



Eileen Gray's Villa E-1027:

A Pivotal Contribution to the Modern Movement

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E for 'Eileen ,' 10 for "J" (the tenth letter of the alphabet), 2 for "B," and 7 for "G." (Adam, 1987, P. 191).

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01. INTRODUCTION

Eileen Gray is an extraordinary woman who can be seen as a pioneer in modern architecture, whose legacy was long overshadowed by the dominant male voices of her time. Gray belongs to the most widely admired female architects who ever existed, having begun her career as an interior designer before becoming an architect. Together with her companion Jean Badovici, who also forced her into a new direction as an architect (Adam, 1987), she designed her most well-known work, Villa E-1027. This villa was designed in 1926 in a modern architectural style and is situated in the south of France.

Because Eileen Gray was such a known female architect, there is already an extensive amount of literature published about her. The same applies to the incident that revolves around the attribution and recognition of authorship for the design of Villa E-1027, between Gray and Le Corbusier. To fill the gap in the literature this thesis focuses on villa E-1027. To be more precise, this thesis will research the design philosophy of Eileen Gray, Villa E-1027 and the development of the modern European Movement. Therefore the main research question that will be answered is *how has Eileen Gray's design philosophy shaped Villa E-1027, and what is the contribution of the villa to the development of the modern European movement?*

This thesis hypothesizes that because of Gray's background as an interior architect, she was less strict with using architectural rules in her design. Based on this she designed a modern villa that brought more playfulness to the development of the modern European villa.

To Research the first main theme, Eileen Gray and Villa E-1027, the biography about Eileen Gray written by Peter Adam (Adam, 1987) will be used as the main source. Later on, Adam updated the biography with more newfound information (Adam, 2019). The biography by Adam gives an overview of Gray's entire life starting with her youth in Ireland and ending after her death when her work got the recognition it deserved. This biography gives a personal and unique view inside the world of Eileen Gray, because Adam is the only surviving person to have been close to Gray during her later years, and it's illustrated with materials from Gray's personal archives.

Another biography of Eileen Gray (Goff, 2015) is used to gain more information about Gray from someone who wasn't personally involved in her life. Because of Goff's function as curator of the Eileen Gray archive at the National Museum of Ireland, she also has access to and made use of Gray's personal archive. Besides the biographies of Gray, the book 'Eileen Gray, designer and Architect' by Pitiot & Stritzler-Levine (2020) elaborates more on the individual designs and architectural projects of Gray. The book contains more than 50 essays that offer an in-depth analysis of these projects, starting with 'beginnings' continuing with 'being a designer' and ending with 'being an architect'.

In the biography written by Adam (1987), it becomes clear that Eileen Gray met a lot of modern architects in the period starting from 1923. Jean Badovici, who at that time was together with Eileen Gray, was the publisher of the magazine *L'Architecture Vivante*. During the second year of the magazine, Badovici collaborated with Fernand Léger, Piet Mondrian, Amédée Ozenfant, and the architects of De Stijl (Adams, 1987). Next to that, Jean Badovici became friends with Le Corbusier. Because Eileen Gray worked closely with Badovici, she was in the position to also

meet all these modern architects.

During the next years, she also travelled together with Badovici to Holland and Germany, looking at buildings by Gerrit Rietveld, Bruno Taut, Ludwig Mies van der Rohe, Walter Gropius, and many others (Adams, 1987). These modern architects, their beliefs and their buildings became the architectural learning materials Eileen Gray got to work with.

Because of that, it's important to know how these modern architects, who Eileen Gray met, worked during that time. What were their beliefs, ideas and designs? What did Eileen Gray learn from them? And how did she differ? 'Modern Architecture; A Critical History' by Kenneth Frampton (2007) dives into this subject, focusing on De Stijl, Le Corbusier and Mies van der Rohe. Programs and Manifestoes on 20th-Century Architecture by Conrads (1970) further elaborates on this. The texts chosen in this book represent the starting point of a particular development and exercised a determining influence on architecture within the area of Central Europe. These sources are complemented by various references focusing specifically on the architecture of villas by different modern architects. For instance, Bradbury (2021) delves into Villa Savoye, The Homewood, The Rietveld Schröder House, and Villa Tugendhat. Friedman (1998) also explores The Rietveld Schröder House in depth, as well as Villa Stein.

The biographies about Gray also include chapters about Villa E-1027, but do not specify deeply the architecture of the villa. There is a lack of analysis on the villa before the villa can be placed in the modern European movement. In the book 'Twenty Buildings Every Architect Should Understand' Unwin analyzes Villa E-1027 (2010). In the chapter 'Villa E-1027' he dives deeper into the background, place, climate, transition and geometry. Alonso and Vega (2011) expand on this by analyzing the materials used. To elaborate on the analysis of Villa E-1027, Constant analyzes Gray's critical engagement with modern movement principles at E. 1027 in her article (1994).

This thesis, following the introduction, is divided into 3 chapters based on literature review. The first chapter will look into Eileen Gray's background and design principles to find out what her design philosophy was. Next, the typology of a villa, especially focused on Villa E-1027, will be researched. In the third chapter the history of the modern European movement will be examined, with an emphasis on Villa E-1027's contribution to that movement. This thesis will end with a conclusion in which an answer and discussion of the research question will be formulated, how did Villa E-1027 contribute to the development of the modern European movement?

02. WHO IS EILEEN GRAY

To answer the first part of the research question, how has Eileen Gray's design philosophy shaped Villa E-1027?, it is necessary to understand Gray as a designer. Because of that, this chapter will take a closer look at her background. Various key aspects of her life are highlighted; the switch from decorative to modern and the shift from interior to exterior. This chapter will conclude by examining her design approach, setting the stage for the architectural analysis of Villa E-1027 in chapter three.

2.1 The life of Eileen Gray

Figure 02 shows a chronological overview of the life of Eileen Gray. The timeline is based on *Eileen Gray: Architect/designer: A biography* by Adam (1987), *Eileen Gray* by Hecker and Müller (1993) and *Eileen Gray, Designer and Architect* by Pitiot and Stritzler-Levine (2020).

1878: Kathleen Eileen Moray Smith-Gray is born on August 9 in Enniscorthy, Ireland.

1895: Eveleen Pounden claims her right to the Gray name and becomes the 19th Lady Gray. Eileen Gray spends her youth in both Ireland and London.

1900: Enrolled in the Slade School of Fine Art in London to study painting. During this period she got familiar with oriental lacquer art.

1902: Eileen escapes from the rictiveness of London and moves to Paris. She takes drawing lessons at the *ad mie Colarossi*.

1906: Buys her own apartment in Paris where she will live the rest of her life. She becomes a professional lacquer artist.

1910: Opens a weaving and a laquear workshop in Paris.

1913: Exhibits her work for the first time in the *Salon de la Soci t  des Artistes D corateurs*.

1914: Eileen becomes an ambulance driver at the outbreak of World War 1 in Paris, later she moves back to London.

1917: British Vogue publishes an enthusiastic article about her. She returns to Paris.

1919: Eileen is commissioned by Suzanne Talbot to renovate the interior of an apartment.

1922: On May 17 Eileen opens her *Galerie Jean D sert*, where she will sell her furniture and rugs.

1923: Eileen exhibits the *Bedroom-Boudoir Monte Carlo* at the *Salon*

de la Société des Artistes Décorateurs. The French press is negative about the design however, the Dutch critics, including De Stijl architects J. J. P. Oud and Jan Wils, are very interested.

1924: Eileen participates in multiple exhibitions. The Dutch magazine *Wendingen* devotes a special edition to the work of Eileen. It includes an introduction by Jan Wils and an article by Badovici. Jean Badovici convinced Eileen Gray to start working in the field of Architecture.

