IDA: ADVANCED DOCTORAL RESEARCH IN ARCHITECTURE

Antonio Tejedor Cabrera, Marta Molina Huelva (comp.)
IDA: Advanced Doctoral Research in Architecture

1.408 pp. 21 x 29,7 cm

ISBN: 978-84-16784-99-8

All right reserved. No part of this book may be reproduced stored in a retrieval system, or transmitted, in any form or any means without prior written permission from the Publisher.

EDITOR
Universidad de Sevilla

COMPILERS
Antonio Tejedor Cabrera
Marta Molina Huelva

DESIGN AND LAYOUT BY
Pablo Blázquez Jesús
María Carrascal Pérez
Daniel Longa García
Marina López Sánchez
Francisco Javier Navarro de Pablos
Gabriel Velasco Blanco

ADMINISTRATION AND SERVICES STAFF
Adoración Gavira Iglesias

Seville, november 2017

© 2017. IDA: ADVANCED DOCTORAL RESEARCH IN ARCHITECTURE
ORGANIZED BY

COLLABORATORS

Consejo Andaluz de Colegios Oficiales de Arquitectos

fundación arquia
All manuscripts have been submitted to blind peer review, all content in this publication has been strictly selected, the international scientific committee that participates in the selection of the works is of international character and of recognized prestige, an scrupulous method of content filtering has been followed in terms of its veracity, scientific definition and plot quality.
COMMITTEES

CONFERENCE CHAIRPERSONS

Antonio Tejedor Cabrera, Coordinator of the PhD Program in Architecture and Director of the University Institute of Architecture and Construction Sciences, Professor Department of Architectural Design, University of Seville

Marta Molina Huelva, Secretary of the University Institute of Architecture and Construction Sciences, Professor of the Department of Building Structures and Geotechnical Engineering, University of Seville

ORGANISING COMMITTEE

María Carrascal Pérez, Department of History, Theory and Architectural Composition, University of Seville

Mercedes Linares Gómez del Pulgar, Department of Architectural Graphic Expression, University of Seville

Ángel Martínez García-Posada, Department of Architectural Design, University of Seville

Pilar Mercader Moyano, Department of Architectural Constructions I, University of Seville

Domingo Sánchez Fuentes, Department of Urban Planning and Spatial Planning, University of Seville

Manuel Vázquez Boza, Department of Building Structures and Land Engineering, University of Seville

CONFERENCE SECRETARY

Pablo Blázquez Jesús, Ph.D. student, Department of Architectural Design, University of Seville

Marina López Sánchez, Ph.D. student, Department of Architectural Design, University of Seville
SCIENTIFIC COMMITTEE

