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Heritage, Concrete and Symbolism in Carlo Scarpa's Architecture

Dziedzictwo, beton i symbolika w architekturze Carlo Scarpy

Keywords: architecture, concrete, Carlo Scarpa, heritage, symbolism

Słowa kluczowe: architektura, beton, Carlo Scarpa, dziedzictwo, symbolika

Introduction

At present, the definition of the term cultural heritage has a wide range of meanings, and as in the case of architectural heritage, it significantly shapes the identity, culture and history of certain states, nations and communities. Continuing with this approach, the modern architecture of the twentieth century and the use of concrete as an expressive material became the protagonists of our cities which, on many occasions, obviated the inherited architecture.[1]

On the other hand, there were also architects who, immersed in modernity, managed to find a symbiosis between modern and classical architecture by exploring the possibilities of the new material by excellence: concrete. One of the main figures in the use of concrete was Italian architect Carlo Scarpa who, with an attitude of respect for what already existed and continuous experimentation with concrete, constantly tested in his own works the search for a plastic and sincere communication through materiality.

As it did with Scarpa, this curiosity continues to preoccupy many of the avant-garde architects who continue to experiment with the use of appropriate materiality when faced with the reuse of historic buildings in order to adapt them to the new contexts of today. The aim of this paper is to present the results of the research conducted on Scarpa's work in this quest, leading to elevate the use of concrete in art in the architecture of his works by the mastery of its execution.[2]

Methodology

The present study responds to the interest in the symbolic consideration given by Scarpa towards concrete, and its consideration as a noble material. The process followed, began with a historical-documentary analytical method, through a bibliographical and documentary search on the author, making visits to his personal archive in order to analyze his drawings and documents first-hand.

Regarding the state of the art of the topic, the following should be specified: It is not our intention to delve into the dosage of the concrete mass, but rather to show the variability and experimentation with it. For more details on the first, it is appropriate to review the title *Il calzestruzzo nelle Architetture di Carlo Scarpa, forme, alterazioni, interventi*.[3] The analysis of the work *A Lezzione con Carlo Scarpa* by Franca Semi is essential, where the master tells us about his architectural ap-

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Fig. 1. Detail of the broken concrete wall, Querini Stampalia Foundation, 2014; photo by M. Twardowski.
Ryc. 1. Detal przełamanej ściany betonowej, Fundacja Querini Stampalia, 2014; fot. M. Twardowski.

proach and his project strategy as well as his sensitivity towards issues of respect for the historical in parallel with integration with modern architecture and the use of concrete for that aim.[4]

Furthermore, what is stated in this article has been possible after the analysis of 329 projects cataloged by the MAXXI Museum in Rome and their original documents, consulted in the Treviso Archives. Of these 329 cataloged projects, 9 correspond to the restoration of historic buildings.[5] The study was completed with an optical analysis of concrete elements, taking into detail the textures and patinas. Fundamental to this objective was the analysis work carried out by Greta Bruschi on the compositions and the state of conservation of the concrete textures used by Scarpa.[6]

Intervention in the architectural heritage: Synchrony between the classic and the modern

The current transformation of cities must consider the recovery of built heritage that, when rehabilitated, can work as a catalyst to rehabilitate urban areas. This recovery and preservation of the architectural past contributes to consolidating the identity of the places.[7] During the second half of the twentieth century, an experience on the intervention on architectural heritage was developed and promoted, trying to integrate into it the modern standards established during the first half of the century. After the Second World War, a large amount of architectural heritage in some European cities was damaged or destroyed. In other cases, the architectural heritage had been forgotten by the warlike economic priority. In Italy, during the second half of the twentieth century, Carlo Scarpa interpreted the classic-modern symbiosis by exploring the inclusion of materials such as concrete. The details thus designed proposed a dialogue between modern materials and old-fashioned elements. This creates a contrast resolved through abstraction in the design of elements that are part of the detail—between the old and the new.

The topic of the connection between materials was discussed by Frampton who explored the so-called adoration of the joint. The coexistence of different materials gives value to their union that is established by means of a caved joint that at the same time separates and links the materials[8] Scarpa pursued the integration of modern architecture in architectural heritage. His knowledge of history of architecture and art and his great sensitivity towards the essential characteristics of architectural elements, allowed him to integrate the old with the new in the modern details. As he said; "Modern architecture cannot be made without the knowledge of the architectural values that have always existed." Since the realization of his first works, Scarpa had dealt with the problem of interventions on historical buildings, such as the Aula Magna of the Cà Foscari University, in Venice in 1951 or years before with his museology interventions in the Gallerie dell'Accademia from Venice between 1945 and 1959. In Scarpa's intervention in the Querini Stampalia Foundation, designed in 1961, we find the integration of concrete with solutions that are not out of tune with the old. They appear expressively molded, and despite the brutality and authority of concrete, Scarpa was able to delicately control the material. In this way also in the back garden we find the plasticity of a concrete wall that from a poetic reading is decomposed by the source of the water (Fig. 1).

