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The city thought and the city built: design approaches to Praça do Comércio, Lisbon

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Abstract. This paper analyses the urban design processes of the square “Praça do Comércio”, in Lisbon. It comprises two distinct moments in its history. The first moment is about the period in the aftermath of the 1755 earthquake. The second analysis moment is about the late XX, and the early XXI century. It confronts a methodological analysis of the iconography and cartography of those periods, with the current local observations and their spatial visual assessment. The paper has three parts. First, it presents the six proposals submitted for “Praça do Comércio” in the second half of the XVIII century. Another sets of four-period maps are also shown as these maps include also the medieval city designs. This reveals the continuity of the different projects’ ideas for the “Praça do Comércio”. The second part deals with the placement of the D. José I (1714-1777) equestrian statue. This section discusses the placement of the statue as part of an overall plan where the “Praça do Comércio” acts as a stage for the D. José I statue. The ideology of public praise towards the reigning king is evident in this tie-in between the square and the statue. At last, the square's different functions and uses during the late XX and the early XXI century are presented. For that, two recent projects are analysed. The first developed between 1992 and 2000 and the second from 2010. The analysis of the square designs reveals the existence of a strong connection with the past. The projects recover the medieval square design, both the opening towards the Tagus River and its design, regardless of the different proposals advances and retreats in relation to its form, notable buildings, and dimensions. Public art acts in an unabridged whole with the urban design. This is near to the notion of urban composition, in that the monument transcends the idea of a sculptural object and becomes the entire urban set. This understanding is in contrary to the notion of public art as a decorative element apposed on pre-existing spaces. The urban composition is also in contrary to the idea of public space as an outdoor gallery where the art pieces are independent units without any coherent dialog with the public space. The 1992 and 2010 plans, although formally and materially different, present the concomitant ideas. Both present ideas for the occupation of the lateral arcades of the square as the touristic and living areas. The current project (2010 drawing), much criticized by architects in the media, abandoned the ideas of the previous plan (1992). These included a road tunnel and an underground car park. The 2010 project includes some movement architectural barriers. It also presents a new design for the pavement based on a diagonal grid that leads to a novel reading.
of the square. These projects, proposed in the XVIII–XXI centuries, show how to interpret the memories, the symbolism and the uses of the “Praça do Comércio”. The recent projects are dissonant about the image of the square, but nonetheless, all projects respect the attributes of its genesis.

1. Introduction
This paper analyses the urban design processes of the square *Praça do Comércio*, in Lisbon. It comprises two distinct moments in its history. The first moment is about the period in the aftermath of the 1755 earthquake. The second analysis moment is about the late XX, and the early XXI century. It confronts a methodological analysis of the iconography and cartography of those periods, with current local observations and their spatial visual assessment. This paper presents a reflexion on the evolution of urban elements focusing on the case study of *Praça do Comércio*. In the cities there’s always a before and an after with implications on the methodology for analysing the urban form, making comparative studies a necessity. Rossi [1] says that the shape of the city is always the form of a time frame of the city, and there are many identifiable time frames in the form of the city. In order to do this, it seeks to frame the existing relations between the way of thinking about the city and the transformative processes occurred through the analysis of *Praça do Comércio*. The persistence of the public space has been emphasized by several researchers of the urban form [1-7]. The structuring open spaces of cities are recycled, over the years, often keeping their form but recycling the functions present. Kostof highlights this “recycling” of urban spaces: “The persistence of the open space is one factor. A large public monument of one period with an open usable space may become a public square in another period, regardless of the shifts in the urban fabric, during the interim [3].” This aspect of the recycling of public spaces should be more widely analysed, so that urban designers do not forget the importance of the memory of these spaces for their inhabitants.

The space denominated *Praça do Comércio* originated in a void named *Terreiro do Paço* that was on the grounds of the Palace of Ribeira occupied by King Manuel I, in 1505. After the choice of this Palace, to the detriment of the Palace of Alcáçova, this parcel of land gains importance and takes a preponderant role through the diverse events taking place in it: (parades, celebrations, processions, Inquisition executions in auto-da-fé) [8]. As is shown in this article, the engineers of the eighteenth century, in thinking of a new square for the open grounds took into account the qualities of the pre-existing urban void. This was also observed by the architects intervening in the square in more recent times. Thus, the persistent urban facts are identified with the monuments as the monuments are persistent in the city. Permanence is given by its constitutive value, by history and by memory [1].

