Signs of Memory: Le Corbusier's drawings at villa E.1027

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Design, beauty, the ethical question, aesthetics: all these terms are present in the story of Le Corbusier's drawings on the walls of Eileen Gray's villa E1027. Seven drawings were painted by Le Corbusier on the interior and exterior walls without her knowledge. They are drawings of considerable size and in very vivid colours, in themselves they are of quality and the author is undoubtedly one of the people who changed the culture of the 20th century. On the other hand, Gray's villa is also considered today one of the masterpieces of modern architecture: it is essential in its lines and colours and every detail has been carefully thought out and designed. The situation that arose with the inclusion of Le Corbusier's wall paintings poses many questions for those involved in Restoration. According to some lines of thought every intervention is a trace and as such has its own meaning, tells a piece of history and as such deserves to be preserved. In this specific case, however, Le Corbusier's brightly coloured drawings completely change the perception of the villa's spaces. The preservation of a trace, no matter how significant it may be, has in this case, the power to change and cause the loss of the basic idea of this villa: preservation causes loss. This story therefore brings an important reflection on the role of conservation, on the ethics of restoration and also on the power that a drawing on a wall can have.

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Introduction

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The paper deals with the results of a scientific research carried out at the Department of Architecture and Design, University of Genoa (Italy), by the author, relating to the tools and methods of Knowledge and Conservation of Modern and Contemporary Architecture (University Research Projects for which the writer is scientific responsible: PRA 2014-'16 Archaeology of Architecture and the Restoration Site, PRA 2018-'19 Conservation and Restoration: methods of analysis and strategies – monitoring/conservation of tangible and intangible heritage, PRA 2022 The Archaeology of Architecture for 20th and 21st Century Structures, knowledge for restoration¹) (Pittaluga 2021). In particular, the various researches undertaken since 2014 have had and still have the aim of investigating the most recent architecture with the tools of the archaeology of architecture², in a

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¹With the Department of Geography, Prehistoria y Arqueologia, Facultad de Letras del Pais Vasco. ²The archeology of architecture is a discipline developed in the 1970s by Tiziano Mannoni and his collaborators. It has the purpose of analyzing the built visible in elevation with archaeological tools (in part deduced from the archeology of excavation, adapting them to the elevation, in part creating new ones). It aims to identify homogeneous phases of construction, destruction and transformation directly from the observation of the walls, painted surfaces and architectural elements; he also uses absolute and relative dating tools (Mannoni 1994, Boato 2008, Casarino, Pittaluga 2001, Pittaluga 2009).

deeper way than has been done so far, and of grasping its various distinctive signs. In fact, in many contemporary structures there are interventions after the construction, even if the latter took place in recent times. These modifications are often due to changes in ownership, changes in taste, plant adaptations and, very often, repairs following deterioration of materials and/or structure (Pittaluga 2022). Understanding the meaning of the different layered signs and understanding their importance allows one to intervene on them more consciously and preserve their memory (Pittaluga 2009, Pittaluga, Nanni 2016). The 'Restoration of the Modern and Contemporary' is in fact a need that is already manifesting itself now, but in the near future will become an urgent issue to which we should give targeted answers. This research includes the case study described in this paper: the signs of memory of Le Corbusier's drawings in villa E.1027.

In the article we have: 1- an introduction relating to the broader research in which this case study is placed, 2- a brief explanation of the methodology used to analyze villa E.1027, 3- a concise description of villa E1027 and its particularities and the affair relating to le Corbusier's drawings on the walls of the villa (literature review), - the issues raised by le Corbusier's graffiti in the light of some theories of Restoration (discussion), 4-Conclusions with broader considerations.

Methodology followed in the case study research: Villa E.1027 - the villa and its transformations

The research aims to identify tools and methods of reading in order to have an in-depth knowledge of the built environment, even the most recent one, and, on the basis of this knowledge, to establish the most suitable methods for a conservative restoration of the existing building. The methodology followed in the study on villa E.1027 is an extension of the entire research on contemporary archaeology and knowledge/conservation tools (PRA 2014-2022): it starts from iconic architectures of the modern period, architectures on which there is a lot of data available, in order to be able to reason about the various important elements we also tried to understand whether the tools currently available for the study of the built environment (in particular the archaeology of architecture) are sufficient or need to be modified. There was therefore a first phase of investigation of indirect sources (bibliographical, published and unpublished sources, archive documents, graphic representations, videos and interviews...) and a second phase of data collection from direct sources (architecture archaeology tools) (Pittaluga 2009) and a third phase of critical reflection both in relation to the tools of knowledge and analysis and in relation to the impact of knowledge as a concrete aid for a more conscious conservation.

Villa E1027, icon of the Modern. Analysis between direct sources and indirect sources

A true icon of modern architecture, Villa E-1027³, it is Eileen Gray's first architectural creation⁴ (1926-1929) and testifies to his attention in the design of every detail, even the smallest. The name: E.1027, is a code closely connected to the name of the designers-owners of the villa itself, Eileen Gray and Jean Badovici: E stands for Eileen, the 10 is Jean's J (the tenth letter of the alphabet), the 2 is Badovici's B and the 7 is Gray's G.

The entire villa has a manifesto value, both for the architectural envelope, for the fixed and movable furnishings, for the lighting and ventilation and the relationship between the internal and external environment⁵. "On an exhibition placard associated with E.1027, Gray articulated her objectives:-House envisaged from a social point of view: minimum of space, maximum of comfort-. Toward this end she initiated certain ordering principles that she later developed in her own houses in Castellar and Saint-Tropez: orientation of the main living space to southern exposure and view and of the bedrooms to the rising sun; segregation of private areas from public zones of the house; and isolation of service spaces. The spatial hierarchy of E.1027 reflects Badovici's penchant for entertaining: an open living/dining room capable of accommodating extra guests and a discrete zone for sleeping and work on the main level; an independent kitchen adjoining an outdoor cooking space near the main entry; a guest room and minimal maid's quarters on the lower "(Constant 1994, p.269).

