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Ideal Community Based on the ‘Primitive Hut’: Through Le Corbusier’s ‘Cabanon’

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Abstract

Le Corbusier’s realization of the villa-shed ‘Cabanon’ in Cap-Martin in the 1950s differed from his own residence on the top floor of an apartment block he built in Paris in the 1930s. The Cabanon was a prototype of the ‘equipment’ of furniture and sanitary, a ‘primitive hut’ of the 20th century that primarily served the function of a bedroom.

Le Corbusier was using this prototype to form a community of artists in Cap-Martin. This was different from the closed communities, such as the large ships in the ‘Unité d’habitation’ realized in the 1950s. The construction principle of the ‘Unité d’habitation’ was the insertion of units (cabins) into the megastructures (hull) of the bottle racks. In contrast, this community initially took the form of a grid of ‘honeycomb’ structures with 226 as the reference dimension, equipped with furniture and equipment. The Cabanon, built on the north side of the site as one of the units, has a base dimension of 366 instead of 226. And probably Le Corbusier discovered the potential of this small building during its construction. He restarted to develop the idea of this community, which had been abandoned due to various problems of acquisition of the estate and project income, and intended to use Cabanon’s achievements in the construction of an ideal community.

This paper considers the ideal community that Le Corbusier found in Cap-Martin by analysing the transformation of the housing complex erection conceived as an application of Cabanon, using the drawings and correspondence documents supplemented by the Le Corbusier Foundation.

Keywords: *Le Corbusier; Cap-Martin; Primitive Hut; Community; Mural Painting*

1. Introduction

Le Corbusier’s realization of the villa-shed ‘Cabanon’ in Cap-Martin in the 1950s differed from his own residence on the top floor of an apartment block he built in Paris in the 1930s. The Cabanon was a prototype of the ‘equipment’ of furniture and sanitary, a ‘primitive hut’ of the 20th century that primarily served the function of a bedroom (Figure 1).



Figure 1: Cabanon in Cap-Martin (AFLC, L3-5-69-001)

Le Corbusier was using this prototype to form a community of artists in Cap-Martin. This was different from the closed communities, such as the large ships in the 'Unité d'habitation' realized in the 1950s. The construction principle of the 'Unité d'habitation' was the insertion of units (cabins) into the megastructures (hull) of the bottle racks. In contrast, this community initially took the form of a grid of 'honeycomb' structures with 226 as the reference dimension, equipped with furniture and equipment. The Cabanon, built on the north side of the site as one of the units, has a base dimension of 366 instead of 226. And probably Le Corbusier discovered the potential of this small building during its construction (AFLC, M2-6-292, 1952.7.4). He restarted to develop the idea of this community, which had been abandoned due to various problems of acquisition of the estate and project income, and intended to use Cabanon's achievements in the construction of an ideal community.

Until now, the link between Cabanon and various other projects by Le Corbusier has not been well known (Benton). This paper therefore considers the ideal community that Le Corbusier found in Cap-Martin by analysing the transformation of the housing complex conceived as an application of Cabanon, using the drawings and correspondence documents supplemented by the Le Corbusier Foundation.

2. Unité de Vacances (1952.7-1955.2)

On the island of Ajaccio, where Le Corbusier inspected the wooden panels of the Cabanon, he lanced the idea of a five-unit artists' housing complex with a honeycomb frame and vaulted roof (Figure 2). The first sketches of this housing complex show the 'honeycomb' structure, assembled in a grid of industrialized materials, and consisting of a roof with interlocking vaulted roofs for each dwelling unit. (C2, pp.802-803, 19.7.1952; C2, p.826. 1952.7).

