DIGITAL ALBERTI:
TRADITION
AND INNOVATION

Coordination:
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Digital Alberti Exhibition
Digital Alberti
Tradition and innovation in the architectural theory and practice in Portugal
**Period**
2010–2013

**Coordinator**
Mário Krüger

**Researchers team**
Bruno Araújo, Bruno Figueiredo, Eduardo Castro e Costa, Giovana de Godoi, Gonçalo Canto Moniz, Hélder Carita, Joaquim Jorge, José P. Duarte, Luís Ferreira, Maria Calado, Nelson Mota, Filipe Coutinho e Vitor Murtinho

**Goals**
This research project is a celebration and an innovation. A celebration in the sense of commemorating the order given by King John III, in mid XVI century, to André de Resende to translate Alberti’s De re aedificatoria to the Portuguese language.

An innovation in the sense of producing, for the first time, an intelligent computational environment to understand the cultural impact of this treatise on classical architecture in Portugal and abroad.

Research developes in six approaches: Alberti and the De re aedificatoria; New digital technologies; Grammar of sacred spaces; Grammar of column systematization; Architecture for a modern humanism; The virtual reality of Albertian Architecture.

**Conclusions**
The influence of the treatise *De re aedificatoria* by Leon Battista Alberti, originally published in 1485 and without illustrations, was investigated by using a computational environment to build a shape grammar, not only to decode that text, but also to understand its influence on Portuguese architecture of the counter-reformation using for this purpose the instruments given by the construction of a generative grammar of form. This allowed, for the first time, to evaluate the transformations, within the classical architecture, of the proposals suggested by that treaty and by the buildings designed and constructed in Portugal and the overseas territories.

**Results**
A mobile exhibition was held showing the ascendancy of this treaty in the religious architecture of that period, as well as was promoted an international conference attended by the entire research team and by international experts. The results were debated and published in more than 30 conference and journal papers. Two educational software were built in relation with the shape grammars.
Budget
161.636.00€

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Portuguese Foundation for Science and Technology

Partners
Centre for Social Studies (CES)
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*Instituto Superior Técnico* (IST/UTL)
Faculty of Architecture, University of Lisbon (FAUL)

Exposições/Exhibitions
Science Museum, University of Coimbra, Abril - June 2013
Faculty of Architecture, University of Lisbon, June - September 2013