ressano
garcia
arquitectos

Earth and Water, Air and Light

ordem dos arquitectos

2025

curadoria:
Isabel Barbas

fotografias:
Daniel Malhão

Projects developed by the office Ressano Garcia Arquitects, presented by a relationship of drawings, physical models and images, which together showcase the office's production.

Barbas, Isabel.
Curator

Earth and Water, Air and Light

With five projects of distinct scale, genre, and typology, the exhibition ***"Earth and Water, Air and Light"*** *illustrates the vision of the studio Ressano Garcia Arquitectos regarding the practice of architecture in a context of regenerative sustainability. In an era of climate emergency, these works demonstrate how architectural expression integrates form, poetics, and function to generate new discourses of environmental ecology. The very title of the exhibition functions as a manifesto, establishing the elemental and primary framework that brings together the projects presented. These are, essentially, exercises in mediation between human construction and these fundamental constituents:* ***Earth*** *supports local materials and the basis of forms;* ***Water*** *guides regenerative cycles and water efficiency;* ***Air*** *defines natural ventilation, its sounds, and energy management; and* ***Light*** *guides spatial poetics and bioclimatic performance. In this way, architecture emerges as a conscious synthesis of the complementary counterpoint among these elements of the environment.*

Assuming a dichotomous discourse, the core of the show lies in the counterpoint between artistic drawing - as a creative and speculative gesture - and the responsibility of technical expression. This duality is explored through a range that includes photographs, renders, rigorous technical drawings, physical models, and video in dialogue with large-scale drawings/sketches that elevate the thinking process to the status of a pivotal element in which the following thematic axes are made evident:

Material and Circular Sustainability: An artists' residence that embodies bio-architecture, prioritizing local and recycled materials and consciously integrating the water cycle.

Neutrality and Performance: An eco-resort that aims for zero carbon emissions, proving that programmatic excellence and form can coexist with maximum environmental performance.

Infrastructure and Ecosystem: An ecological power plant that integrates into the territory by intelligently articulating renewable energy sources, transforming infrastructure into a new productive landscape.

Sensory and Ethical Design: A sound chamber that invites the visitor to listen to the sea and its poetic immateriality. This project designed with Pancho Guedes articulates an environmental ethic by confronting the power, but also the 'fragility' of nature in relation to human presence, calling for a contemplative and conscious presence.

These vectors, and projects, establish constellations among themselves that we can discern in the fluid movements of the original drawings presented in large format, whose echo is felt in a conceptual model entitled machine for testing layouts and drawing - a kind of critical manifesto that transports us to the possibility of redefining the human relationship with the elements of nature.

In every line lies the promise of an architecture that does not 'occupy' the world, but listens to it, breathing in time with its elements. Architecture, at this threshold, is the gesture that seeks harmony between Earth and Water, Air and Light.

01 *boavista - eco-resort*
Alcácer do Sal, Portugal.

turismo *tourism*

02 *companhia das culturas*
Castro Marim, Portugal.

residência de artistas *artists residency*

03 *symbiophilia*
Yong'an, Taiwan.

central elétrica ecológica ecological power plant

04 *a voz do mar*
Sagres, Portugal.

câmara sonora *chamber of sound*

05 *máquina de desenho*
Lisboa, Portugal.

desenho urbano *urban design*

Faria, Nuno.
reference in the application for the OA architecture award.

