~~High Tech Low Tech~~
EPFL, Lausanne

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12.03.2024 – 13.05.2024

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Guest curator
Sophie Dars with the participation of Carlo Menon (Accattone)

Archizoom curator
Roxane Le Grelle in collaboration with Solène Hoffmann

In situ installations
Theo De Meyer / Sujets Objets and Pauls Rietums

Contributions
Accattone / bplus.xyz (b+) / Sammy Baloji and Filip De Boeck / Baukunst / Central ofaau with Juliette Simeone and CUMA (La Cambre Horta Faculty of Architecture, ULB Brussels) / common room and Cornelia Escher on Oswald Mathias Ungers / Kris De Decker with Marie Otsuka, Roel Roscam Abbing and Marie Verdeil / Maxime Delvaux / Élodie Degavre on Jean Englebert, Paul Petit, Lucien and Simone Kroll / Arnaud Depeyre / Nicolas Dorval-Bory / Alice Grégoire, Éléonore Morand and l'Atelier du Désert (P45 Versailles) on André Ravéreau / Kuehn Malvezzi / Lucie Lanzini / L'Atelier Paysan / LIST with Hideyuki Nakayama and Bollinger + Grohmann / Jonas Løland / Thomas Min and Egon Van Herreweghe / MLAV.LAND / Félix Meilleur Roy and Capucine Rombi / Nicolas Nova / Alice Paris on Osamu Ishiyama / Julien Prévieux / Stijn Colon and Arne Vande Capelle with Lionel Devlieger, Robbe Van der Mynsbrugge, Aude-Line Dulière, James Westcott and Rotor on Marcel Raymaekers / Truant School / Truwant + Rodet +

Projects
Andrea Branzi, Buckminster Fuller, Global Tools, Frei Otto, Cedric Price, Superstudio, Félix Trombe, Yositika Utida, Shu-Koh-Sha Architectural and Urban Design Studio

Lectures
Alexandre Monnin in conversation with Charlotte Malterre-Barthes, Nicolas Nova in conversation with Tiphaine Abenia, Victor Petit in conversation with Sophie Dars and Carlo Menon

Photography
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~~HIGH TECH~~
~~LOW TECH~~

Sophie Dars and Carlo Menon

Over the past decade, several studies from various fields of expertise have questioned technology as an ideology of innovation, in light of the environmental, social and energy crises that humanity is currently enduring and is going to endure in the future. These studies put forward the unsettling prospect that most of the technologies in use today are already obsolete, based as they are on production and operating chains that should be abandoned in the near future. These technologies are therefore 'zombie' technologies – not yet dead, but not alive either, because they are contributing to the failures that are heightening the impact of these crises.[1]

For obvious reasons (carbon dioxide, extractivism, etc.), the zombie perspective also calls into question architecture as a discipline of design, resource management, maintenance and hope. It invites us to reconsider the way we make architecture, to 'de-project' it,[2] by reappropriating the tools for thinking and doing. To what extent are today's buildings already dead, or at least 'non-living'? And what about those of the recent and not-so-recent past? How are we to inherit these 'negative commons' and 'ruinous ruins',[3] like air conditioning and concrete, which we can't sweep under the carpet because we still depend on them? How do we navigate between what the building industry is currently offering and the reconfiguration of architectural practice towards a more

1 According to José Halloy, a physicist who has taken a systemic approach to environmental issues related to industry, we cannot talk about technology without talking about extractivism and, rather than energy, power, the quantity of energy deployed in a unit of time. See e.g. José Halloy, 'Du vivant aux technologies zombies et inversement', lecture in the Ethics by Design 2022 series, 29 November 2022, https://peertube.designersethiques.org/w/a22315f9-dcec-4ff3-be9f-70dc103ed5be; and the conversation between Alexandre Monnin, José Halloy and Nicolas Nova, 'Au-delà du low tech: technologies zombies, soutenabilité et inventions', *Ritimo*, 14 September 2020, https://www.ritimo.org/Au-dela-du-low-tech-technologies-zombies-soutenabilite-et-inventions. Monnin and Nova will both give lectures during this exhibition (see programme).

