

# The Myth of High Altitude and its Rock Masses. “What modernity?”

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## Abstract

Nella Serra da Estrela (lett. Montagna della Stella), la nozione di ‘mito dell’alta altitudine’ rimanda all’ancestrale mito cosmologico, favorendo una maggiore vicinanza alle divinità e alle stelle. Questo mito riecheggia nelle sue masse granitiche, nella neve e nell’acqua che le attraversa. Esse plasmano la gloria del suo profilo geomorfologico e il variare delle stagioni che animano tutte le creature che la abitano. Il mito dell’alta altitudine cambiò con la Spedizione Scientifica alla Serra da Estrela, 1881. Da territorio remoto e pastorale alla fine del XIX secolo, è passato a un luogo in progressiva trasformazione nel XX secolo, con centri di cura per la tubercolosi, dighe, aree ricreative e sentieri. Pertanto, nel quadro della trasformazione e dell’antropizzazione di questa montagna, questo articolo propone una riflessione interpretativa di tre opere presenti nella Serra da Estrela: Casa de la Fraga (1892) e Due Case nella Tenuta del Dr. António, di Luíz Alçada Batista (1924-2008).

*In Serra da Estrela (lit. Star Mountain Range), the notion of the ‘myth of high altitude’ refers to the ancestral cosmological myth by favoring a greater proximity to the divinities and the stars. This myth echoes in its granite masses, in the snow and in the water that runs over them. They shape the glory of its geomorphological outline and the variation of the seasons that animate all the creatures that live there. The myth of high altitude changed with the Scientific Expedition to Serra da Estrela, 1881. It went from being a remote and pastoralist territory at the end of the 19th century to a place in progressive transformation in the 20th century, with instances of tuberculosis cures, dams, leisure areas, and trails. Thus, within a framework of transformation and anthropization of this mountain, this article proposes an interpretative reflection of three works in Serra da Estrela: Fraga House (1892) and Two Houses at Tapada Dr. António, by Luíz Alçada Batista (1924-2008).*

## Keywords

Serra da Estrela, Pastoralism, Mountain Shelters, Fraga House, Luiz Alçada Batista House  
*Montagna della Stella, Pastorizia, Rifugi di Montagna, Casa della Fraga, Casa Luiz Alçada Batista*

### **The myth of high altitude has accompanied humanity for a long time**

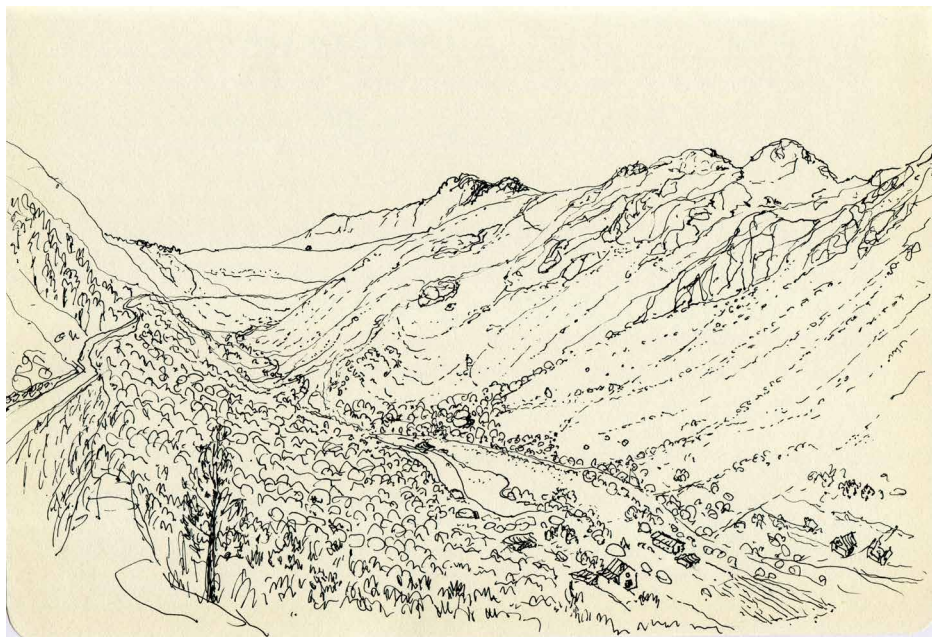
Michel Onfray referring to the Abel and Cain fratricide in the *Old Testament*, distinguishes the herder on the move, as opposed to the man of the countryside who settles on the land. Shepherds, walkers, adventurers, and wanderers, as opposed to the rooted, the immobile, and the petrified (Onfray, 2007, pp. 10-12). Thomas Mann's *The Magic Mountain* (1924), a book set in Davos, Switzerland, embraces the passage of time in mountains at a slower tuning fork than on the plains and in the urbanized and industrialized territories at sea level. Hans Castorp, the protagonist, who begins by visiting his cousin who is recovering, gradually moves away from life on the plains and slowly approaches the fragility of human life and introspection. António Alçada Batista, known as the writer of affections, brother of Luiz Alçada Batista, inhabitant of the Serra da Estrela territory and owner of one of the houses at Tapada Dr. António, wrote a book as a continuation of *Peregrinação Interior* (lit. Inner Pilgrimage) (1971), about the uncertainties of the human condition, hope and the 'hiding places of the soul' (Batista, 1983).

