

## Le Corbusier's Villa Stein

**History:** Les Terrasses occupies a most important place in Le Corbusier's early work. It marks the consolidation of formal and conceptual elements he had developed in the preceding ten years. One of the most influential buildings of the 1920s, the Villa Stein is generally called Garches, after its locality in the outskirts of Paris. "Les Terrasses" is the name it was given by Le Corbusier. When published in 1929 in the first volume of Le Corbusier's and Pierre Jeanneret's *oeuvre complète*, however, it was listed as Villa de Monzie, and the same name appears on the drawings—in some cases as Stein-de Monzie, in others more explicitly as Mme Gabrielle de Monzie. In the Stein correspondence, as well as in literature, this lady is mentioned under her maiden name, Gabrielle Osorio, which she had been using since her divorce. By the time Les Terrasses was completed, she and her adopted daughter had apparently been living for about ten years with the Michael Steins. Gabrielle de Monzie seems not only to have shared their apartment but also their collecting passions. According to one source, it was their joint visit to Le Corbusier's Pavillon de l'Esprit Nouveau at the 1925 Exhibition of Decorative Arts that prompted the choice of him as architect. Jacques Lipchitz, however, remembers that the Steins had already met Le Corbusier in his house, which the architect had designed the year before. In the Stein correspondence Le Corbusier is generally referred to as "the architect of Cook," that is, of the Cook house at Boulogne-sur-Seine, completed in 1926.

At the time of the commission, Le Corbusier was still little known, and only as one among other modern architects in Paris. Michael Stein's choice of him, whether determined by intuition or accident, therefore seems all the more remarkable, for it did not involve acquisition of an existing work of art but the commission for a substantial building. The risks were not limited to artistic uncertainties only; the practical aspects must have been of no less concern to a pragmatic man like Michael Stein. The decision in Le Corbusier's favor must have been taken jointly by Michael Stein and Gabrielle de Monzie, because she is known to have contributed more than her share to the land and construction costs. In fact, the property deed of 1928 was recorded in the name of her former husband, Anatole de Monzie, the Socialist Party leader who, as Minister of Public Works and of Justice, had inaugurated the Pavillon de l'Esprit Nouveau in 1925 and also intervened with the exhibition's directors to remove the eighteen-foot-high fence they had erected around the Pavillon. Besides the prestige associated with their names, Le Corbusier found in Gabrielle de Monzie and Michael Stein rare clients. They were not only sympathetic to his ideas, like the artists for whom he had built in the past; they were also wealthy enough to afford a sizable house. Not that they accepted his proposals without question; there seem to have been the usual number of client-architect discussions about such practical details as bedroom windows. It is hard to ascertain whether their demands or Le Corbusier's own considerations brought about the changes in the various preliminary plans.

From the dated drawings, one can assume that Le Corbusier started to work on the project in spring 1926 and produced the final plans in the summer of the following year. The house was completed in 1928 and occupied by the Steins, their Oriental textiles and Italian Renaissance furniture, and their art collection for seven years. When they returned to the United States in 1935, Les Terrasses was sold to a Norwegian banker (coincidentally named Steen) who incorporated Les Terrasses among his real-estate enterprises. In 1957, it was sold by his son-in-law to the present owner, who by dividing the house into four apartments remodeled it beyond recognition. Although what remains is hardly more than a shell, the Villa Stein is still worthy of being declared a *monument historique*.

**Architecture:** In 1926, the year in which Le Corbusier began to design the Villa Stein, he formulated his famous "5 Points," which became a credo of modern architecture. Their basis is concrete construction, then particularly advanced in France. These points are, in brief: 1) columns supporting concrete slabs; 2) roof gardens; 3) the open plan; 4) ribbon windows; 5) the free facade, relieved of structural functions.