E.1027 was built in an isolated stretch of the Côte d'Azur, on the western side of

Cap Martin overlooking the Gulf of Monaco. Gray had chosen this spot for the

3In 1930 villa E.1027 was published on the front page of the first issue of the magazine Architecture

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Filoan Gray (1878, 1976) was born into an aristografia family in Iraland in 1878. After attending art

⁴Eileen Gray (1878-1976) was born into an aristocratic family in Ireland in 1878. After attending art school in England (Fine Art School in London), she moved to Paris in 1902 to continue her education as a painter and designer. Particular and much appreciated is his use (and adaptation) of traditional Asian lacquering techniques to the design of contemporary furniture. In 1912-13 his fame grew for his luxurious screens, tables and door panels. In 1919 he created the interiors for the Parisian apartment of Madame Mathieu Lèvy. This work consecrates her as an interior designer icon and allows her to design and create some furnishing accessories. It also becomes part of the De Stijl movement. She is one of the most important lacquerers of the last century, thanks to her studies under the guidance of a Japanese craftsman. His lacquered panels, such as the Screen screen (1922-25), have become a symbol of Art Dèco furniture first and then Modernist. Some of his creations are true design icons: the E.1027 table (1927), the Lota sofa, the Transat armchair (1925-26) and the Bibendum armchair (1925) are iconic pieces that have made the history of design. The meeting with Jean Badovici, Romanian architect and editor of the influential magazine L'architecture Vivante, brought her closer to the world of architecture. In 1972 she was named Royal Designer For Industry by the British Society of Arts.

⁵Gray was entirely responsible for the design and construction supervision of villa E.1027. Badovici mainly assisted in technical matters when needed. Some magazines have mentioned the villa and how Le Corbusier brought prestige to the house with his art. Many publications revolve around the great name of the French architect and paint Eileen Gray as a satellite of Le Corbusier and Badovici: the news reports appear to be a woman who is shy and respectful of the two architects, who would have contributed a lot to the design of the villa. However, some studies by Joseph Rykwer, a well-known architecture historian, have questioned this version of events, helping to rehabilitate the figure of Gray as the true architect and architect of this construction (Rikwert 1968).

beauty of its view. The villa follows the level curve, emphasizing the relationship with the west side, towards the sea and the sunset, with a large glass surface that interrupts the white masonry. Wanting to build a house that interacts with the natural elements that surround it, Gray has carefully studied the wind and the angles of the sun at different times of the day and of the year and in this way has managed to build a structure with a constant and evolving relationship with the sun, the wind and the sea. He designed the house so that the inside and outside were well integrated together. (e.g. see in paragraph 3.1 vernacular window).Its interior spaces are loosely composed and its overhangs supported by slender solid iron pilotis.

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Figure 1. Villa E.1027. "...was built in an isolated stretch of the Côte d'Azur, on the western side of Cap Martin overlooking the Gulf of Monaco..."





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Source: PITTALUGA 2023

The "fenêtres en longueur" allow an excellent relationship with the light and the surrounding landscape and the articulated roof allows it to be used as a solarium. To compensate for the uneven ground, an artificial terrace forms the basis of what is articulated as a volume on two levels, for a total area of 120 square metres: the first full-height block rests on concrete pillars and is intended to house the sleeping area, with two bedrooms and bathrooms, plus direct access to the garden. The whole living area faces south. The glazed upper floor is the true fulcrum of the Villa, and it houses the entrance, the living area-belvedere, a study and the master bedroom, as well as a covered outdoor kitchen. A spiral staircase inside the villa connects the lower floor, the guest bedroom and the staff area. A covered space of 55m2 is available under the stilts. To crown it all, the panoramic terrace, which opens onto the sea. The plan of the entire building is an L-shaped plan, in order to have different views and take advantage of different light and ventilation conditions. The villa has the clean and squared profiles of a typical

modern building and makes explicit the five principles of architecture theorized by
Le Corbusier: thestiles, the free plan, the roof garden, the ribbon windows, the free
façade.

Figure 2. Villa E.1027, fenêtres en longueur. "...Not only does each room have its own balcony with access to the outside, but the fixtures, shutters, windows are all removable..."



Source: PITTALUGA 2023

However, Eileen Gray's ingenuity manifests itself in all its strength and originality even more in the interiors. "Everyone must be able to feel free and independent" and "even in the smallest house one must be able to feel alone,

completely alone": these are the principles that guide the project, and to which the Irish designer strictly adheres. The internal composition of the house starts from the need for each of its inhabitants/guests to carve out spaces of privacy and comfort even in a small house. Consequently, the space is organized according to this need for isolation and freedom: everything is calculated: the paths, the gestures, the habits, the perfect exposure for each room, the ideal view, the suspense that is created in the passage from one environment to another. Not only does each room have its own balcony with access to the outside, but the fixtures, shutters, windows are all removable⁶, so that each guest is allowed to modulate and customize the space according to their own changing needs. Every complement and piece of furniture in the house is functional, indeed multifunctional. The interior design tries to adapt to the human body and its needs. The creation of tables, chairs, armchairs, screens, rugs, sofas, lamps, mirrors are designed only for the space that was to accommodate them. In this sense, the E.1027 can be considered as a "total work of art" where container and content live in absolute symbiosis. Gray then custom-made all the furnishings, including the famous Adjustable table E.1027 (height-adjustable by a metal chain) in tubular steel, a material she made extensive use of, anticipating in a certain sense the paradigms of the Bauhaus. As a pioneer of design, she uses the metal tube which will then give shape to the Bibendum armchair, the Tube neon lamp. To recreate the desk that was in the alcove of his office, nickel-plated steel tubes from Vienna were used and the wooden top was built by a craftsman from Menton. However, the attention to materials was also associated with comfort: for example, the support surface of the table in the living area was covered in cork to dampen noise

