

INTERNATIONAL CONFERENCE  
ON 18<sup>TH</sup> CENTURY ARCHITECTURE & CULTURE

# BOOKS WITH A VIEW,

Celebrating the birth of the Portuguese architect  
and city planner Eugénio dos Santos (1711-1760).

FUNDAÇÃO CALOUSTE GULBENKIAN  
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*Lisbon, Portugal*  
*November 23<sup>rd</sup>-25<sup>th</sup>, 2011*



## Abstract ABS0020

**Keywords:** Enlightenment; History of Architecture; History of Urbanism; Collections of drawings, engravings and models;

**Title:** The Rebuilding of Lisbon following the 1755 Earthquake: Analysis and Comparative Assessment of Urban Design[i]

The second half of the 18th century was a rather fruitful and meaningful period from an intellectual viewpoint and quite diversified in cultural terms. The earthquake that struck Lisbon on 1st November 1755 significantly affected the city and acted as a powerful agent in the transformation of said city.

Sebastião José de Carvalho e Mello, the future Marquis de Pombal, saw in the earthquake an excellent opportunity to take on a leading role and to substantiate his political views. Amongst the large team working on the project to recover Lisbon, highlight goes to the chief engineer to the realm, Manuel da Maia (1678-1768) who had the most strategic role in the tactical and technical definition for the rebuilding of the city of Lisbon. "Memory" – the dissertation – which he presented, was seen as the "specifications" for the production of the final plan for the reconstruction of Lisbon. In the third part of his dissertation Manuel da Maia organised various project teams with clear objectives to prepare the best reconstruction plan. For such purpose he handed over a copy of a survey of Lisbon before the earthquake to the teams, and outlined six guidelines.

The work of these teams resulted in the plan for the rebuilding of Lisbon, which has been considered by many authors as a plan replenished with qualities that distinguish it. In mid 20th century the plan for the reconstruction of Lisbon is highly vaunted by the Architect Pardal Monteiro who dubbed the architects and engineers of the 18th century as the forerunners of modern architecture and urbanism. Pardal Monteiro enhances the name Eugénio do Santos and affirms in the words of França a patriotic compliment to the city of Lisbon (MONTEIRO, 1950, MONTEIRO, 1949).

Following Pardal Monteiro the plan to rebuild Lisbon was extensively studied by França (FRANÇA, June 1972, FRANÇA, 1987). From then onward it continued to be analysed by various architects and historians, amongst other men related to social sciences.

This research endeavours to find the answers to the following questions:

1. How is public space distributed in the various plans under consideration for the renewal of post-earthquake Lisbon?

## 2. What distinguishes the built project from the other proposals and from Lisbon prior to the earthquake?

This research allowed to develop a method of interpreting the urban form where the significant structural features of the urban area under analysis are grasped and analysed (18th century Lisbon). To assess the method we studied the layouts of Lisbon by using a methodology that follows three distinct approaches: urban history, urban design and the quantitative assessment of urban form.

The research is based on a comparative analysis of seven drawings of the renovation process of the city of Lisbon at the time of Pombal, taking into account public space observation in the understanding of the urban design.

In the analysis of the urban form of the various drawings a computer aided design software – CAD, was used to measure the public space. All measurements were recorded on Excel tables so as to carry out a comparative analysis of the drawings. The interpretation of the drawings followed two interconnected methods: an urban analysis and a mathematical analysis (MARAT-MENDES, et al., 2011).

The organisation of fieldwork and the preparation to interpret the urban form of the reconstruction drawings of Lisbon post-earthquake, required first a collection of primary sources and then a comparative analysis.

After consulting the archives we should perhaps say that the most relevant for our study were the following: the Museu da Cidade, the Torre do Tombo (National Archive), the Portuguese Geographical Institute, the National Library, the Gabinete de Estudos Olisiponenses (Bureau for the Study of Lisbon), the Army Infrastructure Archives and the Library and Historical Archives of Public Works.

The consultation at the archives was essential as it allowed us to classify the existing maps and the existence of duplicated maps was also noted, as we have already had the opportunity of showing (SAMPAIO; RODRIGUES, 2009).

With this research we:

1. Catalogued the maps in the archives;
2. Carried out the interdisciplinary analysis that combines different approaches, the History and Urbanism based on quantitative data;
3. Created a new methodology to analyse urban forms.

