Enhanced pedagogical methodologies for facilitating the progression of the Master’s final exam between the professor and the student, focusing on the project titled: Vita Nova - The rehabilitation of nature, architecture, and the spirit

Mafalda Maia1* and Miguel Baptista-Bastos1

1CIAUD, Research Centre for Architecture, Urbanism and Design, Lisbon School of Architecture, Universidade de Lisboa, Rua Sá Nogueira, Polo Universitário do Alto da Ajuda, 1349-063 Lisboa, Portugal

Abstract. An article that unites theory and practice, architecture as a union between a final-year architecture student and a professor or advisor at the Faculty of Architecture of the University of Lisbon, throughout the course and throughout the monitoring of the final master's project. This accompaniment began in the first semester of the fourth year, and since then it has been a construction between teacher and student where a series of pedagogical intentions have been explored, from the deep reading and correlation between architecture and nature through the graphic process recorded daily to the most appropriate rehabilitation methodologies in the explored architecture. This whole system was divided into several phases, all of them divided by the themes and chapters addressed in the project. This work culminated in a deeper understanding of the methods of organization and design of a different work. The uninterrupted monitoring by the teacher towards the student resulted in numerous debates and different conceptions, so that the work in question had the best possible result. This procedure resulted in a continuous search for a clearer understanding through pedagogical incitement, guiding the work so that it took the most appropriate course for the student's project. Nature and rehabilitation were the central themes of all the work, where the aim was to establish qualities that cut across the two areas of knowledge. The main objective has always been the research for architecture and rehabilitation and the deep relationship between the built architecture, the one that is intended to be built, and the surrounding nature, through the study for the best possible conclusion of the Master's Final Proof.

* Corresponding author: mafalda.lopesmaia@gmail.com

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1 Introduction: A natural relationship with architecture

Throughout the school year, when choosing the theme of my Master's Final Exam, I always kept in mind the theme of water in architecture and the integration of nature in built architecture. Because I chose a rehabilitation theme, it was essential to better understand the essence of the place, to use the elements of nature, and to relate them to the work. The choice of the theme was linked to the desire to respond to specific objectives related to the rehabilitation of island architecture. The creation of a hotel or reserve in nature in order to preserve and conserve the historical heritage of our country was the main focus. This rehabilitation will then enhance not only the nature reserve and hotel but the entire surrounding park. The use of all the site's capabilities to integrate rural tourism into nature, such as the site's geothermal and endemic nature, was something that was always present. The integration of this reserve and rural tourism in nature was the main challenge of this proposal, due to not magnifying the architecture in a territory that is highly protected and preserved [1].

Thus, the search for architectural solutions to better understand the connection between architecture, nature, and spirit was always the ultimate conclusion. The union between these three elements made rehabilitation possible in the previously highlighted ways. These objectives create links between various areas of knowledge such as architecture, biology, geology, and psychology, focusing not only on architecture as a project but also on its influence at a psychological, interactive, and functional level [2].

The work method used followed a line of thought in parallel with a research grant with the theme "Erudite Residential Architecture from the Eighteenth Century in Rural Places: Historic Suburban Villas and Manor Houses of the Azores: Identification, Valuation, and Revitalization of an Architectural Heritage," for which I applied and was placed in 1st place. Alongside this scholarship, I worked with my scientific advisor on the final master's exam, where I outlined a path of co-supervision and correlation between the two works developed—the final master's exam and the research work.
2 The choice of program

Nature has a way of working in the most mysterious ways. It is believed that nature has evolved over the thousands of years since the universe was formed. Darwin comes to argue "(...) that it is the environment, by means of natural selection, that determines the importance of the individual's characteristic or of its variations, and the organisms best adapted to that environment have the greatest chance of survival, leaving a greater number of descendants". (Darwin, 1859). When applied to species, it is noticeable that the whole planet is a closed system, desirably self-sustaining. Thus, nature has also been evolving over the millennia.

