897 and 1906 (Baldin, 2014). The works were present on the national exhibition of fine arts (1905), where

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2. Rafael Salinas Calado – “Fábrica de Cerâmica Constância de Lisboa”. Divulgation leaflet Exposição: Cerâmica Constância – 164 anos de azulejo, [2000] [probable date].
they were awarded, and classified of unquestionable merit. The factory would since then be identified as a reference for the production of Art Nouveau azulejo (Simões, 2015).

The Italian artist Leopoldo Battistini assumed, in conjunction with Viriato Silva, the factory administration between 1921 and 1936. Battistini was known for painting panels of classicist taste. During this period, the quality of the ceramic production of the factory is once more recognized internationally at the exhibitions in Milan (1927) and Seville (1929). It should be noted that in the period prior to the exhibitions a filmed documentary was produced – by A. C. Macedo from the “Companhia Cinematográfica Portuguesa” – about the artisanal faience and azulejo production process at Constância Factory. In this documentary the clay preparation, azulejo ceramic body forming, glazing, painting and wood firing are depicted and registered in what may be considered a rare and highly informative visual source of the azulejo and ceramic ware production techniques of the time.

Maria de Portugal (pseudonym of Albertina dos Santos Leitão, 1884-1971) was a disciple of Battistini who took over the management of the factory after his death in 1936. The factory came to bear the name of “Fábrica Battistini de Maria de Portugal” in homage to the Italian artist (Lázaro, 2011). During this period the factory produced faience and azulejos, including azulejo decorations for the Portuguese railway stations, municipal markets, public buildings, international exhibitions and other ‘Estado Novo” constructions.

In 1963 the factory was acquired by a new society, changed its name to “Fábrica Cerâmica Constância de Lisboa, Lda.” and was reorganized by D. Francisco de Almeida, who remained its manager until the factory closure in 2001 (Fig. 01). During this period several important works have been produced including public art azulejo panels, an increasing role that azulejo has been acquiring. Examples are the execution of the monumental tiled wall (produced in 1970 and applied in 1982) for Avenue Calouste Gulbenkian, in Lisbon, by João Abel Manta and the tiled façade of the Lisbon Oceanarium (1998) by Ivan Chermayeff. Several Portuguese contemporary artists have had their art works produced at the factory such as Valadas Curiel, Joaquim Rebocho, Francisco Relógio, Nuno Siqueira, João Charters de Almeida, Abel Manta, Eduardo Nery, Luís Pinto Coelho and Lima de Freitas.

3. METHODOLOGICAL NOTES

For the oral testimonies collection through semi-directive interviews, a preliminary questions list was prepared that focused on the following topics:

- Characterization of the narrator (e.g., age, gender, educational level, when he started working, with who learned the office...).
- Historical information, materials and artistic process of creating/producing.
- Designation of spaces, buildings, tools, materials and objects used in the performance of the tasks.
- Description of the work phases (its objective, how it was developed and implemented); office learning process and transmission of knowledge.

The interviews with the workers were arranged by telephone and by electronic mail (e-mail). The first two interviews were held at LNEC, having lasted around four hours. Both interviews were recorded, transcribed and analysed afterwards. Following the interview there were exchanges of information by telephone and e-mail.

Not all aspects reported during the interviews will be mentioned in this article. The information regarding “who makes what” in the production and conception of azulejos will be privileged.

4. CREATING EVIDENCES

Jorge Narciso has granted us the second interview, also in May 2017. Born in Lisbon, he had 57 years at the time of the interview. He worked at Constância since October 1978 until 2001. He presented himself as responsible for the production and maintenance of the factory, describing its function and activity in the following terms:

“I belonged to the team responsible for the production-maintenance of the factory (...). I prepared the azulejo, the azulejo glazing and its distribution. Also I was involved in the maintenance of the factory to produce these tiles, I took care of the electrical system, the kilns, machinery, I did all the maintenance (...). Sometimes, I would support the delivery and preparation of paints. We had a reference (...) I did not really know the composition. It was in the little book, we went to the little book and would do it (...) I glazed the tiles [through the production line] and by spray gun. I was not involved with the painting and drawing of them [the azulejos]. The only thing I would do for the painters was to cut the tiles with a plier. (...) If the piece was broken it had to be made again”. (JN)