José Aguiar-Universidade de Lisboa  
Benno Albrecht-Università IUAV di Venezia  
Francisco Javier Alejandro Sánchez-Universidad de Sevilla  
Dario Álvarez Álvarez-Universidad de Valladolid  
Antonio Ampliato Briones-Universidad de Sevilla  
Joaquín Antuña-Universidad Politécnica de Madrid  
Ángela Barrios Padura-Universidad de Sevilla  
José María Cabeza Lainez-Universidad de Sevilla  
Pilar Chias Navarro-Universidad de Alcalá  
Juan Calatrava Escobar-Universidad de Granada  
María Carrascal Pérez-Universidad de Sevilla  
Helena Coch Roura-Universitat Politècnica de Catalunya  
Jorge Cruz Pinto-Universidad de Lisboa  
Carmen Díez Medina-Universidad de Zaragoza  
Fernando Espuelas Cid-Universidad Europea  
Alberto Ferlenga-Università IUAV di Venezia  
Luz Fernández-Valderrama-Universidad de Sevilla  
Vicente Flores Alés-Universidad de Sevilla  
María del Carmen Galán Marin-Universidad de Sevilla  
Jorge Filipe Ganhão da Cruz Pinto-Universidade de Lisboa  
Carlos García Vázquez-Universidad de Sevilla  
Sara Girón Borrero-Universidad de Sevilla  
Francisco Gómez Díaz-Universidad de Sevilla  
Amparo Graciani-Universidad de Sevilla  
Francisco Granero Martín-Universidad de Sevilla  
Francisco Hernández Oliva-Universidad P. de Madrid  
Miguel Ángel de la Iglesia-Universidad de Valladolid  
Paulo J.S. Cruz-Universidade do Minho  
Francesc Sepulcre-Universitat Politècnica de Catalunya  
Ángel Luis León Rodríguez-Universidad de Sevilla  
Mercedes Linares Gómez del Pulgar-Universidad de Sevilla  
María del Mar Loren Méndez-Universidad de Sevilla
Margarita de Luxán García de Diego-Universidad P. de Madrid
Madelyn Marrero-Universidad de Sevilla
Juan Jesús Martín del Río-Universidad de Sevilla
Luis Martínez-Santamaría-Universidad Politécnica de Madrid
Ángel Martínez García-Posada-Universidad de Sevilla
Mauro Marzo-Università IUAV di Venezia
Pilar Mercader Moyano-Universidad de Sevilla
Antonello Monaco-Università degli Studi di Reggio Calabria
Marta Molina Huelva-Universidad de Sevilla
José Morales Sánchez-Universidad de Sevilla
Eduardo Mosquera Adell-Universidad de Sevilla
María Teresa Muñoz Jiménez-Universidad Politécnica de Madrid
Jaime Navarro Casas-Universidad de Sevilla
José Joaquín Parra Bañón-Universidad de Sevilla
Víctor Pérez Escolano-Universidad de Sevilla
Francisco Pinto Puerto-Universidad de Sevilla
Mercedes Ponce Ortiz de Insagurbe-Universidad de Sevilla
Juan Luis de las Rivas Sanz-Universidad de Valladolid
Carmen Rodríguez Liñán-Universidad de Sevilla
Javier Ruiz Sánchez-Universidad Politécnica de Madrid
Joaquín Sabaté Bel-Universitat Politécnica de Catalunya
Vicenç Sáinz Gutiérrez-Universidad de Sevilla
Santiago Sánchez Beitia-Universidad del País Vasco
Domingo Sánchez Fuentes-Universidad de Sevilla
José Sánchez Sánchez-Universidad de Sevilla
Juan José Sendra Salas-Universidad de Sevilla
Julián Sobrino Simal-Universidad de Sevilla
Federico Soriano Peláez-Universidad Politécnica de Madrid
Rafael Suárez Medina-Universidad de Sevilla
Miguel Ángel Tabales Rodríguez-Universidad de Sevilla
Antonio Tejedor Cabrera-Universidad de Sevilla
Jorge Torres Cueco-Universidad Politécnica de Valencia
Elisa Valero Ramos-Universidad de Granada
Manuel Vázquez Boza-Universidad de Sevilla
Narciso Vázquez Carretero-Universidad de Sevilla
Teófilo Zamarreño García-Universidad de Sevilla
LT 4
ANÁLISIS Y PROYECTOS AVANZADOS
ANALYSIS AND ADVANCED PROJECTS / ANÁLISIS Y PROYECTOS AVANZADOS

López del Río, Albert

Jódar Pérez, Ana Irene

Ros Campos, Andrés

Butragueño Díaz-Guerra, Belén

Sáiligo Zambrano, Borja

p. 1157-1167: ARCHITECT, WORK AND METHOD / p. 1168-1179: ARQUITECTO, OBRA Y MÉTODO
Bessa, Enrique

Casado López, Guillermo

p. 1205-1216: CONTEMPORARY ARCHITECTURE AND ITS INTEGRATION WITH PATRIMONIAL ARCHITECTURE / p. 1217-1228: ARQUITECTURA CONTEMPORÁNEA Y SU INTEGRACIÓN CON EDIFICIOS PATRIMONIALES
Martínez Gómez, José Mario

p. 1229-1240: THE URBAN FORM IN MORELLA AS A HISTORIC LABORATORY IN THE 21ST CENTURY / p. 1241-1251: LA FORMA URBANA EN MORELLA COMO UN LABORATORIO HISTÓRICO EN EL SIGLO XXI
Beltran Borras, Juli

