

Portable Ecologies

Dialogues with the Architecture from the
Anthropocene

posthumano
ecologías pedagógicas
producción de pensamiento crítico
reinterpretaciones propositivas
**posthuman
pedagogical ecologies
critical thinking production
propositional reinterpretations**

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Ecologías Portátiles

Diálogos con la Arquitectura
desde el Antropoceno

Este texto muestra una lectura sobre las ecologías comunes de varios edificios de la Historia de la Arquitectura, experimentando desde la construcción de dispositivos que revisitan estos edificios y construyen nuevas experiencias actualizadas. Teoriza dos metodologías de reinterpretación y abre nuevos diálogos sobre las ecologías con las que convivimos o que provocamos, desde una revisita contemporánea a estas Arquitecturas icónicas. Estos diálogos abren preguntas como las divergencias del Antropoceno, las cuestiones posthumanas que acontecen a su alrededor o incluso las tecnófilas transhumanas. Su reconstrucción y su escenificación establecen estas nuevas lecturas que abren estas miradas propositivas de la Arquitectura, que sean capaces de articular nuevos presentes. La producción de estos dispositivos críticos se apoya en las posibilidades que nos concede la arquitectura avanzada y el parametricismo. Estas historias de estos edificios ocurren a través de un cuerpo orgánico que los escenifica y que performa con cada uno de los dispositivos, desenvolviéndose cada historia entre paisajes virtuales antropizados y conformando una nueva mirada híbrida y ecológica de estas arquitecturas.

This text shows a reading of the common ecologies of several buildings in the History of Architecture, experimenting from the construction of devices which revisit these buildings and build new updated experiences. It theorizes two methodologies of reinterpretation and opens new dialogues about the ecologies we live with or provoke, from a contemporary revisiting of these iconic architectures. These dialogues open questions such as the divergences of the Anthropocene, the posthuman issues that occur around them, or even of transhuman technophiles. Their reconstruction and staging establish these new readings that open up these propositional views of Architecture, which are capable of articulating new presences. The production of these critical devices is based on the possibilities granted by advanced architecture and parametricism. The stories of these buildings occur through an organic body that stages and performs them with each of the devices, each story unfolding between anthropized virtual landscapes and forming a new hybrid and ecological view of these architectures.

