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Villa Savoye: Embodiment of Classics and Modern

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Abstract: *The Villa Savoye is one of the renowned architect Le Corbusier's earliest and representative works of modern architecture. Its design follows the concepts of modernity and Purism that the young, ambitious architect was eager to showcase to revolutionize what architecture meant. Though the Villa Savoye appears in every aspect to the eye as modern, the core of Classical architecture lies within. Le Corbusier applied the ancient concepts of "harmony" defined by Classicism into modernity, creating new classics that he believed would better fit the changes in society in the 1930s. This paper examines how Le Corbusier's early travels to Southern Europe influenced his development of modern architectural concepts and how he applied these ideas to the Villa Savoye, creating a modern and Classical structure.*

Keywords: *Architecture Promenade, Classical Architecture, Five Points of a New Architecture, International Style, Le Corbusier, Purism, Villa Savoye.*

I. INTRODUCTION

Fig. 1, Le Corbusier, *Villa Savoye*, Poissy, France, 1931, photograph by Renato Saboya, https://www.flickr.com/photos/renatosaboya/6310090780/.

In 1931, a remarkable construction was completed in the suburbs of Paris, in a town called Poissy, marking a milestone of its time [1]. This was the Villa Savoye (fig. 1), a weekend retreat designed by the renowned architect Le Corbusier (Charles-Edouard Jeanneret). With minimalist colors, stylized shape, and innovative planning, the Villa Savoye instantly became an icon of modern times. However, while the Villa Savoye may appear as the epitome of modernity, this work by Le Corbusier directly reflects his deep appreciation for the essence of Classical architecture that he acquired during his Grand Tour in Europe as a young adult. With no shadow of Greek and Roman architecture's elaborate decoration visible, how does Le Corbusier claim to have learned from the masters of the past? When young Charles-Edouard Jeanneret embarked on the historic journey to southern Europe with friend Auguste Klipstein, his original destination was Constantinople [2]. However, he unexpectedly found himself in deeper contemplation standing in front of the

Parthenon in Athens. Young Jeanneret did not foresee the drastic impact that the concepts of humanity, simplicity, and balance from these Classical works had on his alter ego, Le Corbusier. It was precisely these elements derived from his tour in Italy and Greece that made the Villa Savoye filled with human emotions and warmth under its contemporary exterior.

Despite its modern appearance, the Villa Savoye's design and concept invoke a historical paradox: it was the product of contemporary and Classical designs that complemented each other. This combination of present and past seemed initially improbable, as the Villa Savoye did not resemble its "ancestors" in Greece and Rome. Yet what Le Corbusier derived from his Grand Tour were not merely the physical forms of architecture but a fundamental understanding of what architecture is and its relationship with humanity. As architect and professor Daniel Sherer puts it, "…the apex of classical Greek architecture…gave Le Corbusier's vision of modern architecture a powerful strategy of legitimation based upon the interdependence of standardized norms and exceptional achievements [3]." In other words, Le Corbusier was drawn to the subtle humanity of Classical architecture, the delicate harmony forged between nature and people, and its focus on the appropriateness of its forms to its functions. These aspects were vital because they formed the basis of the architect's ideologies and contributed significantly to his development of Purism. Arguably the pioneer of modern architecture, the Villa Savoye stands as the embodiment of Le Corbusier's Purist ideologies that contained Classical elements for balance. Beneath its contemporary style lies the core harmony of Classical architecture demonstrated through the Villa Savoye's adherence to the Five Points of a New Architecture, architecture promenade, and international style.

This paper will discuss the Villa Savoye's incorporation of Classical and modern styles by analyzing Le Corbusier's European tour and his Purist ideologies inside the house. To lay the groundwork for this discussion and provide Le Corbusier's education in Classical architecture, I dedicated the first section to explaining the architect's Grand Tour. Here, I will emphasize his admiration of the vernacular styles and modern technology. Based on his observations of both subjects, he found the Acropolis in Athens was full of constructions that fitted his forming ideologies. Then, a thorough introduction to Purism will be provided. Le Corbusier devoted his life to executing Purist ideologies. As the Villa Savoye was among his first few experiments with this style, this information must be provided before delving into further analysis. Now, we shall venture into the Villa Savoye's realm, and I will use three distinct elements Le Corbusier devised from the Acropolis to explain the combination of tradition and contemporary inside the residence. I will first correlate Le Corbusier's Five Points of a New Architecture as it is presented in the Villa that provides a perceptional harmony and demonstrates that these features combine the present functionality and the past balance. From these principles, we will closely examine the architectural promenade inside the Villa Savoye that revives an ancient practice of planning perspectives in modern times, thus granting an experiential harmony. Finally, we will move to the international style that the Villa Savoye used to provide worldwide harmony in Le Corbusier's eyes.

II. DEVELOPMENT OF STYLE

Like many other artists, Le Corbusier developed an iconic personal modern style. This was Purism, an ideology present throughout the architect's life. Purism focused on designing objects so that they resemble their most original, natural form—their "purist" structures. The style was characterized by reducing decorations, using simple geometric shapes for models, and having unified exterior color. Le Corbusier's *Nature Morte Verticale* (fig. 2) and *Nature Morte* (fig. 3) are examples of Purist paintings, while his execution of the Esprit Nouveau pavilion and the Villa Savoye manifested Purism in architecture. Together with his friend Amédée Ozenfant, they announced their manifesto of Purism in 1918: *Après Le Cubisme*. But before he published this demonstration of Purism, Le Corbusier embarked on a journey of self-discovery as he sought to find his beliefs in the mixing stew of modern art [4]. From his early education to his Grand Tour, Le Corbusier was primarily a self-taught architect, and his unconventional path significantly shaped his unique style. Trained by books, experience, and people, young Jeanneret was an observer with the talent to perceive the underlying essence of things. It was during his 1911 Grand Tour that he found a balance between old and new and the human-nature harmony that he later applied to his style.

Fig. 2, (left) Le Corbusier, *Nature morte verticale*, oil on canvas, 1922, Kunstmuseum Basel, https://en.wikipedia.org/wiki/Purism.
Fig. 3, (right) Le Corbusier, *Nature morte*, oil on canvas, 1921, Musée National d'Art Moderne, https://en.wikipedia.org/wiki/Purism.