4.1. About the interviewed factory workers

The first worker interviewed was Paulo Matos (PM), which was born in Lisbon, and had 53 years at the time of the interview (10 may 2017). He began working at Constância Factory in 1990 until 2001, when the factory closed. He presents himself as a painter-creator referring that:

“... I had a vocation for the arts, I very much enjoyed drawing, [so] right after the military service an uncle who knew the owner of the Monogrês pottery arranged for me to work there and this was my first contact and more serious first job, and after that ceramics was with me forever”. (PM)

“Painter-creator was an individual who not only performs pieces that customers (...) order, but also creates personalized works. And [I] also developed watercolour models to scale (...). That was basically my job”. (PM)

4.2. The oral sources contributions

4.2.1. Functional organization of the factory space

In the years of 1990 and probably until its closure in 2001, the activities of the Constância Factory have developed in order to occupy several areas: on the ground floor it was placed the warehouse for receiving and controlling the materials and ovens; there was the glazing area, estampilharia stencil painting (Fig. 02a) and serigraphy; in the first floor was positioned the area intended for manual painting (Fig. 02b), described as “faience and azulejo panels” (PM) and which included “painters of 2nd, 1st rank, highly specialized and painters-creators” (PM).

The factory functional space was described as:

“(...) because it was large, the space was divided between areas: the area of the stencilling, the glazing area, the area of moulds and parts design.
and the area of painting, which had two floors. A space in the ground floor and another above it that was a building recently created (...) to allow answering many orderings. At the time, there were many orders. Moreover, it was large, with good light mainly on the first floor (...) had very good light and good space, so the painters felt good because they could move away and see from a distance. I mean especially for large panels, space is necessary to view the work. It is very important the space to view the work, because if we’re on top of the object we’re not seeing what’s going on”. (PM)

The space for ceramic ware production was described as:

“(...) We started by picking up the [ceramic base], put them on the assembly line, to which we call production line, we did the glazing of tiles, the tiles were distributed regarding the requests: [they] would go to the stencil or [manual] painting section”. (JN)

“(…) In the painting kiln about of 150 tiles would fit. We had another furnace downstairs that had a capacity for 100-120 azulejos. But we had two wagons. We even had three but one was broken (...). We had wagons that would take around 600 to 1000 tiles. It could take ceramic ware and tiles (...) it was a rail like the electric lines. It is a wagon with four wheels”. (PM)

4.2.2. Functions, tasks and production processes

What the documents consulted say

In a brochure from the factory, probably from the 1990 decade, the main technical-creative processes (see Table 1) are presented as follows:

“Using several processes – stencil, screen printing, hand painting, brushed or plain – The “Cerâmica Constância” is able to respond to the most varied requirements both in interior decoration and in functional equipment’s. From azulejo panels with (traditional) style to modern conceptions in tiling’s for kitchens or bathrooms. Both for individual residences and the great urban constructions”.

A systematization of the professional activities described in a factory personnel records from 1998, indicates that from the 74 registries of employees, 55 of them performed creative – technical process or support of ceramic production, from which 40 are directly linked to the activities of painting, stencil/ decoration and serigraphy. In table 2 to 4 these professions and respective categories as described in this document are identified. In order to better understand these professions and their scope the document from the Industries of Ceramics Federation Union, cement and glass of Portugal (CCT, 2000) was consulted (see Table 2-3).
**TABLE 1**

Description of the main technical-creative processes of Constância Factory.  
(Source: Promotional booklet from the Constância Factory, probably from the 1990’s).

<table>
<thead>
<tr>
<th>TECHNIQUES</th>
<th>DESCRIPTION OF THE PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual painting</td>
<td>“(...) After transfer of the drawing made on perforated tracing paper, the artisan works in the most important phase: the painting gently made by brush”.</td>
</tr>
<tr>
<td>Stencilling [estampilha]</td>
<td>“(...) requires an attentive decoration work on various waxed papers corresponding to the various colours that will enrich the tile.”.</td>
</tr>
<tr>
<td>Screen print [serigrafia]</td>
<td>“(...) is used a silk mesh that has uncovered the design to be reproduced and on top of which the paint is applied passing throughout the silk into the tile”.</td>
</tr>
<tr>
<td>Broad brushing [trinchados]</td>
<td>“(...) the decoration is made with a broad brush soaked in a special paint that when passing through the tile leaves in it the texture that the characteristics of the paint and the brush transmit”.</td>
</tr>
<tr>
<td>Plain glazing [lisos]</td>
<td>“(...) obtained by passage of the ceramic base (chacota) under a ‘curtain’ of glass that flows continuously. Only afterwards it is fired”.</td>
</tr>
</tbody>
</table>
**TABLE 2**
Functions related to the Constância Factory production: 
Part I