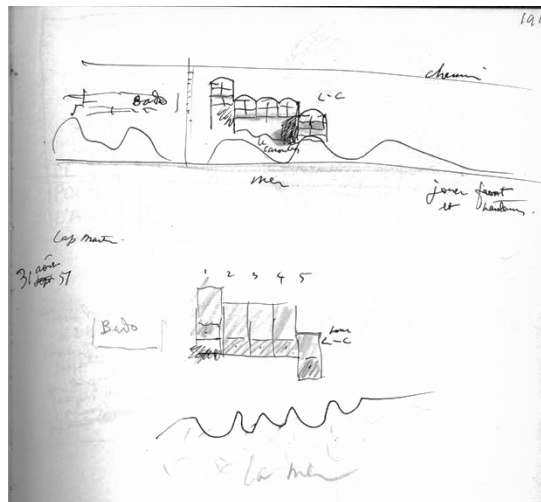


Figure 2: Collective house containing Le Corbusier's dwelling (AFLC, W1-8-12, 1951.8.31)

On the same day that the construction of the Cabanon was completed in August 1952, Le Corbusier tried to insert the 336 and the former 226 volumes of the same plan dimensions as the Cabanon, divided into functional units (C2, p.806, 1952.8.5); 336 bedrooms and 226 kitchen volumes.

On the other hand, Le Corbusier lowered the construction site of this 'honeycomb' structure so that it was not visible from the Cabanon ([Le Corbusier], FLC18921, 1952.8.10). It is probably not unrelated to the fact that the Cabanon, which had been envisaged as a temporary temporary residence, was beginning to be considered a permanent home.

However, Le Corbusier finally abandoned the 'honeycomb' frame on 27 September 1952 (AFLC, M2-9-57, note de Le Corbusier, 1952.9.27). The alternative structure is not a bottle rack like the 'Unité d'habitation', but a structure similar to the columns and slabs of the 'Dom-ino' studied in the 1920s. However, the difference with the spatial composition of the 1920s is that the side walls are stone walls made of vernacular materials (Figure 3).

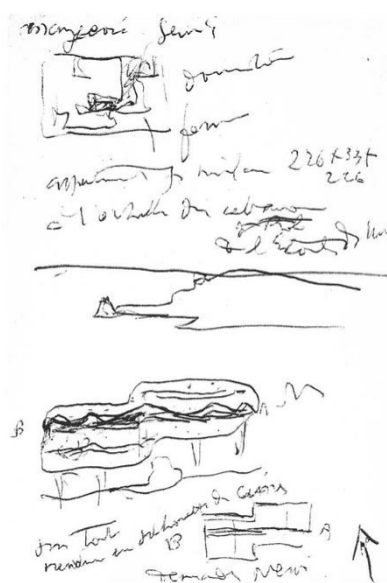


Figure 3 Mediterranean Unité de Vacances (C2, p.826, [1952.8.])

This important decision to abandon the 'honeycomb' to insert the Cabanon is also reflected in Le Corbusier's drawing of 2 October 1952. He considered equipping the bedrooms with hammock bunks and concrete bunks, a development and primitive version of the Cabanon. (Figure 4). The emergence of a spatial phenomenon with the completion of the Cabanon on 5 August 1952, led Le Corbusier to make the volume of the equipment itself autonomous. Indeed, Le Corbusier at this time regarded the Cabanon itself, as a volume of equipment that formed part of the 'honeycomb', as 'the prototype of a wooden structure' (AFLC, M2-6-12, lettre de A. P. Ducret à Thomas Rebutato, 1952.10.30).

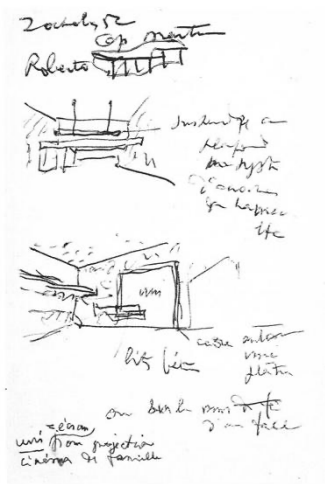


Figure 4: Interior decoration of Unité de Vacances (C2, p.832, 1952.10.2)

The drawing works in the atelier, on 29 December 1952 (ex., FLC18827A, 29.12.1952) and the final drawings produced between May and December 1954 (ex., FLC18849A, 19.5.1954) are the results of the studies. They follow Le Corbusier's instructions without major changes, and the basic spatial and elevational composition remains unchanged.

