# Sea Ranch and Wood Power: A vindication of the underdog culture

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# ABSTRACT

Replaced by materials resulting from sophisticated post-war American research processes, wood becomes in the Sea Ranch the perfect raw material to investigate a new language. To the connection that its renewable origin establishes with the design approach, the commitment to the material is added as a response to contemporary needs that only the new systems seem to supply. Far from stereotyped attitudes or the unchallenged defense of its benefits, wood becomes a vehicle of formalization of the everyday, through successive transformations that multiply their meaning without obviating the contemporaneity of language.

At a time and in an age that based development on total transformation, the organisation of the congress 'Design and Aesthetics in Wood' held in Syracuse in 1967 was offered as an alternative oasis in front of the not always valid duo of innovation and technology. The event, organised by the University of the State of New York, was defined as a forum of thought in which artists, architects and engineers could open a field of critical reflection about the recovery of wood as a material capable of shaping the contemporary landscape.

Wood tries to be present in the discussion as a raw material rich enough to be equal to the materials that at that time were created through complex processes of research and development, and in addition, offering itself as a more efficient form of design and higher aesthetics, capable of satisfying contemporary needs by new methods of manipulation, all of which allowed its competition with the above mentioned novelties in the field of the material.

The organization of the meeting calls not only for the renewable character of its origin – in a world conditioned by the extinction of natural resources – but also for an intimate association between man and wood, as to the dependence still valid today from its derived products to reach a wellbeing often distant because of the lack of familiarity between new forms and industrial materials. The open debate was chaired by specialists from various walks of life, like Carl Koch, Reyner Banham or Charles Moore.

From all of them, it is this last one who seems to acquire a degree of special pertinence, based on a theoretical exposition supported on a materialisation of confirmed validity: the project and construction of the Sea Ranch, completed just two years before.

Spread as a real alternative to the principles of an exhausted Brave New World, the California operation centred on the construction of Condominium I gives shape to a discourse not at all hazardous around timber construction, whose roots lie at the beginning of the previous decade. During the early fifties, Charles Moore – together with those who would become his partners at MLTW –, begins a timid residential development that cannot but be understood as an attempt to escape de submission to the precepts of Western culture, in search for the development of an authentic language of timber construction, something that had already been experienced in some of his previous works like Bonham Cabin, Jobson House or the small cabin he built for himself in Orinda<sup>(1)</sup>.

In one of these examples, Moore faces all the conventionalisms implied in the use of timber, showing a rather nonconventional use of materials that cannot but be read as a material manifest against all contemporary restriction, hoisting the defence of the economy of means and the use of timber in systems that, although distant from tradition, maintain good part of their significance for the inhabitants.

The consolidation of MLTW and the successive orders for homes on the California coast allow the development of a discourse that abandons the levels closer to unconsciousness in order to take on complex contents that find a perfect framework of action in the start-up, in the case of Oceanic Properties, of the Sea Ranch operation in 1963, coinciding with the completion of single family projects.

Although residential projects developed until then<sup>(2)</sup> were helpful to test the good gestalt of timber as a basic material to construct the domestic space, Sea Ranch offers the suitable conditions to certify the validity of the discourse. The occupation of the territory, of wild climate and orography, was limited to afforestation controlled by man for half a century before, which had managed to adapt itself to the conditions of the place in order to offer a landscape dominated by bishop pines, firs and sequoias (these last ones were native), which set the basis of a modest timber industry that had supported the work of shepherding, economy centre of the place. Lawrence Halprin, responsible for the general planning, makes this connection between wood and territory the starting point for the housing project, joining it to other determinants related with its position on the territory and the climate.

Responding to an order to design a pilot project of houses located on meadows in front of the sea, without any protection, MLTW proposes a residential complex as an enclosed precinct that, inspired by Mediterranean towns, would be capable to suggest an alternative of exterior space in front of the immensity of the environment in which it is inserted. The complex, taking shape through the work of the maguette developed in the studio, casually determines dimensions that are maintained to the end: 10 units, of eight feet per side each, organized around a central patio offering a double view in each case, towards the vast surroundings of the Pacific coast on the one side or towards the interior widely domesticated by the other.

Part of the discourse about the authenticity of the inhabitable spaces is also constructed on a double vision of the complex which must be understood, on the one hand, as a unit with a recognizable identity and, on the other, as the sum of 10 units, each of them with a recognisable idiosyncrasy and the capacity to offer the inhabitant a better adapted vital option to his needs.