Subsequently, a relevant case is found in Scarpa's design of the access to the Università IUAV di Venezia, designed in 1966 and executed years after his death. The project consists of the intervention on the space adjacent to the Church of San Nicola di Tolentino and prior to the entrance to the refectory of the old monastery with the same name, transformed into an academic space for the school of architecture. A large concrete mass barrier designed by Scarpa conditions the passage towards the interior. This closing piece was designed to be arranged in such a way that it does not touch either the facade of the church, nor the dividing walls of the buildings between which it fits, leaving a gap that disconnects it from the bordering walls, thus highlighting its autonomy and respecting the heritage of existing buildings.

The result is an abstract composition of separated elements, which enter into a dialogue with each other

through the lines that form them. The orthogonal lines contrast with a single diagonal line running through the sliding door, mutilating one of the vertices of the large rough-looking Istrian stone. In this way, Scarpa introduced the debate on orthogonality and the aggression of the diagonal, which in its day had sparked controversy between Theo Van Doesburg and Piet Mondrian (Fig. 2).

After crossing the threshold, we reach the garden and discover another decision that speaks to us of the sensitivity for heritage and the subtle dialogue with it. The arrangement of the original door of the convent's refectory raises this reading. Scarpa described the placement of the ruins found, arranging the door horizontally on the garden floor, thus not respecting its original placement but the memorial connection of the ruins with respect to the place and the building. In San Vito di Altivole, Scarpa developed the Brion Tomb project. Although it is a new construction project, it relates and converses with the old cemetery both physically and metaphorically. Here the concrete, as a symbol, acquires different poetical meanings. Scarpa made concrete speak. The symbiosis is more formal in the case of the concrete access element, which reproduces the dimensions of the noblest niches or commemorative tombs of the old cemetery (Fig. 3).

The aim of harmonizing the modern and the ancestral through art is a strategy used by Scarpa. His project in Castelvecchio is an example of the consideration of architectural performance as one more element of an artwork exhibited in a museum. He added art to art. On an urban scale, we can find the same idea in recent research on the rehabilitation of heritage. The humanization of the urban environment demands the absence of conflicts between the new and the old. This humanization of urban space is achieved through two aspects; aesthetic and artistic—something that can be extrapolated to Scarpa's work. This artistic aestheticism must preserve the characteristics of the patrimonial and historical through strategies of unity, differentiation or contrast, and control of visual perception.[9]

Fig. 2. View of the entrance to the Instituto di Architectura di Venezia, 2017; photo by M. Twardowski.
Ryc. Widok wejścia do Instituto di Architectura di Venezia, 2017; fot. M. Twardowski.

Experimentation with matter

A relevant aspect of Carlo Scarpa's architecture is the extremely careful and artisanal treatment of concrete. It is necessary to go back to the beginning of his professional activity as a designer of the Venetian glass industry in the first half of the twentieth century, to understand that the essence of Scarpa's architecture is indebted to his previous training in those years. During this period, Carlo Scarpa discovered the light and expressive possibilities of glass, experiencing the ability to transmit sensations; visual, acoustic, and tactile stimuli through the material and the shape. This previous experience would later be implemented in his architecture, resulting in the paradigm of careful design and a taste for the nuances of architectural details. A tireless elaboration process due to his dedication; scientific due to his experimentation method; and intellectual due to his message and results, the result of a deep knowledge of history and an alignment with the modern theories of the twentieth century. In 1926, Scarpa began working for the MVM Cappellin company, dedicated to the craftsmanship of Venetian glass, and six years later, for the Venini firm until 1946. These twenty years of experience with master glassmakers, transmitted to him the philosophy of continuous experimentation and respect for the material with which he was working.[10]

Immersed in the process of designing and manufacturing glass, he acquired the need to seek and know the ancestral techniques already used by the Romans, exploring processes that were sometimes forgotten, introducing personal contributions such as the insertion of additives in the mass or small alterations in the process. All was manufactured, in order to achieve more

Fig. 3. Detail of the access to the Brion funerary complex, 2015; photo by A. Ros Campos.
Ryc. 3. Detal wejścia do kompleksu cmentarnego Brion, 2015; fot. A. Ros Campos.