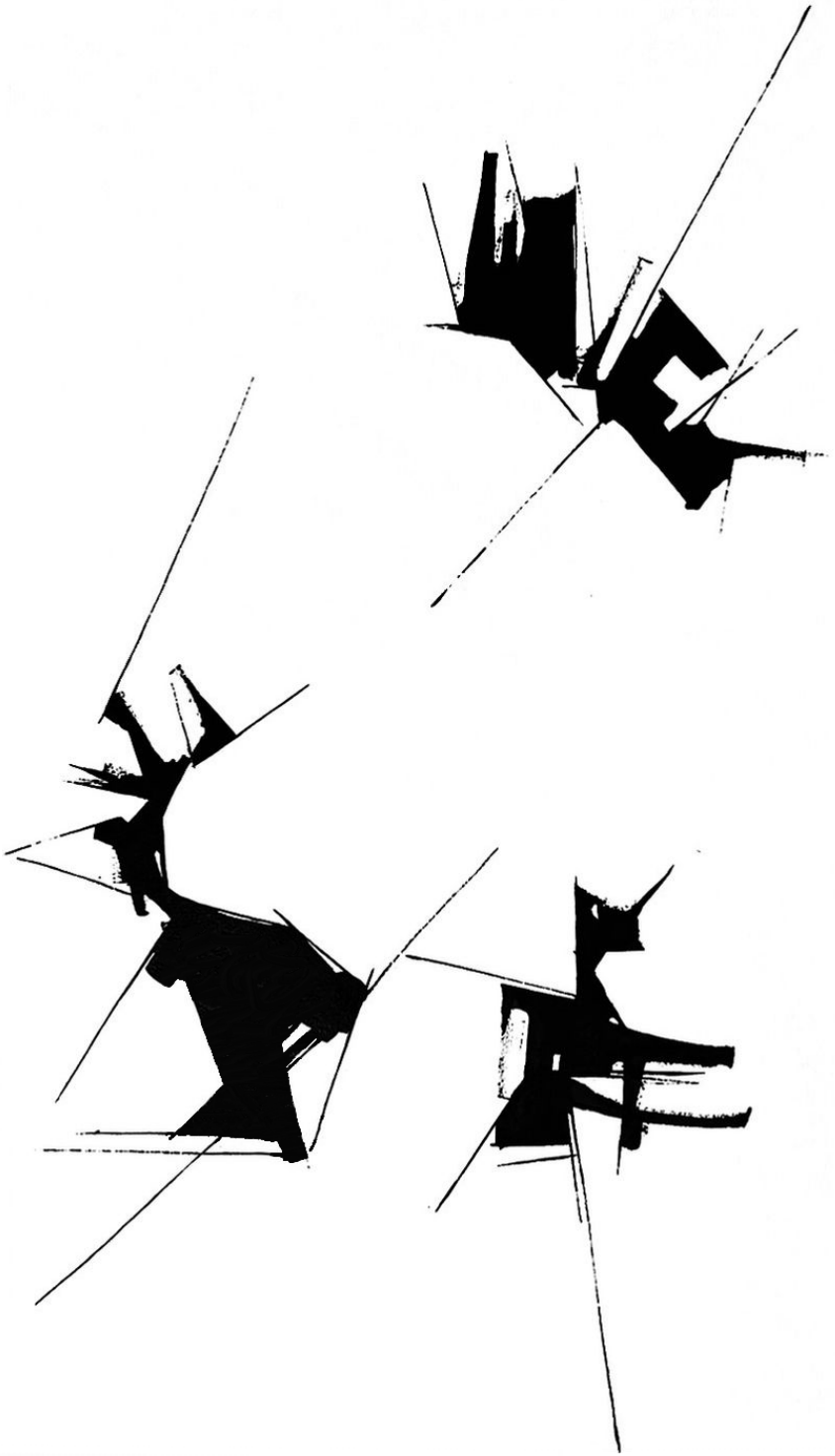
The impulse to draw, that is, the urge to express things through the body (through the continuous line) without passing through the filter of words, is not out of place here. This is not about claiming that the architectural intervention was faithful to the original. It is difficult to discern absolute integrity in that accumulation of contributions and layers of time. Pedro's intervention is, in itself, essentially drawing because it neither shows itself nor seeks to be seen. It reveals. And it does so precisely through a process of subtraction, creating space for light to imprint itself on the walls and surfaces, and for the body to move through the space.

Guedes, Pancho.
*"**Tagus Platform / Back to the River**", 2010, pp. 5.*

After graduation he drove from Tokyo to Lisbon in 80 days. Wanting to study further he was awarded with the Gulbenkian grant to do a masters at UCLA. Finding him difficult, the Faculty decided that he should be shiped to Berkeley.

*Ubbelohde, Susan. "**An Architecture of Beautiful Acts**"*
Selected Works, Ressano Garcia, Documenta, 2016, pp. 17-24.

The works of Ressano Garcia evidence the care that comes from understanding sustainable architecture as a protection of ourselves and the joy that comes from contributions that will endure well past our time. As one visits and experiences these projects, we understand that Ressano Garcia is engaged in an architecture of beautiful acts in all his works. The most explicit ecological project, Herdade da Boavista, is subtitled "Zero Carbon Emission EcoResort – Sustainable Urban Design and Architecture". A tourism development for the ecologically sensitive cork region of Portugal, the project uses a close reading of indigenous villages to organize residential clusters with streets, plazas, and courtyards. In this area with good solar resource, renewable energy from solar hot water collectors, gridconnected photovoltaics and biomass supply energy needs. The buildings fit and follow the topography, working with the climate and water conditions of the region. Stone walls provide thermal mass, local cork is harvested for insulation, green roofs buffer the heat of the summer while retaining rainfall.



boavista - eco-resort

turismo
tourism

esquiço, tinta da china sobre cartolina 100 x 70 cm
sketch, ink on cardboard 100 x 70 cm

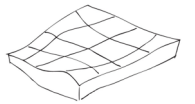


render (conceptual)
***render** (conceptual)*

escala 1/50; 172 x 130 x 20 cm, gesso, esferovite, arame, PVC e cartão.
scale 1/50; 172 x 130 x 20 cm, plaster, styrofoam, wire, PVC and cardboard.