In terms of plan configuration, there are 336 Cabanon-type bedroom equipped with beds and sanitary equipment (the importance of the windows is lost due to the nested structure). On the other hand, the 226 kitchen is separated by furniture and does not form a volume. The only volume inserted into the Dom-ino structure with thick walls is the Cabanon-type volume. The Cabanon-shaped volume of the bedroom, which faced seaward during the estimation phase, has been set back in the final drawing.

There is no evidence that bathtubs and showers were considered for the dwelling units. Le Corbusier's intention is unknown, but it is likely that external showers were envisaged, as was life in his Cabanon. His consideration was solely to equip the Cabanon-type with local materials, without the use of metal (C2, p.1023, 27.12.1953). The main living quarters are developed under the pilotis and on the terraces. Although it does not have glass walls that are fully open to the Mediterranean landscape, it is more connected to the earth by the way in which the lower pilotis are linked to the upper level.

The elevation structure is treated as a 'free elevation' with a Dom-ino structure, with wooden doors opening and closing to provide ventilation and ventilation (C2, p.1022, p.1026, 27.12.1953), rather than a fully glazed wall as in the 'honeycomb' structure. It has become a device that responds to the local climate. It is a practical consideration derived from the ventilation and ventilation of Le Corbusier's own Cabanon, which had already been built (AFLC, W1-89-106, 1954.8.28).

According to drawings made in the studio by 29 December 1952, when the estimate drawings were prepared, the roof was flat (FLC 18853, 1953.12.22) and lost the organic shape that Le Corbusier had drawn. In Le Corbusier's own drawings, on the other hand, the roof is increasingly greened in a country-house style, and the walls become thicker and less smoothly finished (C2, p.978, 21.7.1953, p.990, 1953.[8.]). He referred to the stuccoed Kasbah dwellings and the mud-roofed Kabyle dwellings he had seen in Alger (C2, p.1023, 1953.12.27) (he took the opportunity of his lecture in Alger in 1931 to walk around the hills of the Kasbah and Fort Lambreur; cf. *La ville radieuse*, *La ville radieuse*, pp.230-233)

The site was moved to the west and the roof was changed again to a flat roof (FLC18835A, 18.5.1954; FLC18835, 19.5.1954). Eventually, Le Corbusier adopted a vaulted roof as a 'prototype' (C3, p.90, 1954.8.20), but the columns supporting the roof disappeared and it was no longer a 'honeycomb' or 'Dom-ino' structure, but a wall structure. It is a reversion to the form (FLC17716, 30.10.1949; FLC17727;) of the housing complex at La Sainte-Baume. Presumably, for Le Corbusier, the structural form of the vault had to support the loads by means of the thick walls. Indeed, all of Le Corbusier's major vaulted-roof buildings, such as the weekend house in La Serre-Saint-Cloud (1935) and the Sarabhai house in Ahmedabad (1955), are supported by massive wall surfaces, with no architectural works by 'honeycomb' or 'Dom-ino' with vaulted-roof. In the case of the 'honeycomb', rather an 'umbrella' roof, separated from the girders, is realised as the exhibition building 'House of Man' (1967) in Zurich. In the process of the collapse of the 'honeycomb' in the *Unité de Vacances*, the dimensional system was confirmed 336 again and again, and the methodology of defining space by systematic dimensions was carried over.

3. Casa del Mare (1952.7-1955.2)

However, a storm on 15 February 1955 forced Le Corbusier to abandon the idea of the *Unité de Vacances* because of fears that the site would be flooded (M2-6-227, 1955.3.5.). But also because it blocked the view from the *Cabanon* (C3, p.248, 1955.2.). While dreaming of a community of artists, Le Corbusier excluded volumes that block the view of his own 'Cabanon'.