Fig. 4. Detail of the concrete facade of the Venezuelan pavilion for the Venice Biennale, 2008; photo by M. Twardowski.
Ryc. 4. Detal betonowej elewacji pawilonu wenezuelskiego na Biennale w Wenecji, 2008; fot. M. Twardowski.

Fig. 5. Details of the south wall of the Brion funerary complex, 2015; photos by A. Ros Campos.
Ryc. 5. Detale ściany południowej kompleksu cmentarnego Brion, 2015; fot. A. Ros Campos.

expressive and unique effects. Over time, this research on the subject would be applied to architecture and in particular to the concrete.[11] Consequently, it is understood that for his architecture, Scarpa transferred all his concerns to the materials. The experimentation with the dosages in the stucco coatings or in the concrete mass allowed him to alter the color, the texture or the glossiness of the walls. He explored solutions that allowed altering the aging of the material's surfaces, where time and exposure to humidity would generate characteristic chromatic changes that would give his works a characteristic identity.

As previously cited, the analysis in the work of Greta Bruschi delves into the study of the macroscopic description of the concrete mix of some of Scarpa's project; the composition of the mixture; the technique of building; the texture of the concrete (rough, formwork footprint, irregularity and macroporous arid, stratified, vibrated, etc).[12] Hence, the taste for exposed concrete, fostered by architectural modernity and in particular by Le Corbusier, would be reinforced by Scarpa, giving it the leading role in his architecture. Le Corbusier had coined the term "béton brut" to refer to the constructive sincerity that the main material showed during the construction of the Unité d'Habitation in Marseilles, France, in 1952.[13] The term began to spread widely after British architectural critic Reyner Banham used it in the title of his 1955 article *The New Brutalism*.[14] Consequently, after the experiences of the 1950s in Great Britain led by Alison and Peter Smithson, this idea of material and formal sincerity was renamed Brutalism.[15]

Alluding directly to this expression, Scarpa would declare: "There is an expressiveness in reinforced concrete: the mark left by the wooden planks of the formwork, even if it is brutally arranged, can sometimes even be suggestive."[16] However, and despite this apparent defense of texture, in his architecture the explicit sincerity of the material is delicately resolved, reinforcing the idea that the nature of Brutalism is not contradictory to elegance or to the intervention in elements of architectural heritage.[17]

But the achievement of Brutalism is not exclusive to a single material. On the contrary, steel is also used as an expressive element (Fig. 2, 4, 7, 8). During his classes at the Venice Institute of Architecture, Scarpa stated: "Iron costs a lot, but it solves many problems. I use it easily because it seems hard, solid, even brutal, and in its brutality, it has great elegance." This statement gives us an idea that for Scarpa, Brutalism, beyond providing a formal and material sincerity, was a means to achieve beauty, and ultimately, distinction and originality.[18] On this allusion and taste for metal, in some of its details we can see the use of linear metallic elements that will be used to separate the vertical walls of the interior concrete pavement or the façade openings, as occurs in the Venezuela Pavilion in the Gardens of the Venice Biennale (1953–1956; Fig. 4).

This subtle monochromatic metallic combination, which also accompanies the Brutalist idea of raw materials, is a detail that he will later use again in the project of the Canovian Gipsoteca Museum in Possagno (Treviso, 1955–1957). In this case, the concrete is evidenced only in the diaphragmatic elements in the skylights that Scarpa had configured on the ceiling. These Brutalist-looking concrete beams, even more so in contrast to the plastered finish of the rest of the room, were arranged perpendicular to the proposed initial access, generating overhead lighting reminiscent of the later solution of the Nordic pavilion at the Venice Biennale in 1962, by Sverre Fehn.[19]

Throughout Scarpa's career, concrete details occupied a preferential place in the expressiveness of his designs, with the aim of proposing different expressive qualities. This process can be observed by analyzing some of the architect's works, in which concrete is presented as a means of plastic communication. For this, Scarpa explored the possibilities of the surface of the material investigating textures depending on the dosages and compositions, or depending on its manufacturing process (precast, in situ) or by varying the formwork (smooth, rough, in vertical or horizontal arrangement) or with treatments on the surface, or through differ-

Fig. 6. Series: Details of the Brion tomb, 2015; photos by: A. Ros Campos.
Ryc. 6. Seria: detale grobowca Brion, 2015; fot. A. Ros Campos.

ent formwork techniques obtaining different textures, such as washing, to reveal the aggregates.[20]

He also used to make concrete by strata, generating joints in the finished material, at the same time that it took care of different solutions of edges such as; sharp edges, finished with wooden or stone slats, finished with a metallic element or finished with glass tesserae (Fig. 4, 6, 8).