Using Praça do Comércio as the case-study to reflect on these subjects, this paper is structured in such a way as to answer the following question: how did the different stakeholders involved in the process of designing the *Praça do Comércio* think about the Square and what methodologies did they follow over time?

2. The *Praça do Comércio* in the eighteenth century
Observing the representation of Lisbon published in the plant of 1650 of João Nunes Tinoco (1642-1719), we can affirm that the late medieval Lisbon is characterized by an urban fabric with an organic morphology, with winding streets where the main square (*Terreiro do Paço*) is adjacent to the river, at the extremity of the urban core. A detailed analysis of Manuel da Maia's (1677-1768) plan, resulting from a survey of Lisbon in 1718, allows us to register the appearance of urban phenomena, such as the widening of streets, which imposed regularity to Lisbon’s urban form, since the *Manuelino* period. However, it is only during the 1755 post-earthquake Lisbon reforms that the intervention is done by conferring regularity on the whole city, characteristic of European urbanism of the eighteenth-century Enlightenment.
Figure 1. Representation of the *Baixa* before the earthquake and the proposed plans of the 1756 contest
Manuel da Maia grouped six military engineers into teams that were responsible for six plans for Lisbon’s reconstruction. These were ready in 1756 (see table 1) of which the plan number 5 location is unknown. These 1756 projects aim to complement the whole with unity through the regular geometric designs, with references to the city prior to the earthquake (Figure 1) [7, 8].

Table 1 - Several plans for Praça do Comércio (XVIII century)

| Year | Projectista | Forma Praça | Área Praça |
|------|-------------|-------------|------------|
| 1718 | Manuel da Maia (Desenhador) | Retângulo | 34040 |
| Plan 1 (1756) | Pedro Gualter da Foncêca Francisco Pinheiro da Cunha | Dois Quadrados | 29265 |
| Plan 2 (1756) | Elias Sebastião Pope Joze Domingos Pope | Retângulo | 33621 |
| Plan 3 (1756) | Eugénio dos Santos de Carvalho Antonio Carlos Andreas | Quadrado | 51780 |
| Plan 4 (1756) | Pedro Gualter da Foncêca | Retângulo | 25242 |
| Plan 6 (1756) | Elias Sebastião Pope | Retângulo | 27282 |
| Plan (1758) | Eugénio dos Santos de Carvalho Carlos Mardel | Quadrado | 34382 |

From the different proposals, one was chosen. This was plan n. 5 whose author is Eugénio dos Santos Carvalho (1711-1760), as stated in Manuel da Maia documentation [9]. The cartography found in Portuguese archives reveals that this plan was continuously updated throughout the second half of the XVIII century [7]. In all proposals, the Terreiro do Paço is rethought in relation with the pre-earthquake city.

The city, before the earthquake and the plan 2 for its reconstruction, present Terreiro do Paço with a design that is very similar, just varying slightly the total allocated area. It was, thus, intentional to design the square in plan 2 following identical shapes and forms of the pre-existing city.

Also, Plan 1 adopts an area and shape that is similar (both to the pre-1755 city and to plan 2) but proposes the division of the grounds into two separate spaces. The first space consists of a square closed on the riverside with buildings, while the second space consists of a protection wall and a bulwark. This latter space presents a shape close to that of a geometric square.

The plan 3 authors might have been influenced by the square drawn in plan 1. We consider that this plan was most innovative and challenging as it proposes a quadrangular public square with higher areas (51780 m²) for Terreiro do Paço. This almost doubles the area for the square in relation to the pre-1755 city.

In Plans 4 and 6, the square is drawn with a rectangular shape, but with different orientations. In Plan 4 the long side of the rectangle if perpendicular to the river while in plan 6 the long side is parallel to the river, even if the remaining sides are slightly more blocked.

The [1758] plan creates for Terreiro do Paço a quadrangular space, very similar in shape to the square shown in plan 3 (both plans had contributions from Eugénio dos Santos Carvalho), but with a substantially smaller area (34382 m²).