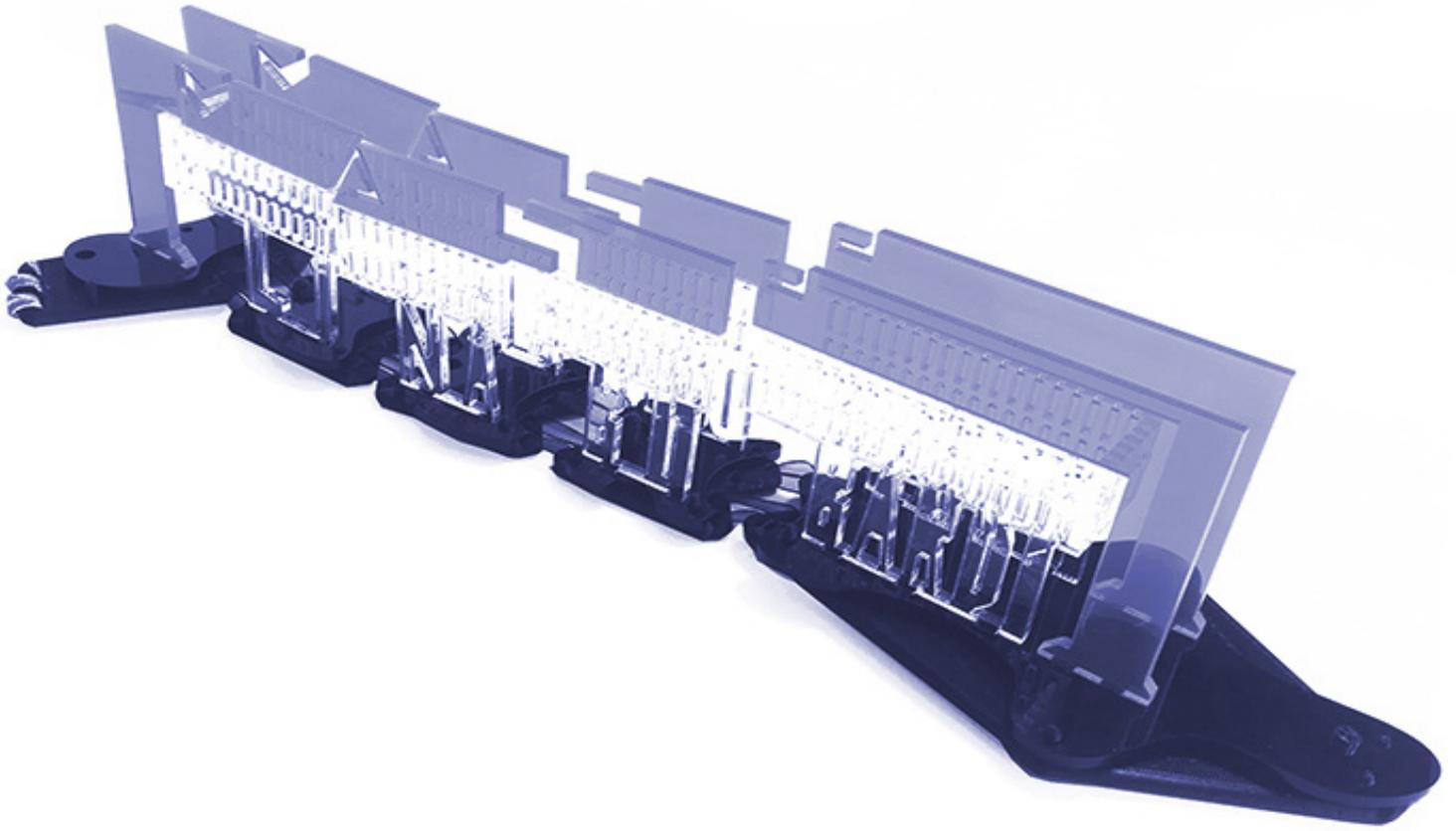


Fig. 1 Interactive Device about the building MASP (Museu de Arte de São Paulo) in Brazil designed by Lina Bo Bardi in 1957.

PERFORMING COMMON ECOLOGIES

With this article I am interested in finding the Common Ecologies from my current positioning of Architecture. In a planetary view, which is already evolving towards a post-Anthropocene, we can question the urgency of re-reading past Ecologies that have affected architectural negotiations and creations. By looking at the means by which energy is distributed, or how resources arrive, by establishing readings on interspecies, the ethical normalization of 'Dolly the sheep', or how planned obsolescence is becoming a

matter of political design, by reading these past ecologies we can articulate new interests from the common Ecologies.

In this article I am also interested in bringing out the value of reinterpretations and their propositional value in an architectural project. A question that I will explore in depth relating two highly propositional project methodologies that work from the reinterpretation of the existing, such as the Roman fictions of Piranesi or the domesticity of the New York buildings of Viesendrop. And in the second chapter I will examine in depth twelve eco-reflections of several buildings of the History of Architecture. (Fig. 1)

Architectural Redrawings and their Interpretations

In the History of Architecture there are several assertive reinterpretations that have become 'Manifestos'. Those assertive reinterpretations re-enact icons of Architecture by approaching them from new scales. For example, Madelon Viesendrop and Rem Koolhaas humanize legendary buildings in New York and place them in domestic spaces, creating intimate scenographies, while Piranesi de-anthropizes monumental buildings in Rome with his engravings, returning them to Nature. In the following two sections, I will somewhat unpack the interest related to 'Portable Ecologies' that I find

in these two examples, from the point of view of a change of scale in the architectures, and their caricaturization in the case of the artist Viesendrop, and then from the point of view of the reinterpretation of ecology when I write about the archaeologist and architect Piranesi.

Manifesto of Humanized Architectures by Madelon Viesendrop

The Dutch artist Madelon Viesendrop draws a sequence of icons of New York City architecture, which she reinterprets through her chromatic illustrations. In this example, for her reinterpretation of the buildings, she edits and builds domesticated scenes, inside a dwelling, where the buildings perform different human scenes.

In her early research, Viesendrop together with her former partner Rem Koolhaas, collected more than 8000 postcards of New York City. In several videos and exhibitions where she shows her suitcases full of postcards, hundreds of views of the Chrysler, or the Empire State, or the Rockefeller Center buildings appear, which she later includes as protagonists of her scenes. These postcards show a superficial and static image of how the city is shown to tourists or visitors. Viesendrop however, shows the most emotional side of the buildings, as she puts them to bed to talk about them, and to interpret their weaknesses or vulnerability, to discuss the conflicts and possibilities of these buildings that, after all, are milestones in

the history of architecture.

The cover illustration of the book 'Delirious New York' (Fig. 2) is one of these famous scenes of buildings which are given feelings and which are suffering emotions. This cover narrates the scene entitled by the author as 'flagrant délit', the Empire State Building

is in bed lying next to the Chrysler Building, when the Rockefeller Center bursts into the room discovering the crime, a crime that becomes the spectacle of hundreds of other humanized buildings on the island of Manhattan staring in concentration through the window.