<table>
<thead>
<tr>
<th>AREA (1)</th>
<th>PROFESSIONS (2)</th>
<th>CHARACTERISTICS OF THE FUNCTION (2)</th>
<th>Nº WORK. (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1º Finisher [Acabador 1º]</td>
<td>&quot;(...) finishes ceramic pieces in a machine or by hand, raw or fired, being able to fix/retouch them&quot;. (p. 32)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Note Keeper [Apontador]</td>
<td>&quot;(...) collects, records, selects and/or forwards elements relating to labour, input and output of products, materials, tools, machinery and infrastructures necessary for the production sectors, and may also collaborate in control and quality assurance&quot;. (p. 33)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Warehouse Supporter [Auxiliar de Armazém]</td>
<td>&quot;(...) assists in the warehouse work of finished products, semi-finished products, raw materials or various materials and, whenever necessary transports them to their places or storage lots, sorting and packing them and doing still the orderings separation&quot;. (p. 33)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Service Assistant [Auxiliar de serviço]</td>
<td>&quot;(...) performs not specified tasks&quot;. (p. 33)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Production Apprentice [Aprendiz de Produção]</td>
<td>In the cited document only appears the reference to function of apprentice and as mentioned for the subsector of structural ceramics has been referred to as the &quot;worker who, under the permanent guidance of a specialized professional, starts his professional training assisting him in his work (...)&quot;. (p. 26)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Coordinator Assistant [Encarregado-Ajudante]</td>
<td>&quot;(...) assists the section manager in carrying out his duties&quot;. (p. 36)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Warehouse-Keeper [Fiel de Armazém]</td>
<td>&quot;(...) controls the entry and exit of materials or products, being still in charge of the physical existences, that is, controlling the stock registries, control of the stock, and may be responsible for up to two subordinate’s discipline&quot;. (p. 37)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Production Coordinator [Responsável de Serviços de Produção]</td>
<td>In the document cited is designated as &quot;production team leader- (...) controls and coordinates directly a group of professionals with related activity, in a maximum of seven&quot;. (p. 33)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kiln operator [Forneiro]</td>
<td>&quot;(...) responsible for the operations inherent to the firing of products and their loading and unloading in kilns or muffles, either in his exclusive guidance and responsibility, or under the guidance of responsible technician (...)&quot;. (p. 37)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kiln load/unload operator [Operador de Enforma/Desenforma]</td>
<td>&quot;A worker who, in or out of the oven, puts or removes the products to be fired or already fired (in boxes or not) on the shelves trolleys, plaques or baskets&quot;. (p. 39)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

(1) Adaptation from the oral contributions; (2) According to CCT-2000; (3) According to Constância Factory workers records, 1998 (C.F.A).
### TABLE 3
Functions related to the Constância Factory production:  
Part II