But before that, he was already concerned about tidal waves, and already makes the first allusion to a plan for another site, the 'Casa del Mare'. 'Concrete slab covered with earth and grass carried by masonry walls in party format, installation of 366 x 366 elements inside the free spaces also constituted. The whole forming an outdoor common room, bedroom and indoor installation, within nature and respecting the trees, the topography, etc...' 'They form external common spaces, sleeping quarters and internal facilities while respecting nature, including trees and topography. (AFLC, M2-7-142, lettre de Le Corbusier à Charles Barbris, 1955.1.4) (Figure 5). It is like the wildened *Unité de camping* we will later refer to, but differs from the *Unité de camping* in that the 'common space' is an important component.

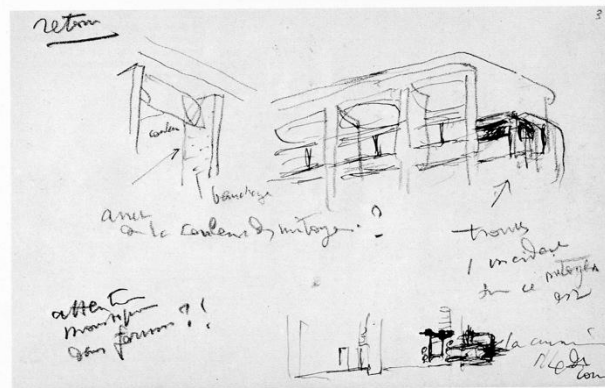


Figure 5: Examination of details of Casa del Mare: (C3, p.242, 10.2.1955)

Le Corbusier further assumed that the stones, sand, gravel and planting would be taken locally (AFLC, M2-7-29, lettre de Le Corbusier à Gildo Pastor, 1955.2.7), reverting almost exclusively to the same construction methods as the sheltered housing of the Maison Murondins (1940): simple concrete is poured and the roof is assembled from extracted timber. All are self-built (OC4, pp.94-95, p.99). However, this study was the starting point for the exploration of the dwelling's prototype. The only difference between it and the Unité d'habitation is whether it is industrialized or not (OC4, p.130), and it remains excellent and standardized.

Several possible construction sites have been suggested but not settled (C3, p.247, 1955.2.; C3, pp.493-494, 498, 1955.4.16). Le Corbusier did not give up on his ideal community. Le Corbusier, who was unexpectedly satisfied with the result of the 'Cabanon' (AFLC, M2-9-36, 30.12.1960), probably wanted to explore its applicability as a prototype of the 'Cabanon'; a year later, the study was restarted again on the same site as the 'Unité de Vacances'. However, it was not a nested 'Cabanon' like the 'Unité de Vacances'.

The 'Casa del Maré' was studied as a combination of Cabanons as a prototype; it was a basic configuration of five Cabanons connected in parallel. The central space was planned as a common space adjacent to the Cabanons, with a kitchen and dining room, while 'Type A' (FLC 28080, 1956.4.11), and 'Type B' (FLC 28081, 1956.4.12), in which it was turned into an outdoor space. And then there was the 'Type Casa del Maré' (FLC28083, 1956.5.2; FLC28084, 1956.5.2), in which the Cabanon was nested like the Unité de Vacances and the remaining space was an indoor space, and the 'Type A' (FLC28080, 1956.4.11) and the 'Type B' (FLC28081, 1956.4.12), in which they were turned into an outdoor space. And then there is the 'Type Casa del Maré' (FLC28083, 1956.5.2; FLC28084, 1956.5.2), in which the cabanon is nested like the Unité de Vacances and the remaining space was a semi-outdoor space, and common living was studied in a more natural environment. The order of the drawings suggests that the 'Type Casa del Maré' was the final destination.

However, the study was very short-lived. This is because common spaces still led to increased construction costs.