2 The concept of 'de-project' was formulated by Alessandro Mendini in 1979 in the article 'Pour une architecture banale', http://www.ateliermendini.it/index.php?page=1979-2. See also Victor Petit, 'Éco-Design: Dé-projet & Low-Tech', in *Global Tools*, ed. Nathalie Bruyère, Catherine Geel and Victor Petit (Toulouse: ISDAT, 2022). Petit will give a lecture during this exhibition (see programme).

3 See Emmanuel Bonnet, Diego Landivar and Alexandre Monnin, *Héritage et fermeture: une écologie du démantèlement* (Paris: Divergences, 2021).

responsible and committed management of human and material resources?

Today, architecture faces a threefold challenge: globalized capitalism, which sees buildings as a financial asset and applies to both design and construction productivist approaches for the extraction of value; the environmental urgency, which requires a radical change in the way buildings are constructed and used, beyond the facile equation of carbon neutrality; and the dispossession of the means of production, as a result of which architects often find themselves confined to assembling industrial products without mastering their production, operation or repair. Steel, concrete, glass and plastics are the irresistible products that twentieth-century industry and architectural culture have made indispensable.[4] Similarly, the injunction to innovate technologically, often translated into standards, has accelerated the obsolescence of technical solutions, to be replaced by new ones that are already known to be old by the time they become topical. Paradoxically, the concept of 'performance', which recurs in official texts and speeches, risks increasing the impact of architecture on the planet and distancing architects from more fundamental research into their instruments and the values to be pursued.[5]

These intertwined conditions have produced two types of extremist and dominant discourses. On the one hand, in a kind of headlong rush, the extent of the environmental emergency is played down by the belief that industry – agronomy, energy, construction – is and will be able to 'solve' these multiple crises (pollinating robots, electric cars, nuclear power, BREEAM). On the other, it is argued that it is already far too late, theorizing an imminent collapse in various ways and, as such, paralysing the search for alternative practices that help to improve our relationship with the world on scales other than the survivalist autarky of every man for himself. In other

4 See, for example, Mark Jarzombek, 'The Quadrivium Industrial Complex', *e-flux Architecture*, 'Overgrowth' project, November 2019, https://www.e-flux.com/architecture/overgrowth/296508/the-quadrivium-industrial-complex.

5 See Olivier Hamant, *Antidote au culte de la performance: la robustesse du vivant* (Paris: Gallimard, 2023).

> words – and in a few words – the concepts of 'high tech' and its counterpart, 'low tech', seem to polarize social theories and practices, including architecture. And yet a multiplicity of concepts set out other possible relationships to technology and broaden our grasp of reality and its imagination. They sketch out a form of thinking 'through the milieu',[6] i.e. specific to its context, transversal, oscillating between the 'engineer' and the 'bricoleur',[7] that starts from what exists, from possible relations, from knowledges that are transferred and contaminated across disciplines and social groups.

The exhibition explores such shifting, partial, situated[8] and sometimes contradictory practices: Wild Tech, Milieu Tech, Open Tech, Trans Tech, Lab Tech, Slow Tech, Easy Tech, Civic Tech, Rural Tech, Live Tech… The list of neologisms is long and could continue to grow, as long as it does not create new dogmas but operational perspectives. The architecture project is a field of experimental learning, made up of attempts, failures, shifts and knowledges acquired *a posteriori*, through trial and error, which can sometimes be transferred to other projects and

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6 Multiplicity and the expression 'through the milieu' are central to the philosophy of Gilles Deleuze. See e.g. Gilles Deleuze and Claire Parnet, *Dialogues* (Paris: Flammarion 1977) and Isabelle Stengers, 'Introductory Notes on an Ecology of Practices', *Cultural Studies Review* 11, no. 1 (2005), pp. 183–196 (187), https://doi.org/10.5130/csr.v11i1.3459.

7 This theoretical opposition was defined by Claude Lévi-Strauss in *The Savage Mind* (1962; Chicago: University of Chicago Press, 1966): 'The "bricoleur" is adept at performing a large number of diverse tasks; but, unlike the engineer, he does not subordinate each of them to the availability of raw materials and tools conceived and procured for the purpose of the project. His universe of instruments is closed and the rules of his game are always to make do with "whatever is at hand", that is to say with a set of tools and materials which is always finite and is also heterogeneous because what it contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all the occasions there have been to renew or enrich the stock or to maintain it with the remains of previous constructions or destructions' (p. 17).

