

The use of “Tijomel” tiles in Portuguese modern architecture

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SUMMARY: Several books present and discuss the use of tiles (azulejos) in Portuguese modern architecture. However, these tend to ignore the use of other glazed ceramics of uncertain classification in the same context. Through the process of identification of modern azulejos in Portuguese cities, a new type of glazed ceramic coating has been found which may arguably be classified as azulejos. These are mosaics with a module of 20 x 40 mm whose units are flat glazed ceramics. The only difference from what we usually understand as azulejos result from the facial dimensions (ca. 18 x 38 mm) of those tessellae. They were manufactured at Ourém, Portugal, by a company named Tijomel from 1960 to 1980 and are a unique product that was widely used at the street level as well as in certain details of modern buildings, such as columns or entrance doors. Tijomel mosaics were often used with great creativity and quite striking results. The authors believe that this type of coating is worth considering as part of the modern heritage in Portuguese architecture and decoration. Therefore, the aim of this paper is to present and discuss for the first time the use of the Tijomel mosaics, revealing several examples of use.

SUMÁRIO: Vários livros apresentam e discutem o uso de azulejos na arquitetura moderna portuguesa. No entanto, estes tendem a ignorar o uso de outras cerâmicas vidradas de classificação incerta, no mesmo contexto. Através do processo de identificação dos azulejos modernos nas cidades portuguesas, foi encontrado um novo tipo de revestimento cerâmico vidrado, que pode ser classificado como azulejo. Trata-se de mosaicos com um módulo de 20 x 40 mm com unidades cerâmicas de vidro plano. A única diferença em relação ao conceito comum de “azulejo” resulta das dimensões (cerca de 18 x 38 mm) dessas tesselas. Foram produzidos em Ourém, Portugal, por uma empresa chamada Tijomel, entre os anos 1960 a 1980 e são um produto único, amplamente utilizado ao nível da rua, bem como em certos detalhes de edifícios modernos, como colunas ou portas de entrada. Os azulejos Tijomel eram frequentemente utilizados com grande criatividade criando resultados impressionantes. Os autores acreditam que este tipo de revestimento merece ser considerado como parte do património moderno na arquitetura e decoração portuguesa. Neste sentido, o objetivo deste artigo é apresentar e discutir pela primeira vez o uso dos mosaicos de Tijomel, mostrando uma selecção de casos.

KEY-WORDS: Azulejos, Tijomel mosaics, Modern architecture, Portugal

INTRODUCTION

Several books [1-8] present and discuss the use of *azulejos* in Portuguese modern architecture. However, these tend to ignore the use of other glazed ceramics of uncertain classification in the same context. The glazed ceramic objects for architectural linings establish a connection with the surface where they are integrated, providing an aesthetic experience. The discussion of what is considered *azulejo* is difficult since it should not indeed be a matter of strict dimensional limits.

The *azulejo* is a traditional art in Portugal, much more than an object, thus encompassing a wealth of shapes and dimensions. In this sense, the authors consider important to mention a type of glazed ceramic coating that came recently to their attention whose dimensions are different from the common Portuguese *azulejo* (ca. 140 x 140 mm). These are glazed ceramic units with facial dimensions 18 x 38 mm produced in many colours and abstract patterns (figure 1). These coatings were widely used in Portuguese modern architecture, however, apart from a slight reference to these mosaics found in the website of *Cerâmica modernista em Portugal* [9], there are no studies regarding these “azulejos” nor known references to them in the published bibliography. These unique products, manufactured from 1960 to 1980 by the extinct Portuguese factory Tijomel, in Caxarias, Ourém, are considered by the authors as *azulejos* and as such will be analysed in this paper [10].



Figure 1: Examples of Tijomel mosaics. Left: *Rua dos Olivais, Viseu*; right: *Rua dos Palomes, Torres Vedras* (integrating two different patterns)

The Tijomel mosaics are often found at street level, as in shops or in the entrance of buildings or lining pillars as a decorative detailing, complementing modern buildings and sometimes in lieu of *azulejos*, while aiming at the same decorative purposes. In our research, several Portuguese cities such as Lisbon, Porto, Torres Vedras and others were visited allowing the identification of many interesting, previously unknown examples, which denote a clear artistic intention in their integration since the colours, patterns and areas lined, create a diverse and often striking impression.