From the start, Jeanneret's trip was a "reversed" version of the standard Grand Tour. The tour down to southern Europe was a traditional must for students in the north. Following the classic route, scholars venture down to the Alps, then to central Italy, and stay a few weeks or months in Rome, the ultimate destination of the journey [2]. Jeanneret and his companion Kilpstein chose a different path: their goal was to travel to Constantinople, present-day Istanbul. The pair spent 50 days there and devoted ten of their nineteen chapters in their book on the Tour to Constantinople—by contrast, only three were given to the Parthenon and the return from Western Europe [2]. Jeanneret's sketches and notes were significant because they reveal his contemplation of the relationship between high art and folk art or, in a larger scope, the integration of tradition and modern art. Initially, Jeanneret set out to find the "tradition of abstract art" in Islam, where pottery was covered with geometric and conceptual shapes [2]. Yet along the way, Jeanneret was intrigued by modern machinery, which was, in his belief, another form of simple and abstract beauty unique to their time.

Jeanneret found engineering a fascinating aspect of modernity that should be recognized. When observing a set of iron bridges over the Danube, he debated with another architecture student, noting, "Our man has nothing but scorn for them. We defend the beauties of modern engineering [2]." Jeanneret points out that during the start of the 20th century, people seemed resistant to accepting the new fashion of modernity's bluntness. Even at this early stage in his career, Jeanneret demonstrated a tendency to embrace science and math in architecture. He believed an object could be in its most natural structure only with the simplest form, without lavish decoration and meaningless ornament. This perspective was crucial because it directly foreshadowed Le Corbusier's later development of Purism, and he extracted this idea from the essence of modern technology. For him, architecture needed to be original and simple so that it was clear what the building's functions were to create harmony; engineering was the method that could help Jeanneret achieve his goal.

In the Greek Acropolis, Jeanneret was delighted to see that Classical architecture agreed with him on simplicity and harmony. In fact, it was an example of the combination of straightforwardness and humanism tender. Greek temples all had the same function for worshippers to honor deities and thus shared a basic form: a rectangular structure with columns topped by a triangular roof. This uniformity was prevalent in Greek architecture, and Jeanneret observed that the Parthenon "is a product of selection applied to an established standard. Already for a century, the Greek temple had been standardized in all its parts [3]." This architectural standardization was exactly what Jeanneret had in mind for modern times. With the industrial revolution, there was a need for abundant architecture due to mass production, population growth, and urbanization. Jeanneret proposed to establish worldwide guidelines for different types of architecture to fulfill this need, enabling people to have a consistent architectural experience regardless of location. The Greeks had accomplished this uniformity centuries ago, according to Le Corbusier, who aimed to bring back their tradition again, along with their infallible creation of harmony in space. The Parthenon's serenity created a sense of belonging that the architect adored:

"In this period of science, of strife and drama in which the individual is violently tossed about at every moment, the Parthenon appears to us as a living work, full of grand harmonies. The sum of its inevitable elements gives the measure of the degree of perfection to which man can attain when he is absorbed in a problem definitely stated [3]."

Here, Jeanneret focused on the set of problems created by rapid modernization. Within cities, people often feel detached from their surroundings and thrown into a mesh of steel and glass. Modernization's strict functionalism lacks the emotion and harmony generated in historic architecture when one enters its space. However, Classical architecture like the Parthenon works with humanism. The Parthenon stands high above and alone in the Acropolis, establishing a sense of serenity. Its white walls and meticulous layout invite visitors to pass through the columns and enter, where they would be awed by the magnificent space encompassed by marble. The Parthenon's harmony was a synthesis of harmonies that could be viewed and experienced. This combination of elements was what granted its perfection. Creating harmony between humans, nature, and architecture became another goal Le Corbusier hoped to incorporate in his architectural works.

Jeanneret derived two critical concepts from the Parthenon and other examples of Classical architecture that would later be the core of his ideology. The first is establishing a universal architectural standard, and the second is adding emotions in three-dimensional space. But more importantly, Jeanneret realized that this new concept he was beginning to formulate was not a kind of "style." In fact, as Professor Daniel Sherer observed, the architect aimed to "show that the 'styles' do not really count, but the norms which implicitly govern them [do] [3]." This statement fundamentally captured the Purist ideology that Le Corbusier dedicated his life to executing. He was not seeking to develop a new style; instead, he returned objects and architecture to their purest and most basic forms. Jeanneret ended his Grand Tour with knowledge taught by the silent Classical architecture, vowing to revive its spirit in unique ways.

Modern times follow modern rules. Upon Jeanneret's return in 1911, he was accepted into the avant-garde Club Artistique de Passy, meeting weekly with fellow artists to explore the modern definition of art [4]. Through connecting with contemporary styles, Jeanneret developed a liking for Cubism and related artists such as Picasso and Metzinger. The abstract but simple and straightforward geometric shapes of Cubism art were another basis on which Jeanneret rested his ideologies. He started collaborating with painter Amédée Ozenfant, and in 1918, they published their manifesto for Purism: *Après Le Cubisme* [4].

Après Le Cubisme served as the theoretical basis for Purism. It was first an advancement from Cubism's abstract art of the war period. Everything before was troubled, unknown, and disoriented; hence complex geometric compositions were essential. By 1918, the war was over, and it was time to start a new era where "everything is getting organized, is becoming clearer, is getting purified… nothing is as it was before [4]." In Jeanneret and Ozenfant's eyes, Purism fits the era of science and society's needs. Jeanneret and Ozenfant believed that art and science were the two main themes of advancement, and they correlated with each other by sharing the common "tendency towards purity [4]." Laws and formulas govern the universe and human society. Science's mission was to uncover these underlying laws and norms in nature, and art aimed to do the same because with fundamental principles comes harmony—"the laws of order are the laws of harmony [4]." The post-war period called for reconstruction of the balance and harmony lost during battles. Architecture, therefore, should be the primary place where purity is first established to convey emotions [5]. Here, Le Corbusier and Ozenfant outlined an extensive theoretical basis of Purism; now, the question was how to execute this universal formula.

Accomplishing this task comes back to the reference in Classical architecture. The architects of the Parthenon captured the ancient Greeks' admiration and reverence towards Athena and translated that emotion into a space they created. To the average Greek citizen, elementary shapes created a sense of balance, and by employing a similar structure for all temples, an unconscious reverence and sanctity towards deities inside were invoked. Two fundamentals of Purism execution are derived from the Parthenon. First, Jeanneret and Ozenfant declared that the task of a modern artist was not to copy objects like a photograph but to materialize what they sensed [4]. Twentieth-century artists needed to be like Greek architects who incorporated feelings into three-dimensional space by using simple forms, colors, and lighting corresponding to nature and the purpose of the construction. Second, the goal of Purism was to create a universal style for every object, or rather, to allow every object to return to its most original form. Architecture historian Judi Loach observed that in Jeanneret and Ozenfant's purist paintings, "they depicted a single, most archetypal example of a bottle stands for all bottles, the most archetypal example of a glass for all glasses… [4]" In short, they aimed to develop elemental objects from elemental objects, defining architecture to be built in its purest form by following the essence of Classical architecture.