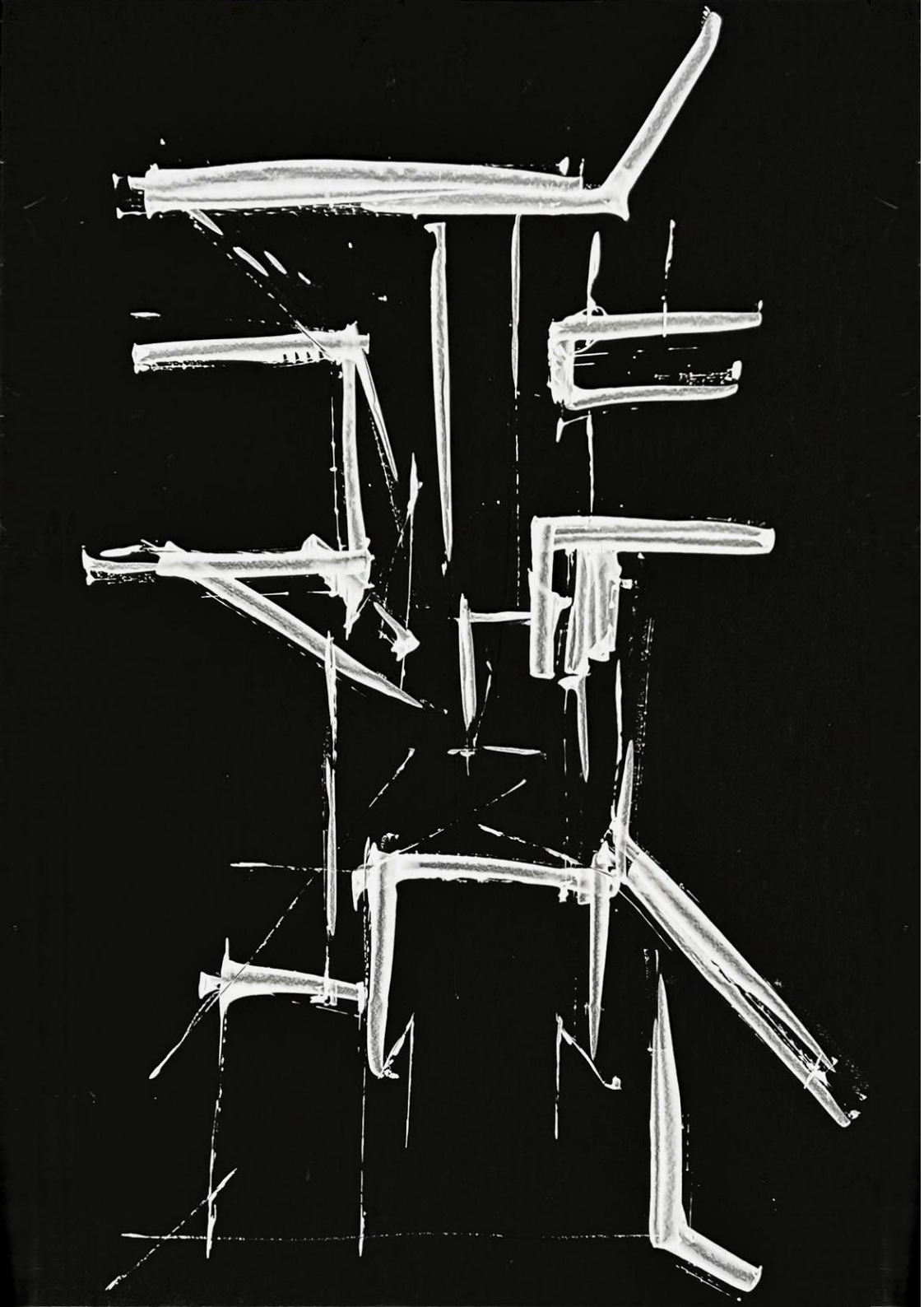
37 x 42 x 8 cm, gesso e esferovite.
37 x 42 x 8 cm, plaster and styrofoam.





maquete (conceptual)
***model** (conceptual)*





Wallpaper Magazine 152
November 2011, pp. 154.

Imbued with a North African flavour, Companhia das Culturas is a farmhouse in the village of São Bartolomeu, Algarve, restored by Lisbon based architect Pedro Ressano Garcia. The seven bedroom retreat hosts food and arts events.

Nineteen doors, and nine windows frames made of sucupira wood, found in the trash were used in the south façade. Their application is aimed at harnessing passive solar energy, ensuring thermal control throughout the year.

The project followed a strategy to reduce energy consumption and ecological footprint.

The combination of several strategies; thermal project (inertia, insulation, and thermal solar energy), recycling of gray and rainwater, wooden structure, and choice of local construction materials contribute to achieving the objective.

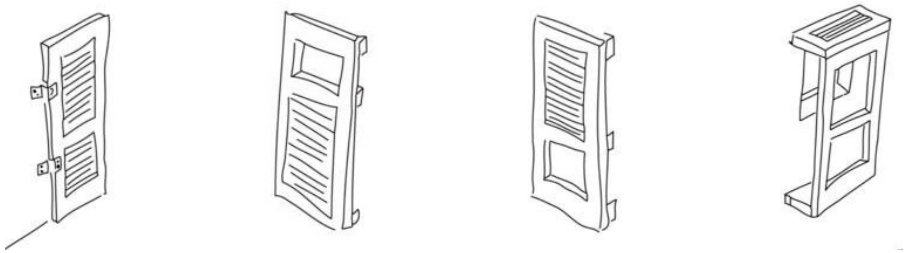
On the south facade, the use of material found in waste, designed to harness passive solar energy, aims to showcase this system.