1926 - Eileen Gray began to build her

1929: first house, Villa E-1027, in the south of France, where she also lived at that time. She made a Design house for an Engineer and different sketches for the renovation of the Battachon-Renaudin House.

1929: Eileen Gray finishes Villa E-1027. Badovici dedicated a special issue of *L'Architecture Vivante* to Villa E-1027 called *E 1027. Maison en bord de mer*. Starts designing plans for a small Parisian studio apartment for Badovici.

1930: Eileen closes *Galerie Jean Désert*. At the first UAM exhibition, she shows photographs and plans of E-1207 in collaboration with Badovici.

1932: She starts working on her first individual project, *Tempe a Pailla*. She lives there during the summer months and works on various architectural projects.

1937: Eileen exhibits her project *Centre de vacances* at the Paris Exposition Internationale in Le Corbusier's *Pavillon des Temps Nouveaux*.

1938: Le Corbusier places several wall pictures without permission in Villa E-1027.

1939: Eileen buys and renovates a house in St. Tropez.

1941: During World War II Eileen was forced to leave the coast. Continues to design multiple projects, most are never realized.

1955: Eileen soled *Tempe a Paille* and returns back to Paris.

1959: The Cultural and Social Centre designed by Eileen is published in the magazine *L'Architecture d'Aujourd'hui*.

1970: The new generation of culture creators begins to re-discover the long-forgotten work of Eileen.

1976: Eileen Gray dies on October 31 at the age of 98 in Paris.

Figure 02: Timeline: Life of Eileen Gray

2.2 Design Philosophy

Gray grew up in a prosperous family, but any show of wealth or status was repulsive to her. (Adam, 1987). She had her own personal style and had no intention of changing her personality in order to fit into the conventional pattern that her family expected of her. Gray was a strong-minded woman, determined and with a continuous desire for freedom and independence (Pitiot & Stritzler-Levine, 2020). Next to her strong character, Gray was never content to continue working in the same way (Pitiot & Stritzler-Levine, 2020). Because of these characteristics, Gray ventured beyond the confines of the ordinary and thereby distinguished herself from her contemporaries. Because of that, she was able to become a pioneer in the architectural field. But what was her design philosophy behind her famous furniture pieces, her intriguing renovation project of rue de Lota, and her well-known design of Villa E-1027?

2.2.1 Interior

After her study in painting, Gray started making furniture and became a professional lacquer artist. In the beginning, her style can be described as extremely decorative, but this changed to a simpler, more functional manner of expression (Hecker & Müller, 1993). In her furniture piece *Le Destin*, dating from 1914, one of the first approaches of Gray to a more modern style can be seen. This screen has two completely different sides because of their style (Fig. 03). While the figures on the front correlate with complex ornamental visualization, the abstract forms on the back, dynamic design of sweeping lines, appear to belong to modernism (Hecker & Müller, 1993). It's intriguing that she created this artwork; it's as if Gray aimed to demonstrate her versatility by effortlessly navigating in both directions (Hecker & Müller, 1993). This change away from decorative to modernism becomes more clear in her renovation project of an apartment at *Rue de Lota* four years later, in 1918. Gray designed with a more functional manner of expression (Hecker & Müller, 1993). It is likely that because Gray is self-thought, she experienced a lot of freedom. She took an unconventional approach to the renovation, drawing on expertise from fields not related to architecture or design (Pitiot & Stritzler-Levine, 2020). She uses innovative set and lighting designs from theatrical performances in Paris for her approach to her first interior commission. Because of this, Gray's furniture was essentially different from that of other architects and designers. Her art was praised for being both powerful and curiously unusual (Pitiot & Stritzler-Levine, 2020).

In 1920 Gray designed *Table* (Fig. 04), which can be marked as the real break between her previous exoticism of lacquer and a new area of innovation and experimentation (Goff, 2015). At that time she acquired a lot of knowledge from *L'Architecture Vivante* and she was in contact with members from De Stijl. Her radical change in work was based on the ideas of Theo van Doesburg's *sixteen points toward a plastic architecture*, in which he stated that Neoplastic architecture be anti-cubic, asymmetrical and anti-gravitational, and the publication *Neo-Plasticism of 1920* which she had in her library (Goff, 2015). Gray started designing as if *Table* was an architectural model for a house. If not for these connections and the De Stijl table they started, it's likely Gray's work would have continued to be lacquer-focused (Pitiot & Stritzler-Levine, 2020).

During the *XIV Salon des Artistes Décorateurs* in 1923, Gray exhibited *Bedroom-boudoir for Monte Carlo* (Fig. 05). Gray broke established interior design principles, disregarded conventional typologies, transcended style history, played with form, experimented with multiple new materials, and gave her creations entirely new purposes (Pitiot & Stritzler-Levine, 2020). Gray worked with a remarkable variety of materials in addition to lacquer, and she is constantly broadening her range of abilities. She defied conventional furniture

Figure 03: Eileen Gray, Le Destin, front and back of screen. (Pitiot & Stritzler-Levine, 2020, P. 261)



Figure 04: Eileen Gray, Table. (Pitiot & Stritzler-Levine, 2020, P. 277)



Figure 05: Eileen Gray, Bedroom-boudoir for Monte Carlo. (Unknown photographer, n.d.)



materials by experimenting with celluloid, cork, aluminum, and tubular steel, all the while addressing the physical and spiritual requirements of the individuals who used her pieces (Goff, 2015). The tradition that an object can only employ one material was dismissed by Gray, who instead grasped all of the materials that could improve the richness and harmony of her work (Pitiot & Stritzler-Levine, 2020). The French press is quite negative about the design of Gray, as she completely dismissed the concept of decoration, she employed asymmetry and unconventional material combinations, which the French failed to appreciate (Pitiot & Stritzler-Levine, 2020). However, the Dutch critics, including De Stijl architects J. J. P. Oud and Jan Wils, are very interested (Adam, 1987) as well as Boeken, a writer and architect from the Netherlands, who travelled to Paris to report on the *Salon des Artistes Décorateurs*. He was thrilled to see Gray's presentation of the abstract design of the furniture, with its almost geometric shapes, this was something new (Adam, 1987).

Gray clearly stood out among her contemporaries, this was not overlooked. The Dutch magazine *Wendingen* published an issue dedicated to "Eileen Gray: Furniture and Interiors". Jan Wils wrote the introduction of the magazine, calling *Monte Carlo* free of every tradition. Next to that, he wrote: "In this way, spiritual content, form, and matter fuse together to form a unity of rare delight. They who know how to choose the material and decide how it is to be used should also be masters of their craft. She is the kind of artist of whom there are very few in existence today." (Adam, 1987, P.164). This shows how appreciated the design of Gray is, coming from an architect. Jean Badovici also wrote an article in the magazine issue about Gray in which he clearly defined the individuality of Gray's approach and her position in the modern scene (Pitiot & Stritzler-Levine, 2020). He states that Gray is the centre of the modern movement because she shows a rare audacity and an original vision with her designs. Badovici elaborates: "We find in her compositions those marvellous abstract geometric elements which are the charm of modern furniture. Instead of presenting each piece separately, she makes them complement each other." (Adam, 1987, P. 166).

Even though Eileen's furniture was getting "purer" and simpler, it nevertheless stood apart from that of her contemporaries. She implanted her own thoughts alongside the modern movement's fundamental beliefs about cleanliness, purity, and machine thinking. Eileen never saw furniture as just an expression of an idea or an aesthetic—rather, she saw it as something that should be both comfortable and practical. Her furniture, however, was never simply functional. She consistently infused irony or humour into her designs (Adam, 1987). Gray was prepared for the next, logical, phase of her career, as seen by the shift in her furniture designs toward more sculptural items.