In the large room on the ground floor, he installed the Transat armchair, inspired by those of ocean liners, he also created a black leather bench with a chromed steel tube structure and floating tables. Other pieces of furniture are integrated, such as the headboard of the small sofa in the large room, with its pillow cabinet, its night light with blue light and its electrical outlets. Next to it, a book lectern is supported by a folding metal arm. In the guest bedroom, a similar device carries the tray inserted into the flap-and-shelf secretaire that hugs the wall. In Eileen Gray's bedroom, the tall, narrow bathroom cabinet acts as a screen between the sink and the work studio. Revolving drawers are stacked in one corner. In the guest bedroom, the famous Satellite circular wall mirror with an articulated arm supporting a small round mirror was the subject of a patent filed by Jean Badovici. The carpets, which Eileen began exhibiting from the early twentieth century, deserve a separate discussion: all woven and knotted by hand, strictly in natural fibers. For the villa he designed four including the "Centimeter", round in shape with circular motifs or the "Marine d'abord" carpet. It can therefore be said that, in general, the style in the villa follows the principles of French rationalism, with a preference for pure forms and white or light tones, interrupted by some metal and leather elements. Gray therefore combines the compositional research of the Dutch group De Stijl in the interiors with the Weissenhofs for the

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⁶The "accordion" structure of the bay windows opening onto the terrace is reminiscent of the screens Gray designed in his youth during her Art Deco period

exterior⁷. The attention to all the details, from those on the scale of the landscape to those of the furnishing complement, demonstrates that for Eileen the villa is much more than a house, its value went far beyond the material value. It was a manifesto, a way of living and thinking about the home. She herself, in the article in the Architecture Vivante magazine, expressed herself in this regard: "Je crois que la plupart des gens se trompent sur le sens qu'il convient de donner à ce mot « type » est synonyme de création simplifiée à l'extreme et destinée à être reproduite en série. Mais je comprends autrement. Une maison type n'est pour moi qu'une maison dont la construction à été realisée selon les procèdés techniques les meilleurs et les moins coûteux,et dont l'architecture réalise pour une situation donnéé, le maximum de perfection; c'est-à-dire qu'elle est comme un modèle qu'on devra,non pas reproduire à l'infini, mais dont on s'inspirera pour construire dans le même esprit d'autres maisons » (Gray, Badovici 1929, p.9)

Villa E.1027 was abandoned for many years, was heavily bombed during the war and passed through many owners; it was also ruined by vandals. In the 1990s it was purchased by the government agency Conservatoire du Littoral. Restoration work began after 2000, with "emergency restorations" completed by 2006. Further restorations took place between 2006 and 2010 under the auspices of the Architecte en Chef et Inspecteur Général des Monuments Historiques, Pierre-Antoine Gatier, who restored many important elements, including the facade, windows and murals by Corbusier. Between 2013 and 2015, the Cap Moderne organization, a non-profit organization, carried out the last restorations (about 1 million euros). In 2016 The Price of Desire, a film by Irish director Mary McGuckian set in E-1027, was released in theaters, in which the Irish director tells in detail the theme of the rivalry between Le Corbusier and Gray.⁸

The Conception of the villa and the contrast with Le Corbusier's theories

If it is true that villa E.1027 is a perfect realization of the five points theorized by Le Corbusier for modern architecture, it is also true that for different ways of conceiving design there are strong differences with the Swiss master.

Caroline Constant captures some of these differences: "In contrast to the urban preoccupations that informed Corbusier's early purist villas, Gray generated her domestic architecture from within the private domain of dwelling. She conceived of the house from the interior outward, from reconsideration of the

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⁷Which Gray probably inspired after a trip to Utrecht (1925) to visit the Schröder House, designed by Rietveld, and Stuttgart (1927).

⁸L'ultimo restauro è cominciato nel 2019 e si è concluso con la riapertura al pubblico della villa. Una parte importante dell'intervento ha riguardato, oltre ai contenuti, il contenitore, l'architettura in *béton*, il risanamento della struttura in cemento armato, fortemente danneggiata dall'ambiente aggressivo salino. Dopo avere effettuato prove non distruttive per valutare lo stato di corrosione delle armature, risultate variamente compromesse, e avere valutato la composizione, le performance meccaniche (piuttosto deboli), la carbonatazione e la durabilità del calcestruzzo, il team di restauro ha optato per un intervento con tecniche miste, una tradizionale con risanamento locale del calcestruzzo ammalorato e una con protezione dei ferri contro la corrosione per corrente imposta. Parallelamente al risanamento della struttura, gli arredi interni sono stati rifatti replicando i materiali e i metodi originali, sulla base di foto e documenti del National Museum di Dublino.

modern individual's need for an interior life and a place of retreat, a direction seemingly at odds with modern movement predilections for transparency and spatial continuity". The interior plan should not be the incidental result of the façade," she argued in reaction to certain of Le Corbusier's built works; it should live a complete, harmonious, and logical life". She sought a more integrated conception, an interior that "as in Gothic times [was] a homogeneous whole built for man, to the human scale, and balanced in all its" (Constant 1994, p.269).

The house was designed as a "la maison minimum": simple and efficient, with areas of built-in furniture and no wasted space. Gray took issue with Le Corbusier who famously thought that "the house is a machine to live in". Rather, Gray described the house as a living organism, an extension of the human experience, stating that "it's not just about building beautiful sets of lines, but above all housing for people" and "Formulas nothing, life is everything. And life is simultaneously mind heart." Gray created a villa with an open and flexible design that allowed the user to experience the living space as an organic whole comprising the self, the home and the external environment. At the same time, her designs allowed the user to maintain a feeling of intimacy and privacy, both values she greatly valued (Constant 1994, p.269).