In the aforementioned Venezuelan Pavilion at the Venice Biennale, Scarpa experimented with a radical Brutalism with which he dealt with the external appearance of the pavilion. He accompanied the material roughness with the roundness of the building's forms. The main facade is resolved with exposed concrete configuring different textures and taking care of the detail of the edges. The name of the pavilion appears imprinted in the mass of the concrete (nowadays hidden). The textures used are in turn reminiscent of the works of Frank Lloyd Wright, for whom he professed great admiration.[21]

The structural calculation sheets that can be seen among the original documents of the Venezuelan pavilion are proof of Scarpa's dedication to detail, and especially to concrete. This interest of Scarpa in calculating and sizing the elements of reinforced concrete, demonstrates the concern for the precise study of the details.[22] It is necessary to stress the delicacy with which Scarpa worked to define the concrete details. Examples of that, are the stone rings embedded in the concrete mass of the pillars of the Ottolenghi house.[23]

In Venice, we can find similar examples in the combination of stone and concrete. In the monument to the Partisana he assembled pieces of Istria combined with the concrete mass to solve the design of the sculpture bed, while in the Querini Stampalia Foundation he reinforced the corners of the garden fountain with a subtle piece of stone embedded in the mass of the concrete.[24]

But beyond the technical solution, Scarpa exercises his taste for the categorical and expressive nuances of concrete, carefully thought out and resolved. His words help to understand this defense for material sincerity; "A plastered reinforced concrete is a beast, no matter how good the bricklayer is. In its essence, reinforced concrete has the idea of force. When it is plastered, nobody knows if it is made of reinforced concrete or of twenty-six-size bricks. I mean that it is necessary to be authentic, to try to exalt a given matter as much as possible."[25]

Concrete as a metaphor

Scarpa adopted constructive sincerity in search of greater expressiveness, but at the same time, he could not be oblivious to the meaning of his architecture and introduced metaphor in his works. That is why, in the poetic content of his works, the materials will assume a decisive role in the symbolic interpretation of his architecture. The influence of his past experience

Fig. 7. Details of the concrete staircase of Scarpa's new intervention in Castelvecchio in Verona, 2015; photos by: A. Ros Campos.
Ryc. 7. Detale betonowych schodów po interwencji Scarpy w Castelvecchio w Weronie, 2015; fot. A. Ros Campos.

made him deepen the relationship between glass, as a distinguished and precious material, and concrete, as a new source of visual expressiveness, giving it a noble character. He generated a rich dialogue between materials, which allowed him a dual game in his architecture through dichotomies such as delicacy and brutality, bright and matt reflections, polychrome and monochrome, or between different materialities: glass and concrete.

In the relationship between glass and concrete, he gave the latter the condition of support for the former, which he considered a precious material. This relationship between the two materials will be reflected in several of his works. This is the case of the concrete walls of the garden of the Querini Stampalia Foundation in Venice (1961) or those of the Brion Tomb in San Vito di Altivole in Treviso (1969–78). In both projects, the concrete acts as a setting for inlays of vitreous mosaics that, forming polychrome tessellated lines, run through the wall in an elaborate recreation of colors, textures and shine, embraced by the roughness of the raw and monochromatic concrete (Fig. 5).

In this description, Scarpa defined the chromatic subtleties of the golden glass tesserae in the arcosolium of the Brion Tomb "This is the interior of the arcosolium with the mosaics. I have explained to you before that the mosaic has a protective covering, made of thin glass that covers the gold that is otherwise lost; Usually, it is made of clear glass, and if you make it colored, you can have a green gold, a blue gold, a red gold, a purple gold, a yellow gold. Here is blue gold and green gold" (Fig. 6).[26]