2.2.2 Exterior

Shortly after the First World War, Gray met Jean Badovici. Badovici was an architect and one of the publishers of the magazine on modern architecture, *L'Architecture Vivante*. Badovici saw a lot of opportunities in Gray to become an architect. Gray herself was somewhat less certain about it; in an interview in 1973 in *Connaissance*, she said, "Badovici asked me, why don't you build anything? First, I laughed in his face. I've always loved architecture. More than anything. But I didn't believe I was capable" (Pitiot & Stritzler-Levine, 2020, P. 184). With these words, she acknowledges that Badovici encouraged her to pursue architecture. He supported her to learn the basic facts of architecture (Adam, 1987). Thanks to her strong character and individuality, she solely pursued her own interests. Supported by financial independence derived from her privileged background (Hecker & Müller, 1993), she didn't lean on Badovici in this regard. Consequently, her financial autonomy granted her considerable freedom, unlike her female peers like Lilly Reich and Charlotte Perriand (Hecker & Müller, 1993).

Badovici made connections with numerous members of the young modern movement and gave the somewhat shy and reserved Gray access to these circles (Hecker & Müller, 1993). Next to that, he introduced Gray to Adrienne Gorska, one of the few women with an architectural degree. She taught Gray how to make technical drawings. As previously mentioned, around 1919-1924, at the same time she met Gorska, she used the most important architectural publications and journals, *L'Architecture Vivante*, *L'Esprit Nouveau* and *L'Architecture d'Aujourd'hui* to gain more architectural knowledge. By subscribing to these magazines Gray followed the key trends in architecture across the rest of Europe. Through these foundational early texts, Gray gained the ability to start creating her own projects by studying the plans, elevations, and drawings of other architects' work (Goff, 2015). This became Gray's textbook (Adam, 1987).

Besides reading the articles from the most important modern architects, Gray also met a few. In the second year of the magazine *L'Architecture Vivante* Badovici worked together with Piet Mondrian, Fernand Léger, Amédée Ozenfant, and the De Stijl architects. Along with being close friends with Le Corbusier, Badovici continued to network with other contemporary architects, as did Eileen (Adam, 1987). In the years that followed, Gray and Badovici traveled together to Holland and Germany, where they visited projects designed by renowned architects such as Bruno Taut, Ludwig Mies van der Rohe, Walter Gropius, and many more (Adam, 1987). Pitiot & Stritzler-Levine even argue in their book (2020) that Gray's collaboration with Badovici set her on a course as an architect at the forefront of modern architecture.

Nevertheless, Gray had to do that hard work all by herself, it's because of her own talent and character that she became a pioneer in the architectural field. Since her early school years, Eileen had always been interested in architecture, but she was completely self-taught and never received any official training in the field. She was taught to make her own observations (Adam, 1987). She was able to translate theory to practice at a remarkable rate as a result (Pitiot & Stritzler-Levine, 2020). But She came to the realization that she had to follow her own path if she ever was going to succeed (Adam, 1987). And so she did. Gray experimented passionately after realising that practising was the best way to learn her new trade. Being self-taught probably allowed her an enormous amount of freedom. She pushed the limits of accepted architectural methods and experimented with them (Pitiot & Stritzler-Levine, 2020). In addition to being eager to learn new things, Gray consistently demonstrated an understanding of how to adapt the spirit of her prior work to fit the demands of the time. She developed her own creative vocabulary in this way (Hecker & Müller, 1993).

Gray shows her knowledge in her first architectural project, *Petit maison pour un Ingenieur* (Fig. 06 & 07), dated 1926. The project exhibits some influences from other architects, including Mies van der Rohe, Van Doesburg, Van Eesteren, and Le Corbusier, but it also demonstrates a surprising level of conceptual independence for a beginner (Adam, 1987). The architecture exemplifies her propensity to engage Le Corbusier's '*five points of a new architecture*' critically (Pitiot & Stritzler-Levine, 2020). Besides that, the name of the house may be chosen in response to Le Corbusier's maxim 'the house is a machine for living in'. Gray stated 'A house is not a machine to live in. It is the shell of a man, his extension, his release, his spiritual emanation. Not only its visual harmony but its entire organization, all the terms of the work, combine to render it human in the most profound sense' (Goff, 2015, P. 263). Her critique of Le Corbusier also reveals her position on the interior of a house. Her statement implies her ideas to create a house to live in, instead of making chilly interiors of functionalism which her contemporaries are designing (Marcos & Swisher, 2021).

After finishing *Petit maison pour un Ingenieur*, she starts designing her undoubtedly best-know-work, Villa E-1027 (Fig. 08). The strongest expression can be found here, in E.1027,

Figure 06: Eileen Gray. Model of Pettit Maison pour un ingénieur. (Hecker & Müller, 1993, P. 52)

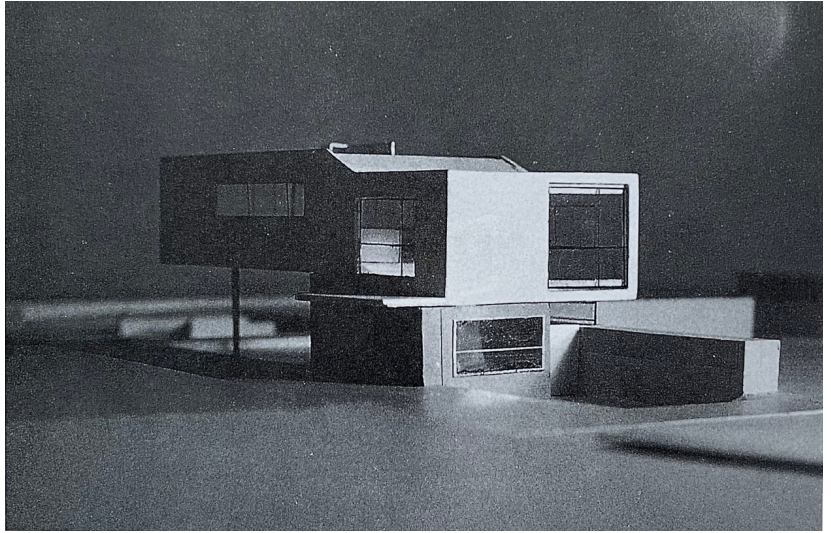


Figure 07: Eileen Gray. Model of Pettit Maison pour un ingénieur. (Hecker & Müller, 1993, P. 50)

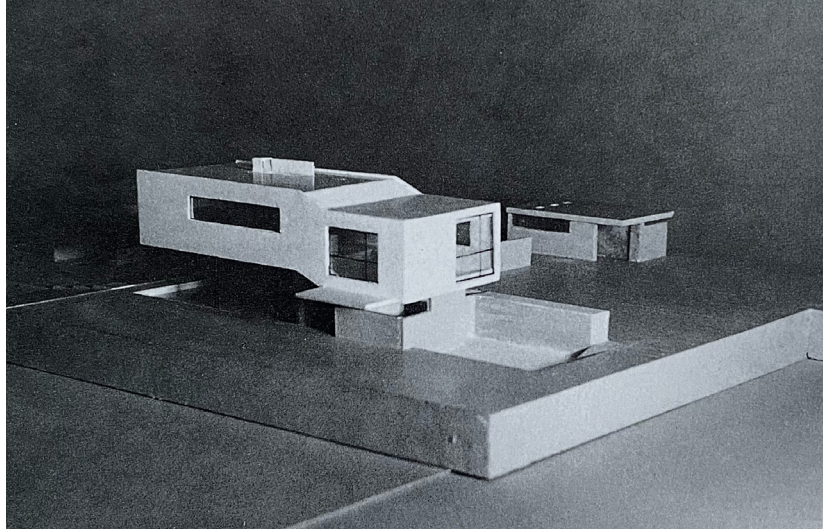


Figure 08: Eileen Gray. Villa E-1027. (Unknown photographer, n.d.)



where she expresses her personal need for isolation, protection, and also her strong desire for freedom (Adam, 1987). Gray distinguished herself from the world of her contemporaries with this design. She combined all her gained knowledge, practices, and experiments into this Villa, to create a masterpiece. Furniture and architecture work in perfect harmony, complementing and interacting with one another (Adam, 1987). “It is not a matter of simply constructing beautiful ensembles of lines, but above all dwellings for people,” Eileen stated in *L’Architecture Vivante* in 1929. This became her approach to the design of Villa E-1027. Gray focuses on creating architecture which prioritizes the inhabitant of the house, rather than architectural appearance (Unwin, 2010). In chapter three the architecture of Villa E-1027 will be further examined.

