

HERITAGE CROSS-DISCIPLINARITY. THE *ARQUITECTURA* TEXTOS DE DOCTORADO COLLECTION

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1. Introduction

Arquitectura Textos de Doctorado is a collection which began its trajectory in 1997, whose aim it was to record research results within specific lines of investigation relating to the city, architecture and building sciences in the form of books. The origin of these texts is therefore to be found both in research projects and award-winning doctoral theses. Over this 25-year period the collection has published 59 titles, the latest seven of which are presented here, as they are considered of current relevance to the sector of heritage conservation.

The collection is coedited by the Instituto Universitario de Arquitectura y Ciencias de la Construcción (IUACC) and Editorial Universidad de Sevilla (EUS). In 2018, it was awarded the Seal of Quality in Academic Publishing (CEA-APQ) by the National Agency for Quality Assessment and Accreditation of Spain (ANECA) and the Spanish Foundation for Science and Technology (FECYT). The CEA-APQ seal recognises both scientific quality and editorial publishing, given that the collection meets the stringent requirements of both these Spanish institutions in terms of quality of information, editorial policy, editorial processes, reputation and editorial prestige.

The collection has also received the prestigious recognition of the PREMIS FAD 2019 given by ArquinFAD, the association for the Promotion of the Arts and Design, under the category of Thought and Criticism and acknowledges the value of a collection specialising in city, landscape, and architecture which has made significant contributions to debate and critique in its field.

Arquitectura - Textos de Doctorado is divided into four branches or series covering different themes. The different coloured covers deal with different topics: the red deal with technical themes and examine architectural technologies; the yellow explore theoretical reflections and essays; the blue specialise in themes relating to architectural design, city, territory and landscape; and finally, the green ones focus on content that more specifically relates to Andalucía. A list of all the titles published within each series can be found at the end of each book.

The seven most recent publications (Figure 1) are of great interest to readers specialising in heritage conservation, whether architectural, archaeological or landscape. In all of these – even those which at first glance do not appear to be linked to heritage – it is possible to sense an interest and unwavering awareness of cultural heritage, the identity of architecture, and the need for its knowledge and preservation.

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This cross-disciplinary nature is preceded by the indispensable “inter-disciplinarity”. As such, it requires a common methodology which follows scientific principles that can be traced back to human and experimental sciences, applying the views of Salvatore Lorusso and Mauro Mantovani [1]. This entails a fundamental exchange, an understanding between experts from different training backgrounds and skills who – without fanfare – reach a final unequivocal conclusion in the examination of the wide range of issues affecting architecture, landscape and immobile heritage.



Figure 1. Covers of the last seven titles published by IUACC-EUS in the collection *Arquitectura - Textos de Doctorado*.

2. Cartographies of hidden space. Welbeck Estate in England and other spaces

This book is a substantial part of the doctoral thesis by Tomás García García [2], a lecturer at the Higher Technical School of Architecture of Seville, with a prologue by Professor Francisco Javier Montero Fernández, his thesis supervisor. *Cartografías del espacio oculto* gradually develops a specific research model for the discipline of archi-

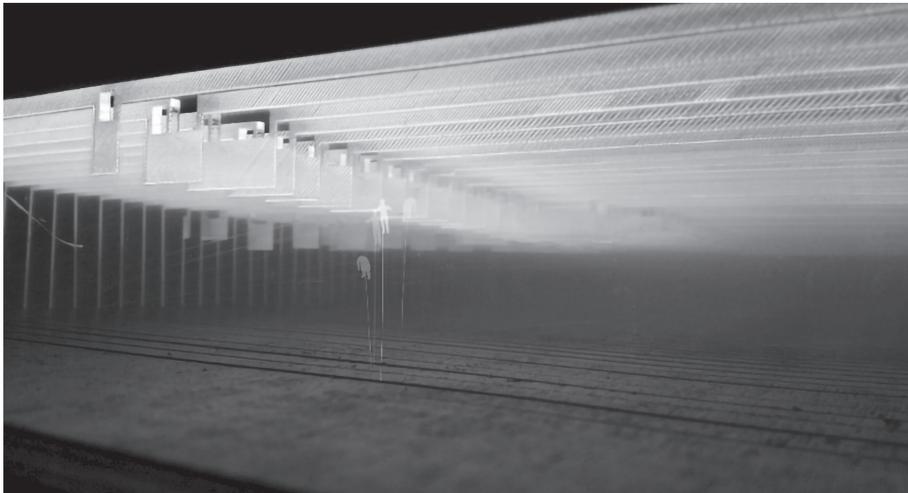


Figure 2. *Welbeck Estate. The city below*. A degree of immersion is required in the experience of this underground space. The built object makes it possible to go underground in search of a dense and weightless place that has been dreamt up (Source: T. García García, 2016, pp.146-147).