Taking into consideration the relation of the plans with the Tagus River, it is clear that only in plans 3, 4 and [1758] there is a totally open connection towards the river.
In all 1756 plans, there is no evidence for the construction of a statue or monument in the square except in plan 6, drawn by Elias Sebastião Pope (1728-1778). Equally, it is possible that Eugénio dos Santos Carvalho considered the placement of a statue in the missing plan 5, similarly to what is seen in posterior plans that are also shown here.

The final plan for the Terreiro do Paço is authored by Eugénio dos Santos de Carvalho. He thinks of this square as a regular geometric space, completed by the King’s statue and surrounded by construction with uniform façades. This conveys the same conceptual ideas of Lamée (active during the XVII century) for royal squares. According to the former, in his *Traité des Statues* (1688), the royal squares should be of regular geometric form, embellished in the centre with a bronze statue of the sovereign and surrounded by uniform façades buildings.

3. **The placement of José I statue in the built square**

An equestrian statue of King Joseph I (1714-1777), the reigning monarch, was planned for the square centre. The statue was executed in 1775, based on the project prepared by Eugénio dos Santos de Carvalho. The statue author was the sculptor Joaquim Machado de Castro (1731-1822). Through his words, we confirm that the early drawings of Eugénio dos Santos de Carvalho (Figure 2) were used as a starting point [10]. Comparing these same drawings with the final result, it is clear that in despite adapting to the drawings of Eugénio dos Santos de Carvalho, which he criticizes; Machado de Castro did not modify or even question the statue's location [11].

![Figure 2](image)

Figure 2. Drawings of the equestrian statue, attributed to Eugénio dos Santos de Carvalho and plan of the Real Praça do Comércio, with the signature of Marquis of Pombal, without date, but with the note “Statue location” (in the center) [10]

The person responsible for integrating the statue in the square was clearly Eugénio dos Santos de Carvalho, who immediately assured his positioning, when the construction of Praça do Comércio began, through the construction of the pedestal, and by indicating in the maps the location for it Figure 2.

Regardless of the sculpture’s final form - there is no data to determine if Eugénio dos Santos de Carvalho really wanted his drawings to be executed strictly or not - it is necessary to conclude that the placement was, for Eugénio dos Santos de Carvalho, a given in the process. Machado de Castro is limited to executing the statue at the pre-defined location; with some changes to the design of Eugénio dos Santos de Carvalho, but, as we have already mentioned, without questioning its location. Thus, the proposal of Eugénio dos Santos de Carvalho, more than to give indications as to the design, aimed at positioning and assigning a scale to the monumental object, in relation to the scale of the square. Similarly, the Triumphal Arch designed for this square, although with a distinct design, was initially
thought by Eugénio dos Santos de Carvalho, having provided drawings for this purpose, namely the facade of Praça do Comércio, approved by the Marquis of Pombal (Figure 3).

The positioning of the Triumphal Arch, aligned by Rua Augusta, by the statue of José I, and by the Cais das Colunas, provides visual alignments and forms a monumental axis of articulation with the waterfront, beginning in the Rossio, ruled by the plane reconstruction of the Baixa [13].

The Praça do Comércio acts as the termination space for an entire urban structure articulating with the waterfront and its gateway into the city. Through the Cais das Colunas, the river entrance was privileged. Praça do Comércio has, therefore, an explicit symbolic charge because it marked the entrance of the city overlapping the former Terreiro do Paço, in a paradigmatic movement of the enlightened politics of Pombal [14]. The triumphal arch accentuates this condition of the entrance of the city, constituting itself a door.

By its typology of regular space, contemplating representative buildings, including on its axis a triumphal arch and punctuated at the centre by a real statue, the Praça do Comércio is compared, by several authors, with the French royal squares [15, 16]. One of the defining characteristics of this model of squares is the joint design of the square with a monument (usually an equestrian statue of the reigning monarch); what França designates as an absolutist monument/royal square and Faria [17] reiterates under the designation model square/central monument.