4. Unité de Camping (1954.8-1957-)

After the construction of Cabanon, Le Corbusier envisaged the construction of a barrack on the east side on 2 October 1952, and the construction site barracks were assembled by the landowner, Rubutato, in July 1954. And shortly afterwards, on 29 August 1954, Le Corbusier would write the five Unite de Camping units for the guests of the Le Butte in '30 minutes', just as Cabanon had been written in '45 minutes' on 30 December 1951 (*Modulor 2*, pp. 252-255). The improvisation was decisive because, from the beginning, the plan was to reduce some of Cabanon's 366 dimensions

and transform them as 355x226.

As each of the Unité de Camping units was a variant of the Cabanon as a prototype, the structure was of course not a ‘honeycomb’ but a variant of the Cabanon in wooden construction on a floor supported by structural walls. It almost looked like a Murondins-type dwelling. The structural form was similar to that of the Unité de Vacances, and the external façade was also similar to that of the Unité de Vacances, but simpler (FLC18665, 1954.11.5).

The Unité de Camping was realized as a simplified version of the Unité de Vacances, changing the site of the Unité de Vacances to the south of Rebutato’s restaurant. The chain of Le Corbusier’s conception at Cap-Martin through Le Corbusier’s Cabanon and the barrack to the Unité de Camping, shows an increasingly smaller scale and simplification.

Le Corbusier was only involved in the actual construction process with very simple drawings and plans. The decision on the details was also left to the client. This is not an abandonment of planning, but rather an attempt to determine the potential of the self-build as a prototype. In fact, Le Corbusier seems to have thought that Rebutato could have built it by himself (AFLC, M2-9-603, lettre de Le Corbusier à André Wogensky, 29.9.1954), and during the construction process, he was positive even when significant changes to reduce construction costs (C3, pp.807-809, 1956.12.). The Unité de Camping was to be built in such a way as to destroy as little as possible of the cliff topography, according to Rebutato’s wishes (Figure 6). Le Corbusier then proposed to the construction company to register this building as a new ‘model’ (AFLC, M2-7-172, lettre de Le Corbusier à Charles Barbris, 1957.8.23).

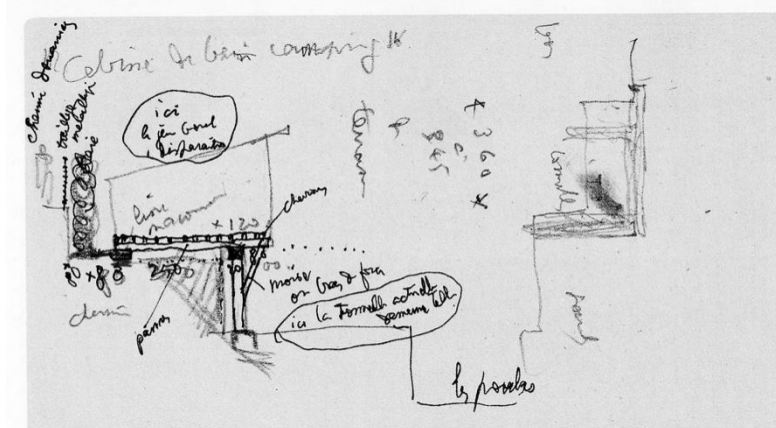


Figure 6: Reviewed Unité de Camping (C3, p. 503, 1955.4)

Furthermore, Le Corbusier wanted to give the Unité de Camping an exterior wall paint that would catch the Mediterranean light, befitting the Cap-Martin site (AFLC, M2-9-45, lettre de Le Corbusier à Hary, 1956.5.11). It was the same idea as the exterior painting of his barrack hut, reversing the interior painting of his Cabanon (C4, p.594, [1960.8]), which was to be embedded in the landscape. In this way, the series of Le Corbusier’s ideas in Cap-Martin were in fact connected in colour, from E.1027, when he first stayed here, to the restaurant of Rebutato, his Cabanon and the barrack and the unité de Camping (Figure 7).