Two years after publishing his manifesto, with his ideologies in written execution, Jeanneret adopted a pseudonym in publication—Charles-Edouard became Le Corbusier. Filled with ambition and enthusiasm, Le Corbusier began designing architecture that followed Purist principles, including the Villa Savoye.

III. VISUAL HARMONY

The residence was commissioned by the Savoye family as a weekend retreat outside Paris. As wealthy bankers, the Savoyes provided Le Corbusier with considerable freedom with the house's design, allowing the talented architect to navigate free waters that blended both his clients' needs and his architectural vision. The Villa Savoye appears like a rectangular box floating in mid-air at first sight. The first floor, painted dark green to harmonize with the environment, recedes behind the slender white pilotis (column). The ground floor features a garage accessible from the side and serves as an entrance hall. Two ascending routes are present on this floor: the main ramp situated in the middle of the hall, which extends through the house and penetrates the roof—forming the central passage inside; the other is a secondary spiral staircase on the left. Visitors follow the ramp to the box-like second floors that rest upon the delicate pilotis below. This floor comprises the main living quarters, complete with a living room, two bathrooms, three bedrooms, a kitchen, and an open terrace connecting to a hanging garden. However, the journey inside the Villa Savoye does not end there. The ramp and staircase take visitors to the roof, where a magnificent outdoor terrace and roof garden are placed (fig. 4).

Fig. 4, first floor (left), second floor (center), roof planning (right), Le Corbusier, *Villa Savoye*, Poissy, France, 1931.

To extract the essence of his extensive study of Purism, Le Corbusier introduced the "Five Points of a New Architecture" in 1927. Using short phrases, he illustrated the elements that a work of architecture must have in order to be both harmonic and appealing to modernism: pilotis, the long window, the roof garden, the free façade, and the free plan [6]. While the Villa Savoye was not Le Corbusier's first attempt to incorporate these five elements cohesively, it was his most successful piece during his early experimentation with Purism—it could even be argued as being the most archetypal of Purism works. By integrating his newly founded principles, the Villa Savoye represents a static visual harmony that is instantly perceived when observed. The Villa is experienced as a sculpture, an aesthetic experience mingled with the functionality that Le Corbusier focused on [5]. These five points played a vital role during the construction of the Villa Savoye, each linking a distinctly modern feature to a reference to Classical architecture that Le Corbusier discovered during his Tour.

Pilotis refer to the circle of columns surrounding the base of the Villa Savoye. This design is a direct descendant of Classical Greek architecture, where temples were supported by rings of thick marble columns (peripteral colonnades) [1]. It was these columns that separated the Parthenon from its surrounding environment. Once people walk into the marble's embrace, they are immediately transported from nature into artificial space; the columns act as a doorway between two very different environments. This clean cut-off was exactly what Le Corbusier desired: "pure architecture in a pure landscape [6]." To him, nature was meant to roam free and untamed in its original ever-changing forms, while houses, according to its characteristic, were confined to be "machines for living." The Villa Savoye stands in an uninterrupted wilderness, and no special boundaries were used to shape the nature around it; only the columns between the grass and walls introduced a transition. Though the Villa Savoye and its surroundings were visually separated, Le Corbusier believed this provoked nature to blend better with construction. According to art history professor Tim Benton, "radical principles of the Laws of Nature—geometry, order, reason—could blend with nature in its primal state [6]." Like the Parthenon, where humanized features coexist with natural context, the Villa Savoye's walls embrace the nature surrounding it. They complement each other because of the balance that Le Corbusier observed in ancient architecture and sought to recreate through purism.

The Villa Savoye's columns have a similar purpose to the ancient Greek temples in terms of tradition. The main rooms of Greek temples were recessed behind the peripteral colonnades requiring worshippers to walk

from the blazing sunshine outside into the darkening ring of columns before emerging into the light of the main chamber again. Metaphorically, when worshippers pursue this route of light and darkness, they are descending from a mortal, natural environment into a divine space [7]. Though in the Villa Savoye's case, it was a route to enter a residence, Le Corbusier applied the same sense of finding the entrance like that of Greek temples. The entrance is located in a way that requires the visitor to walk around the house, appreciating its innovative layout, then only after a flight of stairs and a few direction changes can they venture inside the space enclosed by the columns [1]. Architectural historians Flora Samuel and Peter Jones illustrate this visitor's path as "a switchback journey from darkness to light in order to 'find the sun,' augmented by the manipulation of color, rhythm and proportion [8]." The concept of "finding the sun" refers to the Greeks' journey for light inside the main chamber. Le Corbusier incorporated a similar pathway inside his residence, hoping to evoke the same mental elevation. By employing a similar design for the peripteral colonnade, Le Corbusier successfully preserved the emotional experience of entering a Classical temple within the Villa Savoye, inviting viewers to appreciate the residence's planning.

However, unlike the Parthenon, the Villa Savoye's column design inverted the traditional approach to the column, as seen in the Acropolis. The ancient Greece columns were massive and induced a sense of strength as they supported tall roofs and created enormous spaces for worship. In contrast, the Villa Savoye's columns were slender and spaced apart, seemingly incapable of bearing the weight of the upper stories. Le Corbusier challenged the unwritten rule of placing heavy elements at the base and light ones at the top in architecture by embracing modern construction materials such as steel and concrete [1]. This design was unique and only possible in modern times because of the technology used to support it. The reversal of traditional weight bearing illustrates how Le Corbusier revived an ancient design with contemporary adaptations.

While the columns separated architecture from nature, the ribbon windows gave inhabitants a distinct view of the country's landscape. Pierre Savoye commissioned the Villa Savoye to Le Corbusier as a quiet country house away from the hustles and bustles of the city [1]. It is essential to understand the Villa Savoye's purpose because, as a vacation house, its role was to provide its owners with greenery and nature that they could not see in cities. It is a place for humans to embrace and interact with nature, referring to Le Corbusier's Purist principles of order and harmony. Thus, to maximize this nature-seeking experience, Le Corbusier took a wildly different approach to the subject of windows compared to other architects of the time. Traditional country houses were synonyms for mansions or cottages that had pitched roofs, a few stories, and rectangular windows of the same size in every room. These windows were separated by walls and provided only obstructed outside views. Le Corbusier, on the other hand, made windows replace part of the walls completely. The line of windows in the Villa Savoye goes around on all four sides of the exterior and is only interrupted by the house's corners. Hence, within the house, people can have a view of the outside nature wherever they are and feel present with the landscape outside by having a panoramic view.