tectural projects as applied to emblematic buildings (Seville Cathedral, the church of St. Petry in Klippan by S. Lewerentz, St Paul's Cathedral in London by C. Wren or Welbeck Estate, among others). The result offered by the author becomes – in itself – an architecture conceived from his description and personal experiences, which awakens our imagination.

The text invites the reader to delve into an architectural experience in which, chapter by chapter, ideas and themes are successively verified to provide a brilliant lesson in architecture. As good textual architecture, it also provides form, a specific result, and a strategy for learning, which is detailed through the numerous architectural languages used by the author, downloadable in QR codes. These allow us to perceive shades and textures, to visualise videos and to recognise projects through models created specifically for the doctoral thesis (Figure 2). Tomás García offers us different musical pieces, different personalities, connecting us with as-yet-unused techniques for the study of architecture and revealing secrets hidden in the archives of architects from the past or in the experiences of his own projects as an architect.

3. Francesco Venezia, John Hejduk and the art of memory

Depending on the creative and emotional biography of individual authors, research in architecture is carried out through the application of a logical method which functions as a tool to rationalise the initial reality on which it is based. However, this first layer and strategy are not the only elements operating in the project process. Memory also plays a part. The research is then transformed, meandering through phobias and phobias, drifting aimlessly, while the rhythms and interests of the researcher are seemingly a response to a hidden call, to a personal journey, in order to speak of others and to establish new relationships and approaches to a given reality.



Figure 3. Volumetry of the project by Francesco Venezia for an open-air theatre beside the ruins of Gibellina and the "Cretto" by Alberto Burri.

This book is the work of Gabriel Bascones de la Cruz [3], a lecturer in Architectural Projects at the Higher Technical School of Architecture of Seville, with a prologue by Universidad de Sevilla lecturers Pablo Diáñez Rubio and Esther Mayoral Campa, his doctoral thesis supervisors. This original study aims to explain the work of two authors, Francesco Venezia and John Hejduk, and although their proposals may appear to be polar opposites both in terms of project themes and their representation, they are viewed through the lens of two architectural cultures that are as distant from each other as Italy and the United States (Figure 3). However, their profoundly artistic sensibility and their pursuit of coherent discourse are not usually found in other major authors from their generation.

In this piece Bascones proposes a unique interpretation of the architectural work of Venezia and Hejduk, arguing that the ancient “art of memory” underlies both works, whose significance can only be understood by referring back to the postulates and mnemonic rules of this forgotten science.

4. Architectural topographies in the contemporary landscape

Terrestrial landscape, as we understand it, has been built through premeditated actions carried out in the natural environment with different functional and representative purposes – some ritual, others symbolic. Full advantage has been taken of the properties of the individual places, transformed to suit humans. With each modification, a feature of the culture and the memory of each people has been left behind. With the passing of time, we are amazed to discover how the enormity of these transformations, the delicate details, the dialogue with natural elements and the insight of the authors are superimposed in a rich continuous palimpsest built from numerous memories, both indi-



Figure 4. Archaeological landscape of Tiermes, Soria. Urban lines and outlines. C. Rodríguez Fernández, 2019, pp. 190-191.

vidual and collective, known and anonymous. At the heart of these complexly superimposed layers we find humans and their landscape, that is, the essence of the construction of the world as recorded in the prologue by Darío Álvarez Álvarez, a professor at the Universidad de Valladolid.

Topografías arquitectónicas en el paisaje contemporáneo is a book by Carlos Rodríguez Fernández [4], a lecturer in Architectural Composition at the Higher Technical School of Valladolid, and based on his doctoral thesis. This book takes us on a journey through a fascinating territory, that of the construction of architectural topographies which generate new systems of landscapes in the urban or natural territory. This occurs in a fully modern sense, adding layers to the palimpsest mentioned above, as rich as the development of the different cultures which created it. These architectural topographies of platforms and voids build new artificial horizons in the human landscape as seen in the four extraordinary examples of Brasilia in Brazil (Lucio Costa), Moerenu-ma in Japan (Isamo Noguchi), City in the Nevada desert, United States (Michael Heizer), and Tiermes, a Roman city in Soria, Spain (Figure 4). Four laboratories for experimenting with time and architecture, with the memory which shelters in the voids of the absent city.