Understanding Gray’s architectural work requires an understanding of her unique sense of space, her unique design process (which differed from a typical architect’s due to her training in painting and lacquer), her interest in modern dance, theatre, and stage design, her collaboration with Badovici, her encounters with Dutch de Stijl architects, and her fascination with geometry and new theories regarding the fourth dimension (Pitiot & Stritzler-Levine, 2020). From the 1910s until her death, Eileen Gary maintained a consistency of aesthetic purpose, the expression of a lifelong philosophy, regardless of the diversity of her creative output. By taking on the dominant narratives of modernism, she constantly enhanced and challenged her work (Pitiot & Stritzler-Levine, 2020).

03. VILLA E-1027

The previous chapter examined Gray's Design philosophy. This chapter extends upon the research by looking at how her design philosophy shaped Villa E-1027. Various aspects of the villa are examined, with specific regard to her design philosophy. Moreover, this chapter provides an analysis of the villa for a better understanding, which will help to place Villa E-1027 in the modern movement in the next Chapter.

3.1 Approach

The original program for the design project was to create a house for a man (intended for Badovici) who loves work, sports and entertaining. Besides that, the house needed to be able to welcome multiple friends and to entertain them (Unwin, 2010). This may seem like a quite simple program, but it became a major challenge for Gray to accommodate multiple guests with privacy in a small villa (Pitiot & Stritzler-Levine, 2020). Because of the program, the villa needed to be very flexible.

At that time Gray was critical of the avant-garde movement, she felt that architectural theory was lacking in fulfilling the needs of the person. Gray stated, "external architecture seems to have absorbed avant-garde architects at the sixpence of the interior, as if a house should be conceived for the pleasure of the eye more than for the well-being of its inhabitants" (Goff, 2015, P. 263). In contrast with the avant-garde movement, as read in the previous chapter, Gray's design philosophy was to design for the people. This was also the starting point for Villa E-1027, more focused on providing a place to live than on its appearance. An architecture that prioritizes the enjoyment and comfort of the building's occupants before abstract theory or the architect's celebrity (Unwin, 2010).

In the preface of the *E-1027: Maison en Bord de Mer* edition in *L'architecture Vivante* from 1929 Gray and Badovici are having a dialogue (Adam, 1987, P. 235):

B: In short, you want to react against the fashionable formulas and turn back.

G: No, on the contrary, I want to develop those formulas and push them to the point where they reestablish contact with life; I want to enrich them, make some reality penetrate their abstraction... .

B: You want architecture to be a symphony in which all forms of the inner life find themselves expressed.

G: Exactly. Dream and action find equal support in it."

In this dialogue, Gray makes clear that she wants to develop the current theories. In order to reestablish contact with those formulas with life, her approach for Villa E-1027 is to start designing from interior to exterior. She wanted the inside to control how the appearance of the outside would be, and not the other way around (Adam, 1987). Maybe, partly she chose this approach because of her background as an interior designer, she was probably way more comfortable with interior design. Besides that, by starting with the interior and floorplans,

she could make sure that the villa responds to the human needs which corresponds to her philosophy (Unwin, 2010). Gray wanted to create an interior atmosphere that would be in accordance with the manners of modern life while using existing technological resources and possibilities (Goff, 2015). Next to designing for the inhabitant, Gray had a strong (personal) demand, she stated “Even in the smallest house each person must feel alone, completely alone.” (Adam, 1987, P. 215). This focus on creating privacy and intimacy had a major influence on her approach of the floorplans. This will be further examined in section 3.2.3: Interior.

3.1 The Design

3.2.1 Location

Unlike her contemporaries, Gray began by searching for a piece of land for the Villa before starting the design process. The location thus became the primary choice in the design (Marcos & Swisher, 2021). While her contemporaries, particularly Le Corbusier, aimed to create distance from the location, using elements like pilotis and a roof terrace for conceptual distance (Marcos & Swisher, 2021), Gray approached this differently from the start. She wanted her design to have a direct connection with the surroundings (Goff, 2015). She chose this specific piece of land in Roquebrune on the Côte d’Azur because it was inaccessible and not overlooked from anywhere (Fig. 10) (Colomina, 1993).

In the preparatory phase, careful examination of the land’s different heights led to a choice made by Gray not to change the landscape, but to blend the house with its natural shape. Detailed research into sunlight and wind helped Gray to make optimal use of environmental elements (Adam, 1987). The placement of Villa E-1027 on the site was chosen to enhance the stunning sea views and regulate sun exposure. Positioned within the slope, the villa divides the property into two distinct zones: a northern entrance accessible from a communal path, and a southern private section leading to the sea, only accessible through the house. This layout, along with varying terrace elevations, creates a clear boundary while allowing for landscape preservation. Stairs attached to the building facilitate movement between terraces (Pitiot & Stritzler-Levine, 2020).

3.2.2 Materials

In the late nineteenth century, advancements in building materials such as structural steel, reinforced concrete, and expansive glass sheets revolutionized construction practices. Gray embraced the possibilities offered by reinforced concrete (Unwin, 2010), using columns to liberate floors from structural walls. This allowed for open ground floors and lightweight partitions on upper levels, unencumbered by the need to support the structure above. With the elimination of the need for lintels, entire walls could now be constructed of glass (Unwin, 2010). Gray capitalized on these innovations, incorporating large horizontal windows into her façade and adopting an open floorplan design.

3.2.3 Interior

Gray’s philosophy for Villa E-1027, prioritizes creating a livable space over its appearance, is most evident in her floorplans. Despite the villa’s relatively small size - 150 m² on the ground level and 110 m² on the first floor - there is never a sense of confinement due to the efficient use of space (Adam, 1987). In order to accommodate numerous guests, as outlined in the program, Gray devised a convertible room measuring 14 by 6.3 meters at the heart of the villa (Fig. 13)(Unwin, 2010). This multifunctional space adapts to the occupant’s activities, whether it be dining, sleeping, entertaining, reading, or moments of reflection. However, it’s also designed to provide each inhabitant with complete independence, solitude, and

Figure 09: Eileen Gray. Sea side view Villa E-1027. (Unknown photographer, n.d.)

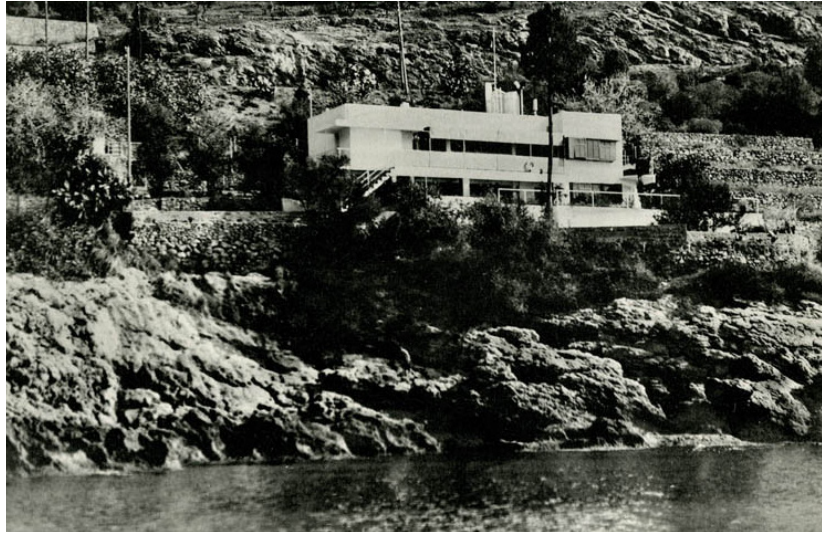


Figure 10: Eileen Gray. Location Villa E-1027. (Unknown photographer, n.d.)