By analysing the urban form of 18th-century Lisbon we enhance an intervention method/process which is still efficient nowadays. As Calado says in relation to the work carried out on Casa do Risco das Obras Públicas for the reconstruction of post-earthquake Lisbon: "... this way of understanding and making the city is, in itself, a heritage, a methodology that is as current as ever." [ii] (VIEGAS; CAESSA, 1999)

This research adds to the core of the Lisbon city analyses a new insight into the history of Lisbon in the second half of the eighteenth century focused on aspects of urban study where public space is quantified and qualified.

Whilst this research offers architects and planners a new analysis methodology of the urban space, it provides new data that should be revisited in an evolving history to historians.

[i] This study is the result of a dissertation for a doctorate in Architecture and Urbanism, to be completed in 2011, by ISCTE-IUL

[ii] Translated by the author.

### References:

FRANÇA, José-Augusto - Les six plans de la Lisbonne Pombaline. Colóquio. Artes : revista de artes visuais, música e bailado. 8: (Junho de 1972), pp. 30-35.

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MARAT-MENDES, Teresa; SAMPAIO, Mafalda G. Teixeira de; RODRIGUES, David - Measuring Lisbon Patterns: "Baixa" from 1650 to 2010. Nexus Network Journal - architecture and mathematics on-line. (2011).

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VIEGAS, Inês Moraes; CAESSA, Ana Isabel de Sá - Cartulário Pombalino. Lisboa: Departamento de património cultural: arquivo municipal de Lisboa, 1999.

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**LISBON, PORTUGAL**

November 23<sup>rd</sup>-25<sup>th</sup>, 2011



CONGRESSO INTERNACIONAL SOBRE  
ARQUITECTURA E CULTURA DO SÉCULO XVIII

**BOOKS  
WITH A VIEW,**

*Celebrando o nascimento do  
arquitecto e engenheiro militar  
Eugénio dos Santos (1711-1760).*

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*FUNDAÇÃO CALOUSTE GULBENKIAN*

**LISBOA, PORTUGAL**

23-25 Novembro de 2011



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23 Nov. 2011

8:30

*Acreditação*

AUDITÓRIO 2

9:30

*Sessão de Abertura*

10:00

*Moderador* | **Leonor Ferrão** | CIAUD - FA/UTL

*Orador convidado* | **José-Augusto França** | FCSH/UNL

*Eugénio dos Santos et l'esthétique des Lumières*

10:40

*Debate (10 minutos)*

10:50

*Intervalo*

AUDITÓRIO 2

*Moderador* | **Madalena Cunha Matos**

CIAUD - FA/UTL

11:05

**Manuel António Correia Teixeira**

CAPP - ISCSP/UTL

*Os planos de Eugénio dos Santos para a reconstrução da Baixa de Lisboa após o terramoto de 1755, duas culturas em confronto*

11:25

**Paula André**

ISCTE - IUL

*Eugénio dos Santos e a engenharia da Cidade*

11:45

**Pedro Ressano Garcia**

LABART - ULHT

*Desenho urbano iluminado: a solução inovadora é de Eugénio dos Santos?*

12:05

*Debate (10 minutos)*

12:15

*Almoço*

AUDITÓRIO 2

14:20

*Moderador* | **Raquel Henriques da Silva** | IHA - FCSH/UNL

*Orador convidado* | **Michel Delon** | Université de Paris-Sorbonne

*Places royales, places publiques dans l'Europe des Lumières*

15:00

*Debate (10 minutos)*

AUDITÓRIO 3

*Moderador* | **Fernando A. Baptista Pereira**

CIEBA - FBA/UL

11:05

**Ana Margarida Duarte Rodrigues**

IHA - FCSH/UNL

*The quality of Eugénio dos Santos' library concerning gardens in the Portuguese context*

11:25

**Luana Giurgevich e Henrique Leitão**

CIUHCT - FCUL

*The architecture book and its "space" in the old monastic Libraries in Portugal*