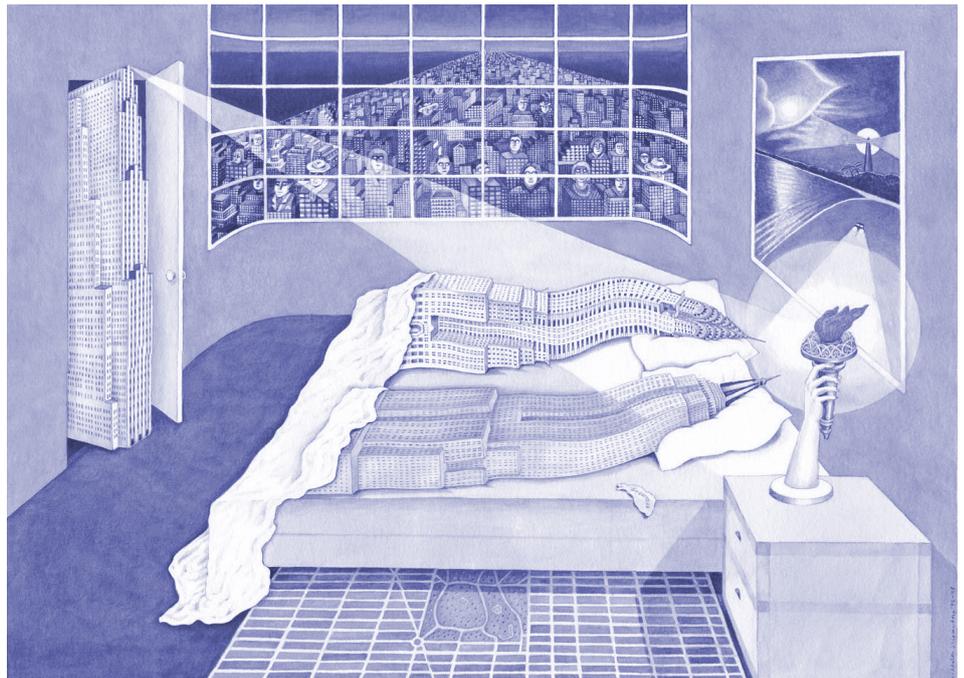


Fig. 2 Cover of the book 'Delirious New York' published in 1978.

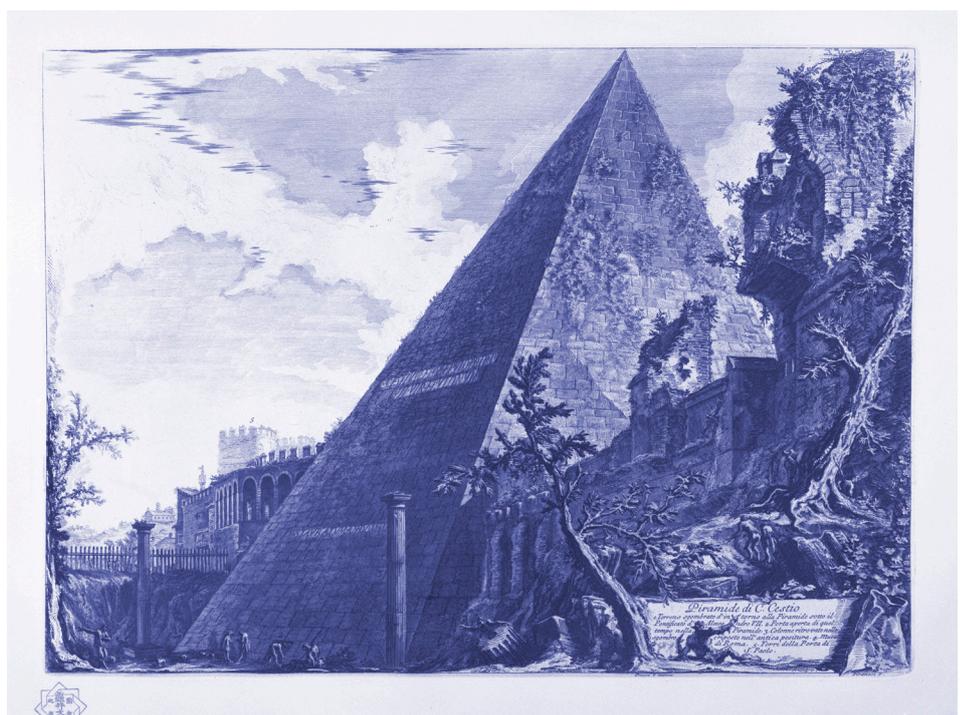


Fig. 3 Piranesi's engraving of the Pyramid of Cestius.