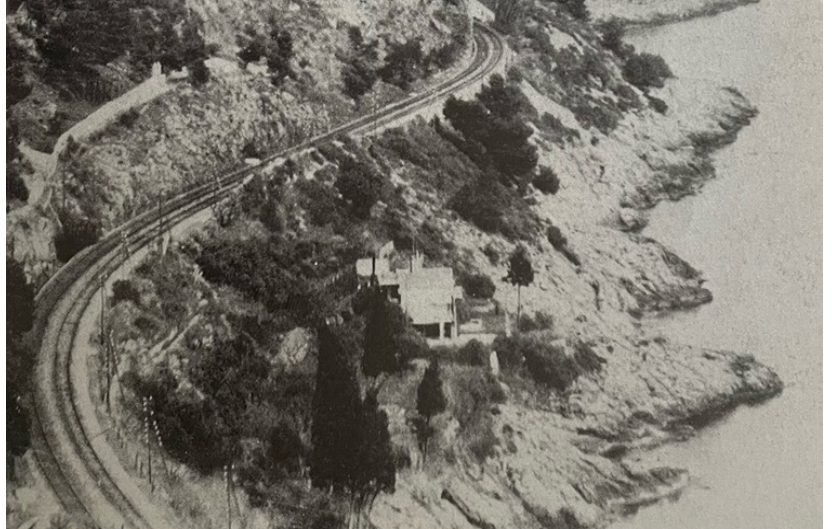


Figure 11: Eileen Gray. Front view Villa E-1027. (Unknown photographer, n.d.)



contemplation if desired (Goff, 2015), which was crucial to Gray. The terrace adjoining the large room extends this space when the window panels are folded against the pillars (Fig. 14) (Unwin, 2010), allowing the room to expand significantly.

Because of Gray's philosophy, she enriches the inhabitant's sensory and physical experiences within the space (Goff, 2015). Recognizing the significance of bodily movement throughout the house, Gray crafted a detailed aspect and circulation plan, illustrating the flow of movement in relation to the sun's daily path (Fig. 12). Using solid lines for inhabitant circulation and dotted lines for the maid's circulation, she meticulously mapped out movement patterns (Goff, 2015). Through such analyses, Gray ensured that natural light permeates every space within the house, employing strategic placement of windows, skylights, shutters, and steelworks (Pitiot & Stritzler-Levine, 2020). Additionally, despite the compact size of the house, the autonomy of each room is preserved (Unwin, 2010). This spatial approach is what distinguishes this small house as unique (Pitiot & Stritzler-Levine, 2020).

3.2.4 Furniture

In addition to the layout of the floor plan, Gray also paid careful attention to the furniture, taking into account the inhabitant's needs. Having previously worked as a furniture architect, Gray aimed to ensure that items not only appeared visually pleasing but also provided a comfortable experience (Adam, 1987). While she embraced the core tenets of the modern movement, such as cleanliness, purity, and mechanical efficiency, Gray also injected her own distinct viewpoint. For Eileen, furniture needed to serve practical purposes and offer comfort; it was more than just a vehicle for an idea or an aesthetic. However, her furniture was never limited to functionality alone (Adam, 1987). This corresponds with her strategy for the design of the interior; she aims to create something aesthetically pleasing, but above all, practical and comfortable for the inhabitant. Convenience comes first.

For the furniture in the Villa, Gray employed two types: mobile and built-in. The built-in furniture, serving as partitions or room dividers, shapes and frames the space to enhance the overall atmosphere (Pitiot & Stritzler-Levine, 2020). Adam (1987) describes Gray's screens as "the most architectural of objects: part wall, part furniture; separating and yet communicating between two spaces." On the other hand, mobile furniture prioritizes lightness, functionality, modularity, and compactness, adapting to the body's movements during daily activities (Pitiot & Stritzler-Levine, 2020).

3.2.5 Exterior

The shape of Villa E-1027 is a straightforward, regular volume divided based on its functional needs. This volume is divided by orthogonal lines, and the resulting sections are shifted along an axis, with doors and windows marking the dividing lines (Hecker & Müller, 1993). The structure is elevated on pilotis to establish a shaded area shielded from the sun yet connected to the garden, situated partially below the main body of the building (Marcos & Swisher, 2021). It was Badovici who originally proposed this elevated placement to Gray (Adam, 1987). As described earlier, Gray's contemporaries used pilotis to create distance between the location and the building, which was not the case with Villa E-1027. Gray and Badovici, on the other hand, used pilotis to deal with the differences in elevation of the landscape. Next, there's the fifth elevation, known as the terraced roof, which, if used, would serve as an exhibition platform. The lack of a protective barrier or handrail implies that the flat roof is more of an aesthetic feature in line with modern architectural conventions rather than a functional space (Marcos & Swisher, 2021).

As previously described, Gray used reinforced concrete, resulting in the facade being

liberated from its traditional load-bearing function. This allowed Gray freedom in designing the façade (Marcos & Swisher, 2021). Gray wrote in *L'Architecture Vivante* “The interior plan should not be the incidental result of the façade; it should lead a complete, harmonious, and logical life” (Unwin, 2010). What she is not doing with the interior, is she doing with the exterior. The façade logically reflects the arrangement of interior spaces and their clustering (Marcos & Swisher, 2021). This aligns with her philosophy of designing for the inhabitant, where the resident is most important, making the exterior architecture subordinate to the interior.

3.2.6 Coherence interior – exterior

Gray has managed to create a great coherence between the interior and the exterior. The lines between furniture, interior design elements, and architecture blur so seamlessly in Villa E-1027 that distinct separation is negligible; instead, they merge into a complex and harmonious ensemble. The connection between the exterior and interior is reinforced through their shared functions (Marcos & Swisher, 2021). Constant elaborates on this by stating: “Both interior and exterior of E. 1027 are characterized by a new inter-dependence of the parts. Architectural components and furnishings are rarely perceived as bounded or distinct; rather, their presence is understood in relation to adjoining elements” (Marcos & Swisher, 2021, P. 494). Marcos & Swisher (2021) elaborates on this by stating that because of her roots as a furniture designer, lacquerer, and interior decorator, Gray developed a keen appreciation for the quality of materials, colours, and textures, which she later incorporated and expanded upon in her architectural activities. Given her background, the concept of unity naturally resonated with her.

One of the key areas where she achieved this coherence is the connection between the large room and the terrace. The window functions as a partition screen that can disappear completely, allowing the interior space to fully merge with the exterior and the landscape (Fig. 14). This removal of the barrier between the interior and exterior (Pitiot & Stritzler-Levine, 2020) extends the building’s unity to include the garden and the layout of terraces. This connection seamlessly blends the structure with the garden, merging the outside and inside into one unified space (Adam, 1987).

Once again, this demonstrates the influence of Gray’s design philosophy on her work. She carefully considers the desires of the inhabitant, ensuring that the house needs to be able to welcome multiple friends and entertain them (Unwin, 2010). By extending the large room into the outdoor space, the intimate space of the Villa becomes significantly larger. As a result, the Villa becomes more suitable for hosting multiple friends.