The Villa Savoye's roof garden (fig. 5) allows nature to coexist with its residence in a more explicit way. The Villa's roof exhibits a garden with a curved windbreak [1]. On the surface, this permits its residents to experience the surrounding nature without stepping out of the house. Nevertheless, more importantly, Le Corbusier constructed this garden as a pleasant addition to the Villa's harmonic space. The fuzzy greens and countless garden colors contrast greatly with the Villa Savoye's solemn cream walls. They add texture to the house, and with texture comes different emotions and perceptions [9]. Le Corbusier hoped that the garden could function and be perceived as a relaxing space where humans interact with the piece of nature that is part of the house. The garden also breaks up the roof's space. The Villa Savoye's exterior is perceived as a cube, and just by observation, people may think of it as two floors of unvarying boredom. But by invoking a roof garden, the space on top is split, and the barrier between the exterior and interior is suddenly broken. People who entered the house now find themselves standing outside but still present inside the Villa. What was externally symmetrical now appeared asymmetrical, allowing visitors to pause momentarily to comprehend, then embrace the garden, creating a balance between nature, humans, and space.

Fig. 5, Villa Savoye roof top view, photography by Monceau, https://www.flickr.com/photos/monceau/16325434505/.

In fact, the collusion of symmetry and asymmetry in space was Le Corbusier's experiment of overlaying modern and Classic styles. Le Corbusier had a unique view of Classical architecture; he believed these works contained both symmetrical and asymmetrical elements, contrary to most *Beaux-Arts* architects who would see it as only symmetrical. The default for early 20th-century architects was to create symmetrical layouts because of the widespread *Beaux-Arts* teaching [8]. In modern times, symmetry was a balance of the eye produced by science, math, and industrial development. Yet this default made architecture appear much alike one another, and Le Corbusier was in the lead to escape this current dullness and adopt asymmetry, whose concepts are rooted in Classical architecture. During his Grand Tour, Le Corbusier discovered an astonishing fact about the Pompeian domus: "If you draw the houses of Pompeii which you imagine symmetrical according to the traditions of the School, your pencil will discover astonishing asymmetries and unexpected symmetries [3]." The essence of this quote states that in Classical precedents, what was first perceived as symmetrical could, in reality, be the play of asymmetry, meaning these two unexpected forms could coexist harmoniously and excite people viewing the architecture. This was the case for the Villa Savoye. Le Corbusier sought to follow in Pompeiian footsteps by first adopting a typical geometric shape, a cube, for the exterior. However, he used different methods to break up space and invoke an asymmetrical experience inside. The roof garden was one of these places where the barrier of inside and outside was blurred, but more notably, the last two phrases of Le Corbusier's five points directly influenced the Villa Savoye's composition.

The free facade and free plan emphasized the liberation of architecture's form. The facade can be any of a building's external walls and typically reveals the construction system as well as the internal layout [10]. However, the Villa Savoye's free facade is not traditional due to the ramp placed in the center of the first floor. Samuel and Jones explain the function of such an unusual ramp: "The ramp…successfully [switches] attention from the facade—the traditional architect's front—to the center and inside of the house, necessitating imagined movement and supporting the idea that architecture is four-dimensional [8]." In conventional architecture, the facade is used to introduce people to the house and provide entrance; once the visitors are inside, the facade is discarded behind them. In the Villa Savoye, this sharp transition of the facade and house center is smoothed by the ramp [8]. Once inside, people's gaze is further introduced to the second floor following the ramp. This scene could even be characterized as a second facade inside the house, welcoming people and defining its interior space planning. This planned entrance journey points to the concept of an architectural promenade, which will be discussed in depth in this essay. The free plan again breaks the traditional indoor planning separated by walls.

Throughout architectural history, the exterior walls served primarily as weight-bearing structures, so openings to the outside were limited. But with the help of modern materials, Le Corbusier made the outside walls merely a membrane that wraps around the interior, providing spatial constraint rather than support [11]. The walls inside the house separate space according to logical order instead of structure so that space can be easily molded to fit clients' needs better. The Villa Savoye's interior is held together by its walls which accommodate the function of the space and provide scenery views for its inhabitants.

Though this design played well in the Villa Savoye's case, Le Corbusier later criticized his works for employing such a free plan. The architect focused on creating harmony between humans and nature, where proportions were essential to make one feel welcome in a space [9]. Though the free plan was an innovative method to separate space, it somewhat obstructed humans from roaming freely inside the house. Architect Nilay Uluçay observed that "this freedom created in the interior of the building damages its suitability to the human proportion and creates a feeling of emptiness with very large volumes [9]." Basically, Uluçay points out that

though the exterior and environment remain proportional, the interior spaces are not cohesive enough to generate the same harmony for humans. With future adjustments to style, Le Corbusier seemed to repudiate his early creations as they were focused more on function than emotions. Nevertheless, the Villa Savoye still holds great significance as it represented an "architectural response to modernization that was specific to the 1920s [5]." The post-WWI world needed a Villa Savoye to call upon a transition in architecture that led to other inventions of styles and thought in constructions later. The Villa Savoye was the pioneer that brought discussions of nature and humans to architects' tables.

Despite later criticism, the Villa Savoye remains a successful example of Purism that exemplified Le Corbusier's early ideologies. Its visual approach of incorporating different elements to balance a rigid structure with its surroundings and human living should be applauded. Moreover, Le Corbusier did not only think of providing a static pleasure; he made the Villa Savoye so that only when walking inside the designed entrance could visitors fully appreciate his ingenious harmonious planning.

IV. EXPERIENCING HARMONY

In the Villa Savoye, the combination of Classical traditions and modernity is particularly evident in the experience of arriving at the house and navigating through it. The entrance into the Villa Savoye via car was designed in an extremely innovative way. By driving to the Villa Savoye, visitors experience what Le Corbusier called the "architectural promenade." Essentially, the promenade is a sequence of planned "picturesque" scenes of the house that unfolds when viewers are on the move [12]. This concept had its roots in the Acropolis, where ancient Greek architects' subtle balance of symmetry and asymmetry provided viewers with astonishment. While the promenade outside was derived from Classical architecture, the pathway inside the Villa demonstrated modern approaches and customs. By incorporating two sets of entrances, Le Corbusier ingeniously combined ancient and contemporary elements and allowed their harmony to be triggered through the viewer's experience.