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Figure 3. Villa E.1027, details. "...a vernacular Niçoise shutter adapted to the strip window enabled the occupant to manipulate outward views and penetration of the sun's rays, admitting natural ventilation while protecting internal

privacy..."



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Source: PITTALUGA 2023

In the Introduction present in the magazine "Architecture vivante" where all the details of the villa are published, through the dialogue with Badovici, Gray brings out another difference with Le Corbusier's way of designing. Jean-Lucien Bonillo puts it this way" On peut penser dès lors que le dialogue qui introduit le numéro de l'Architecture Vivante sur E.1027 doit beaucoup aux idées d'Eileen Gray. Sensible aux productions du Stijl elle l'était moins au dogme de la "dénaturalisation". Et elle parvient ici à exprimer sa posture spécifique sur la question de l'intérieur moderne, en marquant également sa différence avec Le Corbusier. La position de ce dernier[Le Corbusier] était de distinguer clairement, dans les intérieurs, les oeuvres d'art du mobilier utile (équipement). L'enjeu étant de laisser tout leur pouvoir d'expressivité et leur capacité de présence aux oevres d'art, et peut-etre surtout toute sa force d'expression au déploiement de l'espace lui-meme[and perhaps it is no coincidence that he later decides to express himself through the art form of murals to change the space itself]. Rien n'est plus étranger à ce moment à la pensée d'Eileen Gray comme le prouve sa charge, dans ce texte, contre les "casiers normalisés" (LC) et la tyrannie de l'idée de production en série industrielle ». ⁹ This difference in approach can also be seen in the construction details of some elements: for example in the windows where a vernacular Niçoise shutter adapted to the strip window enabled the occupant to manipulate outward views and penetration of the sun's rays, admitting natural ventilation while protecting internal privacy. The strip windows was a primary element in Le Corbusier's domestic ensemble, " a tool in a four-reaching strategy aimed at putting the traditional habitation in a critical position, not only with regard to its form mit also to its use and significance". In contrast to Le Corbusier's sharp delineation of the strip window, Gray articulated hers as a layered membrane. In outer zone of slinding shutters with horizontally pivoting louvers contribute to the privacy of the interior while controlling outward views, penetration of the sun's rays and ventilation. At the same time, its vertical panes of glass are analogous to the human body, suggesting the possibility of embrancing moderne movement principles without suffering the loss of anthropomorphic reference inherent to traditional windows. These panes and the doors opening onto the terrace pivot and slide, much like draperies, to facilitate an interrupted expanse, the interior can thus open directly to garden an sea" (Constant 1994, p.274)

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Le Corbusier's relationship with Villa E.1027

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When he crosses the threshold of Villa E.1027 for the first time, Le Corbusier is struck by lightning: that work presents all the five principles of modern

⁹ "We can therefore think that the dialogue that introduces the issue of "Architecture Vivante" on E.1027 owes a lot to the ideas of Eileen Gray. Sensitive to the productions of the Stijl, she was less sensitive to the dogma of "denaturalization". And here she manages to express her specific position on the question of the modern interior, also marking her difference with Le Corbusier. The position of the latter was to clearly distinguish, in interiors, works of art from useful furniture (equipment). The challenge is to leave all their power of expressiveness and their capacity for presence to the works of art, and perhaps above all all their force of expression to the deployment of the space itself. Nothing is more foreign at this time to the thought of Eileen Gray as evidenced by her charge, in this text, against "standard lockers" (LC) and the tyranny of the idea of industrial mass production.

architecture that he theorized; Eileen learns that the master appreciated her work, and is happy about it. However, some dates are significant for understanding the particular relationship that Le Corbusier could have had with this villa. "In 1929 E.1027 was already inhabited by Eileen Gray and Jean Badovici in all its architectural splendor and in all the beauty of its interior spaces studded with "dancing" furniture designed by the eclectic Irish artist and with carpets designed by herself. When Le Corbusier began work on Villa Savoye in Poissy in February 1929, a manifesto of the five points of architecture, the E.1027 was already a real tangible architectural body... something to make the veins and wrists tremble in the watchmaker's son! The house, an architecture without theory and with designs poor in content (see paragraph 6), stood in the rocks of Roquebrune and, overlooking the sea, showed with its extraordinary beauty what would become the five points of the language of the Modern Movement. It is very probable that Charles-Edouard Jeanneret-Gris considered the designer a heretic and that house a heresy to the point of desecrating it with his murals whose current value has certainly been attributed to their signature rather than to the content" (Benton 2021). In 1938 Badovici, now left alone after breaking up with Gray, invited his friend Le Corbusier to his home, and the great architect-artist did not hold back from having to express his art and decided to give a "touch of colour" to all that white, painting not one, but eight gaudy irreverent murals¹⁰. The graffiti are in different parts of the house: some are in areas in contact with the outside, such as the graffiti near the entrance on the upper floor and the one in the open space of the lower floor, in the pilotis area. Others are in the internal rooms, near the corner bar, in the living room, in the guest bedroom. Le Corbusier never apologized, nor did he consider having the murals removed. Indeed, he was very proud of them: in 1948 when he returned to photograph them he apparently said that "they exploded from sad and opaque walls, where nothing else was happening" 11.

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¹⁰ Le Corbusier stayed there for a few days in 1937, 1938 and 1939. In April 1938, encouraged by Jean Badovici, he painted two murals there, returning the next year to add five. He declared: "I also have a furious desire to dirty the walls: ten compositions are ready, enough to smear everything". It must be said that the mural is in complete contradiction with the definition that Le Corbusier himself gave of architecture as a "pure play of light and volume". According to Eileen Gray's biographers, Gray did not appreciate these paintings. Damaged during the war, several paintings were restored by Le Corbusier himself in 1949 and again in 1963. Three paintings, however, have disappeared. The four surviving paintings have been restored. a quiet appreciation of the genius of Eileen Gray, was hidden behind a panel during the last restoration.