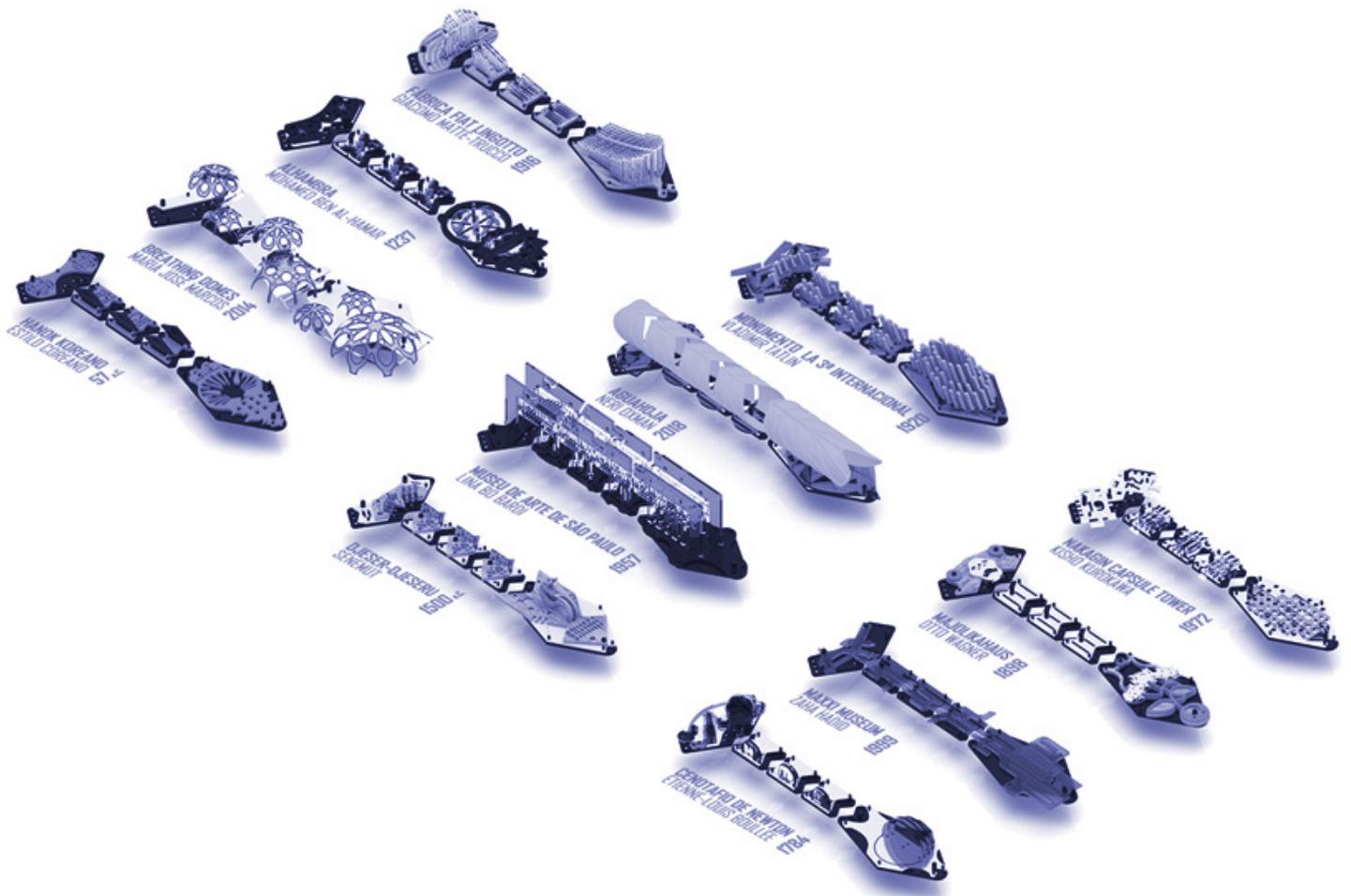


Fig. 4 Collection of the twelve devices that make up the project 'Portable Architectures'.

The reinterpretation of Viesendrop's domestic illustrations narrate new interpretations of the human qualities of cities as they change scale and show their character and are put into a crisis situation with a rigor that can only bring out the humor that emerges from each scene; the tragicomedy grants and validates its legitimacy.

Giovanni Battista Piranesi's Manifesto of Ecologized Archaeology

In the year 1750, archaeology was not yet a very strict, rigorous or defined science, and for this reason the Venetian architect Giovanni Battista Piranesi immortalized

each of his archaeological findings through a creative and unexpected interpretation of history. He had this creative freedom, since there were no dogmas or weight to the emerging discipline. Thus, the interpretation that he carried out in his archaeological engravings was outside of what today would be considered appropriate in the discipline, but this validation was achieved through the precision and hyperrealism of his engravings.

It is true that his rigor in the discipline is born of the major influence of Palladio and Vitruvius during the years he studied in Venice, an influence that gives him a disproportionate fullness,

and the rigor in defining and creating architectural drafts, drafts that he projected through hundreds of engravings. Although the most surprising aspect of his work is his enthusiasm for turning the Monumental ruins back to Nature, particularly in his 135 engravings of Rome, there is a draft where the naturalization of architectural spaces and their colonization by animals and plants coexist in a radical way with the contemporary Rome that he wants to show. There are even natural dunes created by the wind that appear in the engraving of the 'Veduta di Campo Vaccino'.

The de-anthropization happens when Piranesi

denies men and women as protagonists in the appearance of his engravings, since they are hardly the priority in the reinterpretation of his scenes of Rome, an updated reinterpretation of the city where fiction plays an important role in the character of his proposals. When humans appear in the engravings, they sometimes appear as shadows or small, the predominance instead showing how the wind, rain or other means deteriorate the architectures as shown in the engraving of 'Veduta del Pantheon di Agrippa', for example, or how plants grow between the cracks or pediments of the monuments in works such as 'Veduta dell Arco di Tito' or the 'Piramide di C. Cestio' (Fig. 3). We could say that Piranesi's reinterpretations relate his vision of the future of the city, a city extremely linked to natural processes and its shared reading.