Gray’s design philosophy has been evident in all aspects of Villa E-1027. Her philosophy, which focuses more on providing a liveable space than on its appearance, has greatly influenced the design of Villa E-1027. As a result, she began with a location instead of starting with a design, designed from the interior to the exterior, conceived a multifunctional room, and created furniture that was both aesthetic and comfortable. All of these aspects contribute to realizing her philosophy into an outstanding villa. As Gray stated herself: ‘This very small house thus has, concentrated in a very small space, all that might be useful for comfort and to help indulge in joie de vivre’ (Goff, 2015, P.271).

Figure 12: Eileen Gray. Sun-scheme and connecting areas. (Hecker & Müller, 1993, P. 70).

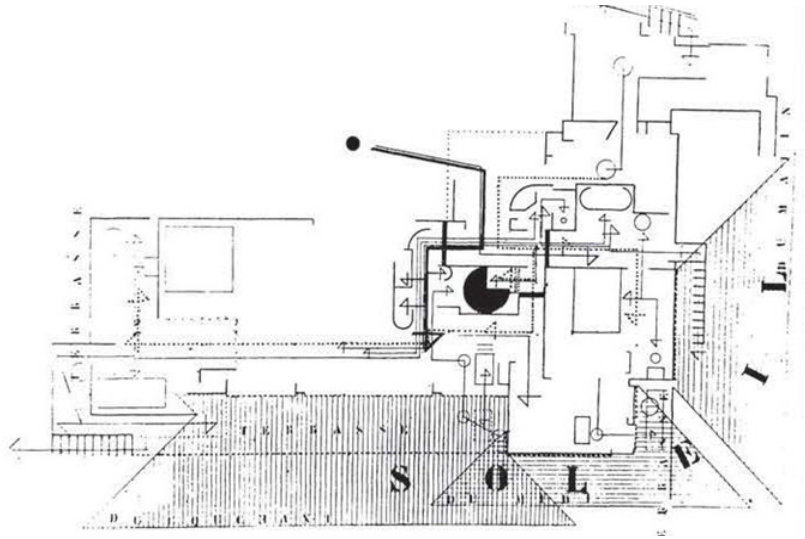


Figure 13: Eileen Gray. Interior Villa E-1027. (Unknown photographer, n.d.)



Figure 14: Eileen Gray. View of main living room Villa E-1027. (Unknown photographer, n.d.)



04. MODERN EUROPEAN MOVEMENT

In this chapter, the development of the Modern Movement in Europe is explored, emphasizing the villas designed during this period. Through an analysis of Villa E-1027 from Chapter 3, alongside the evolution of the Modern Movement, an examination is made into how Villa E-1027 aligns within this movement and the contributions the villa has made to its development.

4.1 Development Modern Movement in Europe

Although the Modern Movement only truly gained momentum after the First World War, its foundations were laid long before by the early modernists. Drawing inspiration from a new generation of machinery (Bradbury, 2021), they designed linear houses characterized by order and functionality, aiming to provide inhabitants with space, light, and air to promote health and well-being. This marked a real revolution, more centred on lifestyle improvements than on politics (Bradbury, 2021). The early modernists worked towards three key objectives. ‘Ornament is crime’ by Adolf Loos, ‘Less is more’ by Mies van der Rohe and ‘Form follow function’ by Louis Sullivan.

After the First World War, the movement further developed, often known as the International Style, in France, Holland, and Germany (Hitchcock & Johnson, 1932). It’s mainly in the early works of three individuals—Walter Gropius in Germany, Oud in Holland, and Le Corbusier in France—in which the initial stages of this new movement can be found. These three, along with Mies van der Rohe in Germany, are considered the main pioneers of modern architecture. However, others like Rietveld in Holland, Larcat in France, and even Mendelsohn in Germany, also made significant strides in the years immediately following the war (Hitchcock & Johnson, 1932).

The evolution of the modern movement is driven by new building technologies. As a result, the traditional solid walls defining space are no longer predominant; instead, they have been replaced by dematerialized structures featuring extended windows and lines of glass that define the space (Colomina, 1994). Walls that are not transparent now appear to float within the house’s space rather than enclosing it. This shift has provided architects with far greater freedom in designing plans, allowing them to focus primarily on meeting the necessary requirements while making minimal concessions to construction limitations (Hitchcock & Johnson, 1932). This transformation not only significantly alters the interior of their buildings, but also impacts architectural design as a whole. “The primary architectural symbol is no longer the dense brick but the open box,” as described by Hitchcock & Johnson (1932).

The writings of Oud and Gropius, and particularly those of Le Corbusier, with the frequent publication of their projects during these years, disseminated the principles of the new style internationally (Hitchcock & Johnson, 1932). Le Corbusier played an absolutely central and seminal role in the movement’s development (Frampton, 2007). He brought global attention to the emergence of this new architectural style through vigorous promotion in the magazine *L’Esprit Nouveau*. His manifesto “Towards a New Architecture:

Guiding Principles” from 1920, where he proclaimed “a house is a machine for living in,” and “Five Points Towards a New Architecture” from 1926, provided significant direction to the movement (Hitchcock & Johnson, 1932). Frampton (2007) describes these five points: “(1) the pilotis elevating the mass off the ground, (2) the free plan, achieved through the separation of the load-bearing columns from the walls subdividing the space, (3) the free facade, the corollary of the free plan in the vertical plane, (4) the fenêtre garden, long en horizontal sliding window or /ongueur, and finally (5) the roof restoring, supposedly, the area of the ground covered by the house.” These 5 points of Le Corbusier are adopted and used by many contemporaries in their designs; their expression in modern villas will be further discussed in the following paragraph. As a result of all his work, Le Corbusier’s name has become nearly synonymous with the Modern movement, although he was not the sole creator (Hitchcock & Johnson, 1932).

In addition to Le Corbusier’s manifestos, there were other texts of significance for the development of the movement. One such text is the first manifesto of De Stijl in 1918, authored by painters Piet Mondrian and Theo van Doesburg, as well as the cabinet-maker and architect Gerrit Rietveld. They wanted a better balance between personal expression and universal principles, and they wanted art to be free from the constraints of tradition and the cult of individuality. Their manifesto was summarized by their guiding principle: ‘The object of nature is man, the object of man is style.’ (Frampton, 2007, P. 142). Another manifesto of great value is “Towards a Plastic Architecture” by Theo van Doesburg, 1924. The 16 points from his manifesto sound like an idealized depiction of the house, representing a new approach to architectural form that the Rietveld Schröder House has just achieved. Something interesting to notice as the Rietveld Schröder huis and “Towards a Plastic Architecture” are finished at the same time. “It fulfilled Theo van Doesburg his prescription, being elementary, economic and functional; un-monumental and dynamic; anti-cubic in its form and ant/-decorative in its colour.” (Frampton, 2007, P. 145).

4.2 European Villa’s

This paragraph delves into how the architects of this movement translated the written manifestos and ideas, described in the previous paragraph, into architecture. The Timeline in figure 15 provides an overview of the most influential European villas designed during the modern movement in Europe, starting from the Rietveld Schröder House from 1925 to The Homewood from 1938.