At the same time, it would also give concrete the difficult task of serving as a link with the pre-existing, attending to the harmony between the new and the old. Thus, in some interventions on heritage architecture, Scarpa employs the concrete to resolve the union between historical areas and new interventions. This relationship between materials establishes a contrast between the new and the old that helps to recognize the value of the historical and to show the respect of the new for the heritage. Scarpa resolved the coexistence between new and old materials by establishing a separation between them. The joint acquired an essential role, separating the new element from the old one in evidence of its autonomy. This concordance between pre-existing materials and the new concrete is visualized in some examples. In the aforementioned Querini Stampalia Foundation in Venice, you can see on its ground floor, the exquisite coexistence between the Renaissance moldings of the sixteenth-century palace and the new concrete walls that respond to the extension of the Foundation in 1961. In the Museo di Castelvecchio, in Verona (1957–1964, 1967–1970, 1974) concrete made its appearance in different staircases. In the one attached to the eastern wall, adjoining the Scaligero bridge, in order to show the different chronologies of the materials, brick in the wall and concrete in the staircase, Scarpa separated both elements by means of a dark joint, which allows ab independent reading of both of them (Fig. 7).

However, the most remarkable point of the intervention in Castelvecchio is the museology solution that Scarpa proposes for the *Cangrande de la Scala* sculpture. This sculpture, which represents the most valuable piece in the museum's collections, is placed on a huge exposed concrete pedestal, whose formwork consisted of wooden boards oriented in different directions, in a symbiosis that shows the consideration of modern material in dialogue with the historical piece (Fig. 8).[27]

As previously mentioned, after Scarpa's death, the new entrance to the Venice University Institute of Architecture (1966–1978, 1984) was finalized. The access threshold, designed by him, is separated from the pre-existing buildings in order not to alter them and to show respect for their integrity. A ribbed concrete wall on its sides acts as a reflection of the steps of the neighboring Church of San Nicola di Tolentino and even the fluted shafts of its columns. Despite its rough appearance, concrete is a message of the delicacy with which the new separates itself from the old, respecting it. Another evident proof of this delicacy is the break that allows the entrance, emphasized by a heavy concrete slab, doubly inclined, delicately supported at the top of the wall (Fig. 2, 9, 10).

