

TITLE OF THE RESEARCH PROJECT

Building Romance cultural identity. Construction history between Spain, Italy and the Latin Arch from 15th up to 18th century: transnational architectural and technical features between traditions and cross-contaminations

SUPERVISORS

	First name	LAST NAME	University	Research Unit
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Fields of study

History of art and architecture; construction history; arts and culture; architectural and artistic techniques; architectural heritage; digital humanities.

Requirements (academic background, languages...) needed to apply for this research topic

- Requested academic background: Master's degree in Architecture; Master's degree in Art History; Master's degree in Construction/Building Engineering-Architecture.
- Good knowledge of English language; basic knowledge of Italian language; basic basic knowledge of Spanish language.
- Good expertise in archival research and palaeography.
- Knowledge of, or availability to learn, current database programmes and basic digital tools and programmes for graphic design and 3D modelling.

5 main KEYWORDS

Art and Architecture; Construction history; Architectural techniques; Italian modern age art and architecture; Spanish modern age art and architecture.

ABSTRACT (250 words max.)

Construction history and research applied to artistic and architectural artefacts have long been recognized as relevant field of investigation, essential for reconstructing the complex palimpsest of built heritage material features and for refining the theoretical and methodological awareness of its preservation and enhancement strategies. The richness of this path of studies has allowed us to recognise as well in the material aspects of artistic and architectural heritage precious intangible values, which are equally worthy of conservation and promotion. In this context, is considerably interesting the development and circulation of building knowledge and technological skills, which in the past governed the architectural and artistic design choices, historically determined by the dialectic between cultured theoretical magisterium and local empirical building traditions. The research aims at exploring the circulation of these knowledge and skills, and their main expressions, from the late Middle Ages up to the 18th century in the territories belonging to the UNITA alliance, highlighting how and to what extent construction techniques have contributed to building a common material and immaterial cultural heritage and identity values, and affected the wider area of the Latin Arch and the Mediterranean basin, in a process of mutual hybridisation. The project is specifically concerned with transfers and exchanges between the lands of the European continental Powers and the Italian peninsula, focusing, through main thematic lines and case studies of major interest, on the circulation of building culture between the territories historically belonging to the Spanish Crown and northern Italy, with particular regard to Lombardy.

Research aims and methodology

The study, comprehension and interpretation of the material and technical-constructive aspects of historic buildings have long been recognised as fundamental themes in the process of awareness, preservation and enhancement of cultural and architectural heritage.

The increasing widening of the historiographical research perspectives has allowed, in fact, to conceive the history of techniques and the research applied to artistic and architectural artefacts as a relevant field of investigation – albeit complementary to others that contribute to the critical definition of architecture – essential for reconstructing the complex palimpsest of built heritage material features and for refining, therefore, the theoretical and methodological consciousness of its conservation and valorisation strategies.

The richness of this line of studies has led to a multiplication of areas and approaches to historical analysis, allowing us to recognise also deep and precious intangible values in the material features of our artistic and architectural heritage, which are equally worthy of protection and promotion. In this sense, ample scopes and research interests are offered by the issue of development and circulation of

2/6



constructive knowledge, technological skills and experimental abilities, which in the past governed the design choices of both large-scale projects and common constructions, historically determined by the dialectic between cultured theoretical magisterium and local empirical building traditions. These can be reconstructed through an integrated cognitive approach that combines the direct reading of artefacts with traditional and innovative historiographical research methods.

This research aims to begin systematically exploring the circulation of construction knowledge and its main expressions from the late Middle Ages up to the 18th century in the territories belonging to the UNITA alliance, with the primary concern of recognising and highlighting how and to what extent construction knowledge and techniques form the basis of and have contributed to building a common material and immaterial cultural heritage and identity values, bounded by the Romance languages, the commitment to regional development and location in rural and cross-border mountain environments. The research also aims to investigate how this circulation of knowledge and skills, which developed from the use of local resources and building materials and matured within specific areas referred to the UNITA alliance, affected the much wider area of the Latin Arch and the Mediterranean basin, in a fruitful process of mutual cultural and technical hybridisation.

In this context, the project strives to deepen transfers and exchanges relating to technical and construction culture between the 15th and 18th centuries between the lands of the European continental Powers and the Italian peninsula. In particular, the project will be focused on the circulation of this culture between the territories historically belonging to the Spanish Crown and northern Italy, with special regard to Lombardy, which was a crossroads of cultural and technical influences from beyond the Alps, as well as from Venice (being the eastern area of the region, also including Brescia, part of the Venetian *Terraferma* dominion) and from the Mantua, Emilia and central Italy areas.

The subject has to be developed by first considering both traditional and innovative building traditions and systems, with specific concern for the main materials used in masonry, flooring and roofing, such as cut stone and common stone, bricks, mortars, wood. It will be examined their supply, work process and use in relation to their intrinsic characteristics and the structural, functional and aesthetic design purposes. Attention must be paid to the organisation of the construction site, to the workers as well as to architects/engineers, their circulation, the exchange of their expertise, the technical language used, both through construction practice and the progressive spread of theoretical knowledge – especially with printed books and architectural treatises – considering its impact (or lack thereof) on local building traditions as well as on the architectural language.