p. 1253-1263: MODEL MANAGEMENT OF HABITABILITY IN PROTECTED WILD AREAS (ASP) CASE STUDY TORRES DEL PAINE NATIONAL PARK (PNTP), PATAGONIA CHILE / p. 1264-1274: MODELO DE HABITABILIDAD EN ÁREAS SILVSTRES PROTEGIDAS (ASP) CASO DE ESTUDIO PARQUE NACIONAL TORRES DEL PAINE (PNTP), PATAGONIA CHILENA
Villaruel, Laura, Cuchil, Albert

p. 1275-1282: DWELLING. INVARIANTS IN CONTEMPORARY ARCHITECTURE / p. 1283-1290: LA MORADA. INVARIANTES EN LA ARQUITECTURA CONTEMPORÁNEA
Morero Sánchez-Cañete, Francisco José; Martínez Díaz, Daniel; Bioy Montesa, Carmen; Muñoz Carabias, Francisco

Monteagudo Blasco, Octavio

Delgado Sapena, Rossana María

p. 1333-1343: HIDDEN SPACE CARTOGRAPHY. ARCHITECTURAL EXPERIMENTATION LABORATORY / p. 1344-1354: CARTOGRAFÍAS DEL ESPACIO OCULTO. LABORATORIO DE EXPERIMENTACIÓN ARQUITECTÓNICA
García García, Tomás; Montejo-Fernández, Francisco J.

p. 1355-1364: ARCHITECTURE & ENTROPY. TIME AND DESTRUCTION AS A CREATIVE SUBJECT / p. 1365-1375: ARQUITECTURA Y ENTROPIA. TIEMPO Y DESTRUCCIÓN COMO GENERADORES DEL PROYECTO ARQUITECTÓNICO
Blázquez Jesús, Pablo

Dovale Carrón, Carmen

p. 1387-1396: DISASSEMBLING DOMESTICITY. HABITING HETEROTOPIAS / p. 1397-1406: DESMONTANDO LA DOMESTICIDAD. HABITANDO LAS HETEROTOPÍAS
M-Millana, Elena
CARLO SCARPA: ABSTRACTION AS AN ARGUMENT OF THE SUBLIME.
RESEARCH STRATEGY

Ros Campos, Andrés
Universidad Cardenal Herrera-CEU, CEU Universities, España
Andrés Ros Campos. e-mail: roscampos@uchceu.es

Abstract: From the visit to the work of Carlo Scarpa fascinates the ability of the architect to maintain the visual balance in spite of the profusion of details in his architecture. The spaces generated, maintain a sense of modernity, tolerating the wealth of solutions and nuances, which seemed to break the aseptic proposals of the architectural vanguard of the first half of the XX century. Contrary to what might seem, by the abundance of elements, in his work underlies a deep respect for modernity and artistic avant-garde, without impediment to reinterpret the modern legacy in an absolutely personal, original and unique way. The research of this thesis was, therefore, focused on the mechanism of abstraction, applied to the creative methodology of architecture and extended to art and design. This intervention in the congress aims to explain the research strategy, its needs and its information and interpretation sources, as well as to claim the importance of collaboration between the archives that safeguard the proposals of the architecture of the XX century and researchers in the academic scope. In this process, it is discovered how the result of the architecture of Scarpa is based on his own methodology for designing, based on a peculiar way of drawing and approaching the creative process.

Keywords: Carlo Scarpa, Abstraction, Sublime, Architecture.