It is interesting to observe how Lavedan [18] refers to the Praça do Comércio, simply assuming that there is no joint project: “Notons qu’aucun des trois projets [de reconstrução da Baixa] ne prévois de statue. Ce n’est pas une place d’apparat. Ce n’est pas même le parvis d’un palais. C’est un débarcadère, avec un escalier qui descend au fleuve et des colonnes pour attacher les bateaux. Le nom marque bien l’esprit pratique de Pombal”. With the understanding that the statue was placed only twenty years later, Lavedan compares the Commerce Square to St. Mark's Square in Venice and not to the Place de Bordeaux, with which it has the greatest similarities: "pas de statue à Venise, mais celle de Lisbonne n’était pas prévue et elle a attendue vingt ans. La place de Bordeaux est une statue autour de laquelle on a construit une place monumentale. La place de Lisbonne est un quai, sur lequel on a plus tard érigé une statue”.

However, the drawings attributed to Eugénio dos Santos de Carvalho and dated prior to the building of the square, namely: 1) the existence of a plant with indication of the "place of the statue" (Figure 2); 2) the drawings for the equestrian statue (Figure 2); 3) the north elevation of the square integrating the Triumphal Arch (Figure 3); and also: 4) Machado de Castro's account in the analytical description, referring to the indications of Eugénio dos Santos de Carvalho as to the location where to place the
statue and the fact that there was already a pedestal built there for this purpose; indicate that there was, in fact, a joint project.

Given these data, we are in the presence of comprehensive public art understanding, close to the notion of an urban composition, insofar as the monument transcends the idea of the sculptural object, to become the whole urban ensemble. It should be noted that this attitude is at the antipodes of an understanding of public art as something that attaches itself to a pre-existing space, just to adorn it - what Lavedan [18] claims to have happened in Praça do Comércio. This view of the urban composition is also very opposed to an understanding of the public space as an "outdoor gallery", which is limited to receiving art pieces, as unitary independent objects, without any dialogue with the place.

As a memorial monument [19], the equestrian statue of José I forms part of a symbolic space of the city with a laudatory function and expresses an ideology of public praise, in life, to a reigning monarch. Today, it constitutes a physical and symbolic reference in the space in which it is integrated. It is also a physical and symbolic reference in the city of Lisbon itself. The relationship with the urban space that is established and that has been demonstrated here contributes much to this effect.

4. Praça do Comércio during the XX and XXI centuries.

Until the middle of the nineteenth century, Praça do Comércio was still unpaved and populated with trees. In the first half of the twentieth century, the square is paved and becomes a parking lot, which has persisted for many years. In 1978 the decree no. 95/78 of 12 September [20] classifies Baixa Pombalina as a national monument and passes a policy for the protection of the existing patrimony imposing conservation rules of the built urban structure. With this classification, thinking and intervening in the city became restrictive in terms of urban design proposals. This decree, while valuing the Pombal plan, belittles the historical dynamics of the place [21]. However, Baixa and its public spaces witnessed profound transformations in its urban form, as seen in the later proposals for the Praça do Comércio.

In the early 1990s, the new planning instruments, such as the Lisbon Strategic Plan and the Municipal Master Plan realign interests in Baixa. In 1992 the Municipality of Lisbon issues a public tender to rehabilitate the Praça do Comércio. The intervention policy defined for this public tender valued heritage through the restoration of the cultural and leisure functions of the square. It asks for it to be in accordance with the location of the previous space, giving back the space to the citizens [21]. The reorganization plan underlying this contest had four intervention axes: i) the surface project (providing for the occupation of the lateral arcades of the square as a tourist and living area); (ii) the road tunnel; iii) the tunnel and station of the Lisbon subway and river interface; and iv) a sewage interceptor [21].

The winning project is authored by architects José Adrião and Pedro Pacheco [21] who developed the project until the execution project submitted in 2000. Of the four axes of intervention, only one provisional plan was implemented for the central plate (relative to the surface project), through the realization of a new pavement, the recovery of existing pavements in Portuguese style pavement and the installation of equipment and urban furniture. The originality of the project is in the choice of materials for the pavement of the central area of the plate (porous concrete, with a lime finish and white cement, added a pigment to the colour of the stone). These architects regained the character of plaza by drawing an open, informal and multipurpose space, which restricted access to the central plateau to pedestrians.