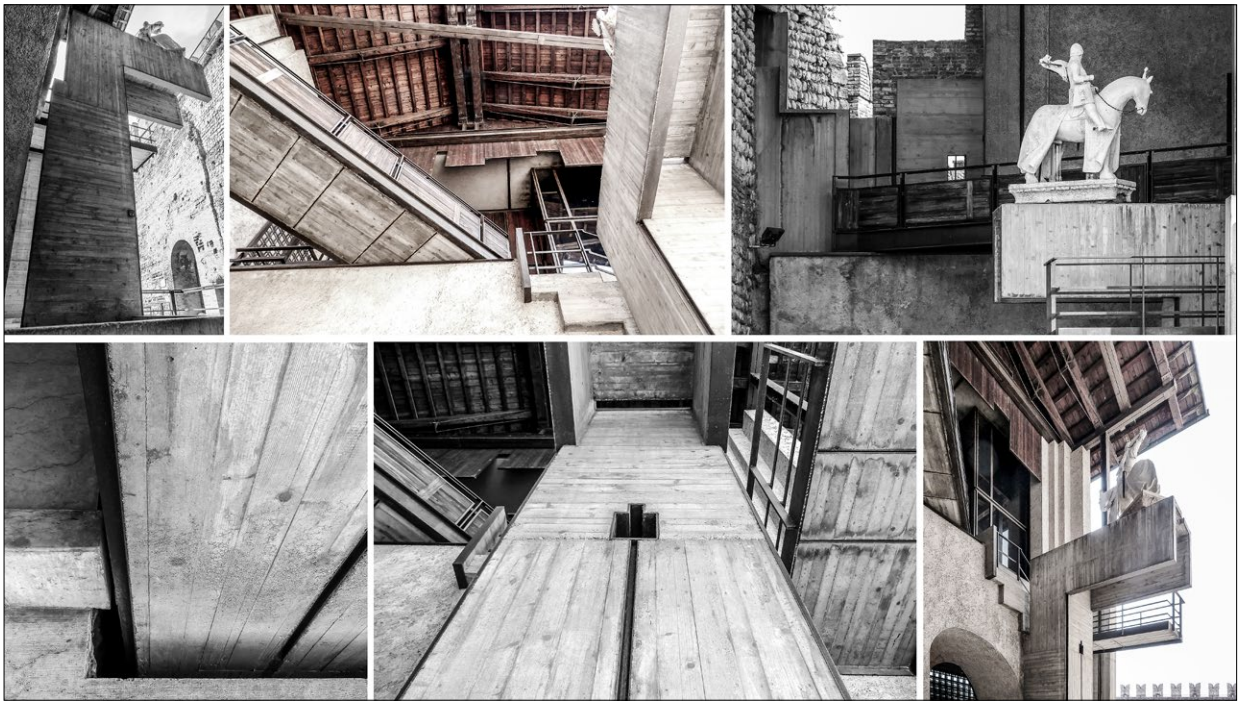

Fig. 8. Details of the concrete support made with wooden formwork of the Cangrande della Scala sculpture in the Castelvecchio museum, 2015; photos by A. Ros Campos.
Ryc. 8. Detale podpory betonowej wykonanej w drewnianych szalunkach: rzeźba Cangrande della Scala w muzeum Castelvecchio, 2015; fot. A. Ros Campos.

Fig. 9. Details of the access door to the IUAV, 2015; photos by: A. Ros Campos.
Ryc. 9. Detale drzwi wejściowych do IUAV, 2015; fot. A. Ros Campos.

Fig. 10. Detail of access to the IUAV, 2018; photo by: A. Ros Campos.
Ryc. 10. Detal wejścia do IUAV, 2018; fot. A. Ros Campos.

We can interpret the use of concrete with another symbolic intention. Scarpa would explore the Brutalist characteristics of concrete to emphasize the stereotomy interpretation of space and an allusion to the return to the cave, as an ancestral housing myth. In the Ottolengui house in Bardolino (Verona, 1974–1978), the use of concrete reaches a high degree of sophistication. The delicate work with the material and its textures shows the recreation in the search for the expressionist aspect.

Consequently, the materiality of the house both exterior and interior, uses concrete to solve floors, ceilings and vertical walls. The structure of the house, also made of reinforced concrete with stone inlays as rings in the pillars, shows us the traces of its formwork. Moreover, the house acquires a stereotomic character when it is half buried, as a strategy to create an uncovered access corridor, like a trench, made entirely of concrete and that Scarpa called the access street. This corridor is reached after descending from the path through an irregular concrete staircase with a certain fortuitous character, as if it were the result of nature's own randomness.

However, the Brion Tomb in the San Vito di Altivole cemetery in Treviso is the project that best represents Scarpa's idea of materials and symbols. It constitutes the synthesis of his architecture and the legacy of his ideas. We find allusions to the artistic avant-gardes.

He honored De Stijl by the compositions of orthogonal lines and subtly introducing virtual diagonals, generated thanks to the grooving and setback in the edges of the concrete walls. They provide an effect of shadows that generates the appearance of the aforementioned diagonals, as we can see in the elevation of the access to the complex. As mentioned above, they invocate the De Stijl polemic between the orthogonal and the diagonal (Fig. 3). However, in this project concrete is not limited to concepts such as Brutalism or De Stijl. The patina acquired by the passage of time, by aging, proposes a metaphor that we could interpret as a parallelism with human nature and the inevitable reality of death. An encounter with destiny and the depletion of living matter, turning the complex into an allegory of life and death, where concrete focuses both meanings.

In the walls, the color acquires a main role by causing a chromatic contrast between the gray of the cement and the colored glass tesserae, which are arranged horizontally along one of the walls or highlighting the edges of the edges of the termination of these. These tiles in ocher and gold tones further emphasize the noble nature of the support material and the transcendental connotation of the place, allowing the horizontality introduced by the line of tiles to reinforce the idea of the wall's boundary (Fig. 5).

But at the same time, in other walls of the enclosure it has vertical thin gaps. The horizontality of the wall will represent the finite, the end of life, while the verticality represents continuity. Additionally, Scarpa designed another mechanism that can be interpreted, a dark joint at the base of the south wall, through which the water from the pond is lost and falls generating a noise when overflowing, and which also causes a dichotomy between the solid mass of the concrete and the liquid. This is how the dualism of life and death appears in the Brion Tomb. Life flows, in watery matter, against the inert, which prevents continuity in the form of a wall.

At the same time, and as a nod to modernity and the American master Frank Lloyd Wright, Scarpa proposed the idea of breaking the corner, being appreciated in the detail of two of the corners of the enclosure, resolved with a concrete element as a lattice that allows to visualize the countryside. Observing carefully this detail, we can recognize the meticulousness with which the supports of it are solved, through a metallic support piece.