1. Introduction

The work developed fits in the thematic area proposed by the congress called Analysis and Advanced Projects, from the hypothesis of use of abstraction and therefore of the connection between architecture and avant-garde art is based on the detailed analysis of some of the works of Scarpa. However, it was necessary not to lose an overview of the figure of the Venetian master, his links with the artistic avant-garde of the first half of the century and his personal concerns. The issue was to control the inclusion of elements and details without the space was aesthetically affected for it, avoiding to reach saturation. His architecture not only tolerated these nuances but also needed them as fundamental pieces of the whole composition. They had already been thoroughly purified, creating an abstract ornamentation closer to modern geometric austerity than to nineteenth-century figuration. For this reason, abstraction, consisting of the decomposition of the fundamental elements, will make it possible to recompose the totality, sometimes transgressing the original order to obtain a new one, in which the integral elements can be read with a certain autonomy. The artistic avant-garde brought the abstraction to the forefront, which quickly affected the architectural scene, eager for transgressive postures. Therefore, there is a flow of ideas between the artistic avant-garde and architecture, which invites us to research and demonstrate that for Carlo Scarpa the avant-garde, and especially the neoplasticism, is a source of imagination admired by the master. For this reason, this text is accompanied by some details, redrawn without a scale, which seek to link with pictorial works of the artistic avant-garde, especially the neoplasticism. The drawings that complete this writing, and that reproduce details of Scarpa, are associated with their geometry and purification of lines to the postulates of the neoplasticist masters.
To the influences received by the architect, we must add the figure of Frank Lloyd Wright. From the recognition to the American master, the geometry of the detail and the sensitivity by the integration of the architecture in the natural context serve as evidence. In this sense, the peculiarity of the city of Venice inspires Scarpa to highlight in several of his projects the value of water as a constructive material of his architecture. Obviously, it does not build with it the solidity of the classic elements but the poetic and symbolic presence of the city and the sensorial contribution. At the same time, the admiration of Scarpa by the neoplastician vanguard is reflected in the geometrization of many of his details and in the protagonism of the line in his architectural conception. This fact made it necessary to inquire into the relations of the architect with the vanguard, and his admiration for Theo van Doesburg or Piet Mondrian. Thus the drawings that are presented show traces of composition that could well fit the record of any neoplastist artist.

The issue treated by the thesis also obliged to be interested in the origin of the term abstraction. The concept of abstraction applied to architecture as a methodology has its origin in the "Précis des leçons d'architecture" by Jean-Nicolas-Louis Durand imparted in Paris during the 19th century. In these proposals, Durand defended a methodology that used a modulated geometric base on which the space was generated or designed. This interest in the use of the module is reflected in the work of Scarpa. However, the Venetian liked to use a module, sometimes fractionated, starting from the measure of 11 cm, a number that symbolises the novelty or even the excess (when it is exceeded 10). In a play between architecture and semiotics, Scarpa, clairvoyant, exposed in an intuitive and codified way, on the one hand, the novelty of his legacy, on the other, the idea of saturation, revealing the risk of surpassing the ornament of the space falling in danger of achieving the indecorous. A reason supports Scarpa's eagerness to embellish architecture, and it is an artistic concern which he described as Byzantine and which, far from rejecting the ornament, incorporated it into the created space throughout a refined geometry that fits with the precepts of the modern architecture, remaining in the rank of the decorous, and fleeing from the figuration. However, speaking in artistic terms we could qualify the work of Scarpa like an abstraction with meaning, that is to say, the abstraction becomes in symbol and this one brings us a meaning. The symbol adequately diluted in the details of his architecture, thus becomes protagonist and deliberately provides several interpretative possibilities, contributing at the same time to the mystery of his work. What is built by Scarpa is the result of a complicated process generating the solution. However, in this process lies a deep researching on architecture and semiotics, on structure, materials and composition, and perhaps most importantly an empathic posture towards who lives Scarpian space.
2. Methodology

Paradoxically the developed researching searched for shedding light on the creative process of the Venetian master while trying to reveal the keys to the understanding of his work. This task required a methodological strategy that investigated in his work, in the meaning of abstraction and in his methodology of work. Therefore a double reading is possible in this research; That one that explores the concept of the abstraction and another that analyses the appearance of it in the work of Carlo Scarpa. The aim of the inquiry was also to provide understanding to the, so misinterpreted or misunderstood architecture of Carlo Scarpa. Thus the research strategy for this work contemplated several phases and needed to resort to different sources of information.