In 2017, the architect Bruno Soares was commissioned to plan the rehabilitation of Praça do Comércio. The main aspects proposed were: I) the redesign of the pavement of the central plate through a diamond pattern; II) The redesign of the sidewalks inspired by the maritime charts; III) The marking of a route between the arch of Rua Augusta and the Cais das Colunas through a stone corridor, dividing the Square in half; IV) The rise of the statue of José I through the addition of steps; V) the rise, with steps, of the central plateau in relation to the Cais das Colunas and the Tagus River; VI) The alteration
of the design of the *Cais das Colunas*; and (VII) the elimination of car circulation in the lateral areas of the square.

Overall, the project was heavily criticized in the media and among architects [22] and eventually underwent modifications. It was criticized for not being the result of a public tender but of a direct commission, named after the previous public tender of 1992. Also, the various solutions present in the project were criticized, in particular, the pavement drawings and the lift of the central plate, which would generate architectural barriers [23]. Of all the options previously described, only the elimination of the automobile traffic in the lateral areas seemed to be consensual.

After the works, *Praça do Comércio* (Figure 4) was opened on May 2, 2010, before the visit of Pope Benedict XVI to Portugal. Of the projected options, the end of the car traffic in the lateral alleys and the diamond drawings in the main plate were dominant. The pedestal of the statue of José I was slightly reduced by one step. Also, the gap between the main plate and the *Cais das Colunas* was kept and the *Cais das Colunas* renovated. Later in 2013 the triumphal arch of the *Rua Augusta* was renovated and converted to a viewport, accessible through an elevator.

It is noticeable that the 1992 and 2010 projects, although formally and materially different, present concomitant ideas, such as the occupation of the side arcades of the square as a touristic and living area. However, the 1992 project does not plan the occupation the arcades of the square. Also, the 2010 project abandons ideas from the 1992 project, namely the design of a road tunnel and an underground car park. Both projects show the importance of the square as a monument and heritage, referring us to the importance of this space as a space of representation associated with state power and collective memory.

### 5. Conclusions

Recovering the initial question how were the different stakeholders involved in the process of designing the *Praça do Comércio* think about the Square and what methodologies did they follow over time?

As we have seen for *Praça do Comércio*, both in proposals of the post-earthquake (1756 and 1758) and in recent projects (1992 and 2010), the urban design ideas of their respective historical period are visible. A recovery of the space of the square in terms of what it was before the earthquake (*Terreiro do Paço*) is theirs as well. The methodologies of the intervention over time comprised: i) a construction by addition (Medieval Age), ii) the Overhauled design of the square subdued to the urban mesh of the neighbourhood (18th century), iii) and the adaptation of the existing square through the new urban design processes (1992 and 2010).

Although there are some reminiscences of the *Terreiro do Paço* in *Praça do Comércio*, there is clearly a theoretical foundation of the Enlightenment, where the sobriety and pragmatism prevail. As shown, the design of the *Praça do Comércio* rectangular shape (but very close to the square) was first proposed in a 1756 plan by Eugénio dos Santos de Carvalho and António Carlos Andreas (active during). In the built proposal, resulting from the 1758 drawing of Eugénio dos Santos de Carvalho and Carlos Mardel, the rectangular shape was assumed (near the square), similar to the 1756 design of the same author, which opposed the elongated shape of the predecessor space of *Terreiro do Paço*. This shows that not everything was reminiscent of the past.

Concerning the placement of the equestrian statue of José I in *Praça do Comércio*, according to the Eugénio dos Santos' project, it was shown that this was a joint design operation based on what is assumed as a comprehensive public art understanding, insofar as the monument is not the sculptural object, but rather the whole urban complex.
The 1992 and 2010 projects for Praça do Comércio wanted the return of the ambiance of the square’s predecessor urban space (Terreiro do Paço). The needs for improvements in the square made by the current architects treat existing problems in varying degrees of complexity.

Ten years on the 2009 project, we find that the much-contested design of the pavement or even the lift of the central plate does not seem to be too problematic after all. What seems rather aggressive is the excessive occupation of the lateral arcades by esplanades and diverse equipment, at the discretion of the touristic concessions. These generate considerable physical and visual barriers (Figure 4), in relation to the square and in relation to the Tagus.