The Villa at Garches is the first full exemplification of these principles. As demanded by Point 1, the structure of the Villa Stein consists of three concrete floor slabs supported by a grid of columns. The columns form bays, with intervals of 3.50 meters (11'5") in one direction and alternating intervals of 5.00 and 2.50 meters (8'3" and 16'6") in the other. The supporting structure is thus isolated from all other components of the building, thereby increasing the design options. Such column-supported structures also allow the basement to be dispensed with, or the entire building to be raised above ground as in many of Le Corbusier's subsequent projects. In accordance with his Point 2, the south half of the topmost slab of the Villa Stein is a roof terrace protected at either end by screen walls. Its most sculptural feature is an elliptical tower, originally intended to conceal a water tank. Accessible by a spiral stair, it served as a lookout from which to enjoy the fine view of Paris in the distance. The metal stair, together with the railings around the opening above the third-floor terrace, produce immediate associations with a boat deck, reflecting Le Corbusier's predilection for naval architecture. The third of Le Corbusier's 5 Points postulates what has become a most consequential innovation of modern architecture—the open plan. Unobstructed by bearing walls, the space between the floor and ceiling slabs permits any arrangement of subdividing partitions. In the Villa Stein, the functions and distribution of the rooms follow an elementary program: main entrance and large hall, secondary entrance and service spaces, garage and furnace on the ground floor; living room with library and other extensions, dining room and kitchen on the second floor; two bedrooms with sitting rooms and bathrooms, and two guest bedrooms on the third floor; two more guest bedrooms with bathrooms, and two servant rooms, in the penthouse. Most of the partitions for these spaces fall within the orthogonal grid of the columns, which they often incorporate. The curved walls introduced on all floors echo the pure, taut forms in Le Corbusier's paintings of the period.

As modern as its concept is, Les Terrasses has more than once been compared to the Late-Renaissance villas of Palladio. The living room and its extensions on the second floor suggest the *piano nobile* of the traditional palazzo. Le Corbusier himself, in his *Une maison—un palais* of 1928, used the Villa Stein to exemplify the house that had become a palace. The column intervals with their emphasis on the central bay suggest a Palladian rhythm. The reappearance of the same 2:1:2:1:2 ratio on the exterior is somewhat of a surprise, since in his last two points Le Corbusier had proclaimed the independence of the facade. (With structural supports removed to the interior, the design of facades is limited only by the requirements of the rooms.) Both main facades of the Villa Stein are elaborate compositions. They contain the long ribbon windows Le Corbusier had declared to be the most efficient source of daylight for any room. The alternation of transparent and solid bands provides the facade with a vertical rhythm. The facades are given further order by what Le Corbusier called the "regulatory" lines that determine their overall organization. For example, the stair leading from the second-floor terrace to the garden parallels the imaginary diagonal that bisects the rectangle of the facade; and because the vertical line of the central bay interrupts the stair before it reaches ground level, Le Corbusier in his preliminary drawings provided a grass mound as footing (later replaced by a conventional landing). Not always do mathematics provide, as he wrote, "comforting truths." In the garden facade, the proportion between the solid areas and the voids—that is, the terraces—conforms to the Golden Section. The larger area forms a square that, repeated identically on the front, shows a symmetrical arrangement of the hall window and the garage door on either side of the service entrance. The access road from the street, intersecting the center of this square, establishes a principal axis. From the street, the Villa Stein now appears as a cube, because the rest of the facade is hidden behind the gate lodge and trees. As one approaches the house, the dominant axis appears to shift—first toward the center, emphasized by the penthouse balcony opening, then toward the main entrance under its welcoming canopy. Lodge and house are part of the intricate composition that organizes the long, narrow lot.

Le Corbusier's preliminary studies (*opposite*) reveal a quite different configuration from the one finally realized. In these, the house is based on an L-shaped plan and composed of projecting and receding volumes (similar to his La Roche and Jeanneret houses of 1923). The terraces appear more conspicuously on successive levels, which may have prompted Le Corbusier to call this the "Pyramid" type. In the evolution of prototypes outlined in his *Précisions* of 1930, the Villa Stein as realized represents the next step. Here the divergent volumes are compressed into one pure prismatic form. The resulting slab, which was to become Le Corbusier's preferred building shape, is, however, not impenetrably solid at Garches. The front with light filtering from the terrace and through the