2.1 First it was necessary to investigate the meaning of the term abstraction. Although in art corresponds to a specific definition, the term in the architecture had a certain imprecision and few theories. It was, therefore, necessary to seek the genealogy of the term in the relationship and flow of ideas between the artistic avant-garde and architecture. To this end, reading and reviewing modern postulates and manifestoes became indispensable. The result of this is the discovery that although the term associated with architecture was devoid of definition in the first half of the twentieth century, allusions to it were recurrent by the main masters, either theoretically or practically. Hence, the first step of this strategy was the bibliographical consultation on architectural modernity, artistic avant-garde or even philosophy, in order to find references to the term "abstraction".

2.2 The second phase required to research into the different archives with contents about Scarpa, exhibitions, monographs and various publications of the architect and his work. It was established that nowadays, although the great majority of the archive is deposited in the "Archivio Carlo Scarpa" in the city of Treviso, other documents of his work are in Rome at the MAXXI museum, which is responsible for catalog the work of the architect and in the Museum of Castelvecchio in Verona where among other documents hosts the project of the building. Moreover, the University Institute of Venice preserves some photographic documents and the CISA archive preserves the Carlo Scarpa photo library with some collections of historical photos of his work. To these institutions of research, cataloging and exhibition must be added other museums that have been resorted to, in searching references and links of union between the architecture and the artistic avant-garde, as reflected in the drawings that accompany this writing and in works of art to which the thesis recurs to explain the conceptual linkage of the term, with architecture.

Fig. 3 Some of the museography institutions consulted to investigate the work of Carlo Scarpa and the influences that the artistic avant-garde of the XX century exerted on the architect.

2.3 Another important phase of the research is the visit and analysis of the works selected. The proximity between them in the Veneto region favours this operation. To experience in the first person the sensations that the master suggests is fundamental for the final understanding of his work and his intention to break with his architecture the banal and disinterested conception of architecture in front of an intellectual conception. In this way, Scarpa was interested in what was exceptional versus the conformist risk of being satisfied with the work well finished but insufficient to achieve the sublime. During the visits to his work, it is verified the capacity of Scarpa to awaken sensations in those who
visit their spaces. The abundance of sensations contributes to create a strong dynamizing character of the space that generates the admiration. How the spectator perceives these sensorial stimuli of his design is part of the experience of the visit and is the result of careful work with the geometric abstraction. From the illustration, the art focused on the elaboration of the sensations caused, what later the vanguard intuit like empathy.

Fig. 4 Map of distribution of the main works of Carlo Scarpa. Drawing A. Ros.

2.4 Then, research on the architect's works became necessary. With this aim, the research was bordered by choosing six representative projects that would help to understand the proposed hypothesis and about which the available graphic information was investigated. In each of these examples, we detect the originality of Scarpa and recognise the difficulty of ascribing the mannerist record of the architect to a particular style. The projects chosen for their analysis are listed below, and the next step involves the drawing of them and the generation of explanatory schemes; The garden of sculptures in the gardens of the Biennale of Venice in 1952, the pavilion of Venezuela in the Biennale of Venice in 1953-56, the expansion of the museum of the “Gipsoteca Canoviana” in Possagno in 1955-57, the Olivetti store In Venice in 1957-58, Brion Tomb in San Vito di Altivole between 1969-78 and finally the Villa Ottolenghi in Bardolino between 1974-78. The redraw of Scarpa's work reveals the dimensional relationships between its elements, the smallest details in which he repaired. As well as the geometrization of forms and the dialogue between textures pieces and reflections, both acoustic and visual. In this sense, both acoustic, material, and visual reverberation is understood as a nexus of union between seemingly disaggregated elements. As he explains (Worringer 1908)\(^4\), abstraction affects the sensibility.

Fig. 5 Carlo Scarpa. Compositional scheme of the support of the sculpture of the Partigiana of Augusto Murer. Venice 1969. Drawing ARC.
2.5 Finally, the creative process of Scarpa is investigated. Another important aspect analysed in the research process is his peculiar way of projecting. Drawing is for him a project tool, in order that, each sketch is a reflective exercise. His drawings show the complexity of the creative thinking of the architect. The process of elaboration of them was evolving with the project. The first drawings and sketches were followed by the generation of scale drawings in plan, carefully delineated and fixed on a rigid support, in order to serve as a base for the successive modifications that were made in translucent grease-proof paper. Moreover, he used the color to separate elements or define different finishing materials.