Mountain peaks refer to primordial nature, purity, redemptive peace, the search for order in chaos, physical and spiritual healing, they allude to the luminous, inspiring, and transcendental. Mountains and their

peaks fascinate humanity, particularly those who intend to unravel its secrets. It was only since the 18th century that its mysteries began to be unraveled. Horace-Bénédict de Saussure, who made several expeditions to Mont-Blanc, is the author of *Voyages dans les Alpes* (1779), a pioneering work on Alpine geology. Johann Graf von Hoffmannsegg and Friedrich Link, botanists and naturalists, made the first expedition to Serra da Estrela, in 1798, to study the *Lusitanian flora*<sup>1</sup>. Viollet-le-Duc after completing the restoration of the Cathedral of Notre-Dame of Paris, made studies in which he presented rational dispositions of the masses of Mont-Blanc, published in 1876.

### **Vast landscape and a 'strange parallelism'**

The approach is simultaneously macro and micro. Macro considering the eloquent scale of Serra da Estrela landscape and micro in the case of Luiz Alçada Batista House (L.A.B. House) (1969-1972), its relative modesty with regard to the studies that were dedicated to it, in view of its singularity and relevance in the panorama of domestic architecture in Portugal, and its small scale in the vast landscape. This last condition means a critical distancing from the city, and in another dimension, it means getting closer to the wild world, enjoying the seasonal variation of the landscape and discovering the surrounding natural space: the mountains, pure air, rocks, vegetation,



**Fig. 1** - Glacier Valley of the Zêzere river, Serra da Estrela, Portugal (drawing: Francisco Portugal e Gomes, 2021).

**Fig. 2** - Herd of goats and sheep guided by a shepherd accompanied by Serra da Estrela dogs, upstream from Tapada Dr. António, Penhas da Saúde, Serra da Estrela, Portugal (photo: Francisco Portugal e Gomes, 2020).





**Fig. 3** - The Convent of Capuchos, Sintra, Portugal (drawing: W. H. Burnett, 1834; source: National Library of Portugal, <https://purl.pt/5601>, public domain).

animals, watercourses, etc. However, the notion of the ‘wild world of the mountains’ must be understood with moderation given the ancestral anthropization of the territory, because of pastoralism and transhumance (fig. 2).

Thus, the aim of this study is to deepen the cultural and multidisciplinary significance of L.A.B. House and the surrounding landscape, from the Scientific Expedition to Serra da Estrela (1881) and the Survey on Portuguese Regional Architecture (1955-1958), two on-site research initiatives, fundamental but not absolute: they cannot be ignored or forgotten.

The methodology is based on a long personal life in Serra da Estrela, with accumulated experience of regular stays, from 2000 to 2025, especially during summer at Penhas da Saúde for mountain wanderings, documented in dozens of sketches, watercolors, and thousands of photographs. The specific topic developed in this research was supported by a literature review focused on the two researches mentioned above and on the theoretical aspects related to the

meaning of the mountain as a place of physical and spiritual healing. The methodology also was based on a visit to L.A.B. House in the summer of 2022, guided by landscape architect Luís Alçada Batista, son of architect Luiz Alçada Batista, and finally was based on consulting the collection of this architect, especially the documentation of the houses in Serra da Estrela region, at Instituto Marques da Silva Foundation, Oporto, in April 2025.