This project received in 2022, the Award from the Chamber of Architects, Algarve, 2nd Edition, in the category Equipment, Services and Industry.

companhia das culturas

Dezanove portas
e nove janelas
reutilizadas
Nineteen doors and
nine windows reused

esquiço, tinta da china branca sobre cartolina preta 100 x 70 cm
sketch, white ink on black cardboard 100 x 70 cm



©Ressano Garcia Arquitectos





***imagens** (images)*

11



50 x 150 x35 cm, cartão e balsa.
50 x 150 x35 cm, cardboard and balsa wood.

maquete secção *(section **model**)*

12

Last year, I had the privilege to visit Pedro Ressano Garcia's studio in Lisbon and was introduced to the exclusive universe of his architectural thought and production. It was meant to be very short, only 20mins as we were joining others for dinner, but we stayed for nearly an hour. It was an extraordinarily immersive experience that left a deep impression on me. I knew Pedro for many years, going back to the early 2000s when he had an affiliation at the AA, while I was in my early years of teaching at the Bartlett. But I never had the chance to look behind the inspiring conversations we had. When I saw his atelier - he doesn't fall into the category of those who run an office! - I was for the first time exposed to the richness of his work; the lobby was cluttered with models made of many different materials, forms and scales, fixed on the walls and casually curated on tables. The intensity of physical explorations reminded me, albeit in a smaller scale, of Morphosis' office. I can still hear Pedro's voice telling me little funny stories associated with particular models which added to my understanding of how distinct each project was.

I knew from his long-standing friendship with the late Pancho Guedes that he sat in a very different lineage of those following the whitewash of mainstream Portuguese architecture. Pedro's approach is fundamentally research-driven, following an intuitive and experimental method. But don't get me wrong, the work is highly serious and rigorous in its explorations. The sheer amount of historic repertoire, programmatic thoughtfulness, and constructive thinking are expressed through models and drawings that simultaneously have a strong sense of plasticity. The collection in his atelier felt like a private archive with numerous investigations that brought to mind Le Corbusier's objets à réaction poètique. Some objects fixed on the wall felt like being generated from a spontaneous gesture that was materialised into an enigmatic composition. In other cases he seemed to have treated buildings as malleable matter. When scrutinising the intricacy of some of his most elaborate designs, I realised that this could only emerge from what I admire most: the relentless practice of 'architectural kneading' - a process whereby multi-layered concepts, tectonics and space are synthetised and contextualised into a bigger whole.

At the first glance, Pedro's projects impress for their complexity and sheer creativity; however, one ought to look closer. His oeuvre goes beyond form, and surely beyond typological arrangements wrapped with clever façade compositions; his designs are more complex, generating a new sense of landscape. They unravel spaces that seem to be grown from the ground, such as the Boavista Eco-centre in Alcácer do Sal or the riverfront proposal Tagus Platform in Lisbon – the former creating a maze of courtyards and roof terraces; the latter simulating a territory of intertwining pathways that reconnect the city with the river. Not by chance, the three-dimensional nature of his work reflects Pedro's inner topographic landscape of his home town.

As we know, architecture on its highest level is always profoundly biographical where our designs are determined by our personality and early spatial experiences. Pedro is an exceptionally cultured and highly articulate person, with a tremendous eye for sophistication, but who is also known for his generosity, and, surely, for his great humour. Perhaps this is what attracted me most when I saw the collection in his office – all these traits were mirrored in the expressive mannerisms of his work.

I recall fondly many moments we spent together, like once when he was telling me about his family's past while walking down cobblestone streets that his great grand-father Frederico Ressano Garcia had planned for Lisbon. Once we were in Quebec City during the Winter having a long walk while intensively discussing architectural education. We ended-up playing and throwing snowballs onto a frozen lake – how wonderful it was to laugh together and indulge with an unhindered simplicity of two young boys engaging with ice-covered scenery. On several other occasions, I had the privilege of being invited and having him introduce in his unique personal manner my lectures, not the least at the Gulbenkian Foundation where Pedro ran the last international gathering of a large European consortium SOS Climate Waterfront which he led for several years.