¹¹ According to Peter Adam, Eileen Gray never returned to E-1027 after 1931 and it is probable that she only found out about the paintings in 1946 or 1948, when Le Corbusier published them in the fourth volume of his Oeuvre Complète, The New World of Space and several other publications. It is understandable that Gray might have been disconcerted by the captions to the illustrations of his paintings, in which he claims that the walls he painted on were «dull, sad wallwhere nothing was happening»36. This led to an angry exchange of letters between Le Corbusier and Badovici between 1949 and 1950 and a temporary interruption in their friendship

Figure 4. Villa E.1027, Le Corbusier's Graffiti





Source: PITTALUGA 2023

Figure 5. Villa E.1027, Le Corbusier's Graffiti







Source: PITTALUGA 2023

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Figure 6. Mural painting by Le Corbusier on the wall of the covered terrace bounded by the "pilotis" 1975 (?)



Source: J-P. Rayon Bonillo 2021

Several Comments on Le Corbusier's graffiti¹²

There are several comments raised by many on Le Corbusier's murals. The debate raised is particularly heated among those who think that Le Corbusier has brought prestige to the house with his art, those who see in the murals the expression of a more humane, Mediterranean Le Corbusier, a passionate and passionate lover of these places and those who strongly criticize his work. A cultural debate has arisen: there is no doubt. It is particularly lively, lit and lasts over time. Even today, many years later, there are comments and reflections from art and architecture historians, restoration and sign analysis experts, from all over the world, who have expressed themselves in various capacities on this matter 13.

Below, for the sake of brevity, we report some of the most significant comments:

"Beginning in 1938, Le Corbusier painted a series of murals that modified the clean pristine quality of Gray's spaces. This is particularly evident in the living

¹²Although Le Corbusier sometimes referred to this mural as a «sgraffitte», he did not incise the lines into the plaster but painted directly onto the wall surface Benton 2017)

¹³In particular we refer to the writings of Adam, Colomina, Rykwer, reported in the bibliography

room: the original layout was designed with gathering places (divan, music and dining areas) that created tensions from one side of the room to the other. When Le Corbusier's mural was painted on the wall at the far end of the room, it prevented the use of that area as a backdrop for the conversation corner around the divan, and the furniture tended to be arranged in a conventional layout at the center of the room" ((Espegel Alonso, Movilla Vega 2021, p.304).

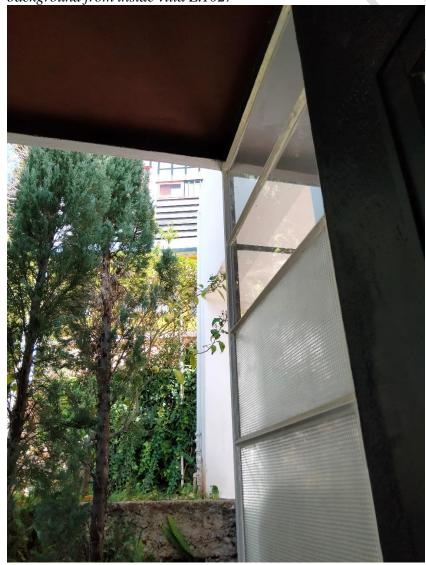
Beatriz Colomina, storica dell'architettura, lo interpreta quasi come un caso psichiatrico: pare che "Le Corbusier voglia marcare il territorio, come un cane che fa la pipì agli angoli della strada, voglia far prevalere la sua figura cancellando quella di lei, riempiendo un salotto bianco con dei disegni colorati, mettendo la sua firma in uno spazio che non gli appartiene". E ancora: "By drawing he enters the photograph that is itself a stranger's house, occupying and reterritorialising the space, the city, and the sexualities of the other by reworking the image. Drawing on and in photography is the instrument of colonisation. The entry to the house of a stranger is always a breaking and entering - there being no entry without force no matter how many invitations. Le Corbusier's architecture depends in some way on specific techniques of occupying and yet gradually effacing the domestic space of the other. Like all colonists, Le Corbusier does not think of itas an invasion but as a gift." (Colomina, p.6). For Colomina, the Drawing is used here by Le Corbusier as a colonization tool, the drawing is therefore seen by the Master as a specific technique of erasing the domestic space of the other

Peter Adam, describes it in terms of sexual assault: "It was a rape." (Adams 2000).

"The article by Beatriz Colomina variously entitled 'War on Architecture' or 'Battle Lines' has come to be accepted as an authoritative statement of Le Corbusier's violation of Eileen Gray's house E1027. In part her article was based on a curious article written by an Egyptian painter Samir Rafi. While accepting the aesthetic violence caused by the addition of Le Corbusier's paintings in the house, I challenge the argument that they represented an attack on Eileen Gray, whom Le Corbusier barely knew. I also challenge the veracity and credibility of Rafi's article, which is supported by no evidence except some drawings which are clearly fakes." (Benton 2017, p.53). This article deals with the relationship between Le Corbusier and lesser known modern designer and architect Eileen Gray as it plays itself out in Le Corbusier's fixation on and eventual occupation of Eileen Gray's first house, E.1027. In 1938 and 1939, Le Corbusier painted eight massive murals in E.1027. Gray was horrified. What lines of inquiry are opened if one begins to think of Le Corbusier's proximity, his eventual intimacy with Gray's house and interiors as enactments of sexual violence? Why this compulsion to see, to mark, and eventually to be inside? The authors argues that Gray develops, in her design and architecture, an aesthetic of desire that radically challenges the particular modern movement that Le Corbusier championed and epitomized. One can begin to read the violence toward Gray and E.1027 as covert, perhaps even unconscious, disciplinary responses to the aesthetic, philosophical, and sexual threat that her work represented.