5. Plastic form in structure. The expressivity of resistance

Structure in construction has always been guided by analysis and calculation. However, it is less frequent to encounter examination on the topic of structure in buildings through composition and plastic aspects, creating forms and spaces which satisfy the conditions of equilibrium, stability, and resistance. Therefore, the book title itself is already a declaration of intent. This publication from IUACC–Editorial Universidad de Sevilla, with a prologue by Professor Javier Estévez Cimadevila, from the Universidade da Coruña, is based on the doctoral thesis of the same title by the lecturer Félix Suárez [5].

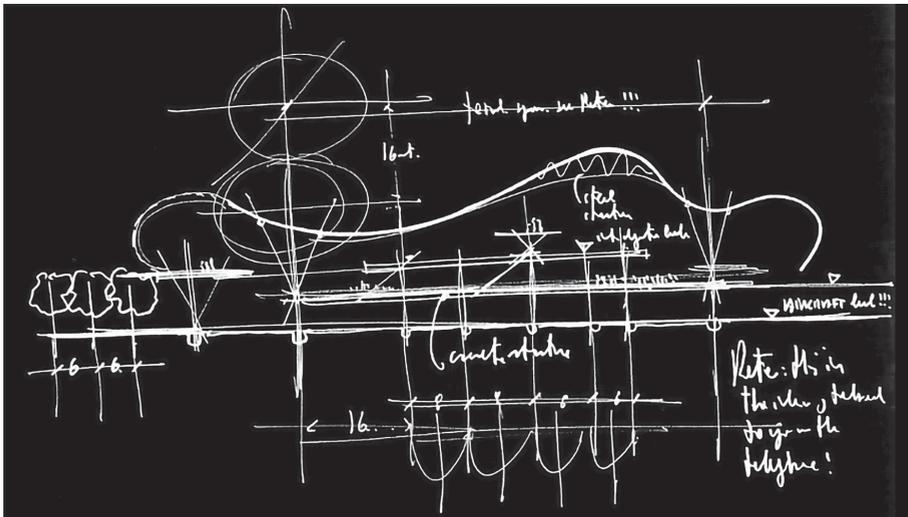


Figure 5. Kansai International Airport Passenger Terminal Building, drawing by Renzo Piano, 1994, p. 98.

In *La forma plástica de la estructura*, we cover the entire creative process from its origins (Figure 5), seeking the formal logic of structure in terms of plasticity and perception, following a triple approach: the Genesis of Form, the Project of Form, and the Materialization of Form. The author considers this analytical process in relation to the factor of time, thus viewing each period in relation to the expressivity of its structure, its 'style', following a sequential process in several stages: the experimental phase of the discovery of the material, the Classical period which tries to consolidate the models, the Mannerist period and its search for limits, before concluding in the Baroque period which marked the start of a phase of decadence before returning to its origins.

This publication is based on research resulting from the in-depth analysis of a vast number of buildings, architects, and structure consultants. Although the buildings selected are recent and can mostly be dated to the 21st century, the methodology followed is timeless and the conclusions reached can be extrapolated to any architectural work, irrespective of era and style, given that the expressivity of built architecture is analysed by handling the timeless concepts characteristic of the human perception of form.

In short, this fresh, innovative, and exciting way to approach the analysis of architectural structures allows these to be understood from a visual and composition perspective without having to compromise on their intrinsic character as technological objects.

6. Heritage landscapes in coexistence

To talk of heritage landscape is to talk of the past and of memory. This sound and painstaking text has been stripped of the futility which characterises most current culture, offering the reader an exercise in cultural militancy. This book from the collection *Arquitectura – Textos de Doctorado* published by IUACC-EUS, with a prologue by the



Figure 6. Geometrical construction of the access road to Mont Saint Michel designed by Dietmar Feichtinger Architects. S. Fernández Raga, 2020, p. 34.

director of the Higher Technical School of Architecture of Valladolid, Darío Álvarez, is based on the doctoral thesis of the author, Sagrario Fernández Raga [6], a lecturer in Architectural Composition at the same school.