PORTABLE ECOLOGIES

This second chapter is mainly based on a series of eco-reflections upon the collection of the twelve architectural devices that make up the 'Portable Architectures' project (Fig. 4). The article is based on a theorization of this project that was initiated in 2018 and re-edited to be exhibited at the 17th Mostra International of Architecture of the Venice Biennale in 2021. The project was developed by my architecture studio MAGICARCH and in collaboration with the digital fabrication labs, FaBlab L.A.D. and FaBlab Alicante. The aim of 'Portable Architectures', is to

build a reinterpretation of some landmarks of architecture, the project was raised as devices from which to discuss this eco-reflection.

The devices are ties of approximately 30 centimeters produced entirely in the nearby factories of the FaBlab and

experimenting with parametric tools. Through them, various buildings from the History of Architecture are revisited, such as Lina Bo Bardi's MASP, Giacomo Matte Trucco's Fiat Factory in Lingotto, Zaha Hadid's Maxxi Museum or Neri Oxman's Aguahoja. These

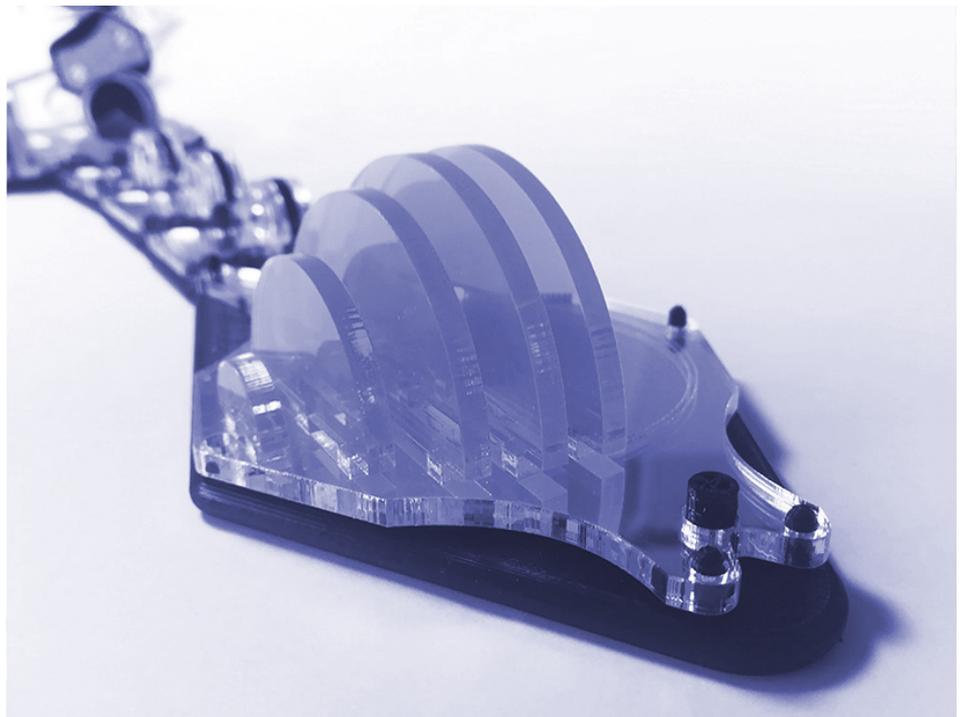


Fig. 5 Interactive Device about Newton's Cenotafio, Étienne-Louis Boullée, 1784.