We should also take into account Le Corbusier's obsessive relationship to this house as manifest - and this is only one example of a complex pathology - in his quasi-occupation of the site after World War II, when he built a small wooden shack (the "Cabanon") for himself at the very limits of the adjacent property, right behind Eileen Gray's house. He occupied and controlled the site by overlooking it, the cabin being little more than an observation platform, a sort of watchdog house. The imposition of this appropriating gaze is even more brutal if we remember that Eileen Gray had chosen the site because it was, in Peter Adam's words, "inaccessible and not overlooked from anywhere." But the violence of this occupation had already been established when Le Corbusier painted the murals in this house (there were eight altogether) without the permission of Eileen Gray who had already moved out. (Rault 2005, p.162)

Figure 7. The "Unité de Camping" designed by Le Corbusier can be seen in the background from inside villa E.1027



Source: PITTALUGA 2023

"A special consideration must be given to Le Corbusier's mural paintings, however. They transformed the perception of space as conceived by Eileen Gray, and in all rigor should be eliminated. Yet they deserve to be preserved for their intrinsic value" (Espegel Alonso, Movilla Vega 2021, p.308).

Benton and Bougot in their book state that the mural, as a typology of painting, is in complete contradiction with Le Corbusier's definition of architecture "architecture is a pure play of light and volume", but underline how paradoxically Le Corbusier creates in Cap Martin various murals, both in Eileen Gray's mansion and on the walls of The Starfish and on the walls of his Cabanon. Benton and Bougot analyze the various factors that led to this conversion and place this evolution of the architect in the more general context of the mural painting of this period. Basically, through their research, on Le Corbusier's pictorial and drawn work, they also show a freer Le Corbusier and a true lover of the Mediterranean (Benton, Bougot 2021)

Figure 8. Villa E.1027, interior of the main hall, after the 2015 restoration



Source: PITTALUGA 2023

Figure 9. Villa E.1027, interior of the main hall with Le Corbusier's Graffiti



Source: J.-P. Rayon (1975?) in RAYON 2021

Concluding Reflections: The Power of a drawing in a villa built without drawings

In the story of Villa E.1027 the design somehow dominates: from the "missed" construction drawings of the villa to the all too obvious drawings on the walls by Le Corbusier.

Much has been discussed about the design drawings of the villa. According to some authors (Maggio 2022) few and "apparently heretics" are the basis of one of the most iconic buildings of the Modern movement. "Peter Adam, who can be considered Eileen Gray's biographer to all intents and purposes, states that Eileen stayed in Roquebrune for two years, from 1927 to 1929, and that together with a master builder and a young laborer, she built the house with her own hands. A masterpiece of modern architecture without contemporary designs; a real heresy in evident contrast with the graphic production of the architects of the time. Eileen Gray never drew well, far from it. The representations are enigmatic and sometimes even incomprehensible, it is difficult to find in his drawings the difference in thickness between a projection line and that of a section, testifying to a reluctance towards the scientific basis of representation" (Maggio,81).

As regards the aspects relating to Eileen the designer, "good design" was replaced by sketches, sometimes even quoted ones, and by manual, visual and inventive skills assisted by the craftsmen who built the prototypes with her of the furniture that would become true design icons.

So with the drawing (Le Corbusier's drawings on the walls of the villa) an icon of modern architecture is annulled, which was moreover created, according to the research carried out so far, without architectural drawing. It almost seems like a paradoxical situation which, from different angles, leads us to reflect on the importance of drawing in architecture and for architecture.

Francesco Maggio in his essay on villa E.1027 with the already very significant title of "Apparent heretic drawings" asks a question about the missing drawings of the villa " One of the aspects of architecture, probably the most comforting one, is the design understood in the double meaning of intention and representation of something real or imagined; the sketches in their essential features communicate a thought, an intention, a desire, an idea and the desire for form very often resulting in refined drawings that are functional not only to a more precise transmission of the idea but also to the construction of the "thing". In fact, one of the main aspects of drawing is, as Vittorio Gregotti states, that of "technical communication, of the objective or conventional representation of the elements that make up the parts of the whole of an object to be built". And precisely in relation to villa E.1027 Maggio the questions arise: "But in the 20th century, has the construction of architecture always been entrusted to the execution of what has been represented on the sheet according to conventions? Is it possible to build by overcoming methodical representations through the imaginative process alone? Finally, is it possible to delegate a building procedure to uncertain spellings?" And the answer that is given is: When in 1925 Eileen Gray bought a small plot of land located in an isolated area between Menton and Nice, under the ancient Saracen fortification of Roquebrune, to build a house for her holidays, it mattered little to her that she did not know how to correctly draw an orthogonal projection or an axonometry, probably because she was convinced of her much higher abilities. The E.1027, completed in 1929, is in fact one of the masterpieces of the Modern Movement. All the drawings relating to the house, starting from the very first ones, those published in the special issue of Architecture Vivante in 1926, are the result of others' elaborations. Only the not very detailed horizontal sections and the drawings of the profiles, probably from 1926, preserved in the Victoria & Albert Museum in London can be attributed to Eileen Gray by analogy with other drawings by the Irish architect kept in the archives of the prestigious institution.

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Drawings to take possession of a space-drawings to destroy a space

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In this whole affair there are elements that appear to be in contrast:

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1) Drawing has always been Le Corbusier's favorite tool for appropriating a space

2) "By working with our hands, by drawing, we enter the house of a stranger, we are enriched by the experience, we learn" (Le Corbusier, 1960 (b), p.203) and "When one travels and works with visual things — architecture, painting or sculpture — one uses one's eyes and draws, so as to fix deep down in one's experience what is seen. Once the impression has been recorded by the pencil, it

stays for good – entered, registered, inscribed. The camera is a tool for idlers, who use a machine to do their seeing for them" (Le Corbusier, 1960 (b), p.37).