Gonçalo Byrne (2009) suggests a “parallelism”, “strange as it may seem”, between the L.A.B. House and the Capuchos Convent, Sintra (fig. 3). This understanding can be justified by the common idea between these works as places in close communion with nature. While agreeing with Byrne’s proposal, however, it is difficult to ignore an identity hypothesis with the vernacular mountain roots of the shepherd’s shelter and with the Fraga House (1882). Furthermore, the modernity rooted in local conditions is the most distinctive aspect of this work, which will be discussed later.

It is unanimous to consider that the houses at Tapada Dr. António (in particular, L.A.B. House) reflect, among other influences, the Survey on Portuguese Regional Architecture. However, there is no other known study that establishes an interpretative link between the Scientific Expedition to Serra da Estrela, the Fraga House and the two houses at Tapada Dr. António. The multidisciplinary scope of the scientific expedition, as we will see later, due to the impact it had on society, the direct effect of the scientific confirmation of the Serra da Estrela plateau as a suitable place for the treatment of tuberculosis, mark the irreversible awakening of the discovery and experience of a remote territory with stunning landscapes.

### **Scientific Expedition to Serra da Estrela. Demystification of beliefs and legends, and the healing power of the high altitude climate**

Tuberculosis was one of the greatest scourges to strike humanity, peaking in the 19th century, primarily due to urbanization and precarious living conditions. The first cure for this disease emerged in Davos, Switzerland, in the mid of the 19th century and influenced the emergence of sanatoriums in other countries, including Portugal. The concept of ‘rest’ has continually evolved over time. From the advent of Christianity onward, it was essentially *requiem aeternum* (lit. eternal rest), (Corbin, 2022, p.119). The no-

**Fig. 4** - Fraga House, Penhas Douradas, Manteigas, Serra da Estrela (source: Seia City Council, 1883, <https://cm-seia.pt/eventos/cise-organizacao-passeio-expedicionario-as-penhas-douradas/>).

tion of ‘therapeutic rest’ reappeared in the late 19th century. The sanatorium – or ‘temple of rest’ – as it became known, inherited some of the concepts of its distant ancestors: the exaltation of rest amidst nature and the fashion for “open-air healing” (Corbin, 2022, p.114). It was in mountain settings that temples of rest proliferated. In Portugal, it was in Serra da Estrela that they appeared for the first time.

Scientific Expedition to Serra da Estrela organized by the Lisbon Geographical Society, constitutes a historic milestone in the deepening of knowledge about the highest mountain in Portugal, constituting to date the largest multidisciplinary concentration of scientists and resources held in the country, having given rise to the publication of six reports. The purpose was to explore the territory, to study the potential of high altitude and the mountain climate for the treatment of tuberculosis, and investigate ancient legends and beliefs about Serra da Estrela, originating in literature with fabulous and other absurd narratives. One of the most bizarre beliefs was that in Lagoa Escura (lit. Dark Lagon) there was an underground connection with the Atlantic Ocean. A central belief was that Serra da Estrela had been a stronghold of the Lusitanian people, led by Viriato, against the Roman legions. Some reports demystify legends and beliefs. The Archaeology Department, for example, revealed that the investigations carried out and the



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Casa denominada da Fraga

SERRA DA ESTRELLA  
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information obtained on the ground established, until evidence to the contrary was provided, that “there were no antiquities to be found in the heart of Serra da Estrela” (Sarmiento, 1883, p.7).

### Between the Rocks. Experimental Fraga House

The Expedition led to the conclusion that there were perfect climatic conditions that guaranteed the treatment of pulmonary pathologies. The following year, in 1882, the Fraga House, in Penhas Douradas (lit. Golden Rocks), (fig. 4) was built for Alfredo Henriques, who suffered from lung disease. He was cured after two years, becoming the first patient to be treated in Serra da Estrela, in adequate facilities and with medical support, a fact that popularized that house as the healthiest in Portugal. The success of this experiment sparked a sudden interest in this mountain and marked the beginning of its transformation. Between the late 19th and early 20th centu-

ries, Penhas Douradas place developed into a high-altitude village.

This designation, which uses the term *fraga* – which means inclined rock, cliff or crag – conveys the idea of the archetype of an ancestral construction in the Beiras region<sup>2</sup> that make use of large rocks and granite in their location. It is possible that in the past some of these crags may have been dens of bears or wolves. The places’ names Pedra do Urso (lit. Bear Rock) or Salto do Lobo (lit. Wolf Leap) denote the presence of these animals in Serra da Estrela. With some additional stones, walls were built that delimited the shelter, leaving only an entrance and one or two windows. These shelters were built by shepherds and in some cases evolved into a small house around the rock formation, next to a stream (fig. 5).