We are living through an era in which logical and calm thinking seems to be waning, affected by the digital barrage which in some way attempts to change not only the course of our lives, but also our reasoning. However, this book goes against the tide, forcing us to take a long hard look at the past recorded in the landscape so that we can understand the present better and discern the future in a natural way. One of the many themes in this book is the beauty of the past, recorded in different landscapes over time, rescued and enhanced by the devices of the present, emphasizing the memory deposited in these landscapes. As the author, quoting Proust, stated at the start of the book “objects preserve some element of the gazes which once rested on them”.

The search for coexistence in the heritage landscape is approached through the construction of architectural models for integrating broader road infrastructures into the territory, in sites as unique as Mont Saint Michel in France (Figure 6), Stonehenge in England, Lake Zurich in Switzerland, Camino de Santiago in Spain, or the viaducts of Garabit and Millau in France. With this approach the author shows us new ways to design landscape and historical heritage.

7. Architecture of reservoirs in Spain

Analysing the architecture of reservoirs in Spain is like examining the Iberian Peninsula, along with its form, reliefs and basins, in order to increase awareness of this country straddling the Atlantic and Mediterranean. The reservoirs are the manifestation of Spanish orography and the expression of how water is obtained and administered (Figure 7).



Figure 7. Aldeavilla dam in 1963, seen from Llano de la Bodega. Archivo Fotográfico de Iberdrola, 1963, p. 113.

This book places the reader in an exceptional vantage point: the dams allow us to reflect on the importance of territory and its architectures in the smart control of the environment, identifying the unchangeable factors which shaped the landscape and which find their superlative expression in these reservoirs.

This publication from IUACC-EUS is an exciting addition given the examples contained within its ten chapters and the particular way in which the author, Universidad Politécnica de Cataluña lecturer Eduard Callís Freixas [7], has presented them as a reasoned catalogue. The prologue was written by Professor Xavier Monteys Roig. In these pages, architects will find an invitation to identify the architecture and heritage in these works of engineering and in the vicissitudes leading up to their construction. Engineers will understand the reason for our architectural admiration and recognition of these structures, which are so much more than mere constructions and are deeply rooted in the landscape of Spain.

8. A client and an architect: Jan Antonín Bat'a and Le Corbusier

The relationship between modern architecture and industry is not only explained through the classic examples of success recorded in the history of architecture (AEG and others). It is a constant process of progress established on the basis of converging capital and a discipline which, since the incorporation of the modern gaze, has been aimed at “organising and improving” the conditions of a given setting (Figure 8). For reasons relating to organisation enterprise needs architecture while industrialists have to develop the creations of architects. This book details how the figure of industrial patronage of major architects, especially from the late 19th century, is a constant – and at times also



Figure 8. Jury of the International Housing Competition examining the model of the Zlin valley. From left to right: B. Fuchs, E. Schön, F. L. Gahura, A. Sehnal, D. Čípera, J. A. Bat'a, J. Syříště, Le Corbusier, D. Jurkovič and H. Vavrečka (April 1935), p. 102.

unknown – factor. This is the case of the great Czech entrepreneur Jan Antonín Bat'a and Le Corbusier, a master of 20th-century architecture. Over two years, 1935 and 1936, Le Corbusier carried out several projects for the company owned by Bat'a, which despite their disappointing material results were clearly highly influential in his later career.

This publication from IUACC-EUS, based on the doctoral thesis of the author, the architect Jaime Prior y Llombart [8], offers an in-depth exploration of the close links between architecture and enterprise along a path of mutual growth and benefit, improving working conditions and generating a new model of decent high-quality housing, a key issue in Western society since the industrial revolution.

References

- [1] Lorusso, S. Mantovani, M. (2021) Syncretism and transdisciplinarity in art and life. *Conservation science in Cultural Heritage*, 21. pp. 57-60.
- [2] García García, T. (2018) *Cartografías del espacio oculto. Welbeck Estate en Inglaterra y otros espacios*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).
- [3] Bascones de la Cruz, G. (2018) *Francesco Venezia, John Hejduk y el arte de la memoria*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).ç
- [4] Rodríguez Fernández, C. (2019) *Topografías arquitectónicas en el paisaje contemporáneo*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).
- [5] Suárez Riestra, F. L. (2019) *La forma plástica de la estructura. Expresividad del hecho resistente*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).
- [6] Fernández Raga, S. (2020) *Paisajes patrimoniales en coexistencia*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).
- [7] Callís Freixas, E. (2021) *Arquitectura de los pantanos en España*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).
- [8] Prior y Llombart, J. (2022) *Un cliente y un arquitecto: Jan Antonín Bat'a y Le Corbusier*, Sevilla: IUACC & Ed. Universidad de Sevilla (coeds.).