These issues will be highlighted through thematic lines and case studies of major interest, focusing on the analysis of exemplary civil or religious architectures or building types that show peculiar creative and technological research. Possibly will be also considered traditional specificities in the distribution and use of spaces, as well as spatial or functional elements of specific interest, such as, for example, in residential architecture, atriums, courtyards, flats, services, but also staircases and vertical connections, opening systems and their screens, water systems, etc. Attention must also be paid to materials and finishing techniques, particularly in flooring and interior and exterior elevations.

These concerns must be approached from an innovative comparative perspective through the territories and cultural areas examined, highlighting, as mentioned above, in particular the phenomena of transfer/export/import/hybridisation of construction techniques and skills, as well as of building materials and elements, technicians and craftsmen, technical terminology, artistic-architectural

languages, that can be used to trace some of the main paths of construction of a shared European cultural heritage.

The research methods, beyond those well established in art and architectural history research, typically carried out in archives, libraries, cultural institutes and museums, will also include the identification of existing and accessible case studies in order to undertake investigations and surveys in situ. This, with the purpose of coming into contact with the reality of building practice, often far from theory, and providing interdisciplinary awareness, both theoretical and practical, of construction systems.

Furthermore, based on current trends in the field of digital humanities, the research will involve the use of specific databases, which will allow for the collation, sorting and cross-referencing of the data regarding the considered cases and contexts, and basic computer graphics programmes for renderings and 3D digital models of the case studies and solutions considered.

Relevance and added-value of the proposed research in relation to the current state of knowledge

As mentioned in the previous paragraph, the study and interpretation of the material and technical-constructive aspects of historic buildings have long been recognised as fundamental themes in the process of understanding, conserving and enhancing artistic and architectural cultural heritage, and in this field, scientific literature is extensive and sound.

Nevertheless, the project offers the opportunity to significantly widen the established knowledge, which often focuses on the analysis of individual cases or techniques, by proposing a research approach and theme that are still relatively unexplored and promise significant results. This research focuses on the circulation of knowledge and constructive magisterium, which, with significant repercussions in terms of identity, society and economics, literally crossed and contributed to building Europe in the modern age, laying the groundwork for the contemporary era and raising the issue of the preservation of an extraordinary heritage. The aim is to settle a first network of knowledge related to the European architectural techniques, starting from the main paths traced within the territorial contexts of the UNITA alliance, specifically between Spain and Italy. Highlighting and relating artistic-architectural design and technical conception through Europe and the Mediterranean area will offer the bases for a more conscious action of awareness, valorisation and enhancement of a huge material and immaterial cultural heritage, especially relevant for more marginalised areas, which can develop and foster European citizenship and identity.

Besides, the project undertakes the collection and critical digitisation of archival documents and printed sources relating to the design and construction aspects of architecture as well as the graphic modelling of the main study cases and technical solutions. Thus can be started a first digital mapping of direct and indirect sources and a first 3D models collection of study cases on the subject in the different European UNITA areas, with very interesting perspectives of exploitation.

Interdisciplinary nature of the research together with the alignment with the CHORAL programme and complementarity expertise of the teams

The present project is strongly consistent with the CHORAL program, which mainly focuses on the different aspects of material and immaterial cultural heritage of the territories involved in the UNITA Alliance. The project stresses the current need for investigating, or better, re-investigating, art and architecture as a significant expression of Romance cultural identity through the Modern age.

A thorough investigation of the circulation of architectural technical knowledge and of technical architectural features will benefit from the expertise of researchers from the different countries participating in this project. The interdisciplinary nature of the research, both theoretical and practical, is proved by the different expertise involved in the project, covering research areas like history of art, architectural history, construction history, and by the opportunity to benefit from the extensive and diverse expertise available within the two universities involved, both in the humanities and in civil engineering, as well as in digital archiving and design. Additionally, the complementary knowledge of the researchers is enhanced by their awareness with the architectural sites within their respective countries.

Output plan including publication and dissemination activities

The dissemination of the research activity will be carried out at different levels and channels. First of all through publications in international scientific journals, communications in international and national conferences, congresses and workshops, extending as well at a local level with the involvement of school, protection and government bodies and interested stakeholders of the investigated territories.

Basing on the level of the research achievements, the doctoral thesis will be published in a book with international spread.

Estimated schedule

The research, organized over a 3-year period, will begin with an initial 3-month phase focused on surveying the current state of art at the international level, especially within UNITA and other European countries, and in a subsequent 3-month phase focused specifically on Italian and Lombardy territory and on Spanish area.

In the following 6 months, deepening local historic building contexts along the established time-frame, potential case studies will be identified within the Italian and Spanish territories for further cross-study, verifying, collecting and digitising the available related archival documentation.

The subsequent 12 months will be dedicated to analysing the archival sources, outlining the design and construction history of the selected case studies, providing their basic surveys through onsite inspections, designing graphic schemes and 3D models.

The remaining 12 months will be mainly devoted to all the activities regarding the critical synthesis of the conducted research, the developing and the writing of the doctoral thesis.

The candidate will submit a short report on the research advancements every three months. The candidate, in relation to the topics of the thesis, will be encouraged to attend national and international courses and seminars, to participate in national and international workshops and congresses, to give

5/6

seminars and conferences within the teaching and research activities conducted by supervisors in order to develop first academic skills.