Le Corbusier adopted the French architectural historian Auguste Choisy's findings in the Acropolis for the architectural promenade. The historian first noticed that the stairs on the west side of the Parthenon had a distinctive curve (fig. 6) [12]. He argued that this curvature was intentionally made to be off from the Parthenon's central axis. This 7.5-meter displacement demonstrated the principles of symmetry and asymmetry employed in the Parthenon's construction [12]. Contemporary architectural historian Richard Etlin concluded Choisy's observation by stating, "The temple was not on axis with the entrance to the sacred precinct but rather off to the side so as to present 'a more imposing aspect' by offering simultaneously a front and side view [12]." The essence of this argument is that Choisy believes introducing asymmetry in a balanced setting incites people's emotions inside the building, adding to its aesthetic value. In fact, by introducing a curved staircase, people standing in angled positions would also perceive this impeding effect of divinity [12]. Using elements of asymmetry, Greek architects allowed the same sense of solemness regardless of people's viewpoints. This was astounding because the ancient architects considered people's movements and modified their designs to make people generate the same emotions in motion.

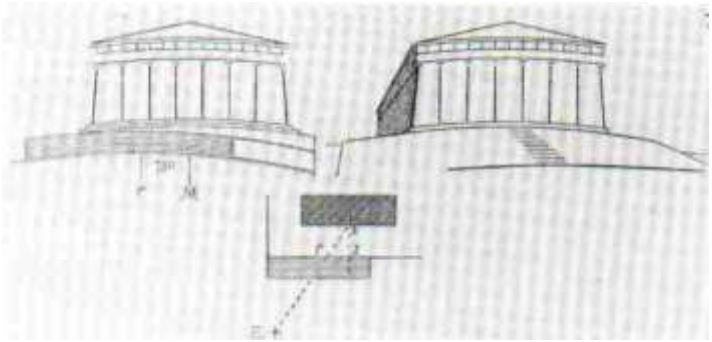

Fig. 6, curved steps on the west side of the Parthenon, from Choisy, *Histoire*.

Choisy then extended beyond the Parthenon, concluding that the whole Acropolis was applied with this asymmetry rule, providing onlookers with mobile harmony. The ancient civilizations seemed to have a knack for creating "skillfully managed transitions" at the entrance of temples so that the action of walking could activate the emotions of a static work of architecture [12]. Choisy called these transitions "picturesque" scenes that the architect deliberately planned to show when people viewed the construction from different distances and angles. In the Acropolis, Etlin states that "buildings and statues of different sizes and at different distances were asymmetrically balanced or 'ponderated' with respect to a central object with the frontal view the exception and the oblique the rule [12]." In other words, Greek architects used artificial constructions to mold landscapes to produce visual harmony through asymmetry. Four main scenes of observation were constructed surrounding the

Propylaea, the Parthenon, and the Erechtheum [12]. These observation sites gave viewers the maximum visual sense of the temple's religious and civic purposes.

While Choisy called this series of planned harmonic sites "picturesque scenes," Le Corbusier gave them a name that is later known as the "architectural promenade [12]." Based on Choisy's study, Le Corbusier wrote that "…Architecture can be classified as dead or living by the degree to which the rule of sequential movement has been ignored or, instead, brilliantly observed [12]." His concept of incorporating a moving perspective in his designs directly came from layouts created in the Acropolis. Considering a new age of development, he implemented the designs with modern trends. His architecture promenade gradually evolved into having a staircase introducing the inside of a house and another design of the outside route approaching the residence. The Villa Savoye was an early and exemplary model of the architecture promenade; Le Corbusier even considered incorporating a new transportation device's perspective for arrival. Cars were introduced to mass production during the twentieth century, and it has quickly become a vital method for traveling [8]. Designed as a weekend house outside Paris, the Villa Savoye's owners would likely arrive at their country lodging by car. For Le Corbusier, he now had to apply the architecture promenade to something that was moving fast, reaching the Villa Savoye.

The arrival is carefully planned so that intentionally placed objects moderate the movement and turns of the car. The Villa Savoye is situated on a hill, and by driving, visitors would find themselves passing first a rubble wall and to the entrance lodge [8]. At this point, on the left, people could glimpse the country house they are about to enter between trees. This view of the Savoye's facade mimics the initial sketch that Le Corbusier made in his *Oeuvre Complète*—in some way, the visitors are reliving Le Corbusier's design process of the building by approaching it via car [8]. Once past the trees and with a turn, the Villa Savoye is presented on its clearing in its final form as a three-dimensional space. In this view, the Villa Savoye would appear to be "floating" in mid-air as its thin pilotis seemed unable to support the weight of the second floor—the first floor was painted green and recedes behind the pilotis to not be the center of attention when seen the first time [1]. The car then drives through the pilotis, approaching the curved first-floor facade and catching flashes of the inside through its glassed walls.

Now, the car finishes its duty and slides into the Villa's garage on the first floor. Compared to other common garage designs in the 1920s, Le Corbusier took another insightful step in making the car a part of the house. Standard garage designs of the day were basically a barn for the car; they were either attached to the main residence or were a shed in the garden. The car and its habitat remain aloof from the household's activities; this modern invention seems to be in the adjustment stage to people's lives as architects struggle to put a roof over the new mechanism. However, Le Corbusier, as he did on the Danube River with iron bridges, embraced this new technology by designing a path for its arrival and fully including a car's space inside the house. The Villa Savoye's garage is placed on the first floor (fig. 7) and nearly takes up half of the layout, allowing the car to live alongside its owners. This garage design accomplishes two things: first, it allows the house's exterior and nature not to be disturbed by the occasional parking of a car under the pilotis. The outside remains in its original form, for "any kind of differentiated garden would detract from the purity [8]." Second, a garage inside the house enhances the concept of functionalism that Le Corbusier, somewhat rhetorically emphasizes, throughout the Villa's design. Arriving on site and into its garage, the car's promenade is now finished, and the human's promenade inside begins.

Fig. 7, dark green garage, photography by Monceau, https://www.flickr.com/photos/monceau/15702950194/.

The human promenade starts with the double entrance doors that mark the point where the exterior fully transitions to the interior with the help of pilotis. The visitor enters and is immediately drawn to the long ramp penetrating the house (fig. 8). Daylight splashes down from above, and visitors notice a spiral staircase on the left that also grants access to floors above; nevertheless, visitors take the ramp as it is the true diamond of the promenade [8]. They ascend upwards, making a sharp turn halfway through the level, and keep elevating. During this part of the ramp, visitors can vaguely see the roof garden hanging above them on the side and reach the second floor accompanied by this outside view [8]. On the second landing, visitors are given a choice: they are introduced to the main living room and path to the roof garden, thus could promptly step off the promenade and proceed to these quarters, or they could follow the continuing ramp that goes beyond and through the opening to the roof. With a final turn, visitors find themselves standing at the top of the household overlooking the balanced beauty that Le Corbusier created—the final scene of the journey that was titled *promenade architecturale* in his *Oeuvre Complète* [8]. Hence, both the arrival and indoor promenades conclude.

Fig. 8, Ramp and spiral staircase, photography by Scarletgreen, https://www.flickr.com/photos/9160678@N06/2650386807/.