The Azores, known for being a mostly preserved natural landscape, are the place of choice to work the communion between natural green and artificial brown. Volcanic territory by nature, calderas and springs by consequence, the Azores, and especially São Miguel are some landscape rich in natural elements. Man will take advantage of what nature gives him to explore, making the architect a symbiotic medium between the natural and the artificial.

Through the rehabilitation of a ruined farmhouse, the aim is to unite architecture, nature, and spirit. Architecture as rebirth, water as a means of union, and spirituality as communion. The aim of this article is the continuation and preservation of the historical and architectural heritage of the archipelago. Thus, architecture is the main premise, and its preservation is the ultimate conclusion. The preservation, rehabilitation, and restructuring of an island recreational farm meet the need to preserve, rehabilitate, and rebuild a complex that is the communion between the natural, the artificial, and the spiritual. In this way, what has been lost is what we want to recover [3].

Thus, the first premise is the problem of rehabilitation and preservation; it is intended that the heritage is recovered and what has been removed is returned. The historical heritage of the Azores Archipelago is one of the most important in Portugal, but it is also one of the least preserved. Being aware of the need to preserve these farms, there is a need to reuse an existing structure and give it a new life. In short, the main objective of this final project is the rehabilitation of the Casa do Parque da Grená on the island of São Miguel, in the Azores. Thus, it is intended to create an experience of deep connection between the built architecture, the one to be built, the water and the spirit.

Quinta do Parque da Grená is a property with more than 100 years of history. Situated near furnas lake, this property has had more than five owners, going from being just a simple farm to sometimes becoming a hotel. In 1987, it was purchased by the national government to accommodate government families when they visit the archipelago. Over time, the house was abandoned and left in ruins until 2015, when it was acquired by the government of the Autonomous Region of the Azores. In 2018, the government sells the property to its last private owner, Feliz Terra, where he begins a work of recovery and rehabilitation of the house. After a year, the park is all rehabilitated, but the house still remains in ruins.

3 A way forward for the method

The whole basis of a research project starts with the strategic subdivision of what you want to address. And the role of the supervisor is to share and work on the adversities that arise along the way. The relationship between the supervisor and the student are characterized by a partnership, where the teacher acts as a mentor to the student. The teaching of architecture and its pedagogy are transversal to all forms of expression in education. On the other hand, a methodical division was made for the best outcome of the work. The study of place, criticism and comparison, the use of technology, and the project itself were the best ways we could achieve the greatest success in the dissertation. To better understand nature and stay within the mysterious environment of the Azorean landscape, a parallel study was made between Azorean literature, nature, and architecture. The classic author who gave a motto to all the
research was Palladium, where the work "The Four Books of Architecture" was published. The work "Complexity and Contradiction in Architecture" allowed the student to make the whole process a great plot of images and simple imaginary journeys that, as a whole, allowed for a complex outcome in the architectural context.

The deviation between the theoretical part and the project was partly purposeful but, at the same time, done in tandem. The whole contradiction between the classification of architecture, but on the other hand, its complexity was the beginning of the choice of the method that flows into a unique creation, which represented the island and the landscape, where all its development was a worked program, where the outcome will be a final proof of a master's degree in a document.

With Venturi, a high value of preservation was internalized with the integration of natural, local, and historical elements because they believe that architecture has to relate meaningfully to the context in which it is inserted.

The itinerary proposed by the teacher was something based on the plurality of architecture and how it relates to other areas of knowledge. The natural world and its most primordial elements gave rise to the theoretical conception of the document, and the preservation of the natural gave rise to the project [4].

4 Travel: The materialization of the dream

A journey means change, both physically and mentally, and it is on journeys that you learn the most and can share your experiences. It is in travel that one gets to know and leave the unnecessary. Inevitably, a good traveler seeks to absorb the unknown, to live on the border between physical and spiritual travel, between new paths and new perspectives on himself and others. The need to explore arises from the need to explore and learn, yet it is an escape from everyday reality; the desire to leave is accompanied by the feeling of leaving the perception of a stagnant actuality preserved.