All cases included in the present paper are considered from the point of view of a street walker, therefore excluding the more utilitarian use in interiors. Due to the high number of cases found, the calling to the attention of their use in modern architecture in Portugal is of particular

interest. The importance of bringing to light their integration is related with to the will to create potential interest for their preservation as cultural heritage worthy of care.

TIJOMEL FACTORY

Slightly mentioned in the literature, the Tijomel factory was, at a time, considered the most modern ceramic factory in the Iberian Peninsula [11]. Created and managed by Júlio Redol, it was located in Caxarias, Ourém (Central Portugal, not far from the city of Leiria) and would suffer from relational and economic instability after the 1974 revolution, leading subsequently to its closure. Through research, it was possible to find publications [11-15] related to the exhibition held at the *Museu Municipal de Ourém: "Ao Redol da Tijomel"* following the study of three young designers - Mélanie Rodrigues, Luís Freire and Rúben Pereira, regarding the factory and the legacy left by its founder Júlio Redol.

Júlio Redol Nunes was born in Tomar in 1915. Initially, he worked in the Prista ceramics factory where his dynamism and entrepreneurial spirit have revolutionized the manufacturing methods. Later, Redol decided to create his own factory in Caxarias and the company was founded in 1941 under the name "Materiais para Edificação Lda". Only in 1961 did it become "Tijomel". Located next to the railway line it had a wealth of raw materials available in the region, such as clays and sawmill waste, creating the ideal conditions for the industry. It contained two sections, the "pavimel" and "decormel" and scoped the entire production of ceramics, from the raw material to the final product, as well as its commercialization [11, 13]

In its grounds, there was a canteen, medical service, school, library, constituting a model of social assistance unusual for the time. It would have had approximately 300 workers and some modern artists, such as Júlio Resende who developed projects there [11, 13]. One of his work is the panel "O Café" where he used glazed bricks, present in *Confeitaria Sical* in Porto [16]. Figure 2 shows a catalogue from the section "decormel" and the different types of Tijomel mosaics available.



Figure 2: Catalogue from the archives of *Laboratório Nacional de Engenharia Civil* of the section "decormel" with different Tijomel mosaics available

The factory closed in the 80's and its founder Júlio Redol died shortly afterwards. The building remained abandoned thereafter [11, 12]. Figures 3 and 4 offer a glimpse of the greatness of the factory and some spaces that survived the ruin. The entrance is all lined with Tijomel mosaics

(figure 4) which is very interesting since it seems to work out like a catalogue of the products or as an invitation for those who would go to the factory and could see a showcase beforehand.



Figure 3: The factory building. *Caxarias*, 2018



Figure 4: The entrance of the factory. *Caxarias*, 2018

Figure 5 presents some Tijomel mosaics applied on the walls of the factory and the several possibilities of colours. Many of them have the same pattern that have been found in buildings of Portuguese towns screened by the authors.

The land around the factory was, however, divided and sold to several owners [13]. The study of the production of this company is particularly important given their uniqueness. Such study may also reflect on the knowledge of the materials and contribute to a more conscious future intervention of this type of coating.



Figure 5: Tijomel mosaics applied on the walls in the factory building. *Caxarias, 2018*

THE PROFUSION OF UNKNOWN CASES

As discussed by the same authors [17], understanding the relevance of modern *azulejos* in Portugal as cultural heritage and the reason of their integration in architecture is important to foster their preservation. Lining or decorative detailing at street level is particularly relevant because its decorative intention easily reaches the viewer.



Figure 6: *Avenida do Lago Nº 61*, Estoril

The modern Portuguese architects adopted a solution that has not been seen elsewhere and is routinely overlooked in Portugal. The use of Tijomel mosaics, different in dimensions or decorative value from common Portuguese *azulejos* or glass mosaics, indeed transmits a rather unique notion of modernity.