<table>
<thead>
<tr>
<th>AREA (1)</th>
<th>PROFESSIONS (2)</th>
<th>CHARACTERISTICS OF THE FUNCTION (2)</th>
<th>Nº WORK. (3)</th>
</tr>
</thead>
</table>
| Pottery  | 1<sup>st</sup> Mould potter  
[Oleiro Formista 1<sup>ª</sup>] | “(...) manufactures ceramic pieces, by slip or slab”. (p. 38) | 1            |
|          | Note Keeper  
[Apontador] | | 1            |
| Manual Painting | 1<sup>st</sup> painter  
[Pintor 1<sup>ª</sup>] | In the document cited is designated the role of “ceramic Painter – […] that, composes jointly or not, draws and paints by brush the entire ceramic article, including the brush painting of pictures and statues”. (p. 40) | 6            |
|          | 2<sup>nd</sup> painter  
[Pintor 2<sup>ª</sup>] | | 2            |
|          | Highly skilled panels painter  
[Pintor altamente especializado de Painéis] | “(...) composes, draws and paints by brush an entire series of figurative or other type of compositions of artistic structure inserted in a tile panel”. (p. 40) | 7            |
|          | Painter-Creator  
[Pintor-Criador] | “(...) creates decorative motifs, draws them and paints them by brush in ceramic ware or tile panels.” (p. 40) | 2            |
| Stencilling | 1<sup>st</sup> Decorator  
[Decorador 1<sup>ª</sup>] | “(...) performs the following decoration works: borders, colourful fillets, backgrounds, filling (by hand or air gun) and stencilling”. (p. 34) | 20           |
|          | 2<sup>nd</sup> Decorator  
[Decorador 2<sup>ª</sup>] | | 2            |
| Screen print | Screen print Decorator  
[Decorador de Serigrafia] | “(...) decorates by screen printing in manual or mechanical devices”. (p. 34) | 1            |

(1) Adaptation from the oral contributions; (2) According to CCT-2000; (3) According to Constância Factory workers records, 1998 (C.F.A).

Regarding to the stencilling activities it is to highlight the fact that they were almost only executed by female professionals (100% in 1998):

“(…) It was mostly a feminine factory. Because at the time when I started there were […] many orders of pattern tiles, […] at that time it was a very used material, the stencilling section was always working and a lot of people was needed”. (PM)

At the manual painting section, the majority were also women painters (85% woman): at the 1<sup>st</sup> and 2<sup>nd</sup> category they were all woman; from the 7 “highly skilled panels painters” one of them was a man and both two top painter-creators were male.
# TABLE 4
Other professional functions existing in 1998.
Source: Constância Factory workers records, 1998 (C.F.A.)

<table>
<thead>
<tr>
<th>FUNCTIONS</th>
<th>Nº WORKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager [Gerente]</td>
<td>1</td>
</tr>
<tr>
<td>Management Accessor [Assessora de Gerência]</td>
<td>1</td>
</tr>
<tr>
<td>Managers Secretariat [Secretária de Direção]</td>
<td>1</td>
</tr>
<tr>
<td>Head of Section [Chefe de Secção]</td>
<td>2</td>
</tr>
<tr>
<td>Section Manager [Encarregado de Secção]</td>
<td>3</td>
</tr>
<tr>
<td>1º Clerk [1º Escriturário]</td>
<td>4</td>
</tr>
<tr>
<td>2º Clerk [2º Escriturário]</td>
<td>2</td>
</tr>
<tr>
<td>Seller [Vendedor]</td>
<td>2</td>
</tr>
<tr>
<td>Heavy duty driver [Motorista de Pesados]</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

## 6. FINAL NOTES

From the analysis of the workers registries and the syndicate document (CCT, 2000) it can be identified that the various jobs and categories existent in the ceramic factories, including Constância Factory, were very well defined and circumscribed. However, we also get from the oral sources that there was a dynamic aspect in their functions at the factory, where people would be involved in a learning and selection process according to their aptitude, skill and capacity. It is also interesting to note that certain functions had some flexibility. Regarding the interviewed persons, it is evident that existed some transversal knowledge of the several functions of the factory. A task in the field of tile production is not circumscribed in itself and, it is only a part of the production chain that in this case allows the workers to have knowledge about all the processes and support each other in case of need.

The documental and historic research about the Constância Factory allows obtaining important and necessary information regarding the production mechanisms of the factory; however, much is still necessary to know about the techniques and production know-how. A large amount of this knowledge has been transmitted orally and by experience and there are usually no or few physical records that register them. It is therefore important to record this knowledge by direct communication with the **azulejo** makers. Creating in this way sources of information that aid on the knowledge of the materials, tools and production techniques used but also on the sociologic aspects related with this practice. Through oral interviews with artisans-artists and processing of the collected information, new tangible sources are created that ensure the preservation of the memory of the factories and perpetuate the technical knowledge related to azulejo production. The role of the azulejo artisan/artists producers is valued and the importance of the technical knowledge highlighted.
AKNOWLEDGMENTS

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BIBLIOGRAPHY


QUEIRÓS, José – Céramique Portuguaise. Lisboa: Typographia do Annuario Commercial, 1907.