By applying the design concept of the architectural promenade from the Acropolis, Le Corbusier allowed the Villa Savoye to be perceived as a work of art and a residence. While the series in Athens provides mainly an exterior promenade that allows people to observe their religious purposes when approaching, Le Corbusier made his promenade an interaction between humans and the country house. From driving uphill and approaching the Villa, visitors experience the minimalist exterior of the Villa, taking in the unconventional design of the early modern times. Samuel and Jones commented on the Villa's facade as "an object for sculptural contemplation [8]." Le Corbusier's design of making visitors arrive at the Villa allows them first to regard it as a piece of art; as they drive towards it and are welcomed inside, the residential purpose shines through. The ramp is the object that guides people throughout the house, understanding its details on each floor. Finally, it takes people through the roof, where a panoramic view of everything they have just experienced is visible. These four "picturesque" scenes—the arrival, entrance, and roof—imitate the sequence of views in the Acropolis.

On the first floor, the ramp sitting in the center of the entrance hall had always been the center of attention, yet the spiral staircase (fig. 8) on the left also shares accordance with history and modernity. A secondary set of staircases was often used as a pathway for household attendance while the masters of the house took the main route—the ramp [8]. This was associated with Renaissance palaces where the first floor was designated for servants and house necessities [8]. But more importantly, the spiral staircase was a deliberate way for Le Corbusier to showcase modern elements inside. Steel was a product unique to modern technology, and molding steel into a spiral staircase ascending upwards through the house is a method of showing the presence of modern creation [13]. The two sets of staircases complement each other: the ramp, as an extension of the traditional architecture promenade of the Acropolis, and the spiral staircase as a contemporary and industrial object. In his own residence (fig. 9), the famous modern architect Walter Gropius shares a similar take on the staircase as Le Corbusier: "he invoked the industrial vernacular alongside the domestic references by employing steel-sash windows and a dramatic metal spiral stair that provided access to a roof deck [13]." Seeing as Gropius' spiral staircase was located on the exterior, it did not have much functionality as an aesthetic statement. In the Villa Savoye, the spiral staircase's presence, not so much as its function, was a statement of industrialization. The spiral staircase's purpose demonstrates a great deal about Le Corbusier's understanding of functionalism.

Fig. 9, Walter Gropius, *Walter Gropius House*, Massachusetts, United States, 1938, photography by Via Luna Archives, https://archeyes.com/gropius-house-walter-gropius/.

From his Purist harmonic concepts to the declaration that a house is a "machine for living," Le Corbusier emphasized functionalism in his early works. Undoubtedly, he wanted houses to provide modern functions for modern people while presenting the abstract ideologies he devised. However, in the Villa Savoye, Le Corbusier's understanding of functionalism appears quite visual and blunt. A lone faucet stands on the far side of the first floor, past the spiral staircase. It was just a single tap standing in the middle of the room with no connection to anything that seemed largely out of place. Le Corbusier may have imagined that guests used this faucet to clean their hands and face—which was unconventional and even considered rude in the setting. The reason for incorporating a faucet was Le Corbusier's demonstration that the house demonstrated functionality, although no one might have cleaned themselves there. To him, the appearance of functionalism was equally important as the actual functionality, so elements were present in the Villa Savoye merely to advocate a functionalism that they might not inhibit.

In fact, the house was largely uninhabitable after construction finished. Mme. Savoye wrote to Le Corbusier in 1930 during the rainy season that "it is still raining in our garage" and that the rainfall on the skylight "makes a terrible noise […] which prevents us from sleeping in bad weather [14]." The complaints continued, and in 1935 Mme. Savoye wrote another letter to the architect expressing her exasperation with dealing with the humidity, dampness, and leaks everywhere in her country house. The Villa Savoye's contractor maintained that he had warned Le Corbusier that his designs would create future problems [14]. Yet, the architect stuck with his sketches. It seemed that Le Corbusier's emphasis on functionalism only played a visual role in the Villa Savoye, and the house's aesthetic qualities may be less appreciated because of this lack of enjoyment with living in the house.

Later in his career, Le Corbusier admitted that he regretted incorporating mass amounts of representations of functionalism in his works, saying that they "denied the magical qualities of architecture [8]." The architect's style changed dramatically during the 1950s when he created the Ronchamp Chapel. The humanistic, art-like qualities of the Chapel expanded Le Corbusier's flexibility in architecture, and he focused more on generating emotions from audiences than on emphasizing visually the functions of buildings [5]. As architectural history professor Kevin Murphy states, "The vocabulary of his 1920s houses, which he had advocated as the basis of a new architecture, was thus no longer applicable [5]." Though critics and historians took a negative view of the Villa Savoye and its functionalism later in the century, the residence still holds great importance in modern architecture history. Viewed from a 1920s lens, the Villa Savoye was an extremely innovative construction that tied contemporary, vernacular, and traditions together. Its incorporation of the architect's Five Points, architecture promenade, and ramp introduced the word "modernism" to the world and set a base for future development.

V. A WORLDWIDE HARMONY

Apart from being a single house filled with harmonious features, the Villa Savoye was designed with an "international style" that allowed its "machine of happiness" to be felt worldwide. Le Corbusier first introduced this change of style from past to modern in his *Vers Une Architecture*, published in 1922: "There exists a new spirit [15]." This new spirit refers to the inventions that modern development brought to architecture. To match mass production, industrialization, and technology of the modern age, the term "international style" was introduced in 1932 to describe buildings composed of modern elements that fit the era's spirit [15]. The international style architecture was mostly rectangular and asymmetrical and had no decorations on its white exterior. They were made with modern materials, such as concrete and steel, and thus invoked a contemporary tone [15]. Leaving the building blank and simple was intentional, as modern

architecture is open-ended: it invites visitors to have their own interpretations and emotions as they walk inside. The creation of such a style aimed to present the same harmony of modernism universally because such constructions could easily be replicated. The Villa Savoye was an early effort to push this style to create a new era of modern buildings. Le Corbusier and his fellow modern pioneers aimed to use the international style so that the same work of architecture could be rebuilt anywhere, allowing people worldwide to feel a universal harmony. Furthermore, of course, the modern architects were inspired by the Greek architects' process of unifying architecture.