The mosaic itself is very simple, it often has a background colour (blue, white, black etc) sometimes overlaid with areas of a different colour as can be seen in the figures. The richness of the application of these *azulejos* lies in the fact that they obtain an artistic scenario with a "game" of colours (figure 6) or varying the position of the mosaics (alternating vertically and horizontally) as can be seen in figure 7 (right), creating interesting patterns in façade areas that might otherwise look plain.



Figure 7: Some (fortunately rare) examples of decayed Tijomel mosaics

The conservation of this type of linings should stem from an appreciation of their unique aesthetics. Some cases already present degradation (figure 7), pointing to the need for preservation actions of this heritage.

Several cases (78), so far never seen mentioned, of the application of Tijomel mosaics have been found in Portugal. These were identified in nine different localities: Porto, Viseu, Ourém, Torres Vedras, Lisboa, Ericeira, Estoril, Almada and Beja. Table 1 depicts the number of applications already identified in each of those localities, of which Porto presents the higher number of examples (35). Figure 8 shows their distribution throughout Portugal.

In the following sections, selected examples of the different types of use of these coatings in modern Portuguese architecture are presented. They will (so to say) speak for their case.

Table 1: Number of cases of Tijomel *azulejos* found in each Portuguese city visited

Portuguese cities	Number of cases
North	
Porto	35
Viseu	2
Centre	
Ourém / Caxarias	6
Torres Vedras	2
Lisboa	19
Ericeira	1
Estoril	1
Almada	4
South	
Beja	8



Figure 8: Localities visited where Tijomel tiles were used

Porto and Ourém examples

The city of Porto was a surprise due to the high number of examples found (35 until now). In contrast to the *azulejos* commonly used in Portuguese architecture, usually covering whole façades, in the examples described below, there is often an intention for aesthetic appeal merely through small-scale details.



Figure 9: *Rua do Visconde de Setúbal N° 346, Porto*

Figure 9 and 10 demonstrate two different examples of Tijomel coatings integrated only in the entrance door of the buildings. The mosaics are very simple with a black background colour superimposed by odd lines in grey or fawn (figure 9) or dots of pink and white (figure 10). It is possible to see that there was a clear intention to decorate the surface appealingly, maybe for the sake of the prospective buyers and for the long-term appreciation of passers-by.

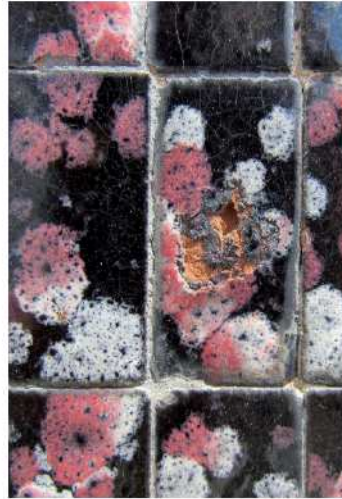


Figure 10: *Rua do Paraíso N° 104, Porto*

Figure 11 and 12 are two examples where the lining covers a larger area, creating an interest in façades that would otherwise be plain and uninteresting. In the first case, the building is in a corner of the street and its unassuming modern design contrasts with the rather sumptuous lining at street level.



Figure 11: *Rua 5 de Outubro N° 93, Porto*

The mosaics in white glaze with a black line, create an aesthetic focus of attention that enriches the whole building. In the second (figure 12) we have a rare case of an extensive use of the Tijomel mosaics in the whole façade. Here the blue of *azulejos* only framing the protruding windows in the upper part of the building, contrasting with the verandas, like a chequerboard, creating an impact on viewers.



Figure 12: *Rua da Boa Hora N° 2, esquina com a Rua de Santa Catarina - Porto*

Another example shown in figure 13 is the group of residential buildings that are far from appealing in which the different bold colours used on the side walls completely alters the perception of buildings. These three cases can be considered relevant examples since they express innovation through the use of these linings which do not cover the entire façade and yet bear an important aesthetic value and demonstrate a clear intention to decorate the surfaces appealingly.



Figure 13: Three buildings with the “azulejos” Tijomel in Porto. *Rua do Seixal Nº 75*

Figures 14 and 15 depict some Tijomel coatings in different colours and patterns applied in buildings of Porto and Ourém, the city of extinct Portuguese factory Tijomel.