3)The Murals technique (or as it is defined by Le Corbusier himself "The graffiti") was considered by the master a technique to dematerialize the wall, to destroy its consistency "Le Corbusier had repeatedly stated that the role of the mural in architecture is to "destroy" the wall, to dematerialize it. In a letter to Vladimir Nekrassov in 1932 he wrote: "I admit the mural not to enhance a wall, but on the contrary, as a means to violently destroy the wall, to remove from it all sense of stability, of weight, etc." (Colomina 1996 p.5) and "The mural for Le Corbusier was a weapon against architecture, a bomb" (Colomina 1996 p.5)

With respect to the first point, the depictions on the walls of villa E.1027 could be interpreted as an attempt to re-appropriate a space through the medium most suited to Le Corbusier: drawing? But the definition, in general, of the Murals given by Le Corbusier himself raises some questions. Colomina, in his article, publishes an answer that Le Corbusier himself writes in a letter to a friend of his. To the question"Why then to paint on the walls, at the risk of killing architecture?" he replies "It is when one is pursuing another task, that of telling stories" (Colomina 1996 p.5)

The 8 murals must therefore be interpreted as the will to tell a story. The murals are therefore an expression of an intangible heritage that lies behind them. At the same time, however, these murals have a specific function and that is the same function that Le Corbusier attributes to them in some writings: that of destroying the wall, of destroying the architecture. And the impact that these murals have in E.1027 is exactly this: they destroy the conception of these spaces, they destroy the idea, the manifesto of Eileen Gray's house. Thus the material heritage becomes the bearer of a specific intangible heritage but at the same time destroys another intangible heritage (linked to the canceled material heritage).

Matter, traces, tangible elements but also ideas, ways of living these spaces, stories behind them: this is villa E. 1027.

Le Corbusier's graffiti. Considerations in the light of some theories of Restoration

 Beauty, design, ethical question and then we come to the ethical question: the ethical question that is raised when one has to think about a conservation, a restoration of the villa. The ethical question: what to keep, what to keep in the restoration work? Only material assets? O Also the intangible heritage associated with it?

What elements should a restoration that claims to be "conservative" preserve? Only the material elements or also the immaterial ones connected to them? The answer to this question would seem obvious but it is not quite so. In the case study addressed, for example, the question is particularly complex. If in fact some theories of restoration lead to the conservation of all the material traces that come down to us, others, albeit with total respect, make some distinctions (Bellini et al. 2005). For Torsello, for example, restauration must have as its first purpose the

protection of all the questions that the architecture (or what is to be restored) is capable of raising¹⁴.

From what has been said, it would therefore seem that the main objective of a restoration, according to this particular vision, is to leave intact the artifact's ability to raise questions. In this sense, therefore, in the specific case, there is no doubt that the material presence of Le Corbusier's paintings poses many questions to those who visit these spaces. In this sense, therefore, they should be preserved in full. The restored work must remain a source of culture 15. Three corollaries follow from this general concept: "1.Il restauro deve prolungare la vita dell'opera nella sua consistenza fisica, con tutti i mezzi tecnici di cui disponiamo, in modo che l'opera stessa risulti il più possibile solida, protetta e sana, purchè tale azione non sia in contraddizione con il secondo criterio. 2. Il restauro deve assicurare la permanenza dei segni che connotano la fabbrica nella sua configurazione generale e nelle sue parti anche minime, indipendentemente da ogni giudizio o preferenza di natura storica ed estetica, purchè tale azione non contraddica il primo e il terzo criterio, 3. Il restauro deve assicurare l'utilizzabilità della fabbrica in tutti i casi in cui essa può assumere con proprietà forme e funzioni connesse all'abitare, a condizione che ciò non contraddica il primo e il secondo criterio" (Torsello 2005, 55)¹⁶. And in explaining the second corollary this is how Paolo Torsello expresses himself. The second corollary has its core in the hermeneutic and analytic work that underlies it. It is based on the assumption that the task of restoration is a Re-Veiling, that is, a bringing to light an enigma. But there is still a problem: "...the circumstantial framework with which the historic building is shown does not admit of total preservation..." (Torsello 2005,56). We are obliged, then, to develop increasingly refined methods of analysis and, at the same time, systems of documentation and recording that can compensate for any forced loss of traces and clues useful for interpretation. This implies a creative commitment that invests our analytical and documentation means, urging research and scientific advancement.

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¹⁴"Perciò, il restauro non può essere reificazione di risposte irrevocabili desunte dall' interpretazione, ma piuttosto difesa degli interrogativi che l'opera-testo è in grado di suscitare. E il termine conservare, così diffusamente invocato, va riferito nel senso del custodire, intatto e disponibile, uno spazio ermeneutico ove sia praticabile la perfettibilità e la stessa revocabilità del giudizio, e dove nessun "valore" storico, costruttivo, formale o materiale può essere privilegiato o ricondotto a una presunta "unità" figurale" (Torsello 2005, 52).