Experimental Fraga House is a more appropriate name, as it reflects hybridity, which combines the mountain shepherd’s shelter with the scientific ex-



Fig. 5 - Shepherd's shelter next to a stream, Penhas da Saúde, Covilhã, Serra da Estrela (photo: Francisco Portugal e Gomes, 2025).

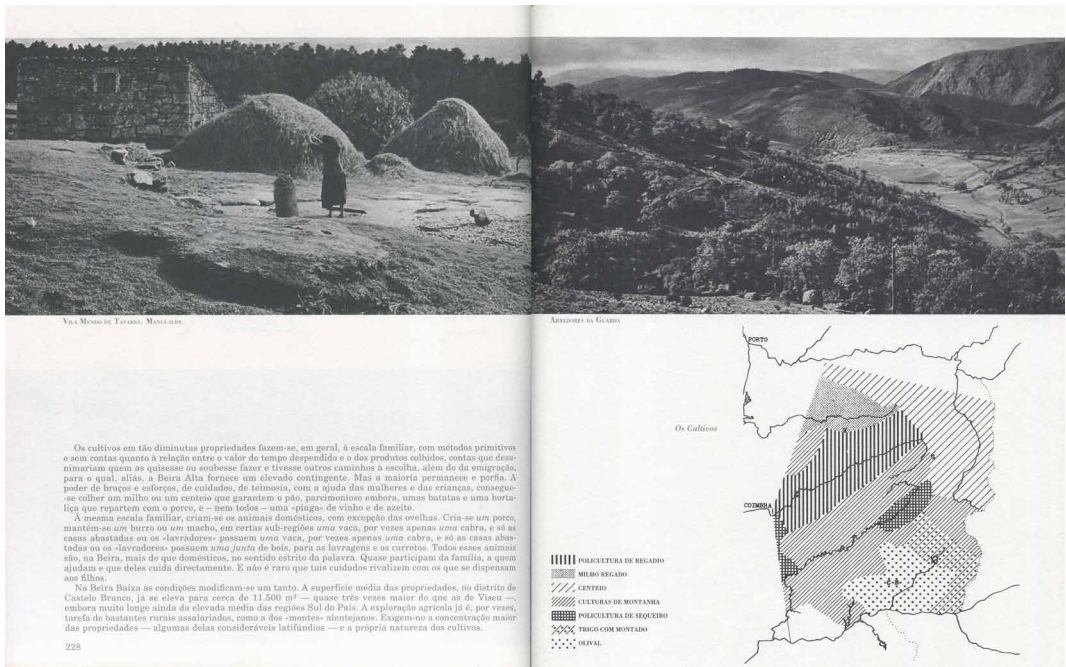


Fig. 6 - Book *Popular Architecture in Portugal*, Vol. 1, 1961: Zone 3 - Beiras (pp. 228-229).

perimental component. Its function being unusual, it represents an experiment related to the original creation of the conditions of a mountain living space for the treatment of a lung disease. The guarantees of survival in a remote and cold location result from the combination of a fraga shepherd's shelter with the attached part, built with stone masonry and some non-local materials, for example, the gabled roof is covered with metal sheet, since the ceramic tiles used in the region's lower altitude locations cannot be used in snowy climates<sup>3</sup>.

In addition, the house had innovative technological devices for the time, such as lightning rods and pyramid-shaped chimney bases, for greater stability and easy drainage of accumulated snow, with metal smoke outlet terminals attached with metal cables anchored to the rocks that guaranteed stability, since the winds in winter blow with great intensity. Rural houses, especially those in the mountains, did not have chimneys; the smoke darkened the walls and came out through the open roof tiles. Unlike other types of materials, for example, reeds or wood, granite rock masses have great thermal inertia, which means that they absorb heat during the day and dissipate it slowly at night<sup>4</sup>, which is why these shelters were originally used by the wild animals.

### **Serra da Estrela and the Survey on Portuguese Regional Architecture**

It took about 75 years from the Scientific Expedition until Serra da Estrela became the object of study by a team of architects who traveled to the Beiras region. The Survey on Portuguese Regional Architecture<sup>5</sup>,

which gave rise to the book *Popular Architecture in Portugal*, 1961 (fig. 6), was a pioneering work in architecture, involving 18 architects. This work made evident the cultural link between vernacular architecture and landscape, and revealed the diversity of types of settlement and architectural typologies linked to local conditions: climate, economy, materials, ways of life, etc. The territory of mainland Portugal was divided into six zones, which corresponded to six work teams. The Zone 3 - Inland of Beira Alta and Beira Baixa region, coordinated by Keil do Amaral with José Huertas Lobo and João José Malato, includes a study about Serra da Estrela region.