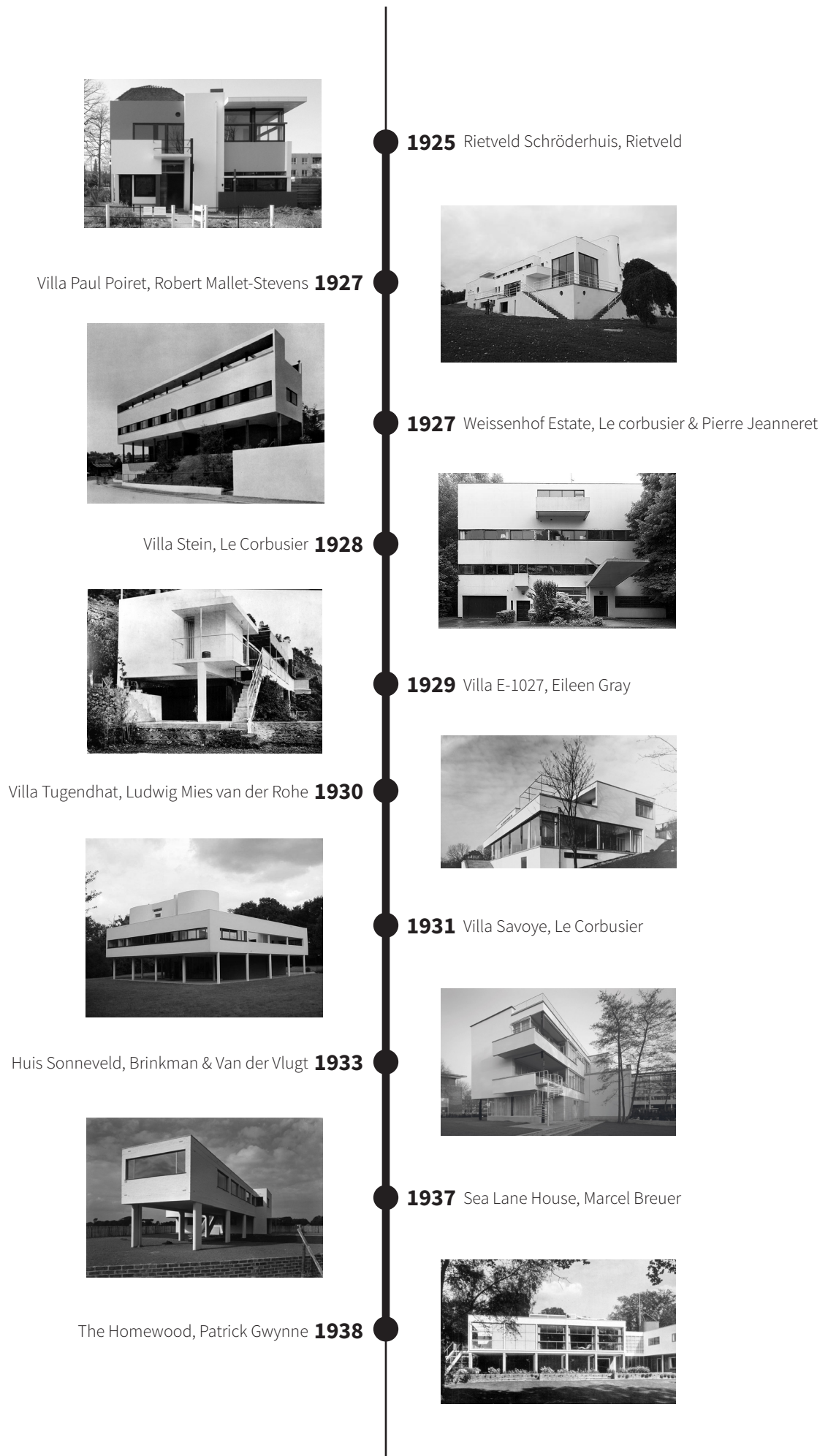


Figure 15: Timeline European modern villas

As previously mentioned, the modern movement was driven by advancements in building technologies. Thick load-bearing walls were no longer necessary, being replaced by structural steel, reinforced concrete, and glass. This is evident when examining the timeline. Generally, due to these advancements, almost all villas were finished in white plaster, with windows playing a significant role in the exterior. Additionally, it's noticeable that all villas are horizontally oriented and feature flat roofs. Furthermore, around 1929, villas began to elevate more, using pilotis, creating distance between the locations and the villa. What may not be immediately apparent, but made possible by new building technologies, are open floor plans. The aforementioned similarities among the villas align with the five points outlined in Le Corbusier's "Five Points Towards a New Architecture" from 1926. The influence of this is thus clearly visible.

Before Le Corbusier connected his five points to modern architecture, Rietveld designed the Rietveld Schröder House in 1925, which can be seen as the founder of the modern movement. For many critics, the house marked a significant milestone in the evolution of modern architecture: it symbolized a true departure from the past, embracing colour and abstract form (Friedman, 1998). The Rietveld Schröder House broke away from traditional associations with period architecture (Bradbury, 2021) and embraced new machine technologies (Friedman, 1998). Rietveld viewed the house as an opportunity to establish a thoroughly modern environment, liberated from the restrictive traditions and regulations - both social and architectural - that hindered new experiences and emotional expression (Friedman, 1998). The house featured thin walls, open and adaptable living spaces with folding partitions and movable walls, large windows, striking colours, and exuded a sense of *joie de vivre* (Friedman, 1998), all contributing to the modernity of the house. It's notable that Rietveld, unlike the designs of the villas in the subsequent years, still used colours, a practice that faded in the following years. The Schröder House played a crucial role in creating a modern consciousness that influenced and defined the course of modern architecture (Friedman, 1998).

Simultaneously with the Rietveld Schröder House, Le Corbusier designed Villa La Lac. This villa progressed beyond the transitional phase more than anything that Oud or Gropius were to build for several years (Hitchcock & Johnson, 1932). The classical elements of the modern movement - horizontal orientation, flat roof, influential windows, and white appearance - are all incorporated into this house. It's interesting to note that Le Corbusier designed this house one year before he published "Five Points Towards a New Architecture." It is likely that he had been refining his manifesto for several years and perhaps used Villa La Lac as a testing ground for his ideas. In 1928, a few years later, Le Corbusier designed Villa Stein, which was immediately hailed as a landmark in the evolution of modern architecture and has since been widely regarded as one of the most significant buildings of the twentieth century (Friedman, 1998). Once again, this villa exhibits the classical elements of the modern movement. Interestingly, the villa was designed before the location was chosen, something very different than the approach of Gray, making the location the primary choice of the design (Marcos & Swisher, 2021). Furthermore, Le Corbusier disapproved of the residents' interior decoration and furniture choices, preferring to showcase the rooms completely empty (Friedman, 1998). This implies that Le Corbusier was anything but concerned with designing for the inhabitants of the villa, unlike Rietveld, for example, who did so in the Rietveld Schröder House.

The Tugendhat Villa by Mies van der Rohe, completed in 1930, builds upon the ideas of his contemporaries. Once again, he incorporated all aspects of the modern movement into his building but expanded upon them. In Tugendhat, he designed with a free plan, resulting in a large multifunctional living room. Here, where the living room bordered

the adjoining terrace, he blurred the boundary between inside and outside through the use of large windows (Frampton, 2007). This is something also evident in Villa E-1027 and Villa Savoye. Additionally, Mies van der Rohe designed much of the furniture in the house, creating a cohesive and truly modern work of art (Frampton, 2007). This contrasts with Le Corbusier's approach in Villa Stein, as Le Corbusier did not design his own furniture and preferred no furniture from the residents, as it did not align with his modern villa design. However, this does align with Eileen Gray, who also designed the interior for Villa E-1027 in 1929, thereby creating coherence between furniture, interior, and exterior.

When discussing modern villas within the modern movement, one cannot overlook Villa Savoye. Designed by Le Corbusier in 1931, this villa is considered the real-life embodiment of the manifesto "Five Points Towards a New Architecture" (Bradbury, 2021). It is primarily linear in design, constructed with a steel framework combined with reinforced concrete, painted white, and partially elevated on a series of pilotis. Featuring a multipurpose living space, it has floor-to-ceiling glass walls that blur the distinction between indoor and outdoor areas, exemplified by the seamless connection between the main living room and the elevated terrace (Bradbury, 2021). These are all aspects that render this villa thoroughly modern from top to bottom. What stands out about the villas described above, including Villa Savoye, is that Le Corbusier's approach structurally differs in some respects. As described in his previous villas and also Villa Savoye, he views the villa as a house of universal validity, adaptable to any setting (Rykwert, 2000). This is fundamentally different from Villa E-1027 and Villa Tugendhat, which specifically capitalize on impressive views.