8 See Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', Feminist Studies 14, no. 3 (autumn 1988), pp. 575–599 (590): 'We seek not the knowledges ruled by phallogocentrism (nostalgia for the presence of the one true Word) and disembodied vision. We seek those ruled by partial sight and limited voice – not partiality for its own sake but, rather, for the sake of the connections and unexpected openings situated knowledges make possible. Situated knowledges are about communities, not about isolated individuals. The only way to find a larger vision is to be somewhere in particular.'

other scales. In this way, the projects and artefacts presented in the exhibition are not ‘showcased’ as virtuous propositions, but as clues to be analysed, commented on and debated, as pieces that question the possible relationships between architectural practices and construction techniques.


Chauffage + Refroidissement
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WILD-TECH ?!

Nicolas Nova

Among the contemporary binarisms most commonly mentioned in the public debate, the opposition between high and low tech is almost a cliché. As are the dichotomies between industrial and artisanal, imported and local. On the one hand, we are said to have a range of increasingly sophisticated and flashy techniques, objects and infrastructures in the field of digital technologies that fill our daily lives, robotics and biotechnologies. On the other, we are said to have more rudimentary and resource-efficient technologies, undoubtedly less efficient, but which promote forms of social justice.[1] If we were to caricature the binarism: modular nuclear reactors on the one hand, solar cookers on the other.

Such an opposition between these two interpretations of technology is at bottom simplistic. The gradation from 'low' to 'high' overlooks the existence of multiple continuums which correspond to the energy required for use or production, the greater or lesser reuse of recycled materials or components from different periods, or different types of technology. Nor does it take into account the place our societies generally give to technologies, particularly in many areas of our daily lives, as in the case of healthcare devices. Should we, for example, no longer produce certain medicines? Do without medical imaging equipment to achieve a low-tech objective? Or rethink our relationship with technology with greater sobriety? While this opposition is laudable in the fight to move towards low-intensity technologies that consume less energy and are more respectful of the geochemical cycles of our environments, the defence of low-tech solutions sometimes reflects a position of visceral rejection of material technologies and cultures. This critical stance vis-à-vis modernity is certainly acceptable, but it ignores the complexity of situations and the importance of the dependencies and attachments

1 Philippe Bihouix, *L'âge des low-tech: Vers une civilisation techniquement soutenable* (Paris: Seuil, 2014).

we face, as the philosopher Alexandre Monnin has shown.[2]

That is why the notion of 'wild tech' seems relevant, both as a way out of binarism and as a way of rethinking simplistic models of innovation that describe a univocal linearity in technical progress. At the initiative of a special issue of the anthropology journal *Techniques & Culture* published in 2017, the expression has emerged as a means of designating unclassifiable innovations that combine strange assemblages of advanced techniques with those of the past, as well as repurposed materials and objects, or surprising vestiges that have been brought up to date in other cultural contexts.[3] For the authors of this contribution, the adjective 'wild' has several connotations, referring not only to the untamed and uncultivated, but also to behaviour that is uncontrolled, undomesticated and present beyond human activity. More precisely, for these authors, it refers to going beyond 'the criteria of sophistication or "traditionality" of operating chains or manufacturing processes' and to emphasizing 'their capacity for recomposition in contexts marked by the heterogeneity of needs and issues'. For this wild character corresponds to a wide range of interventions, inviting us to think, following English historian David Edgerton, of these techniques as always 'in use'. In other words, we need to bear in mind that technologies are certainly 'invented', but also used, reappropriated, maintained insofar as possible, and reinvented here and there in social and cultural environments and at times that all have their own specificities.[4] That is why, even in the Western world, we still have a banking infrastructure based on old programming languages (Cobol), combustion-powered cars retrofitted with electric batteries, buildings from the Middle Ages equipped with Wi-Fi, and smartphones cobbled together from spare parts taken from more or less similar models.

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2 Alexandre Monnin, Interview in *Le Monde*, 15 May 2023, https://www.lemonde.fr/idees/article/2023/05/15/alexandre-monnin-compte-tenu-du-rechauffement-climatique-le-renoncement-n-est-plus-percu-comme-un-mot-repoussoir_6173480_3232.html.