Ideal Community Based on the 'Primitive Hut'

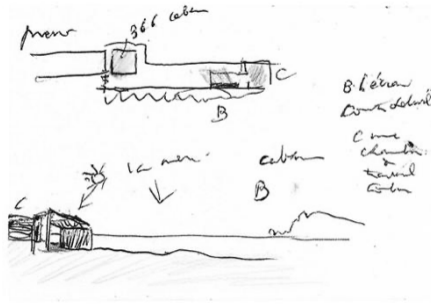


Figure 7: Promenade around Cabanon (C2, p.836, 2.10.1952)

According to Le Corbusier, this Cap-Martin was one reduced city, a figure of ‘give them a geography, man and nature adopt useful spaces’ (C3, p.664, 1956.5.8). And Le Corbusier dreamed to construct another residential units and create an ideal community until 1963 (two years before his death). (AFLC, M2-6-401, 1963.6.19).

5. Conclusion (Figure 8) (Table 1)

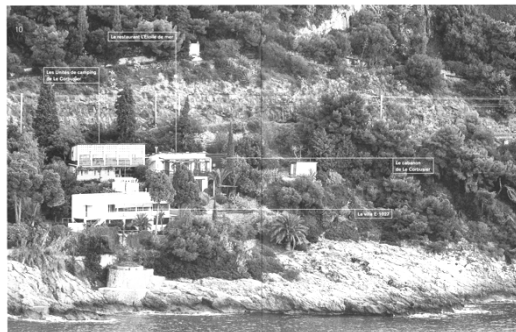
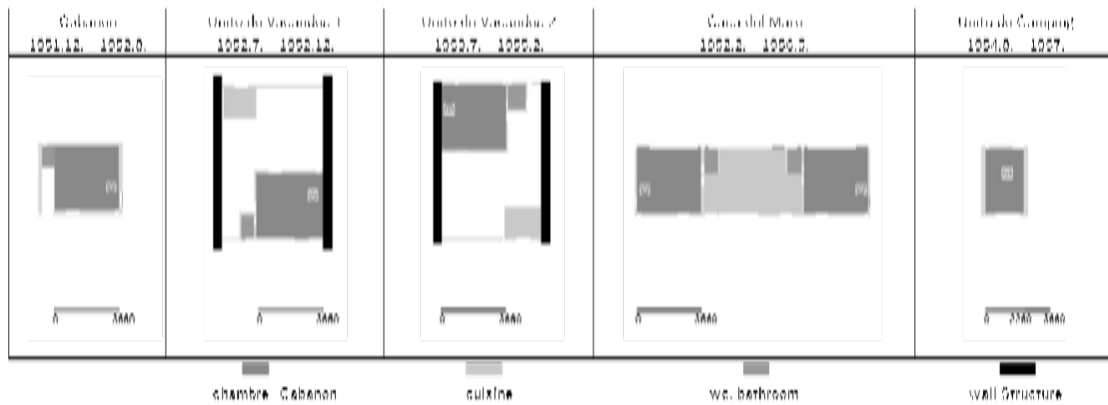


Figure 8: Le Corbusier’s buildings in Cap-Martin (Benton, 10-11)

Table 1 Transformation in Cap-Martin: structure and interior decoration

Cabanon 1951.12. – 1952.8.	Unité de Vacances 1952.7. – 1955.2.	Casa del Mare 1952.2. – 1956.5.	Unité de Camping 1954.8. – 1957.



The ‘Cabanon’ was succeeded in research by the ‘unité de vacances’ and ‘unité de camping’, in which the ‘honeycomb’ frame supporting the vaulted roof, which caught the Mediterranean sun, was transformed into a ‘wall’ with built-in ‘equipment’. Indeed, it was a ‘Dom-ino’ structure, an application of the traditional walled structure. Eventually, the initial conception reverted from dwellings with industrialized erections to self-built primitive dwellings, such as the Murondin type proposed in 1940.