11:45

**Adélia Maria Caldas Carreira**

FCSH/UNL

*Os Tratados de Higiene setecentistas e o seu impacto no urbanismo olisiponense*

12:05

*Debate (10 minutos)*

AUDITÓRIO 2

*Moderador* | **José Aguiar**

CIAUD - FA/UTL

15:15

**Madalena Cunha Matos**

CIAUD - FA/UTL

*Turin and post 1755 Lisbon: the Piedemontese parallel*

15:35

**Mafalda Teixeira de Sampayo**

ISCTE - IUL

*A reconstrução de Lisboa pós-terramoto: análise e avaliação comparativa de desenho urbano*

15:55

**João Appleton**

FE - UCL

*Building construction in Portugal in the 18th century: from Mafra to Lisbon Reconstruction*

16:15

*Debate (10 minutos)*

AUDITÓRIO 3

*Moderador* | **Maria Calado**

Grupo de Investigação Forma Urbis Lab - FA/UTL

15:15

**Isabel Maria Pinto**

CET - FL/UL

*Gessner's Pastoral Dramas: new choices of the cognoscenti*

15:35

**Maria Alexandra Salgado Ai Quintas**

CIAUD - FA/UTL

*Le jardin sauvage et La Nouvelle Héloïse : une influence romantique sur le concept de jardin sentimental*

15:55

**Madalena Costa Lima**

Bolseira da FCT

*The architectural heritage in the narratives of the 1755 earthquake in Portugal*

16:15

*Debate (10 minutos)*

16:25

*Intervalo*

AUDITÓRIO 2

16:40

*Moderador* | **Fernando Moreira da Silva** | CIAUD - FA/UTL

*Orador convidado* | **Cesare de Seta** | Istituto Italiano di Scienze Umane, Firenze-Napoli

*L'immagine della città europea*

17:20

*Debate (10 minutos) e fim do 1º dia de trabalhos*

17:40

*Partida de autocarro para o Museu da Cidade, Palácio Pimenta, Campo Grande (visita limitada a 50 pessoas)*

18:10 - 19:00

*Visita guiada ao Museu da Cidade*

24 Nov. 2011

AUDITÓRIO 2

Moderador | **Luísa Capucho Arruda**

CIEBA - FBA/UL

11:10

**Rafael Moreira**

IHA - FCSH/UNL

*Revisitando os pioneiros: o Tratado de Ruação de José de Figueiredo Seixas e o urbanismo luso-brasileiro*

11:30

**Eduardo Duarte e Teresa Sequeira Santos**

CIEBA - FBA/UL

*José da Costa e Silva (1747-1819): a bird's eye view of a neo-classical architect's library*

11:55

**Helder Carita**

ESAD/FRESS

*José Manuel da Costa Negreiros and the portuguese civil architecture at the end of the 18th century*

12:15

*Debate (10 minutos)*

12:25

*Almoço*

AUDITÓRIO 2

14:20

Moderador | **Rafael Moreira** | IHA - FCSH/UNL

Orador convidado | **Carlos Sambricio** | Universidade Politécnica de Madrid

*De Italia a Lisboa, de Lisboa a la America Latina: la experiencia urbana en la segunda mitad del XVIII*

15:00

*Debate (10 minutos)*

AUDITÓRIO 3

Moderador | **Carlos Moura**

IHA - FCSH/UNL

11:10

**Eduardo Côrte-Real**

UNIDCOM - IADE

*Beauties-Beasts: myths, architecture, literature and sensible perception in a changing world*

11:30

**Katerina Lolou**

National Technical University of Athens

*The prudent soul and its body*

11:55

**David Martin Lopez**

IHA e D. de Historia del Arte, Universidad de Granada

*Las constituciones de Anderson (1723): masoneria, arquitectura y clasicismo*

12:15

*Debate (10 minutos)*

15:15

Moderador | **Carlos Moura** | IHA - FCSH/UNL

Orador convidado | **François Bessire** | Université de Rouen

*«C'était une ville immense, dont les rues étaient propres, larges et bien percées»: l'urbanisme rêvé des Lumières*

15:55

*Debate (10 minutos)*

16:05

*Intervalo*

16:20

Moderador | **Luís Manuel Bernardo** | CHC - FCSH/UNL

Orador convidado | **Juan Calatrava Escobar** | Universidad de Granada

*¿Un "Urbanismo" de los Philosophes?: La Idea de Ciudad en Voltaire y Rousseau*

17:00

*Debate (10 minutos) e fim do 2º dia de trabalhos*

17:20

*Partida de autocarro para o Museu de São Roque*

*(visita limitada a 30 pessoas)*

18:15 - 19:45

*Visita guiada à Capela de S. João Baptista e ao Museu de São Roque, Bairro Alto*