Back in 2018 I was invited as a jury member of an international competition for a large-scale electric powerplant in Southern Taiwan. I was delighted to see Pedro's scheme Symbiophilia shortlisted amongst so many high-profile proposals, and I witnessed him with his Taiwanese partners present before the jury. The extrapolation of the technical programme into a porous Inselberg that protruded out of the surrounding landscape with its greenery and embedded power plant was not only daring, it was indeed an ingenious green solution with a minimal environmental impact. It made me realise that his projects transcend what others might read as mere topographic or tectonic compositions; they are in essence architectural ecologies where there is never one, but multiple landscapes that interlock. In 2013, I presented a TEDx talk at UCL which I entitled 'Architecture's Path Towards Ecology' where I anticipated the biologicalisation of our future built environment. Pedro's work is less biological, but it has an ecological dimension where interactions of species (including the human), environments and spaces permanently shape something unpredictable and exciting. It suggests an extended understanding of architecture, one where buildings create an intertwined ecology of landscapes.



symbiosis + biophilia = symbiophilia

symbiosis */ kind interaction between two organisms living in close association and mutually beneficial relationship*

biophilia */ supports the idea that humans are instinctively kind to nature and other living beings*

symbiophilia */ a new topography that sustains interactions between two very different organisms allowing the human instinct to be kind to nature*

It is an innovative project for the international competition of Hsinta Ecological Power Plant, Taiwan, a flagship public project where the interaction and the connection of different systems can built a better future. The project, inspired by the existing fish farms on the site, presents a new topography and promotes an ecological design strategy where landscape and waterscape are merged with the power plant area and its surroundings. The design makes use of existing resources to create a natural system in symbiosis with nature. The health of the users and the neighbour community is improved, both at physical and spiritual level, by the promotion of an organic living system within a rigid built environment. The community has access to the site to participate in the educational activities and share their vision of biophilia.

This project received the Merit Award in 2018, for "Hsinta Ecological Power Plant Design International Competition"

Symbiophilia

Uma estratégia de
conceção para o
controlo das emissões
A design stategy for
controlling emissions

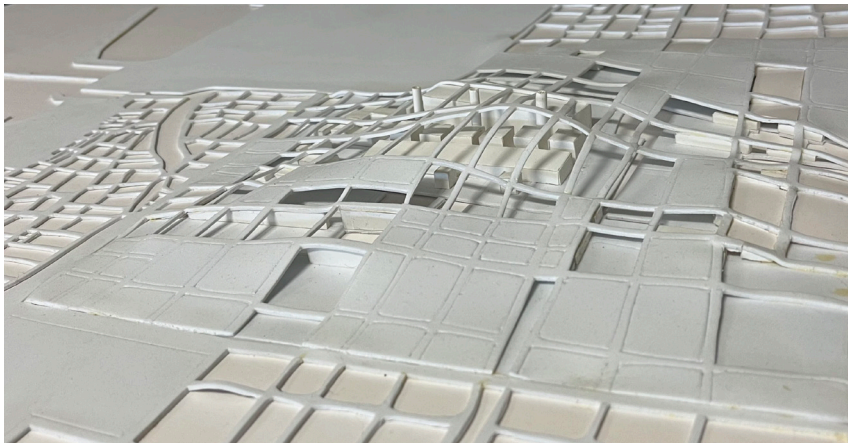
esquiço, tinta da china sobre cartolina 100 x 70 cm
sketch, ink on cardboard 100 x 70 cm