In the past ten years, probably, the great changes of this space are not only physical, but also of other scopes. The tourist growth of the last years has had serious consequences for several city public spaces, mostly visible in the Baixa. Lisabon is facing the challenge, common to contemporary capitals, of thinking about tourism in a sustainable way.

In order to define a current intervention project for the Praça do Comércio better, it is important not only to study the present-day square, but also not to lose sight of its history. It is also important to think about the functions Praça do Comércio should have and how to articulate it with the remaining spaces of Lisbon waterfront. Without this, there is also the risk of drawing and redesigning the square without a meaningful purpose.

![Figure 4: Praça do Comércio in March 2019](image)

**References**

[1] A. Rossi, *The architecture of the city.* Lisbon, Editions Cosmos, 1977 (in Portugal).
[2] M. Poète, *A city life;* Paris from birth to the present day. Paris, Picard, 1924 (in Portuguese).
[3] P. Lavedan, *History of urbanism.* Paris, Henri Laurens, éditeur, 1926 (in Portuguese).
[4] S. Kostof, *The city assembled - the elements of urban form through history.* Londres, Thames and Hudson, 1992.
[5] F. Chueca Goitia, *Brief History of Urbanism,* Lisboa, (1982) Editorial Presença, 2003 (in Portuguese).
[6] P. J. Larkham, *Understanding urban form?* Urban Design. n.º 93, 2005.
[7] M. Sampayo, *Forma urbana da parte baixa de Lisboa destruída*. Análise e avaliação da cartografia (1756-86). Lisboa, ISCTE-Instituto Universitário de Lisboa, 2011. Tese de Doutoramento.

[8] J-A. França, *Lisbon Pombaline and the Enlightenment*. Lisboa: Livros Horizonte, 1965 (in Portuguese).

[9] C. Aires, *Manuel da Maia e os Engenhieros Militares Portugueses no Terramoto de 1755*. Lisboa, Imprensa Nacional, 1910.

[10] J. Machado de Castro, *Analytical description of the execution of the real equestrian statue of the Most Reverend King. D. José I*. Lisboa: Academia Nacional de Belas Artes, 1975 (in Portuguese).

[11] J-A. França, Posfácio. In Machado de Castro, *Analytical description of the execution of the real equestrian statue of the Most Reverend King D. José I*. Lisboa: Academia Nacional de Belas Artes, 1975 (in Portuguese).

[12] A. Tostões and W. Rossa (orgs.) *Lisboa 1758: o plano da Baixa hoje. Catálogo da Exposição*. Lisboa: Câmara Municipal de Lisboa, 2009.

[13] R. Ochoa, *City and water front. Role of the public spaceco*. Barcelona: Universidade de Barcelona, 2012 (in Portuguese).

[14] J. Cunha Leal, *Private architecture, politics and urban facts in Lisbon*. From the city of Pombal to the liberal city. PhD Thesis in Contemporary Art History, Faculty of Social and Human Sciences, Universidade Nova de Lisboa, 2005 (in Portuguese).

[15] P. Lavedan, *New history of Paris*. Histoire de l’urbanisme à Paris. Paris: Diffusion Hachette, 1993 (in Portuguese).

[16] P. Zucker, *Town and square*. From the agora to the village green. Nova Iorque: Columbia University Press, 1959.

[17] M. Figueira de Faria, (coord.). *Real squares. Past, present and future*. Lisboa: Livros Horizonte, 2008 (in Portuguese).

[18] P. Lavedan, *Urban planning in the modern era: XVI-XVIII centuries*. Geneve: Droz, 1982 (in Portuguese).

[19] A. Remesar, *The symbolic character of the street. Identity and appropriation. In "The Street of All"*. Documentos do Simpósio, 2011 (in Portuguese).

[20] Decreto nº 95/78 de 12 Setembro, DR I série – Número 2010.

[21] AAVV, *Objective: Terreiro do Paço*. Lisbon: Lisbon City Hall, 1998 (in Portuguese).

[22] R. Antunes, *Architects criticize new Terreiro do Paço project*. Newspaper 27 June 2009 (in Portuguese).

[23] A. Henriques, *Terreiro do Paço remodeling project does not convince architects*. Public 27 May 2009 (in Portuguese).