20:30 - 22:00

*Jantar Books with a View no Palácio Quintela, Chiado*

*(mediante inscrição)*

25 Nov. 2011

AUDITÓRIO 2

Moderador | **Nuno Saldanha**

UNIDCOM - IADE

9:00

**Raquel Henriques da Silva**

IHA - FCSH/UNL

*Lisboa nos anos de 1780 segundo o Diário de William Beckford*

9:20

**Luísa d'Orey Capucho Arruda**

CIEBA - FBA/UL

*Francisco Vieira Lusitano's autobiography*

9:40

**Maria João Durão**

LabCOR - FA/UTL

*Contributions to the understanding of colour in Nature and Art: Diogo de Carvalho e Sampayo's Tratado das Cores*

10:00

**Fernando António Baptista Pereira**

CIEBA - FBA/UL

*Machado de Castro e o paradigma do artista culto*

10:20

*Debate (10 minutos)*

10:30

*Intervalo*

AUDITÓRIO 2

10:45

Moderador | **Paulo Ramalho** | FA/UTL e IPL

Orador convidado | **James Mosley** | University of Reading, UK

*Towards neo-classicism in letter design: the coming of the 'modern' face printing type*

11:25

*Debate (10 minutos)*

11:40

Moderador | **João Luís Lisboa** | CHC - FCSH/UNL

Orador convidado | **Patrick Wald Lasowski** | Université de Paris VIII, France

*Corpus librorum eroticorum*

12:20

*Debate (10 minutos)*

12:30

*Almoço*

AUDITÓRIO 3

Moderador | **Susana Oliveira**

CIAUD - FA/UTL

9:00

**Paulo Ramalho**

FA/UTL e IPL

*A woodblock carving sorts: from the latest Sino-European woodblock books to digital typeface*

9:20

**Teresa de Jesus Olazabal Cabral**

CIAUD - FA/UTL

*A interpretação de Mário Feliciano dos tipos espanhóis do século XVIII*

9:40

**Rúben Dias**

FA/UTL e ESADCR

*Uma perspectiva tipográfica no século XVIII em Portugal*

10:00

**Miguel Jorge A.M. Bandeira Duarte**

CIEBA - FBAL/UL e EA/UM

*O conceito de esquisso na teoria e prática artística do século XVIII: o tratado, a crítica, o dicionário e o capriccio*

10:20

*Debate (10 minutos)*

AUDITÓRIO 2

14:20

Moderador | **Luís Manuel Bernardo** | CHC - FCSH/UNL

Orador convidado | **Colas Duflo** | Université de Picardie

*Diderot, l'Encyclopédie et la publicité des Lumières*

15:00

*Debate (10 minutos)*

AUDITÓRIO 2

Moderador | **Leonor Santa Bárbara**

CHC - FCSH/UNL

15:15

**João Luís Lisboa**

CHC - FCSH/UNL

*Ler-ver-rir (com os livros jocosos setecentistas)*

15:35

**Maria Calado**

*Grupo de Investigação Forma Urbis Lab - FA/UTL. Referências à cultura arquitectónica no Vocabulário Português e Latino (1712-1721) de Rafael Bluteau - vocábulos relativos ao espaço público*

15:55

**Ricardo Silva Pereira**

Câmara Municipal de Sines

*Estevão Lis Velho, ler o tempo nas entrelinhas*

16:15

**Luís Manuel Bernardo**

CHC - FCSH/UNL

*Les accidents eucharistiques et l'âme des brutes: la stratégie conciliatoire de Teodoro de Almeida dans la Recreação Filosófica*

16:35

*Debate (10 minutos)*

16:45

*Intervalo*

AUDITÓRIO 2

17:00

Moderador | **Leonor Ferrão** | CIAUD - FA/UTL

Orador convidado | **José Esteves Pereira** | CHC - FCSH/UNL

*A Ilustração em Portugal*

17:40

*Debate (10 minutos) e fim do 3º e último dia de trabalhos*

18:00

*Partida de autocarro para o Museu Nacional dos Coches (visita limitada a 50 pessoas)*

18:40 - 19:40

*Visita guiada ao Museu Nacional dos Coches e Porto de honra*