Biographical notes

Germán Herruzo Domínguez is an architect with a Master's in Architecture and Historical Heritage from the Universidad de Sevilla. He holds a PHD in Architecture from the International Doctoral School of the University of Seville. Since 2021 he has also worked as a Research Support Technician at the University Institute of Architecture and Building Science and has collaborated in the drafting of the Master Plan for Municipal Historical Heritage (2019-20) for the Ayuntamiento de Sevilla.

Antonio Tejedor Cabrera is a Professor in Architectural Projects at the Universidad de Sevilla and has been the director of the University Institute of Architecture and Building Science (IUACC) since 2015. Since 2017 he has been in charge of co-directing the collection *Arquitectura – Textos de Doctorado* along with lecturer Marta Molina Huelva. He is the main researcher in numerous research projects establishing correlations between heritage, tourism, and landscape and the architectural project. Along with his studio, Tejedor-Linares Arquitectos, he has been awarded different international prizes, including: PRAM Premio Internazionale sul Restauro e Architetture Mediterranee (2013); work selected at the PREMIS FAD (2011); second position at the II Premio Mediterráneo del Paisaje (2007), and the Voto de Louvor (Laudatio) from Universidade de Lisboa (2012).

Summary

Readers are introduced to the most recent titles from the collection ARQUITECTURA - TEXTOS DE DOCTORADO, published jointly by the University Institute of Architecture and Building Science (IUACC) and Editorial Universidad de Sevilla since 1997. The seven titles are the result of doctoral theses awarded by the IUACC. All of them share a cross-disciplinary approach touching upon architecture, landscape, and immobile heritage (architectural, archaeological or landscape) and are highly relevant to readers with an interest in heritage conservation: *Cartografías del espacio oculto. Welbeck Estate en Inglaterra y otros espacios* by Tomás García (2018); *Francesco Venezia, John Hejduk y el arte de la memoria* by Gabriel Bascones (2018); *Topografías arquitectónicas en el paisaje contemporáneo* by Carlos Rodríguez (2019); *La forma plástica de la estructura. Expresividad del hecho resistente* by Félix Suárez (2019); *Paisajes patrimoniales en coexistencia* by Sagrario Fernández Raga (2020); *Arquitectura de los pantanos en España* by Eduard Callís Freixas (2021) and *Un cliente y un arquitecto: Jan Antonín Bat'a y Le Corbusier* by Jaime Prior (2022). All of these clearly show the interest of the authors in the dissemination of cross-disciplinarity and the need for in-depth research and conservation of architectonic heritage.

Riassunto

Vengono presentati ai lettori i titoli più recenti della raccolta ARQUITECTURA - TEXTOS DE DOCTORADO, pubblicata congiuntamente dall'Istituto Universitario di Architettura e Scienze delle Costruzioni (IUACC) e dalla Editorial Universidad de Sevilla dal 1997. I sette titoli sono il risultato di tesi di dottorato rilasciate dall'IUACC. Tutti condividono un approccio interdisciplinare che tocca l'architettura, il paesaggio e il patrimonio immobile (architettonico, archeologico o paesaggistico) e sono molto importanti per i lettori interessati alla conservazione del patrimonio: *Cartografías del espacio oculto. Welbeck Estate en Inglaterra y otros espacios* by Tomás García (2018); *Francesco Venezia, John Hejduk y el arte de la memoria* by Gabriel Bascones (2018); *Topografías arquitectónicas en el paisaje contemporáneo* by Carlos Rodríguez (2019); *La forma plástica de la estructura. Expresividad del hecho resistente* by Félix Suárez (2019); *Paisajes patrimoniales en coexistencia* by Sagrario Fernández Raga (2020); *Arquitectura de los pantanos en España* by Eduard Callís Freixas (2021) and *Un cliente y un arquitecto: Jan Antonín Bat'a y Le Corbusier* by Jaime Prior (2022). Tutto ciò mostra chiaramente l'interesse degli autori per la diffusione della transdisciplinarietà e la necessità di una ricerca e di una conservazione approfondite del patrimonio architettonico..