The stereotomy allusion of the arcosolium to the early Christian tombs is evident, as the last link between tradition and modern interpretation. In order to complete the sensory experience and move us to a primitive interpretation of the architecture, Scarpa alluded to the cavern as a refuge archetype, by creating a resonance cavity in the access corridor. For this, the concrete surfaces are filled by the sounds of the pavement pieces that move when stepped on, emitting a low rumbling sound, reverberating and emphasizing the concept of a cavity, as a refuge for the mother's womb, in a metaphor of the life.

Conclusions

The presence of concrete in Carlo Scarpa's work constitutes the paradigm of experimentation with the solid material of architecture. Scarpa, through a meticulous abstraction, develops the meaning in the symbolic content of his work, enhancing a deep interpretation of his intentions. This abstraction allowed him to synchro-

nize Modernity with the architectural historical heritage. His proposal is an intellectual architecture.

Concrete will become the fundamental material used in many of his works, and should be preserved as a sign of identity and value of modern architecture, preventing it from being lost or distorted as in other cases of modern architecture. It will give it an exclusive role, even anticipating the behavior of the material, predicting the result of its aging and giving it the character of a symbol of modernity, but also, giving it a profuse expressiveness. Texture, perception and persistence over time, are some parameters that we could link to the use of concrete in Scarpa's architecture, presenting this material as a way of plastic and sincere communication.[28]

The results obtained in the materiality of Scarpa's work are the result of a tireless elaboration process, achieved both by his dedication through a scientific method of experimentation, and by the intellectual nature of his message. All this was possible thanks to deep knowledge of the history and an alignment with the modern theories of the twentieth century. His respect for architectural heritage did not prevent him from experimenting with new solutions in a modern interpretation.

Obviously, experimentation in the use of materials for his works is not a consequence of immediacy. On the contrary, the knowledge acquired after twenty years of testing in the design of glass elements, allowed Scarpa to acquire a taste for naked material and to recognize its expressive possibilities. This path led him to work Brutalist solutions, almost primitive, that allowed him to convey the raw material of his architecture with sincerity. The slow design process in the details, attest to the meticulousness with which Scarpa elaborated his architecture.

It would be necessary to evoke again the Brion Tomb, which can be interpreted as the conclusion to a life of architectural design and experimentation, a masterful lesson in architecture full of details, meanings, dualities, metaphors and contrasts, with a prominent presence of concrete in the resolution of the complex. All of this focuses on a scientific project method, where research on history, matter, space, light, modernity, abstraction and the intellectual character of architecture are the protagonists of originality.

Finally, among his legacy two examples of the parallelism in his work should be highlighted; the permanent duality that we appreciate in the aforementioned Brion Tomb, where the dualism between concepts such as; modern–ancestral, new–old and life–death. The second example is the stereotomy-tectonic vision of the architecture in the Ottolengui house but also in the Brion complex. Both projects, carried out in the last year of his life, return us to the theme of the origin of architecture. A debate from the Enlightenment on the dilemma of the cave or the cabin as an inflection of the intellectuality of architecture.

As a conclusion, we could qualify his architecture as a permanent dichotomy of meanings and the continuous search for expressiveness under the domain of the material. In the intellectual, the primitive and the modern are entangled as in the details do the concrete and the ancient elements.