As mentioned before, Le Corbusier was impressed during his tour of the ancient Greeks' standardization of architecture. The ancient architects used the same material, basic forms, and function for their temples, making their purpose and origins easily recognizable thousands of years later [3]. This uniformity was what modern architecture needed, according to Le Corbusier. While constructing Purism, Le Corbusier paid the most attention to explaining that architecture and other objects needed to return to their original, standardized form to achieve harmony. A famous page in Le Corbusier's *Vers Une Architecture* shows him comparing the modern automobile to the Parthenon (fig. 10). Both had standards developed through time, and each represented a different focus of standardization in time. At the end of this page, Le Corbusier states, "A standard is necessary for order in human effort [16]." To achieve the same unison as in the Acropolis, modern architects should first act to create a style that resembles the essence of their times and begin implementing it in everyday life. The Villa Savoye, amongst other works in the period that strived to accomplish this goal, was the beginning for Le Corbusier to replace traditional designs and decoration with modern simplicity, starting from a weekend house.

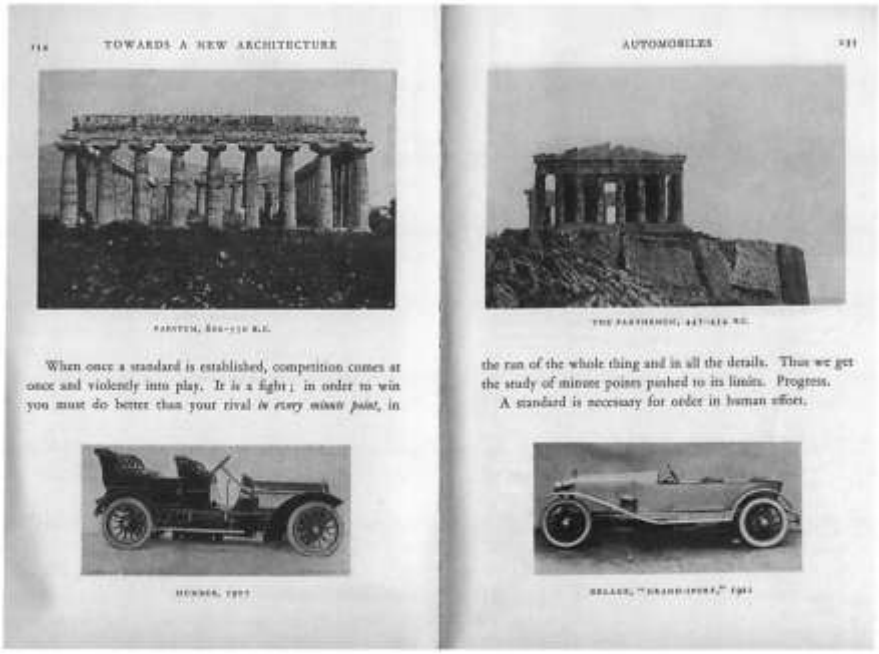

Fig. 10, Le Corbusier, *Vers Une Architecture*, 1923.

In the post-WWI period, when the Villa Savoye was constructed, reconstruction was happening throughout the world, and the Villa acted as an example of how modern residences could be "mass produced." Le Corbusier suggested that the Villa Savoye could be recreated anywhere in the world [17]. Its usage was not limited to just being a country house in France. People across the globe could also experience the same purity and architecture promenade in other Villa Savoyes should they be built in America or Asia. Instead of customized houses with lavish decorations, making them one of a kind and their harmony only appreciated by a small number of people, Le Corbusier's implementation of the international style would have granted people from all around the world the same purity and comfort inside the architecture. However, his vision of providing a universal harmony with the repeating model was not realized. The Villa Savoye, though it represents the international style and looks simple, was actually luxurious, costly to construct, and inhabitable. Though Le Corbusier's idea of recreating a single design to provide the majority with harmony was innovative, it was not plausible because of the financial and construction issues behind such a style. Above all, critics argued that a single, universal style created by Western architects could not generate the same emotions in people with different cultural backgrounds. Still, the international style remained present in Le Corbusier's works throughout his life, demonstrating the hope of bringing universal harmony from architecture.

Twenty years after the Villa Savoye's construction, Le Corbusier finished another residence, but this time designed for mass housing—the Unité d'Habitation, Marseilles (fig. 11). This was an 18-story block

completed with 335 apartments, a hotel, convenience stores, and a daycare on the top of the roof [18]. The Unité was commissioned after WWII; thus, another post-war era meant it was part of another universal reconstruction. Le Corbusier envisioned the Unité d'Habitation to solve the problem of mass housing from then on, allowing people to live in "vertical garden cities" instead of spread-out individual residences [18]. He exclaimed, "How I pity the people who think they will be freer, better off in these little houses! They'll be hugging the ground while their neighbors in the four big buildings can gaze upon vast horizons and benefit from communal services [18]." Here, Le Corbusier is embracing societal differences and developing the housing needed at the time. The Unité was not meant to stand out with exotic shapes and clever designs, but it was to be "a prototype for a building to be built in huge numbers all over the world [18]." Hence, the international style and its purpose appear again. Like the Villa Savoye, the Unité D'habitation exhibits Le Corbusier's Five Points of Architecture and resembles a construction that aimed to be mass-produced to benefit people universally [18]. In the twenty-first century, it is common to have apartment houses with high stories in crowded cities, and in the 1950s, Le Corbusier made the first step toward a solution to mass housing. The Acropolis' uniformity leaves a modern legacy.

Fig. 11, Le Corbusier, Unité d'Habitation, Marseilles, France, 1952, photography by Gili Merin, https://www.archdaily.com/85971/ad-classics-unite-d-habitation-le-corbusier.

With that said, Le Corbusier does not always follow the international style in his works. The Ronchamp Chapel (fig. 12) strictly represented the humanitarian side in Greek, Renaissance, and other traditional precedents. Built in the small town of Ronchamp, France, the Chapel appears nothing like the high serene structures of traditional Catholic churches [17]. The asymmetrical design might come as a shock, but past the slender doors that blend smoothly into its exterior, visitors find themselves standing in a chamber filled with ethereal light. Yet Le Corbusier incorporated references to traditional cathedrals in a subtle way. Having studied aspects of Roman Catholicism extensively, Le Corbusier included the high nave and the idea of distributed light that was of Baroque precedent [17]. The Ronchamp Chapel was Le Corbusier's pinnacle work in imitating the majestic and holy quality given to visitors when they stepped inside a Greek temple or a cathedral. Instead of following the international style, Le Corbusier chose to fully exemplify humanism and warmth in Classical architecture constructed in their places of worship. In contrast to the Villa Savoye, whose primary purpose was to be a weekend house for bonding with nature, Ronchamp Chapel was like a "marvelous piece of abstract sculpture" that exemplified the "magical" qualities of Le Corbusier's architecture [17].

Fig. 12, Le Corbusier, *Notre-Dame du Haut,* Ronchamp, France, 1954, photography by Ronan Colin, https://www.flickr.com/photos/63282793@N02/8756385523.