When in 2008 the plans for the construction of a dam in the parish of Cortes do Meio, in Serra da Estrela, became known, the Survey was rightly invoked. The dam would create a reservoir in the valley of Covão do Teixeira river that would destroy the two houses at Tapada Dr. António, designed by architect Luíz Alçada Batista, and a hydraulic system from the 19th century, with water channels for irrigating marshes for pasture production.

The possibility of building the dam gave rise to a controversy with an alert from the Order of Architects and the Portuguese Association of Landscape Architects, in 2009, which led to a process of classifying the two houses in Instituto de Gestão do Património Arquitectónico e Arqueológico (IGESPAR), promoted by the landscape architect Luis Alçada Baptista, and fighting for their safeguarding, taking into account their heritage value. The objection was more justified insofar as there was a more appropriate solution downstream (Teles, 2009), in accordance with

the principles of good land use planning practices and which did not jeopardize the cultural heritage of the Tapada Dr. António, its agricultural soils and the ecological dynamics of the valley.

The process at IGESPAR was accompanied by a set of opinions, among others, from architects Siza Vieira, Gonçalo Byrne, Nuno Portas, Ana Tostões and landscape architects Gonçalo Ribeiro Teles and João Gomes da Silva which highlight the historical and cultural significance of these houses and contextualize them in the period that followed the Survey on Portuguese Regional Architecture, with a critical reading of rationalism, with attention to local conditions, the site and the landscape.

Gonçalo Byrne argues as follows:

“The modernist trend that moves away from the orthodoxy of the purest and hardest modern movement, Le Corbusieran, rationalist and functionalist, to, attentive to the entire local historical identity of “long duration”, propose a much more anthropomorphic, organic composition, which in our case is linked to the “Survey on Portuguese Regional Architecture”, converging in time and spirit with the revision of the last CIAM and the appearance of such important architectures as those of A. Aalto, BBPR, Ridolfi, Quaroni, etc., following Frank Lloyd Wright, in Portugal is a very substantive moment where truly notable works emerge by architects such as Távora, Filgueiras, Viana de Lima, in the North and Portas, Teotónio Pereira, Alzina Menezes and Alçada Batista in the South, among others. They are works of great poetic intensity, true but rare testimonies of a period that unfortunately remains little studied, but which represents a very strong period of identity affirmation at serious risk of being lost.” (Byrne, 2009, p. 1)

Similarly, Álvaro Siza defends the work:

“In those days of desire for change, some teachers and architects from the Schools of Lisbon and Porto began the ‘Survey on Portuguese Regional Architecture’. They sought, in a way that was only apparently contradictory, an answer(s) to an urgent question: what modernity?

The ‘Survey’ dismantled the invention that there was a ‘National Architecture’; documented and outlined the image of a country with multiple and secular cultural roots, but also open throughout history to multiple influences. This paved the way for a modernity that was far removed from the avant-garde’s attraction to the *Tabula Rasa*.

Luiz Alçada Batista’s work is exemplary for the continuity and mastery of that fertile dichotomy. Those trees and rocks, of which the mountain houses are part, that landscape and the way of inhabiting it (although in natural transformation) explain that Architecture.” (Siza, 2009, p. 1)

### ‘The third way’ or a new modernity

It is precisely this idea of ‘fertile dichotomy’, by Siza, that sheds light on the question ‘what modernity?’ that is important to debate. Álvaro Siza (2012), in a meeting held at Soares dos Reis National Museum in Oporto, noted that the Survey generated great enthusiasm – which had precedents – and had a direct influence on architecture in Portugal. One of the main precedents was a “yearning for modernity”, for which Carlos Ramos, as Director and Professor of the Oporto School of Fine Arts, had been decisive (Portugal e Gomes, 2019, p. CIII).

This ‘yearning for modernity’, which mobilized a new generation of architects, in the words of Álvaro Siza, expressed a critical consciousness that sought to

free itself from the stylistic impositions promoted by Salazar's dictatorial regime, which had given rise to a "crisis of professional dignity" (Portugal e Gomes, 2019, p. 346). Thus, the Survey had a decisive influence on Portuguese architecture in the late 1950s, 1960s and 1970s, causing the end of the 'Portuguese house'<sup>6</sup> and enabling the affirmation of the 'terceira via' (lit. 'third way') – neither radically traditionalist nor radically modern – an architecture in line with local conditions and culture, a synthesis between the historical and regional values of Portuguese architecture and the affirmation of modern architecture, in which the main protagonists were Fernando Távora, Nuno Teotónio Pereira, Nuno Portas, Álvaro Siza, among others.