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[1] A. Kozień, *Efficient Management of Cultural Heritage by Local Government Bodies*, "Wiadomości Konserwatorskie – Journal of Heritage Conservation" (hereinafter: "WK") 2020, No. 64, p. 7–16.
[2] M. Orlenko, Y. Ivashko, *The Concept of Art and Works of Art in the Theory of Art and in the Restoration Industry Art Inquiry*, "Recherches Sur Les Arts XXI" 2019, p. 171–90.
[3] G. Bruschi, *Il Calcestruzzo nelle architetture di Carlo Scarpa: forme, alterazioni, interventi*, Bologna 2005.
[4] F. Semi, *A lezione con Carlo Scarpa*, Venezia 2010.
[5] Palazzo da Mula, Murano, Venezia (1925–1926); villa Velo, Fontaniva (1926–1927); Ca' Foscari, Venezia 1935–1937; casa (Sacerdoti), Venezia (1940–1943); Museo di Castelvecchio, Verona (1958–1974); chiesa di Santa Caterina per il Museo Civico, Treviso (1973–1975); villa Matteazzi-Chiesa, località Ponte Alto, Vicenza (1974–1975); villa Loschi Zileri, Monteviale (1975–1976); Castel Grande di Bellinzona, Bellinzona (1978–1979).
[6] F. Semi, op. cit.
[7] E. Węcławowicz-Gyurkovich, *To Demolish or Preserve for Posterity*, "WK" 2020, No. 62, p. 85–96.
[8] K. Frampton, *Studies in Tectonic Culture: The Poetics of Con96. struction in Nineteenth and Twentieth Century Architecture. Carlo Scarpa and the Adoration of the Joint*, Cambridge 1995, p. 299–333.
[9] O. Kashchenko et al. *Revitalization of the Urban Environment and Contemporary Trends of Its Humanization via the Means of Art*, "WK" 2020, No. 61, p. 31–34.
[10] Venini is a company dedicated to the design of Murano glass products, where glass has been manufactured for more than 900 years. In this link you can consult the designers who at some point have collaborated for the firm. http://venini.com/en/authors/.
[11] M. Barovier, *Carlo Scarpa: Venini 1932–1947*, Milano 2013.
[12] Ibidem.
[13] W. Boesiger, *Le Corbusier – Œuvre Complète Volume 6: 1952––1957*, Berlin–Basel 2015.
[14] R. Banham, *The New Brutalism*, "Architectural Review" 1955, December.
[15] Peter Smithson (1923–2003) and Alison Smithson (1928––1993). English architects who studied brutalist architecture during the 1950s and 1960s.
[16] F. Semi, op. cit., p. 89.
[17] R. Banham, *The New Brutalisim: Ethic or Aesthetic*?, New York–London 1966.
[18] F. Semi, op. cit., p. 67.
[19] Sverre Fehn, a Norwegian architect (1924–2009).
[20] *Bocciardato, martellinato, scalpellato* – bush hammered, hammered, chiseled.
[21] Reference is made to the multiple concrete details designed by Frank Lloyd Wright. Storer House, Los Angeles, California, USA, 1923. Ennis House, Los Angeles, California, USA, 1924. Or the Imperial Hotel in Tokyo, Japan, 1923.
[22] Centro Carlo Scarpa, Via Pietro di Dante, 9, 31100 Treviso TV, Italia.
[23] G. Tommasi, et al., *Carlo's Scarpa Drawings for the Ottolenghi House*, Regione del Veneto 2012.
[24] C. Martínez Arroyo et al., *The Water Line. The Monument to the Partisan Woman by Carlo Scarpa in Venice*, "Rita Revista Indexada de Textos Academicos" 2019, No. 11, p. 36–43.
[25] F. Semi, op. cit., p. 97.
[26] Ibidem, p. 270.
[27] Alberto I Canfrancesco della Scala, known as Cangrande della Scala, lord of Verona between 1308 and 1329.
[28] N. Antonenko, O. Deriabina, *Preservation of Monuments of Modern Architecture in Ukraine (1990–2010)*, "WK" 2020, No. 62, p. 7–15.

Abstract

In the intervention of architectural heritage since the second half of the twentieth century, the need for coexistence between historical or traditional materials, with those derived from the latest architectural movements, has been experienced. This is the case of concrete, the material par excellence of the Modern Movement and which has come to acquire its own prominence from the hand of architects such as Le Corbusier or Scarpa. The latter explored the expressive possibilities of the material, drawing inspiration from ancestral customs and trying different solutions in its composition, which made Scarpa an original innovator. The result was the use of matter as a means of transmitting meanings in its architecture, where concrete is the protagonist of this action and in which any current intervention must be subject to the maximum respect for this lexicon. This text aims to reflect on the symbolism and interpretation of the use of concrete in Scarpa's work.

Streszczenie

W interwencyjnych pracach konserwatorskich w obrębie dziedzictwa architektury podejmowanych od drugiej połowy XX wieku dostrzegano potrzebę współistnienia materiałów historycznych czy tradycyjnych z wywodzącymi się z najnowszych nurtów architektonicznych. Tak jest w przypadku betonu, materiału *par excellence* Ruchu Nowoczesnego, który zyskał na znaczeniu w rękach takich architektów jak Le Corbusier czy Carlo Scarpa. Ten ostatni, badając różnorodne rozwiązania składu masy betonu, dodatków i technik szalunkowych, eksplorował ekspresyjne możliwości materiału, czerpiąc inspirację z pradawnych zwyczajów i próbując różnych rozwiązań w jego kompozycji, co uczyniło z niego oryginalnego innowatora. Efektem jest wykorzystanie tego materiału w jego architekturze jako środka przekazu znaczeń i szacunku dla każdej bieżącej realizacji artystycznej. Artykuł ma na celu refleksję nad symboliką i interpretacją użycia betonu w twórczości Scarpy.