3. Results and discussion

The result of the research sheds light on the links between art and architecture through the concept of abstraction. The consequence is that from the modern movement, the concept is intuitively used without an accurate definition. However, the ability of abstraction to generate sensations was intuited and it was attributed to the ability to clean the form and make it purer. Thus the formal essence and the autonomy between form and decoration were unlinked. The types were purified to the maximum until they were unrecognisable, as a mere spatial and formal scheme that nevertheless continued to contain the essence of the original archetype. And it is precisely this disfiguration operation that needed a process of decomposition that the abstraction allowed.

Carlo Scarpa without typecasting in any stylistic current possesses the ability to personify an own way of projecting and solving the architectural problem of the second half of the XX century. Obviously, he recognises the legacy of the first modernity in. The discussion opens up, therefore... to investigate something whose definition is not clear and to frame the figure of Scarpa in an unknown and unpublished analysis. his original interpretation (unusual), unique (sublime) and innovative (transformative).

All this is based on drawing as the main element of the research, both by the analysis of the original drawings available in the Archive of Treviso and by the redrawing of spaces and details that facilitates the understanding of the design. This dependence on drawing in the design methodology of Carlo Scarpa recalls the claims of (Ruskin 1857)⁰ that attributed to drawing the ability to solve two architectural needs; on the one hand the proportion, and on the other the abstraction.

Thus, Scarpa personifies the perfect paradigm that explains the use of abstraction to order and control the arrangement of elements in the architectural space, contributing to the transmission of sensations towards the one who lives their spaces. As (Le Corbusier 1921)⁰ explained; "The greatest delight of the human spirit is the perception of order and the greatest human satisfaction is the feeling of collaborating and participating in that order." This is achieved by Scarpa by the use of mechanisms of abstraction, applied to his creative methodology, to obtain as a result a composition of elements refined and reconfigured in a new order of space, which derives not directly from the technique but from experimentation, in a creative attitude close to phenomenology.

Fig. 6 Carlo Scarpa. Detail of the pillar of the Querini Stampalia Foundation. Venice 1961-63. Drawing ARC.
4. Conclusions

In this research process that goes through the bibliographical consultation, the consultation of the archives, the redrawing of the projects and the visit of them, the figure of Carlo Scarpa is valued as one of the greatest architectural exponents of the twentieth century. The quantity and quality of the graphic documents bequeathed by the architect explain the careful development of the creative process of his work, which resulted in refined spaces open to intellectual interpretation with the aim of achieving the extraordinary.

Consequently, the relations detected during the investigation between art and architecture lead us to propose the idea of the transmission of influences between the art of avant-garde and modern architecture as far as the concept of abstraction is concerned. For this reason, we can find in the work of Scarpa highlight of avant-garde neoplasticism, suprematist or constructivist positions. But also the scarpian creative process was based on the own investigation; of the space, of the constituent elements, of the materials, of the color, of the form, of the light or of the integration of architecture in the environment, and finally of the empathic capacity of his architecture and of a strong semiotic content of it. The symbol is diluted in his architecture through the abstraction, generating a variety of meanings that enrich its reading.

At this point I remember the ideas of (Barragán 1980)² when he wrote: "... I have dedicated myself to architecture as a sublime act of poetic imagination... in me it is rewarded... to all who pursues poetry and beauty" and that seem to speak about the architecture of Carlo Scarpa.

Citations

1 The commitment of Scarpa for adding, contrasts with the obsession of architectural modernity for eliminating.
3 Documentary archive of projects of the Carlo Scarpa Foundation in Treviso and other documentary resources: Carlo Scarpa photographic library of the Andrea Palladio archive and funds of the library and project archive of the IUAV University Institute of Architecture of Venice.

Basic bibliography

Frampton, K., 1999. Estudios sobre cultura tectónica. Ediciones AKAL.
Kant, I., 1919. Lo bello y lo sublime: ensayo de estética y moral. Espasa-Calpe.