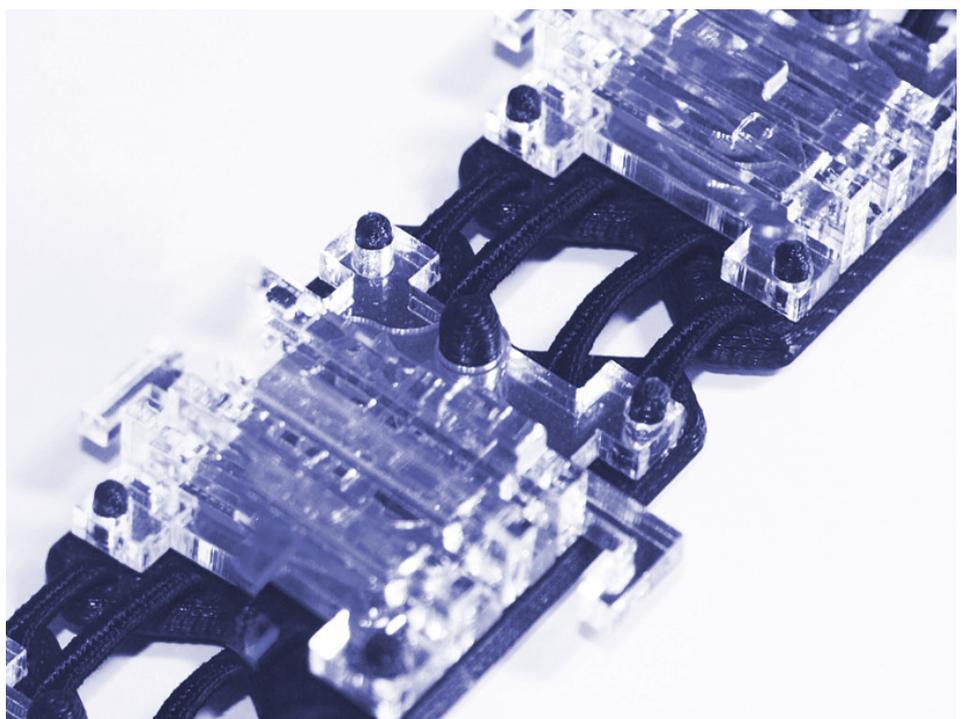


Fig. 6 Interactive Device about Nakagin Kisho Kurokaga, Japan, 1972



Fig. 7 Interactive Device about Breathing Domes, project in Afghanistan 2017.

portable devices show new readings of these cultural icons, approaching and showing their ecologies and raising questions of the architectural intelligentsia of a universal and pedagogical interest. From a sequence of audiovisuals of anthropized virtual landscapes, counterpositions are established that place these buildings in antagonistic scenarios relating to their scale or their historical moment, new readings are arranged from which to continue learning about the cultural value of each one of these works of architecture.

The twelve devices that become the object of study are

based on the following twelve buildings:

- Interactive Device 1. Corean Hanok, Joseon Dinasty, South Korea 57 a.C.
- Interactive Device 2. Majolikahaus design by Otto Wagner, Austria 1898
- Interactive Device 3. Alhambra. Granada 1237
- Interactive Device 4. Djoser Djoseru. Templo Funerario Hatshepsut. Senemut. Egypt 1500 a.C.
- Interactive Device 5. MASP Sau Paulo, Lina Bo Bardi, 1957
- Interactive Device 6. Fiat Factory Lingotto, Giacomo

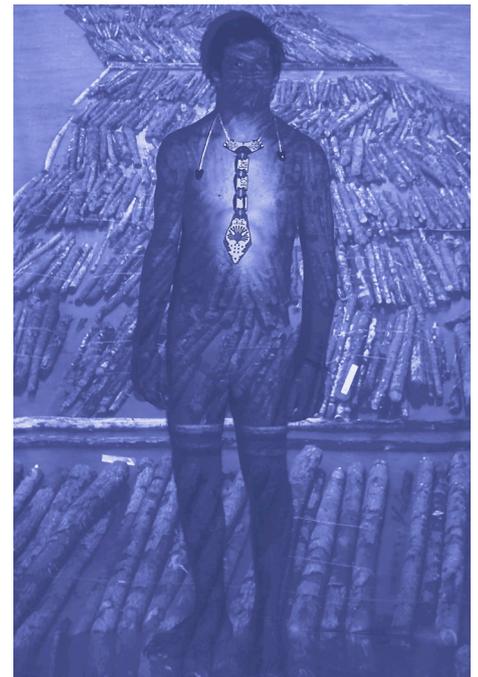


Fig. 8 Landscape of a timber yard carried by the sea projected onto the Korean Hanok device.

Matte Trucco, Italy 1916

- InteractiveDevice 7. Cenotafio of Newton, Étienne-Louis Boullée, 1784
- InteractiveDevice 8. Aguahoja, Neri xoman, 2018
- InteractiveDevice 9. Maxxi Museum, Zaha Hadid, Italia. 1999
- Interactive Device 10. Tatlin Tower. Vladimir Tatlin, Rusia, 1920
- Interactive Device 11. Nakagin Kisho Kurokaga, Japan, 1972
- Interactive Device 12. Breathing Domes, Afghanistan. 2014

I am interested in reinterpretations, like those of Piranesi or Viesendrop, reinterpretations that other creators at different moments in history produced as a propositional methodology to elaborate and narrate the cultural and intellectual moments in which we find

ourselves. That is why in this project of 'Portable Architectures' I am interested in revisiting these reinterpretations in order to talk about Ecology and about Common Ecologies. Above all, to be able to examine questions of Ecology updated and adapted to our times. I am trying to summarise this in few words, through the twelve points that I am developing in relation to the twelve devices. Thus, in each of the following sections I narrate a minimal story of this architecture building and which constructs these targets of common ecologies and which are no more than the summary of another, more extensive investigation.