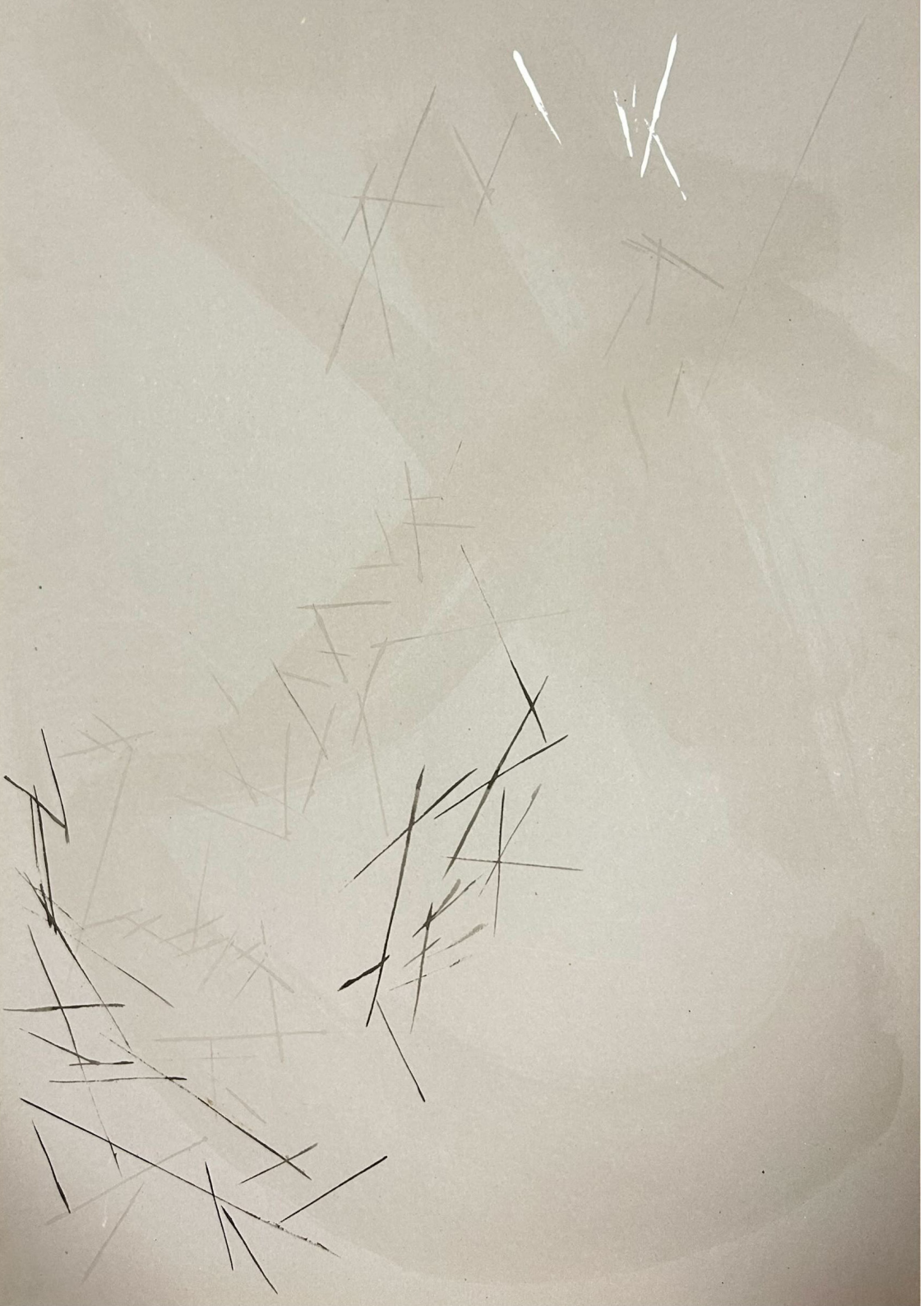
17



***render** (render)*



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a voz do mar

Câmara sonora,
activada pela maré
para ouvir as ondas
do mar
Chamber of sound, turned
on by the tide to listen to
the waves of the sea

esquiço, tinta da china sobre cartolina 100 x 70 cm
sketch, ink on cardboard 100 x 70 cm

DOMUS Magazine 1071 - editor convidado Jean Nouvel
Setembro 2022, pp. 58-63.

DOMUS Magazine 1071 - guest editor Jean Nouvel
September 2022, pp. 58-63.

A entrada da instalação, por sua vez, está orientada a sul, em direção à imensidão do oceano. A presença rítmica do som produzido pelas marés, juntamente com as paredes que se erguem em altura, traça um percurso que conduz à descoberta do lugar. Trata-se de um projeto acústico caracterizado pela intensidade das reverberações, revelando um espaço onde, literalmente, o mar se sente sob os pés, celebrando uma dimensão oculta.

The installation's entrance, meanwhile, faces south towards the immensity of the ocean. The rhythmic presence of sound produced by the tides, together with the walls that rise in height, traces a path that leads to the discovery of the place. It is an acoustic project characterised by the intensity of reverberations, revealing a place where, literally, the sea is felt beneath one's feet, celebrating a hidden dimension.

José Tolentino, Mendonça. "Ver melhor, escutar melhor - notas sobre a poética da arquitectura em Pedro Ressano Garcia" Obras Seleccionadas, Ressano Garcia, Documenta, 2016, pp. 65-72.

*José Tolentino, Mendonça. "**Seeing better, listening better - notes on the poetics of Pedro Ressano Garcia's architecture**" Selected Works, Ressano Garcia, Documenta, 2016, pp. 65-72.*