¹⁵ "Perciò, il restauro è il sistema dei saperi e delle tecniche che ha per fine la tutela delle possibilità d'interpretare l'opera in quanto fonte di cultura, in modo che sia conservata e attualizzata come origine permanente d'interrogazione e di trasformazione dei linguaggi che da essa apprendiamo" (Torsello 2005, 55)

¹⁶"1. Restoration should prolong the life of the work in its physical consistency, by all technical means at our disposal, so that work itself is as solid, protected and healthy as possible, provided that this action does not contradict the second criterion. 2. Restoration must ensure the permanence of the signs that connote the architecture in its general configuration and in its even minimal parts, regardless of any judgment, or preference of a historical and aesthetic nature, provided that such action does not contradict the first and third criteria. 3. Restoration must ensure the usability of the architecture in all cases where it can take on with properties, forms and functions related to living, provided that this does not contradict the first and second criteria"

The archeology of architecture: an instrument of knowledge, of memory for a tale of different stories

The concepts that this case study highlights are the following:

- Villa E.1027 is a house made for man, for his needs (see paragraph...)

Archeology and in this case the archeology of architecture has as its aim the research and study of material traces with the aim, however, of grasping the man behind these signs, understanding their choices, decisions, skills, aspirations. In particular, the whole story of graffiti cannot be understood if we do not take into account the human events behind it. In analyzing the contemporary, in a certain sense, we are facilitated in finding and in the availability of this data too (Gurlain, De Felice...)

Looking at architecture (and also at contemporary architecture) with an archaeological approach (Pittaluga 2022, 2023, g...20...) means giving meaning to the different signs that can be read on it.

Once again, the archaeological study of a contemporary architecture leads to a reflection on the necessary analysis tools and which can sometimes be partially different from the archaeological study of more ancient eras. The reconstruction of an intangible heritage closely connected to the material one must be taken into consideration and adequately evaluated ¹⁷

For a restoration intervention that takes into account an archaeological reading of the artifact, it would make sense to maintain and preserve all signs and transformations, or at least to keep intact the future possibilities of reading and understanding (Pittaluga 2009, Bellini et. Al. 2005)

In the context of villa E.1027 the subsequent transformations and in particular Le Corbusier's murals have a devastating impact. They completely nullify the spatiality of the villa, break a balance intended and sought after by E. Gray, profoundly change the perceptions of spaces that had been thought out studied in every detail, change spaces in which every element had been carefully studied in every aspect.

If we think back to the three criteria on Restoration expressed by Torsello in some ways you may have help to settle this question. Every trace, every element has its own value and should be preserved as long as it does not conflict with the other principles set forth. Restoration must therefore ensure the permanence of the signs that connote the "architecture both in its general configuration and in even the smallest parts "...regardless of any judgment or preference of a historical and aesthetic nature as log as..." The "provided" assumes that in some particular situations, one may not even preserve everything. But still says that precisely because of this "we are obliged, then, to develop increasingly refined methods of analysis and, at the same time, systems of documentation and recording capable of compensating for the possible forced loss of traces and clues useful for interpretation". This implies, for us, therefore, a creative endeavor that invests our

¹⁷See the writings of De Felice, Gonzalez and Pittaluga reported in the bibliography

analytical and documentation means, urging research and scientific advancement. (Torsello 2005,56).

Specifically, preserving the paintings cancels a substantial part of the villa, cancels its deeper meaning, cancels the particular spatiality of the rooms. In this case, then, the issue might seem simple: when the conservation of the one element strongly undermines the conservation of the others, its removal is permissible. On the other hand, the more recent debate on the notion of heritage and what heritage should be protected and conserved also pays specific attention to intangible heritage¹⁸.

The history of the villa is also the history of those who lived there, it is the history of the use that has been made of it over time: these considerations would also lead to preservation and conservation of Le Corbusier's murals. The question would seem difficult to solve: the conservation of one aspect cancels the other and vice versa.

Currently, with the latest restoration, a partial solution has been tested: the graffiti in the living room are preserved but placed behind a white panel which in any case recovers the sense of spatiality that this room must have originally had.

Similar solutions, possibly combined with sliding panels or sophisticated technologies and augmented reality, could in the future provide other answers to the problem of conserving signs and maintaining the intangible heritage connected to them.

The case study of villa E.10 27 therefore made more explicit an element that may be of crucial importance in research for the knowledge and conservation of contemporary and modern architecture: the complex retationship between tangible and intangible heritage.

In contemporary architecture the relationship between tangible and intangible heritage is particularly close. We have seen how actions strictly connected to tangible assets have had an impact on intangible assets and vice versa. This calls into question both the discipline governing knowledge and the discipline of restoration. The former, in particular through the archeology of architecture, is called upon to find tools that not only record, describe and understand the subject matter but seek the appropriate ways to also capture all those data that pertain to the sphere of intangible heritage. Some studies in this sense have already begun in the field of archeology in general (Gonzales-Ruibal 2019, De Felice 2022) and in the field of archeology of architecture (Pertot 1993, Treccani 2007, Pittaluga 2021) but there is still much to be done. And the study on villa E.1027 proves it.

A final consideration on the whole story of villa E.10127 concerns the power of drawing: as mentioned above, a drawing, or rather several drawings on different walls, in this case nullify a spatiality and a precise conception of the house. A house, by the way, built without drawings.

However, beyond the case in question, it also poses a more general question to us that also concerns urban spaces, the facades of our cities: let's think of the murals on contemporary designer neighborhoods (e.g. the case of Serra Venerdì

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¹⁸The debate on tangible and intangible heritage is very broad and current. In this regard, see among other publications on the subject Fiorani 2014, Musso 2015, Bortolotto 2011, Marino 2006, Lancellotti 2020

- 1 (1953-'56) of Piccinato, La Bussola district of Cosenza...). All this makes us
- 2 undestand what the disruptive force of even a trace on the wall or a change of
- 3 color can be: elements not to be treated lightly, to be known, evaluated both in
- 4 case you want to keep them and in case you want to eliminate them.
- 5 The implications, albeit on a different scale that were brought to light in villa
- 6 E.1027, the ethical question regarding the conservation of tangible and intangible
- heritage, can and must also be addressed in these cases. And it will be good to
- 8 remember that a drawing on a wall is not just a drawing on a wall.

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