The ambitious order intends projecting and building a residential complex for unknown

users and with a strong economical limitation. Even the advantage of being in a territory with abundant raw material is limited by a set of inconveniences that Moore himself describes as follows:

"It seemed at the time of its inception an economical system, since big timbers were to be found in this area. As it turned out, it was not quite that economical because floods prevented the delivery of some of the big wood that was to come from the coastal forests to the north and it had to come from the California High Sierra instead" (Moore, 1972, p. 98).

With great conviction, architects of MLTW found their proposal on the development of a constructive system based on the properties of wood not only as the link with the territory, but also as the only materials capable of giving form to the intentions suggested by them. Thus, and in spite of the problems, construction of the condominium takes shape supported by two fundamental agents for the work: engineer Patrick Morreau and contractor Matt Sylvia. The ability of the first one to solve a complex structure because of the geological properties of the soil and the experience of the second in timber work, acquired in his participation in some of Richard Neutra's first works, result in a construction system based on the ballon-frame, whose nature, far from the rigidity provided by prefabricated systems, favoured an adaptability to the irregularities of the place, keeping the roundness of the piece in the landscape.

The system allowed building each unit through three orders that took as base material the wood of the Douglas Fir: a vertical structure based on 10 x 10 pillars, a horizontal structure of  $4 \times 4$  inch beams shaping the surrounding (including the cover) and a diagonal bracing with elements of  $4 \times 2$  inches (derived of the

## purest ballon-frame).

Beyond the simplicity of a normalized technique, the system had to be adapted to the special condition of a seismic territory. Two mechanisms were implemented to allow the bracing of the different elements and the stability of the piece itself. In the first case, the main problem derived from the difficulty of obtaining stable screw joints that would allow the connection of pieces in very diverse angles. The solution arrived with the constructor, who, thanks to his already mentioned experience, was capable of designing a mechanism that allowed a multiple connection that was called, during the construction, 'Japanese Hardware', a solution that was simple and did not mean a cost increase:

"A big steel plate that has holes all around it so that spikes can be driven through whichever hole comes over the four-by-four stud arrangement of most houses, these ten-by tens are just barely adequate according to our engineer, to stand up against the wind on this exposed site" (Moore, 1972, p. 96).

As Moore himself says in his description of the system, the rather unconventional solution for joints weakened the general functioning of each piece, so Patrick Morreau planned a design that would allow integral stability of the same. Thus, each of the units has two opposed sides with two pillars each and two beams placed on the exterior located on the favourable topographic locations, forming two stable walls allowing the structure of the alternative sides to have only one pillar and two horizontal beams supported on the other beams of the adjacent walls. The result is a stable unit that acquires rigidity when inserted in a bigger set, allowing the corners of the structure to be free and to play with the deformation of identical systems by means of its rupture and the

incorporation of diaphragmatic elements: viewpoints, terraces or patios.

The whole structure is surrounded by an enclosure formed by three layers: a finishing of sequoia timber boards one inch thick to the exterior, a sheet of isolating cardboard and, finally, a plank of untreated fir two inches thick, which is in sight in the interior of each unit giving continuity to a domestic space formed by two other wooden pieces: a frame that houses the bed on the upper part and an element of equipment that allows the functioning of the whole house. Both elements are formalized through autonomous elements whose formal treatment and no interaction with the structural system of its covering allows them to be understood as special pieces of furniture, despite their scale.

Moore articulates his presentation at the Syracuse congress showing solutions with a high degree of simplicity, offering a great capacity to remain over time and that can be understood as a defence of the presence of wood and its suitability to co-exist with new construction systems, without this meaning the exclusion of others. However, this is not a wholehearted defence, innocent on being passionate, but of a show of arguments directed to a particular way of understanding the architectural project. Charles Moore does not mean to say that the characteristics of wood compete with the natural technological evolution, rather than preventing it from being forgotten as an alternative to lower scale solutions and closer to the inhabitant.

The overflowing naturalness with which Charles Moore and some of his partners at MLTW approach wood construction in some of their most iconic residential projects comes from various sources, as many as there are in the fields of knowledge of the history of architecture, that Moore felt close to from the beginning of his academic training. Among all of them, as emerges from his writings and the wide library of images accompanying his texts, the cultural North American tradition occupies an important role, surpassing the constructive regulation to be a representative of a complex national idiosyncrasy in which the traditions of winners and defeated live together.