Finally, Le Corbusier realized the Cabanon, the barrack and the Unité de camping, and then integrated the architectural complex of the land. His design act represent Le Corbusier’s fundamental understanding of the dwelling of ‘nature and man’, and are the seeds or primordial forms of the city (or village) in unity with its natural environment. However, it is also true that Le Corbusier, at the same time, sought a solitary space isolated from the ideal small world (Figure 9).

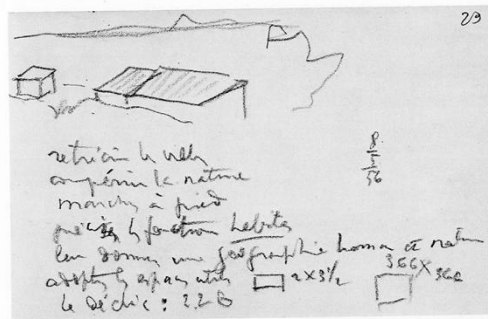


Figure 9: Cabanon and Mediterranean landscapes, consideration of ‘man and nature’ land (C3, p.664, 8.5.1956)

Underlying this series of Le Corbusier’s acts was the conception of the functional space for the eating connected to the ‘Cabanon’ as a common place as well as an external space. Because Le Corbusier’s living in the Cabanon, he could eat have his meals in the restaurant of the neighbouring Rebutato. Only the functions of defecation, washing hands and sleeping were provided inside, and the communal nature of the eating was similar to that of the Unité de Camping. Although this may only be possible during limited periods in the warm south of France, the contrast between the mutually beneficial ‘eating’ open to nature and the silence-dominated ‘sleeping’ is different from the communal urban life typical of Unite d’habitation’s roof garden.

This open-air eating space also shares with the archetype of the primordial space of a community surrounded by a ‘fire’ in *The Book of Architecture* by the ancient Roman architect Vitruvius. However, the ‘fire’ in Le Corbusier’s dwellings is not a sheltered space. Only the space

of sleeping is sheltered, and it is a more primitive human act than the act of 'building' (Bauen) or actively 'dwelling' (Wohnen), which Heidegger meditated on in the Totenauberg Villa and elsewhere.

Could this be the result of Le Corbusier's vision of a space suited to the warm, calm nature of the Mediterranean? However, even in the Mediterranean there have been storms, and Le Corbusier has allowed indigenous materials to be used, abandoning industrialized materials. Confronting the particularities of the earth, Le Corbusier ultimately found a fundamental place in the 'bedroom' as a resting place for the body. It was never a compromise for the sake of economic construction.

The ideal of communal life between individual and collective that the young Le Corbusier found in the monastery of Emma in Italy was embodied in a single urban building, the Unite d'habitation, while in Cap-Martin Le Corbusier sought to realise a space open to primitive life in the open natural lands of the Mediterranean.

Legend

FLC: architectural drawing number by Le Corbusier Foundation

AFLC: document number by Le Corbusier Foundation

C: *Le Corbusier Carnets*

Bibliography

1. Le Corbusier, *Le Corbusier Carnets 2 1950-1954* (Paris: Éditions Herscher / Dessain et Tolra, 1981)
2. Le Corbusier, *Le Corbusier Carnets 3 1954-1957* (Paris: Éditions Herscher / Dessain et Tolra, 1981)
3. Le Corbusier, W. Boesiger éd., *Œuvre complète 1938-1946* (Zürich: Girsberger, 1946)
4. Le Corbusier, *Modulor 2* (Paris: Les Éditions de L'Architecture d'Aujourd'hui, 1955)
5. Le Corbusier, *Le Corbusier Carnets 4 1957-1964* (Paris: Éditions Herscher / Dessain et Tolra, 1982)
6. Tim Benton, *Le Corbusier Peintre à Cap-Martin* (Paris: Éditions du Patrimoine, 2015)

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