During this period, criticism of international rationalism crossed different latitudes and was largely rooted in the appreciation of organic architecture, the works of Alvar Aalto and Frank Lloyd Wright, largely due to the influence of Bruno Zevi's promotion of organic architecture and the influence of the works of neo-realist Italian architects revisionists of the modern movement, such as Ludovico Quaroni, Mário Ridolfi, among others.

### **The Tapada Dr. António**

The land is located in the southeast quadrant of Serra da Estrela, between 1200 and 1400 meters above sea level, in the parish of Cortes do Meio, municipality of Covilhã. It has an area of approximately 130 ha and is entirely within the boundaries of the Serra da Estrela Natural Park. The property was acquired by

Antonio Alçada de Moraes (Dr. António) at the beginning of the 19th century and the constructed elements (walls, dams and channels) were designed and built in the middle of that century. The Nave de Areia, Água Fria, Salgueira and Covão do Teixo streams flow into it, the latter, winding and with its deep bed between the granite cliffs and rocks, defining the valley or *covão* in its course and extension.

The aquifers of the mountain converge on the slopes in the property, which means big water availability, which, combined with the conditions of the gentler relief in this valley, led Dr. Antonio Alçada to choose this location to develop his agricultural project (Santos, 2013). "The various agricultural, forestry and pastoral cultures, animal production and the leasing of pastures for transhuman herds during the summer kept Estate's self-suggestion" (Santos, 2013, p. 97). Especially because the transhumant routes of the Covilhã slope and the Bouça and Cortes do Meio valley pass through there.

At the end of the 1950s, the property was owned by the third generation of António Alçada de Moraes heirs, including the writer António Alçada Baptista and the architect Luíz Alçada Baptista, and both decided to build there (fig. 7). In addition to being weekend or holiday homes, a space for recreation and socializing, they were also a refuge for important gatherings of thought in resistance to the dictatorship in the period before the April 25th<sup>7</sup>, with personalities linked to the thought and culture magazine *O Tempo e o Modo*. They were also a refuge for writers and important literary works were written there,

such as the novel *O Delfim* (1968), by José Cardoso Pires and the essay *Peregrinação Interior* (1971), by António Alçada Baptista.

### Luiz Alçada Baptista Houses

Regarding the threat of destruction by the dam reservoir over these two houses, José M. Fernandes (2009) develops in detail both the influences of the triangular/hexagonal regulatory grids of Frank Lloyd Wright's houses from the 1930s, and their inclusion in the production of modern architecture in Portugal, namely the House in Venda do Pinheiro, by Maurício de Vasconcelos, or the House in Sesimbra, by Nuno Teotónio Pereira and Nuno Portas, "[...] which adopted the triangular grid pattern, in a way that is closer in plan to that of the Serra house, by Luiz Alçada Baptista" (Fernandes, 2009, p. 153). The author mentions that these houses denote influence from the Wellington and Ralph Cudney House, Arizona (1927), (unbuilt) and the Hanna House, California (1937) by Frank Lloyd Wright, among others, with a triangular geometric grid.

Luiz Alçada Baptista (1924-2008) was an architect from the same generation of Fernando Távora (1923-2005), Octávio Lixa Filgueiras (1922-1996) and Nuno Teotónio Pereira (1922-2016), three architects directly involved in conducting the Survey on Portuguese Regional Architecture. At the beginning of his professional practice in the 1950s, he carried out some

**Fig. 7** - Two Houses in Tapada Dr. António, Covão do Teixo, Serra da Estrela: (top) António Alçada Baptista House, (below) Luiz Alçada Baptista House (photo: Adriano Alves Portugal, 2025).

projects for the Serra da Estrela region, namely in Covilhã and Fundão, among others, the Chãos de Vazeirão House Tortozendo, Covilhã, 1953, the House in Soalheira, Fundão, 1956, and the Cruz Dinis House, Tortosendo, 1957.