Figure 14: Detail of applied Tijomel mosaics in different buildings in Porto. Left: *Praça da Liberdade Nº 121*; centre: *Rua de Fernandes Tomás Nº 493*; right: *Rua Faria de Guimarães Nº 357*



Figure 15: Detail of applied Tijomel mosaics in different buildings in Ourém. Left: *Av. Bombeiros Voluntários N° 55*; centre: *Praça da República N° 11*; right: *Rua Teófilo Braga N° 8*

Examples in Lisbon

Some interesting cases were found in Lisbon and satellite localities. Interestingly, amidst the many patterns and colours available, the local architects and decorators often chose identical solutions to those found in Porto. Fortunately, the vast majority is in a good condition. Figure 16 presents an example in *Avenida de Roma* in which the lining is part of a shop design and therefore only at street level, imparting, however, a sense of modernity in contrast with the rest of the building that is rather plain and devoid of decoration.



Figure 16: *Avenida de Roma N° 19*, Lisbon

Examples in other locations, such as Moscavide (in Lisbon) and at the nearby city of Amadora are demonstrated in figures 17 and 18. The curious of these coatings is that they are used, more or less sparingly, most anywhere, enriching any building where they are integrated.



Figure 17: *Rua Francisco Marques Beato N° 79, Moscavide*



Figure 18: *Rua Cândido dos Reis N° 8, Amadora*

Other types of Tijomel mosaics found in Lisbon buildings are shown in figure 19, which express once more a clear intention to communicate aesthetic appeal with the use of these coatings.



Figure 19: Detail of applied glazed ceramic Tijomel in different buildings in Lisbon. Left: *Rua da Prata N° 269*; centre: *Rua Gomes Freire N° 6*; right: *Rua Combatentes da Grande Guerra N° 43 (Moscavide)*

Interesting examples of Torres Vedras city

In the cases found in Torres Vedras, the integration is slightly different. The mosaics were applied in small areas at the upper part of the buildings, such as decorative details of the balcony seen in figures 20 and 21. Together with the architectural aesthetic of the building (figure 20) their integration creates an aesthetic impact on viewers and enriches the constructions.



Figure 20: *Rua Dias Neiva N° 12, Torres Vedras*



Figure 21: *Rua dos Palomes N° 8, Torres Vedras*

CONCLUSION

In this paper the authors present some examples of the use of Tijomel “*azulejos*”, small pieces of glazed ceramic with 18 x 38 mm that were produced in several colours and abstract patterns, integrated on the exterior of the Portuguese modern architecture.

It was possible to identify, so far, 78 examples considered worth mentioning, most of which in Porto and Lisbon, 35 and 19 cases respectively. Most often, the applications are found at street level, such as in the decoration of shop fronts or the entrance of buildings.

Exclusively and much used in Portugal at this period, the innovation is in their peculiar aesthetics and the way they were locally integrated to the modern architecture in Portugal. The possibility of different forms of application, using the same mosaic vertically or horizontally or mixing different colours, offer many possibilities to create a sense of *Modern* and impact the observers (figure 22).



Figure 22: *Rua da Cantina, Tijomel factory, Caxarias*

In this sense, it is important to define their value as a cultural heritage in Portugal and to understand the importance of their integration in Portuguese modern architecture, as a unique regional trend. Those who studied modern *azulejos* do not seem to be aware of their existence and the knowledge about them is scarce or non-extant.

The conservation of this type of linings should stem from an appreciation of their unique aesthetics. Some cases already present degradation, pointing to the need for preservation actions of this exclusive heritage, not only for their distinctiveness but also for the way they complement the modernity of the constructions. Therefore, calling to attention their existence and relevance as a heritage asset, as well as their study and conservation are essential.

In this way, further investigations need to be carried out. The identification of more Tijomel mosaics integration in Portuguese cities, in order to gather a higher number of examples as possible and also, attempt to link to the artist / architect behind the project; understand the relation between the factory and the artists who developed their works there and, for *azulejos* preservation, the study of the factory production is particularly important. Such study will reflect on the knowledge of the characteristics of these *azulejos*, to later on be able to understand which intervention methods are the most appropriate.

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