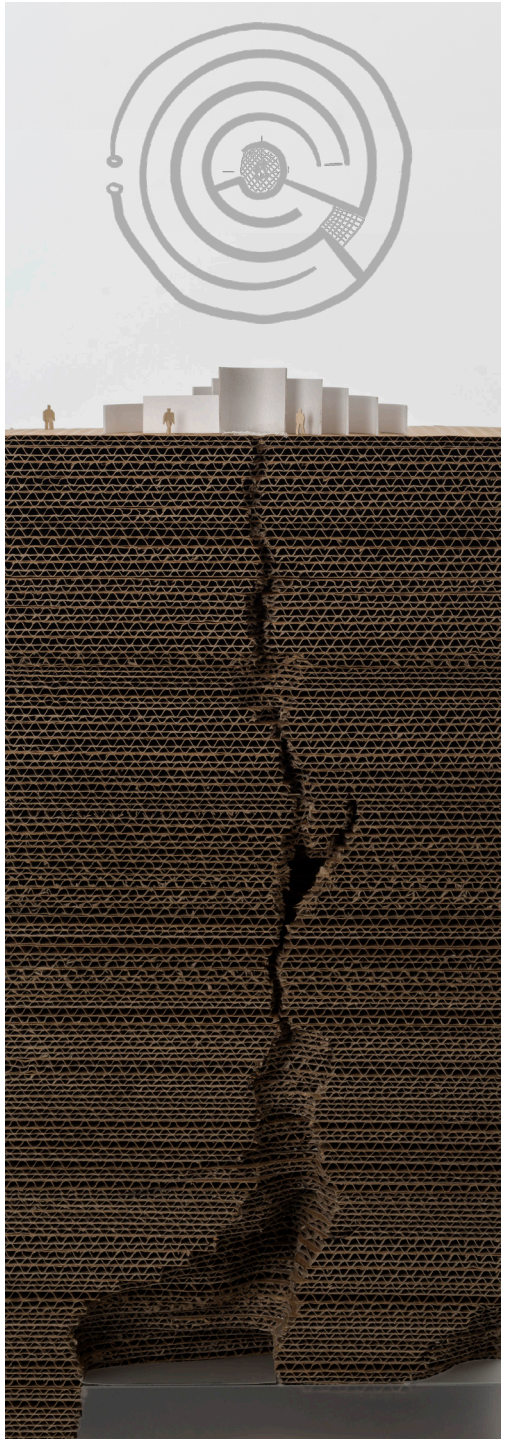
A arquitectura é aqui entendida na cumplicidade com os sentidos: ela intensifica e problematiza a actividade do olhar; ela abrenos os ouvidos (externos e internos) para iniciarnos nessa tarefa infinita que é a escuta. Nesse sentido, há um investimento, que não saberíamos chamar de outra forma que não amoroso, na construção que este criador propõe. Vejase o projecto do eremitério em Vila do Conde, pensado como máquina contemplativa para uma obra de Lawrence Wiener, ou oiçase a instalação «A voz do mar», no promontório de Sagres, numa colaboração estreita com Pancho Guedes. Mas este «investimento amoroso», mais do que tópico contextual para estas duas obras emblemáticas, deve ser visto como um programa que atravessa o conjunto da produção de Pedro Ressano Garcia. Ela desafianos a «ver melhor» e a «ouvir melhor». Ou seja, a habitar poeticamente o mundo.

Architecture is understood in complicity with the senses: it intensifies and questions the act of looking; it opens up our ears (both external and internal) to initiate the endless task of listening. Thus, the construction he proposes includes an investment that we can only call tender. Look at the "eremitério" (hermitage) in Vila do Conde, which was conceived as a contemplative machine for an art piece by Lawrence Wiener, or listen to "The Voice of the Sea" installation in the Sagres promontory, in close collaboration with Pancho Guedes. Rather than a contextual topic for these two iconic projects, this "tender investment" should be regarded as an approach across the entire production of Pedro Ressano Garcia. It challenges us "to see better" and "listen better". In other words, to poetically dwell the world.



©A Terceira Dimensão

***imagem** (image)*



52 x 25 x15 cm, cartão e PVC.
52 x 25 x15 cm, cardboard and PVC.

maquete secção *(section **model**)*

Hudnik, Špela.
Escrever o Território: Mecânicas do Coletivo

Hudnik, Špela.
Writing the Territory: Collective Mechanics

A dimensão performativa da Máquina de Desenho ressoa com os Méta-Matics de Jean Tinguely, onde as máquinas ultrapassam a utilidade para revelar a sua própria lógica, envolvendo o público na perceção e na interação - uma sensibilidade que Garcia aplica de forma semelhante, transformando o mecânico num ato de perceção e de envolvimento coletivo. Os Bichos participativos de Lygia Clark dissolvem igualmente a fronteira entre objeto e utilizador, transformando o espectador em coautor. Ressano Garcia amplifica esta linhagem para a escala urbana e territorial: relacionado com as problemáticas da frente ribeirinha, a Máquina de Desenho coreografa os ritmos da água, do vento e do movimento humano num único mecanismo vivo. O modelo opera não como representação, mas como instrumento de relação - um dispositivo através do qual fluxos urbanos, ecológicos e sociais se tornam visíveis, audíveis e partilhados, transformando a própria frente ribeirinha numa escultura viva e relacional.

The performative dimension of Máquina de Desenho resonates with Jean Tinguely's Méta-Matics, where machines move beyond utility to reveal their own logic, engaging viewers in perception and interaction - a sensibility that Ressano Garcia similarly applies, transforming the mechanical into an act of perception and collective engagement. Lygia Clark's participatory Bichos likewise dissolves the boundary between object and user, turning the spectator into a co-creator. Garcia extends this lineage to the urban and territorial scale: related to the problematics of waterfront, Máquina de Desenho choreographs the rhythms of water, wind, and human movement into a single, living mechanism. The model operates not as representation, but as an instrument of relation - a device through which urban, ecological, and social flows become visible, audible, and shared, turning the waterfront itself into a living, relational sculpture.