In these early projects, concerns for the surrounding environment, the use of local materials and sloping roofs are evident, however, the influences of the European avant-garde are still visible. For example, in the House in Soalheira, the play of light and shadow is accentuated by the contrast between vertical planes without openings in local stone and the other surfaces that combine plastered walls with glazed surfaces where the openings meet. The House in Amial, Oporto, 1950-1953, by Celestino de Castro (1920-2004), is also marked by the contrast between the two closed granite side planes, and the two Corbusian facades, which bring together the spans of the habitable spaces.

In the reports of the projects for these houses in Covilhã, the constants adopted are: integration with the environment, the expression of the various functions in the plan, the compatibility of industrial materials with the materials of the region, adaptation of the volumes with plays of light and shadow and the sloping roofs.

Therefore, the two houses break with some references, continue most of the constants of those projects for Covilhã and assume the following fundamental



principles: 1. integration with the environment: conservation of existing trees and natural rocks, careful orientation and valorization of panoramic views; 2. layout of the plan with a set of differences in levels in order to settle the construction as much as possible on the ground (avoiding costly earthworks); 3. granite walls emerging from the natural granite ba-

se; 4. load-bearing granite wall with a rough (brutalist) expression on the outside and defining the internal spatial structure, which shows a notion of thickness in the architecture as opposed to the thin wall or transparent glass panel; 5. authentic and unpretentious attitude, which is rooted in the influence of the Survey on Portuguese Regional Architectu-



**Fig. 8** - Luíz Alçada Batista House (exterior), Covão do Teixo, Covilhã, Serra da Estrela (photo: Francisco Portugal e Gomes, 2022).

**Fig. 9** - Luíz Alçada Batista House (interior), Covão do Teixo, Covilhã, Serra da Estrela (photo: Francisco Portugal e Gomes, 2022).

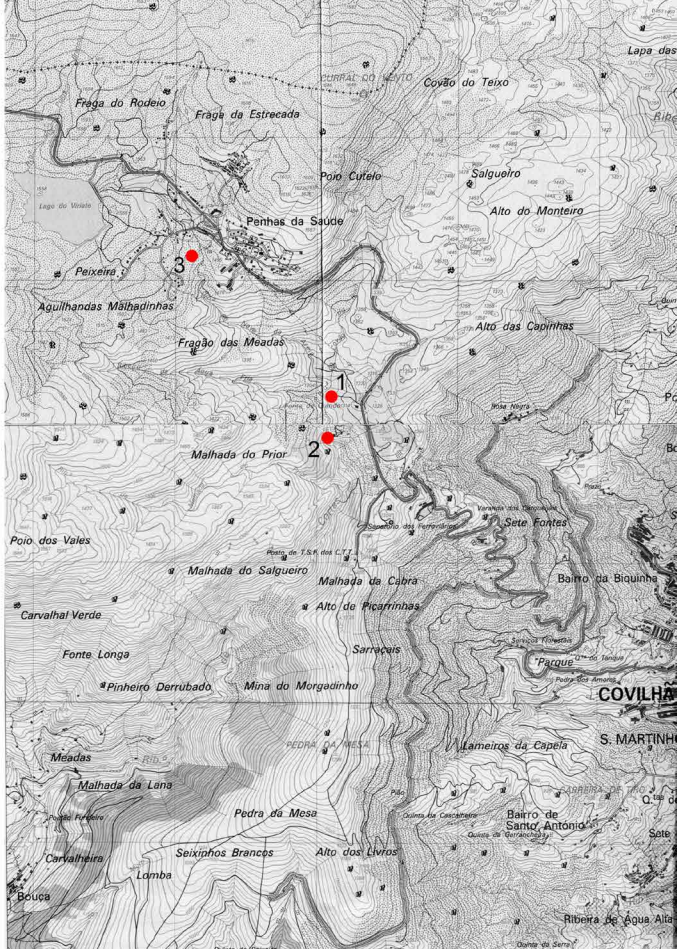
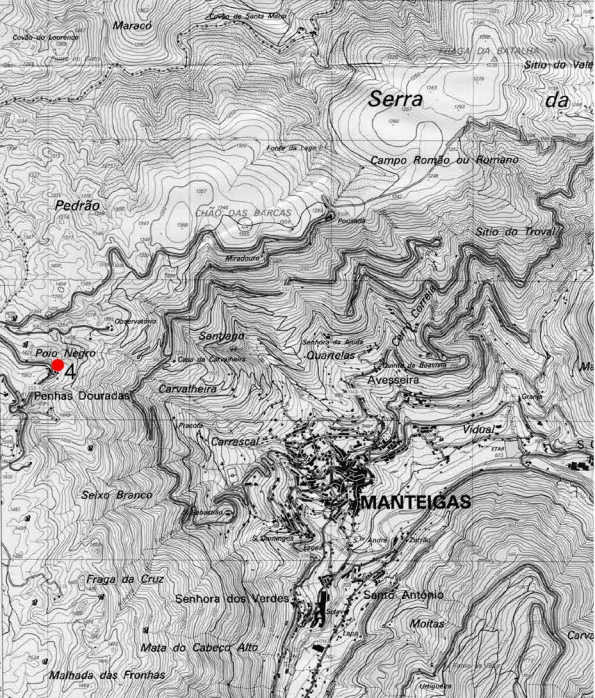
re, which from the point of view of poetic expression is based on the use of local materials and their rudimentary and artisanal application in the work, keeping alive a vernacular expression on a erudite geometric composition.