To the current authenticity of the massive systems of Fort Ross and the prefabricated systems of Michoacán<sup>(3)</sup>, that are also included in the operation, there is the unprejudiced use of wood presented by Japanese architecture, very close to Moore through his travels to the East. The constructive discourse on which the Sea Ranch is articulated, stands as the last bastion in defence of the constructive contemporaneity of the material. Supporting an architecture without the complexes underlying in the conquerorconquested scheme, those that contaminate the American architectural development of the 19th Century, Moore considers the use of wood in Japan a reference capable of contradicting all of those who reject its use arguing that it has some properties which are not quite adequate to the ways of life at present.

Building with wood was subject of study in later trips. After these, Moore states in his writings that he has found the same authenticity mentioned for American buildings, supported, besides, by a constructive expertise on which its contemporaneity is based. So, facing a lack of use based on the scarcity of requirements of stability and durability that make it rather inadequate for high density urban settlements, construction of villages such as Nara or the complex of villa Katsura show its conscious adaptation in relation to temporality.

In a territory like the North American one, whose recent memory speaks of conquests, Moore identifies the loser with a subculture distant from the European models (inherited from the classical culture), submerging its roots in the constructive legitimacy of the Northern forests and in the use of wood as the basis for any type of domesticity, which he refers to as the under culture<sup>(4)</sup>. In his presentation at the conference, Moore praises the values of an authentic architecture without any aspiration except for differentiating interior and exterior, above all for its capacity to become an alternative to contemporary models.

The discourse about the domestic realm that accompanies him throughout his life moves away from the assertive or prophetic in order to offer what is understood as a possible choice facing the domestic reality of megalomaniac constructions of heavy materials with an apparent immunity to the passing of time, constructions that do not connect (or at least do not constitute a sine qua non quality) with the vital needs of the contemporary inhabitant.

The very persuasive appeal of Wood Power<sup>(5)</sup> may be considered an extraordinarily specific ramification of reactions after the fall of the modern movement. But in Moore, as shown by his theoretical demonstrations and, above all, his built works, his proposal collects some of the obsessions about domesticity that only in Sea Ranch can reach the quality of the real and the possible.

### NOTES

### REFERENCES

(1) Designed and built in California between 1960 and 1962, authorship of all of them is attributed to Moore, who seems to admit his collaboration with William Turnbull, Donlyn Lyndon and Richard Whitaker in what seems to be the seed of his imminent association with MLTW.

(2) Among those previous examples the Jobson House can be highlighted for its capacity to condense certain derivatives from Moore's thinking. During his presentation at the abovementioned congress, Moore refers to the home as a big 'redwood tent' attributing this phrase to Frey Otto, 'the great German manufacturer of camping tents'. Great story teller, real or not, the truth is that referring to the home as a camping tent or primitive shelter echoes many of the obsessions that will accompany him along his career, among which we can mention the housing project as a recreation of dream spaces of childhood games and the tent as a reproduction of an essential form associated to the idea of shelter. This story of improbable truth, thus becomes an authentic declaration of intentions.

(3) Fort Ross, the work of Russian immigrants of the 19<sup>th</sup> Century – located a few miles South of Sea Ranch – and the Mexican constructions of Michoacán, with their sensible cultural tradition of prefabrication, appear as obsessions of powerful influence in Moore's residential work during the 50s and the 60s. The nature of Fort Ross and its configuration around a tower as a landmark find their analogy in unit to of the condominium, while the reflection on the unprejudiced use of wood as a material whose stability is shown at the service of the user.

(4) The references of belonging to a sub-culture, always presented with concealed pride, are not limited to the use of a material that seems destined to disappear as such at a moment determined by history, but accompany and determine Charles Moore's architecture from the beginning of his professional work. "I like to be marginalized" (as cited in Allen, 1980, p. 6). With such a convincing statement, Charles Moore answered the doubts of his friend, student and partner Gerald Allen regarding his position, clearly maladjusted, in front of what could be called 'established architecture'.

(5) Or, in Moore's own words, "the second coming of wood" (1972, p. 74). An attempt to put before our eyes, not so much the inhabitant but the contemporary architect, the wholesome alternative of wood facing architecture after the modern movement. "I only ask that you note how refreshingly easy it is, even in the late twentieth century – especially in the late twentieth century – to saw these slightly dissimilar sticks in quantity and to bang them together with so much ease that enough energy might be spared for the subsequent enjoyment of the product" (1972, p. 74). A + U. (1978). The Work of Charles W. Moore. Tokyo, Japan: A + U.

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