The international style remained a focus in Le Corbusier's works as he hoped to bring the joy and harmony of architecture to the whole world. At the same time, the architect was flexible with his reference to Greek architecture in different projects, deciding whether to follow the structural or humanist aspects of Greek temples to achieve maximum sensory stimulation. Nevertheless, by casting the shadow of Classical architecture onto his contemporary works, Le Corbusier translated its ancient beauty into modern words, allowing people to feel the power of ancient architecture once again.

VI. CONCLUSION

The Villa Savoye's course in history continued after its completion in 1931. The Savoyes lived in their weekend house until 1940 when they left due to WWII. During the war, the Villa was abandoned and temporarily occupied by the Germans and Americans, each time critically damaging the building [19]. The Villa's ill condition extended to 1963 when a first round of restoration was carried out after protests, joined by Le Corbusier himself, against Poissy's thought of demolishing the iconic building. Finally, after decades of being deserted, the French government recognized the Villa Savoye as their first modern building to be considered as a historic monument in 1965 [5]. Le Corbusier was alive to receive this news about his early work; however, a year after, the brilliant architect met his end swimming in the Riviera. The life of a great architect concluded, yet the Villa Savoye and its designer left behind a contribution to architectural heritage for modernity.

Therein lies the value and meaning in the Villa Savoye and is Le Corbusier's legacy. Though the 20th century saw the rise of numerous modern architects, each bringing their unique ideas to a new era, Le Corbusier and his early work, the Villa Savoye, stand in a vital position defining the term "modernism." Le Corbusier intertwined in his work the technological freedom and simple forms of contemporary architecture with something seemingly the opposite of avant-garde—the Classical style. Ada Louise Huxtable illustrates the significance of Le Corbusier's heritage in the *New York Times,* where she writes that the architect was a "Renaissance man who turned the 20th century into a one-man Renaissance [5]." As did his counterparts in the 14th century, Le Corbusier revived humanist elements of Greece and Rome in an era where fast development overshadowed people's emotions. With the Villa Savoye, Le Corbusier constructed an early example of modern architecture, demonstrating that Classical architecture's warmth could coexist with the sleek forms of steel and glass. He opened a new set of laws that he categorized under Purism, allowing modern architecture to serve both its era and humans. While its architect continued his eternal sleep underground, his Villa Savoye still stands in the suburbs of Paris today. Now functioning as a museum, countless visitors each year can appreciate this pioneering work of modern architecture and reflect on the architect, the present, and the distant past.

REFERENCES

[1] Kleiner, Fred S., and Helen Gardner. *Gardner's Art through the Ages: A Global History*. 16th ed. Boston, MA: Cengage Learning, 2020.

[2] Vogt, Adolf Max, and Radka Donnell. "Remarks on the 'Reversed' Grand Tour of Le Corbusier and Auguste Klipstein." *Assemblage*, no. 4 (October 1987): 38–51. https://doi.org/10.2307/3171034.

[3] Sherer, Daniel. "Le Corbusier's Discovery of Palladio in 1922 and the Modernist Transformation of the Classical Code." *Perspecta* 35 (2004): 20–39. https://doi.org/www.jstor.org/stable/1567339.

[4] Loach, Judi. "Architecture, Science and Purity." In *Being Modern*. Robert Bud, Paul Greenhalgh, Frank James and Morag Shiach, Eds. London: UCL Press, 2018, 207–44. https://doi.org/10.2307/j.ctv550d3p.16.

[5] Murphy, Kevin D. "The Villa Savoye and the Modernist Historic Monument." *Journal of the Society of Architectural Historians* 61, no. 1 (2002): 68–89. https://doi.org/10.2307/991812.

[6] Benton, Tim. "'I Am Attracted to the Natural Order of Things': Le Corbusier's Rejection of the Machine." In *Being Modern*. Robert Bud, Paul Greenhalgh, Frank James and Morag Shiach, Eds. London: UCL Press, 2018, 207–44. https://doi.org/10.2307/j.ctv550d3p.23.

[7] Papadopoulos, Costas, Holley Moyes, and Efrosyni Boutikas. "The Role of Darkness in Ancient Greek Religion and Religious Practice." Essay. In *The Oxford Handbook of Light In Archaeology*. Oxford: Oxford University Press, 2022.

[8] Samuel, Flora, and Peter Blundell Jones. "The Making of Architectural Promenade: Villa Savoye and Schminke House." *Architectural Research Quarterly* 16, no. 2 (2012): 108–24. https://doi.org/10.1017/s1359135512000437.

[9] Uluçay, Nilay Özsavaş. "A Method Proposal for Interior Design Analysis via Villa Savoye." *Journal of Art and Architecture Studies* 9, no. 1 (2020): 5–13. https://doi.org/10.51148/jaas.2020.2.

[10] "What Are Architectural Facades?" Maple. Accessed June 19, 2023. https://www.maplesunscreening.co.uk/what-are-architectural-facades.

[11] "Le Corbusier, 'a New Architecture' & Concrete." Speculative Cities, March 25, 2018. https://speculativecities.wordpress.com/2018/03/25/le-corbusier-a-new-architecture-concrete/.

[12] Etlin, Richard A. "Le Corbusier, Choisy, and French Hellenism: The Search for a New Architecture." *The Art Bulletin* 69, no. 2 (1987): 264–78. https://doi.org/10.2307/3051022.

[13] Murphy, Kevin D. "The Vernacular Moment: Eleanor Raymond, Walter Gropius, and New England Modernism between the Wars." *Journal of the Society of Architectural Historians* 70, no. 3 (September 2011): 308–29. https://doi.org/doi.org/10.1525/jsah.2011.70.3.308.

[14] Sully, Nicole. "Modern Architecture and Complaints about the Weather, or, 'Dear Monsieur Le Corbusier, It Is Still Raining in Our Garage….'" *M/C Journal* 12, no. 4 2009. https://doi.org/10.5204/mcj.172.

[15] Jordy, William H. "The International Style in the 1930s." *Journal of the Society of Architectural Historians* 24, no. 1 (March 1965): 10–14. https://doi.org/doi.org/10.2307/988273.

[16] Le Corbusier. *Vers une architecture*. Paris: Crès, 1924.

[17] Mueller, Linda May. "The Symbiosis Between Art and Architecture as Evidence in Le Corbusier's Ronchamp," 2004.

[18] Millais, Malcolm. "A Critical Appraisal of the Design, Construction and Influence of the Unité d'Habitation, Marseilles, France." *Journal of Architecture and Urbanism* 39, no. 2 (2015): 103–15. https://doi.org/10.3846/20297955.2015.1062636.

[19] Curtis, William J R. *Le corbusier: Ideas and forms*. London: Phaidon Press Limited, 2006.