Thus, it is a way of looking at what is left detached and objective, without the mere existence of what remains dictating its value. In this sequence, the decision to travel brings a feeling of a certain purification of the self. For the spiritual journey to happen, there must be an environment conducive to evoking spirituality, a place where we feel protected and welcomed by it, freeing our inner selves for the necessary journey. It is in this playground that
we intend to achieve maximum contemporaneity as well as the recovery of previously existing spirituality. After this deep reflection we try to savour the good that the trip will give us, as if it were a counsellor between the moment of rest, what will be left behind, and a new chapter to be discovered. [5]

A journey is made in many different ways. A journey through the physical world where we are constantly limited and defined and where the possibility to explore the elements is finite. A spiritual journey, on the other hand, can be seen from countless perspectives. It is a journey without time or space. It is from this journey that thoughts and ideas will arise that will guide us in making future decisions. Thus, we will always have a duality of concepts: if water is the physical, air is the spiritual, and if architecture is the physical, painting is the spiritual.

Consider, then, that literature is physical and poetry is spiritual. Poetry makes us transcend beyond the physical world, transforms the concrete into the abstract, and materializes the immaterialized. It is an unexpected journey without a beginning or an end. Transversally, one can compare architecture by stating that both are timeless. Time is the transversal variable for everything, from nature to architecture, and especially the spirit. Its passage is not linear, with the degradation of one and the continuation of the other.

5 Conclusions

Architecture as a subject requires discipline and practice. It is the search for constant knowledge, yet it is sometimes the simplest realization. The search for a formula to teach it is inevitable, but the outcome will never be the same. All students are different, and the adaptation of the teacher to the student is something that has to be worked on by both. Throughout this work, it was possible to see the relevance of the relationship between theory and practice in the teaching of architecture.

The joint journey between a final-year architecture student and the teacher/supervisor at the Faculty of Architecture of the University of Lisbon allowed for the exploration of several pedagogical intentions throughout the final master's project. Since the first semester of the fourth year, this construction between teacher and student has been built, culminating in an enriching learning process and the search for a clearer understanding of the theme.

The research focused on the relationship between architecture and rehabilitation, especially in the insular context of the Azores, with an emphasis on the integration of nature in built architecture. The main objective was to develop a rehabilitation project for the Grená Park House on the island of São Miguel, preserving the historical and architectural heritage of the region. This endeavour included the integration of the natural environment in the architectural design, respecting the context, and valuing the spirituality of the place.

The working method followed a methodical approach, combining literary studies on the Azorean region with the study of nature, architecture, and historical elements. Classical works of architecture that inspired the creative process were also analyzed, with emphasis on the importance of preserving and integrating natural elements in the project.

The most suitable environment for introspection and connection with spirituality was sought, and the rehabilitation of the recreational farm played a key role. The project sought to balance contemporaneity with the recovery of the spiritual elements inherent to the site [6].

In the context of teaching architecture, the importance of the teacher adapting to the student was observed, recognizing that each student has their own specific characteristics and needs. Discipline and practice are fundamental in the training of architects, but flexibility and openness to different approaches and solutions are equally important.

In summary, the final master's project provided an enriching experience for the student, allowing her to deepen her knowledge and skills in architecture, rehabilitation, and the
integration of nature in the built environment. The uninterrupted support of the supervisor contributed to the realization of a work that seeks to respect and value the historical and architectural heritage of the Azores while promoting an architecture integrated with the natural and spiritual environment.

Acknowledgments

This work is financed by national funds through FCT - Fundação para a Ciência e a Tecnologia, I.P., under the Strategic Project with the references UIDB/04008/2020 and UIDP/04008/2020.

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