4.3 Contribution Villa E-1027

What makes Villa E-1027 unique, among other things, is Gray's minimal use of space (Goff, 2015). This marked a breakthrough in the quest for the "Maison minimum." Due to the housing shortage resulting from wartime, many sought to address this by designing a "Maison minimum," aiming to create smaller houses that could serve as prototypes. Bauhaus architects in Germany, Constructivists in Russia, and notably Le Corbusier, all focused on "Maisons minimums" or "machines à habiter" (Adam, 1987). Standardization of housing became a rallying cry from Gropius to Le Corbusier. However, Gray's small residences, could easily be adapted and replicated on a larger scale. Just as her furniture served as prototypes for later production, so did her houses. The incorporation of prefabricated elements in wall panels, windows, and even doors underscores this point (Adam, 1987). Nevertheless, there may be doubts about this. As discussed earlier, Gray adapted the villa to its specific location, so the entire villa might not be suitable elsewhere. However, aspects such as the design and concepts of the first floor, where she efficiently used space, could be applied elsewhere.

Although Villa E-1027 is considered unique, there are several aspects that can be traced back to manifestos and earlier built villas. Adam (1987) suggests that Villa E-1027 can be viewed as a manifesto house formulated based on Le Corbusier's "Five Points of the New Architecture" from 1926. Indeed, Gray used pilotis (not to create distance but to deal with the landscape), incorporated a flat roof (though not in the manner intended in the manifesto), and embraced a free floor plan, long windows, and a flexible design of the façade. However, E-1027 transcends and emancipates itself from its numerous influences, earning praise from Le Corbusier himself (Pitiot & Stritzler-Levine, 2020). Despite these associations, it remains a wholly unique structure. Gray notably integrated the building into the landscape, a departure from Le Corbusier's approach, as he designed most of his

villa's before the site was chosen (Pitiot & Stritzler-Levine, 2020).

However, the primary inspiration for Villa E-1027 stems from a project by Le Corbusier and Pierre Jeanneret, Villa Le Lac, constructed in Vevey in 1925 (Pitiot & Stritzler-Levine, 2020). It's evident that Gray extensively studied Villa Le Lac, as a series of architectural plans, cross sections, and facades of Villa Le Lac were discovered in Gray's own archives. There are numerous similarities in how both structures were conceived, and designed, and in their architectural characteristics (Pitiot & Stritzler-Levine, 2020). Despite these resemblances, there are also significant differences. One notable distinction is that Villa E-1027 was designed with the presence of a servant in mind (Pitiot & Stritzler-Levine, 2020). As described in earlier chapters, Gray's design philosophy prioritized creating spaces for people. Additionally, while Le Corbusier specified the need for "movable partitions allowing all sorts of transformations" and advocated for "standard furniture, fabricated by industry without any characteristics of art or decoration charged with meaning," as written in *L'Esprit Nouveau* (Adam, 1987, p. 212), Gray took it a step further for E-1027. All the furniture and fixtures in E-1027 contribute to the partitions' ability to transform space (Pitiot & Stritzler-Levine, 2020). Gray achieved a remarkable coherence between furniture, interior, and exterior (Marcos & Swisher, 2021).

However, Gray's practical sense prevented it from simply becoming the embodiment of architectural ideas. Eileen did not consider E-1027 "a perfect house" capable of solving all the problems that concerned her (Adam, 1987). Instead, the house was an attempt to address the challenges of modern domestic architecture. She viewed it as an example, a model upon which other architects could build and improve upon her ideas (Goff, 2015). And they did. For instance, the cohesion Gray achieved between furniture, interior, and exterior can also be observed later in Villa Tugendhat. Furthermore, as mentioned earlier, Gray eliminated the barrier between the interior and exterior, extending the unity of the building to include the garden and the terraces (Pitiot & Stritzler-Levine, 2020). This can be later seen in Villa Savoye, Villa Tugendhat, and the Homewood House. Based on this, it can be concluded that Gray further developed the ideas and villas of her contemporaries, just as they did with her ideas implemented in Villa E-1027. Unfortunately, it is difficult to precisely determine who based what on which design. However, it is clear that all modern architects learned from each other and approached some aspects quite differently.

05. CONCLUSION

This thesis delved into the background of Eileen Gray to gain insights into her identity as a designer and to formulate her design philosophy. Additionally, Villa E-1027 is researched through the lens of Gray's design philosophy to understand its formation. Lastly, the study explored the history of the modern European movement, with a particular focus on Villa E-1027's role in shaping this movement. Drawing on the information gathered in the preceding chapters, the main research question how has Eileen Gray's design philosophy shaped Villa E-1027, and what is the contribution of the villa to the development of the modern European movement? Could be answered.

Because of her unique sense of space, her unique design process (which differed from a typical architect's due to her training in painting and lacquer), her interest in modern dance, theatre, and stage design, her collaboration with Badovici, her encounters with Dutch de Stijl architects, and her fascination with geometry and new theories regarding the fourth dimension (Pitiot&Stritzler-Levine,2020), she designed an outstanding modern masterpiece, Villa E-1027. Gray focuses during the design of the villa on creating architecture which prioritizes the inhabitant of the house, rather than the architectural appearance (Unwin, 2010). This became her design philosophy for Villa E-1027; more focused on providing a place to live than on appearance.

Gray's design philosophy has been evident in all aspects of Villa E-1027. Her philosophy, has greatly influenced the design of Villa E-1027. As a result, she began with a location instead of starting with a design, designed from the interior to the exterior, conceived a multifunctional room, and created furniture that was both aesthetic and comfortable. Gray viewed Villa E-1027 as a prototype, a model for other architects to build upon and refine her ideas (Goff, 2015). In doing so, she designed a villa that made significant contributions to the development of the modern movement. For example, Gray achieved a remarkable cohesion between furniture, interior, and exterior, a concept later echoed in Villa Tugendhat. Moreover, as previously noted, Gray blurred the barrier between interior and exterior spaces, expanding the unity of the building to include the garden and terraces (Pitiot & Stritzler-Levine, 2020). This architectural innovation can also be observed in later works such as Villa Savoye, Villa Tugendhat, and the Homewood House. Consequently, it is evident that Gray not only furthered the ideas and designs of her contemporaries but also influenced subsequent architectural developments with her innovations implemented in Villa E-1027. In conclusion, Villa E-1027 played a role in the development of the modern European movement by exemplifying how to achieve coherence between furniture, interior, and exterior spaces.

Unfortunately, pinpointing the exact origin of certain architectural solutions or design principles is challenging. It is also difficult to establish who influenced whom and how those influences manifested in the buildings. However, it is evident that modern architects learned from one another, although they often held different perspectives, leading them to approach certain aspects in diverse ways.

This conclusion partially confirms the hypothesis posed at the beginning of this thesis. Namely, that Gray, due to her background as an interior designer, approached architectural rules with less rigidity, thereby introducing more playfulness. Based on the research, it appears that Gray did indeed start designing from the interior, but it is not clear whether this was influenced by her background or by her vision of designing for the inhabitant. However, her background as an interior designer enabled her to design the furniture for the Villa herself. As a result, she created a cohesive unity between the furniture and the rest of the Villa, one of the key aspects of the design of Villa E-1027. It can be assumed, therefore, that Gray approached her work differently from her contemporaries due to her background.

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Fig 06 - 07: Hecker, S. & Müller, F. C. (1993). *Model of Petit Maison pour un ingénieur*. [Photograph]. Eileen Gray. Gustavo Gili.

Fig 08 - 11 & 13 - 14: Unknown photographer. (n.d.). *Villa E-0127*. [Photograph]. 20th Century Architecture. <http://architecture-history.org/architects/architects/GRAY/OBJ/1927,%20E-1027%20House,%20Roquebrune%20Cap%20Martin,%20FRANCE.html>

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