The detail of these twelve Eco-reflections would be listed as follows:

- Eco-reflection Adaptive Ecologies
- Eco-reflection De-anthropised Landscapes

- Eco-reflection Ecosophy
- Eco-reflection Biopolitics and its biomediated contradictions
- Eco-reflection Cultural Mapping Device
- Eco-reflection on the obsolescence of 612.000 m3 of rubber
- Eco-reflection Acceleration of techno-science
- Eco-reflection The interspecies
- Eco-reflection on Bio-Parametricism
- Eco-reflection Evolutionary Geometries and Multinaturities
- Eco-reflection Dancing among cyborgs and other metabolisms
- Eco-Reflection Breathing with Biodesign

TWELVE ECO-REFLECTIONS

Eco-reflection Adaptive Ecologies

This reflection focuses on the static nature of the Korean Hanok 57 BCE. The

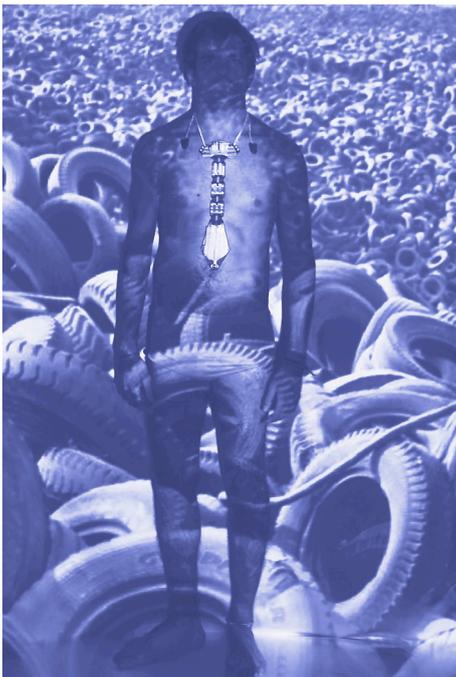


Fig. 9 Anthropised landscape of a tyre dump, projected on the Lingotto Factory site.



Fig. 10 Lunar landscape projected on the device of the Newton Cenotaph by Étienne-Louis Boullée



Fig. 11 Hive landscape projected onto Neri Oxman's Aguahoja device.



Fig. 12 Interactive Device about Aguahoja at MIT designed by Neri Oxman in 2017

Hanok is one of the most adaptive architectures in the history of architecture, for throughout our anthropised history, the Hanok endures and remains immovable. This pre-Darwinian adaptability is already evolutionary since it emerged in Korea in 57 BCE. It emerged even before the Asian nation itself existed. The concept of Hanok is a precursor to many pre-Darwinian theories and even a precursor to the understanding of cosmopolitics. Yet it has multiple readings such that it could be called common evolutionary ecology. Beyond the cosmopolitics and from the climatic point of view, the Hanok is articulated as a way of life close to the earth,

an earth heated by the 'ondol' and where the politics of life can be constantly reorganised throughout the seasons, the politics of life are evolutionary and the Hanok enables them to be adaptive, thus adapting through the years since there is no fixed element in this heated ground, in this ondol. Their material and design make it possible for such climatic adaptation.

Eco-reflection De-anthropised landscapes

This paragraph reflects upon the common ecology that can be interpreted from Otto Wagner's Majolikahaus, which was built in Austria in 1898. Wagner aimed to introduce de-

anthropised landscapes into the Majolikahaus, a building he designed to be quite severe. It established one of the iconic triggers of the Viennese secession and forms the centre of the ensemble of three apartment buildings that make up a unit. On its façade, the Majolikahaus has bunches of roses that bloom on its surface and among which wild lions run. It is this scene of a highly chromatic, de-anthropised landscape that the creator of the project chose to incorporate in view of the plainness of the construction.

Eco-reflection Ecosophy

If we establish a reading of the 'eco-sophical' stream and

pay attention to the theatrical effects of the Alhambra, we can find that its gardens and hydrology set up a highly ecological and pedagogical network. The Alhambra, located in the Spanish city of Granada, has remained climatically habitable, becoming a focus of habitable design wisdom, or climate-smart design, thus insightfully and atmospherically adapted to the planet. This eco-sophy is evident in each of its architectural elements, in each of its fountains, vaults and above all in its gardens, but also in the birds and insects that inhabit it and in the constant sound of water, whatever the time of year.

Biopolitical eco-reflection and its biomediated contradictions

In terms of the modes of dying described by Rosi Braidotti, the Funerary Temple of Hatshepsut of Senemut, completed in Egypt in 1500 BCE, displays an extension of the social contradictions and conflicts of our anthropised world. The temple known as DjoserDjeseru may become a bio-power device of the once bio-mediating and highly eroticized pharaoh Hatshepsut. The posthuman is not an enemy of the human, but an extension of its bio-mediated contradictions for, according to Braidotti, 'the control of bodies has changed from the advent of the cyborg to renewed forms of vulnerability'. This funerary architecture unfolds new conversations of current necro-politics.

Eco-reflection Cultural mapping device

Cultural identities, and the

production of Museu de Arte de Sao Paulo MASP as an activating device, are linked to issues of anti-colonialist and colonialist discourse, in what Haraway calls an antagonistic dualism. The architect Lina Bo Bardi completed the Museu de Arte de Sao Paulo MASP in 1957, a name that is also the fruit of the cultural consensus it symbolizes. These questions of antagonistic dualism that construct the anti-colonialist contradiction, are developed in an advanced time frame during the decade that the Italian-Brazilian architect spent negotiating and building MASP. This modern landmark contrasts the language of domination with the new cultural cartography she draws under its flying beams. The multiple situations that have taken place under these beams refer to this.