### **Healing Power and Poetry of the Essential**

Finally, some considerations on the importance of on-site studies, namely, multidisciplinary scientific explorations and research by six teams of architects. Regarding the Scientific Expedition to Serra da Estrela, 1881, confirmed the healing power of the high altitude of the Serra. The Fraga House is an hybrid construction that crosses an ancestral mountain shelter with an experimental house, and was the origin of the healing instances of tuberculosis on that mountain, marking the meaning of the fundamental transformations that occurred in Serra da Estrela; in relation to the Survey on Portuguese Regional Architecture, which reveals vernacular architecture and demystified the 'Portuguese house', it constitutes a basis for affirmation of the generation of 'third way' architects, of which Luíz Alçada Batista was included.

In the two houses at Tapada Dr. António built during the period of modern architectural revision, still marked by the Italian neorealism, the influences of the Survey and the Frank Lloyd Wright's organicism, intersect in a unique way. While the Fallingwa-

ter, Pennsylvania (1936-1937) is a reference point for the presence of native vegetation, the building's positioning on existing rocky outcrops, and the surrounding space and river as a natural extension of the idea of home beyond the interior space, the Hanna House, California (1937) is the most evident reference for its composition based on a geometric articulation of hexagons and triangles, which generate fluid spaces that dispense with the rigidity of right angles. However, neither of Luíz Alçada Batista's houses features 'L' or 'T' shaped floor plans, as is often the case in Frank Lloyd Wright's houses. Instead, they feature spatial arrangements based on unevenness in keeping with the terrain's slope and dynamic interplay of volumetric articulation, bringing them closer to the compact agglomeration found, for example, in the shepherd's shelter (fig. 5) or even in the Fraga House (fig. 4). In the latter case, the house's isolation on the mountain, its proximity to existing rocks, its formal compactness, the use of stone walls, and the sheet metal roof are common features. So, in conclusion, the Tapada Dr. António is inseparable from the culture of pastoralism, the mountain landscape, Portuguese literary culture and the resistance to the dictatorship of the New State, and Luíz Alçada Batista House is a poetic work that connects life to place, an exceptional symbiosis in Portugal between the essence of vernacular culture and modern architectural culture.



- 1 - Luiz Alçada Batista House, Covilhã
- 2 - António Alçada Batista House, Covilhã
- 3 - Ruin of Shepherd's Shelter in Rocks (['Fragas'], Penhas da Saúde, Covilhã (Fig.5)
- 4 - Ruin of Fraga House, Penhas Douradas, Manteigas

0 500 1250m

## Notes

- <sup>1</sup> The reference to this expedition appears in *Expedição científica à Serra da Estrela em 1881*, Sociedade de Geografia de Lisboa, Imprensa Nacional, Lisbon, 1883, p. 8.
- <sup>2</sup> Inland region of Portugal between the Serra da Estrela and the eastern border with Spain.
- <sup>3</sup> As snow accumulates, the ice crystals that form and occupy the small empty spaces in the ceramic expand, progressively causing the material to disintegrate.
- <sup>4</sup> Currently considered an ecological architectural principle of passive solar energy that corresponds to the use of direct solar radiation on rock masses.
- <sup>5</sup> Organized by the National Union of Architects and with financial support from the State.
- <sup>6</sup> Multidisciplinary culturalist movement in the early 20th century, which led to a nationalist architectural doctrine from 1933 onwards lead by Raul Lino.
- <sup>7</sup> Carnation Revolution, 1974.

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**Fig. 10** - Location plans, over public military charters 1/25000m (author's elaboration).

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