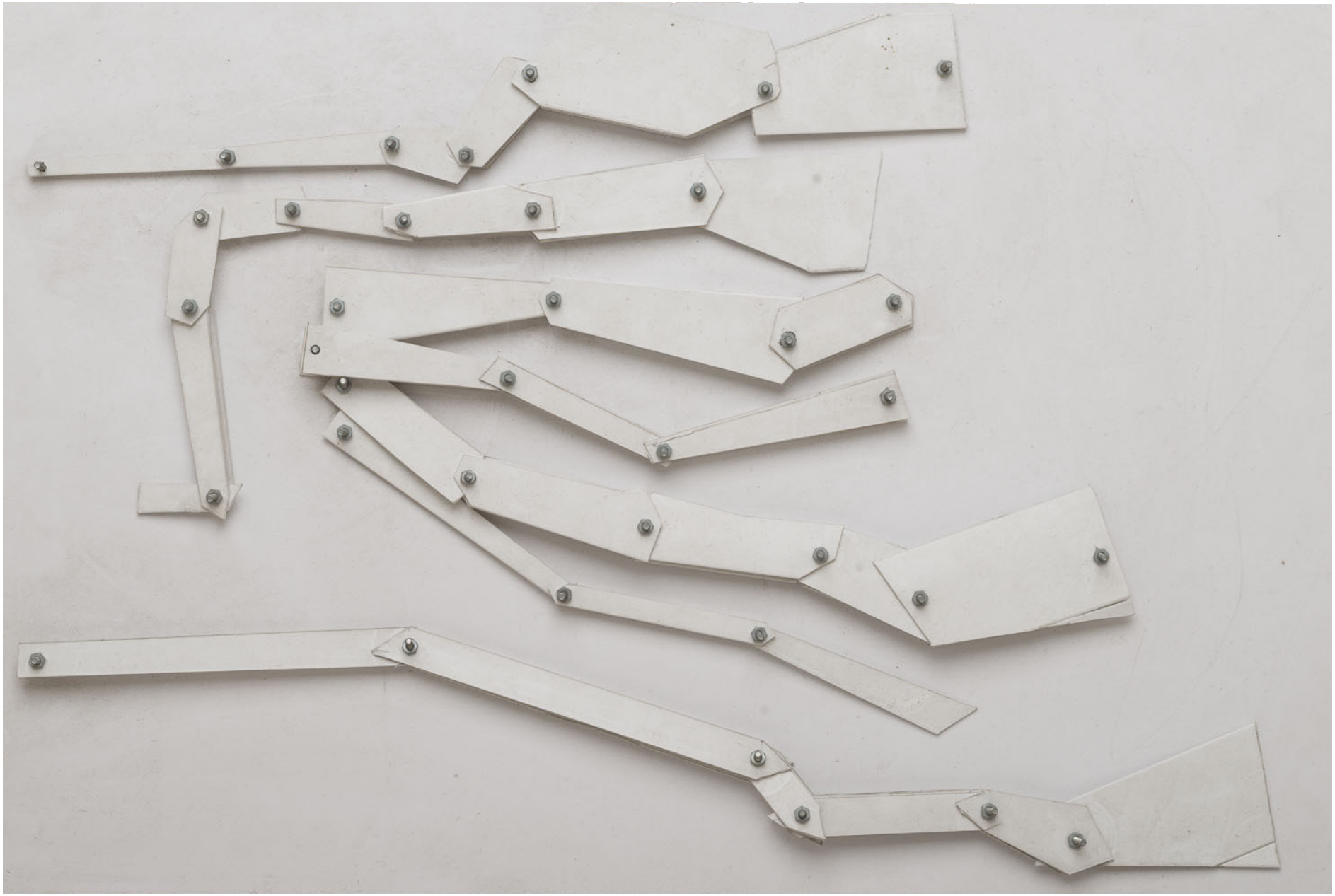
máquina de desenho

Regenerar
o aterro portuário
To regenerate
the port landfill

Paka, Alkmini.
Reflection about the exhibition "Earth and Water, Air and Light"

When I first saw Pedro's architectural drawings, without knowing anything about his architectural practice, I was deeply moved by their poetic and visual language that was conveying a feeling of freedom and intuitive creativity. His drawings are visual works that have a life of their own. When later he showed me some of his projects, I could better understand how the spaces he was able to create could be shaped with such a complexity and subtle, organic fluidity, full of surprises. For Pedro drawings, as well as models, are a preliminary intuitive itinerary where forms, axis, volumes are being shaped freely until they reach a state of equilibrium and harmony. They create a pool of latent architectural ideas always fuelled by architectural thinking and the rich vocabulary of the human habitat and nature's landscapes that he had encountered during his long tours around the globe. His love of nature and life shapes an environmental ecological approach always present in his designs, inserting buildings in their site in harmony with their context, offering an enriching way of life when dwelling in them. This approach is well rooted and shaped through this preliminary creative itinerary, that manages to convey the initial poetic language of his drawings while dealing with the actual technical issues of an architectural design project.

The playful object called "máquina de desenho", -looking like an architect's toy-, falls into the category of Pedro's tools, along with his drawings and models, for exploring and shaping architectural forms, only in this case, it manages to address the multiple parameters involved in a complex large scale urban design project. It is a design research tool, informed by the different scales of the site and the building program, put together in a genuinely playful way, having the potential of examining multiple alternative forms for a larger scale synthesis.



maquete conceptual *(concept **model**)*