Eco-reflection on the obsolescence of 612,000 m³ of rubber

In the inter-war period around 1931, one of the car models produced in the 153,000 m² Lingotto factory was the Fiat 515. Giacomo Matte Trucco completed the Fiat Lingotto factory in Italy in 1916. During one year at least 300 cars of the Fiat 515 car model were built in the factory and left the factory with five wheels, four service wheels and one spare wheel. Each of these wheels was tested with the cars on the extremely steep curves of the circuit, a test for their tyre casing. These 1500 tyres, after rolling on the streets of Turin or Milan, would end their useful life and occupy a volume of 11,250 m³, which in less than

six years would be equivalent to filling the volume of the Lingotto building full of rubber tyres. This would be equivalent to the thickness of some Anthropocene layer filling a volume of 612,000 m³ of rubber tyres.

Eco-reflection Acceleration of technoscience

The armillary sphere with which paid homage to Newton in his design for a Cenotaph to Newton became the standard-bearer of French revolutionary architecture in 1784. These fantastic designs suggested new techno-scientific horizons of Architecture, which highlighted the accelerating powers of technology. Boullée established his planetary approach through the a representation of the law of universal gravitation; what techno-scientific horizons would the architect Boullée be able to incorporate into the Architecture of our days, architecture that is immersed in the current technosphere? How would Boullée interpret techno-objects such as the iphone, the roomba or the nanoscience?

Eco-reflection The interspecies

From a posthuman perspective, Neri Oxman makes her building Aguahoja grow; after multiple investigations she recently presented it and blurs the limits of its permanence. The architect links to a new way of decentralizing the axis of dominating relevance of the human species towards a broader view of organic planetary life. With her proposals for changing buildings according to the

needs of insects, she poses a series of dilemmas of inter-species issues. This work methodology establishes more egalitarian dynamics with the rest of the species, sharing the cycle of life and entering into the politics of being that bring us closer to the non-human.

Eco-reflection Bio-Parametricism

In the words of Zaha Hadid when explaining her 1999 MaxxiMuseum building, she tells how 'the chaotic fluidity of modern life' converges in this museum that also produces art. The extreme fluidity of parametricism could be an extension of biodesign, in the ten years it took to erect this masterpiece, the common issues of parametricism that link questions of self-organization of Architecture emerge.

Eco-reflection Evolutionary geometries and multi-natures

Irregular architecture is moving away from controlled forms towards new, unprecedented transitions that embrace multinatures. The Tatlin Tower, which was the Monument to the 3rd International in Russia was created by these evolving geometries, which are eccentrically positioned to establish transitions. Transitions in geometries that don't have beginning or end, and that give rise to new architectural species and new avant-gardes. In 1920, the architect Vladimir Tatlin designed an inclined spiral within a twisted structure. If we draw from the emptiness of the ground plan of this irregular spiral of the

Tatlin Tower, would we be able to draw the course of the water that floods a seashell?

Eco-reflection Dancing among cyborgs and other metabolisms

The constant threat of Nakagin's demolition is a reality, and it is beyond the environmental ecology due to the evidences of its weakness to incorporate social ecology. In the Japan of 1972 Kisho Kurokaga built this metabolic architecture, which once metabolised but now must actualize a constant organic change, just like the organic change that the Nexus Rachael needs in order to remain organically and emotionally autonomous. However, Nagakin, like Rachael, needs to continue in cybernetic bondage, as his technology does not stand the test of time and dilutes his metabolism.

Eco-reflection Breathing with Biodesign

Knowledge of planetary bio-evolution will lead us to the adaptation of the anthropised landscape. This eco-reflection identifies biodesign as an opportunity for self-sufficiency in architecture, so through biodesign in Magicarch's 'Breathing Domes' project, breathing domes were designed for a cultural centre in Afghanistan. These breathing domes oxygenate the vaulted spaces with a passive climatic design, without the need to incorporate any further added energy. Breathing Domes, a project of vaults that breathe and regulate humidity, challenges the scarcity of energy resources with an eye

towards energy self-sufficiency, advocating a new climate design discourse that embraces the experimental horizons of biodesign.

ON THE RELEVANCE OF TO BE WEARABLE IN ORDER TO ACTIVATE REINTERPRETATION

On the theme of common ecologies, which raise new questions of these twelve transportable, wearable devices have been designed that stage twelve buildings from the History of Architecture, twelve buildings that constantly reoccur among my references. The portability and performativity of this micro-architecture is the key to the proposal of this article, an article of ecological pedagogy and architectural cultural transfer. For we currently live connected in a technosphere with an infinity of virtual information that blurs our access to knowledge, leading us to an increasingly virtual and less empirically considered social behavior. The pandemic and its virtual synonyms have further exacerbated the deficiencies produced by the diminished presence of the physical. Thus, each device, and the body that stages them in the photo-reportage, re-enacts new versions that make transparent questions of political ecology, hence becoming a new material interface of cultural transference, a physical device, a pedagogical sculpture, a tangible tie, a wearable building, you can activate from your own experience.

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