3 Emmanuel Grimaud, Yann Philippe Tastevin and Denis Vidal, 'Low tech, high tech, wild tech. Réinventer la technologie?', *Techniques & Culture* 67 (2017), pp. 12–29.

4 David Edgerton, *The Shock of the Old: Technology and Global History since 1900* (Oxford: Oxford University Press, 2006).

These considerations underline the twofold interest of the term ‘wild tech’. It enables us to think about objects and their design in terms of both space and time. By encouraging us to grasp that our material culture is made up of hybridizations and assemblages of ‘low’ and ‘high’, as adapted to different cultural areas and ways of maintaining, extending and transforming it over time, the ‘wild’ nature of technology is rich in potential. It makes us realize that technologies are never unambiguous, inert or stable. And that any intervention by architects, designers or engineers must take account of these aspects, these fertile hybridities, the possibilities of survival or repurposing. And this, as much as a fact with which to come to terms in this damaged world[5] as to preserve the habitability of the world by reducing our ecological footprint.[6]

5 Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press Books, 2016).

6 Alexandre Monnin and Laurence Allard, ‘Ce que le design a fait à l’Anthropocène, ce que l’Anthropocène fait au design’, *Sciences du Design* 11, no. 1 (2020), pp. 21–31.

But it doesn't have to be: beyond a certain limit,
the history, technology and language of the projection
have to be reversed: instead of projecting,
we have to de-project the world. We have to introduce
the negative notion of DE-PROJECT. The de-project
is the project conceived backwards: instead of
increasing the quantity of information and matter,
the de-project removes, reduces, minimizes, simplifies;
it rationalizes the mechanisms that have become
jammed. The de-project is a decongestant creation,
whose objective is not the architectural design.

Alessandro Mendini, 'Notion de dé-projet',
Casabella 410 (February 1976), p. 5.

TECHNOLOGY OF THE MILIEU VS. ENVIRON-MENTAL ENGINEERING

Victor Petit

By way of introduction, let's advance three propositions that are provocative in terms of the prevailing environmental thinking:

1. *Ecology has nothing to do with nature* – which reproduces the dualism with culture. Ecology is about technology.
2. *Ecology has nothing to do with the environment* – which in fact supports a soil-less science. Ecology is about the milieu.
3. *Ecology has nothing to do with a new spirituality* – nor with our supposed new divinity: Gaia. Ecology is about the flow of matter and energy and can be summed up in the slogan: 'Materialists, you're almost there…'

So what does ecology have to do with then?
Answer: the politics of the common technical milieu.

Since its inception, ecology has been divided into an ecology of the environment (*Umgebung*) and an ecology of the milieu (*Umwelt*). These two concepts share neither the same history nor the same philosophy.

1. The environment, as its etymology suggests, surrounds and is therefore external. The milieu, as its name also indicates, is in the middle, so it is both internal and external. So, for example, a termite mound is not, strictly speaking, the termites' environment, nor is it their external milieu, because it also refers to their internal milieu.
2. The environment is absolute, the milieu relative (to the living being it complements). In other words, while to change environment you simply have to change it, to change milieu you also have to change yourself – or change your own *standards*, as Georges Canguilhem would say.
3. The environment refers implicitly to nature, or at least to the natural sciences, whereas the milieu, because of its history, is indissolubly physical-bio-socio-geo-technical.

As these two concepts are opposed, so are the two ecologies that flow from them:

1. The ecology of the environment deals with our impact on the environment and seeks to modify our technologies to make them more eco-compatible. The ecology of the milieu is concerned with the quality of the living milieu and attempts to modify our relationship with technology, in other words our consumption and production methods.
2. The ecology of the environment is the same everywhere and is reproducible (which is why it can be the subject of technical standards). The ecology of the milieu is specific to each territory; it is relative to the actors, the *commoners*.
3. The ecology of the environment models flows and stocks with a view to technical optimization. The ecology of the milieu works on the *capability* of stakeholders.

However abstract it may be, the distinction between the ecology of the environment and the ecology of the milieu has very concrete effects that cut across all fields of technology (design, architecture, engineering).

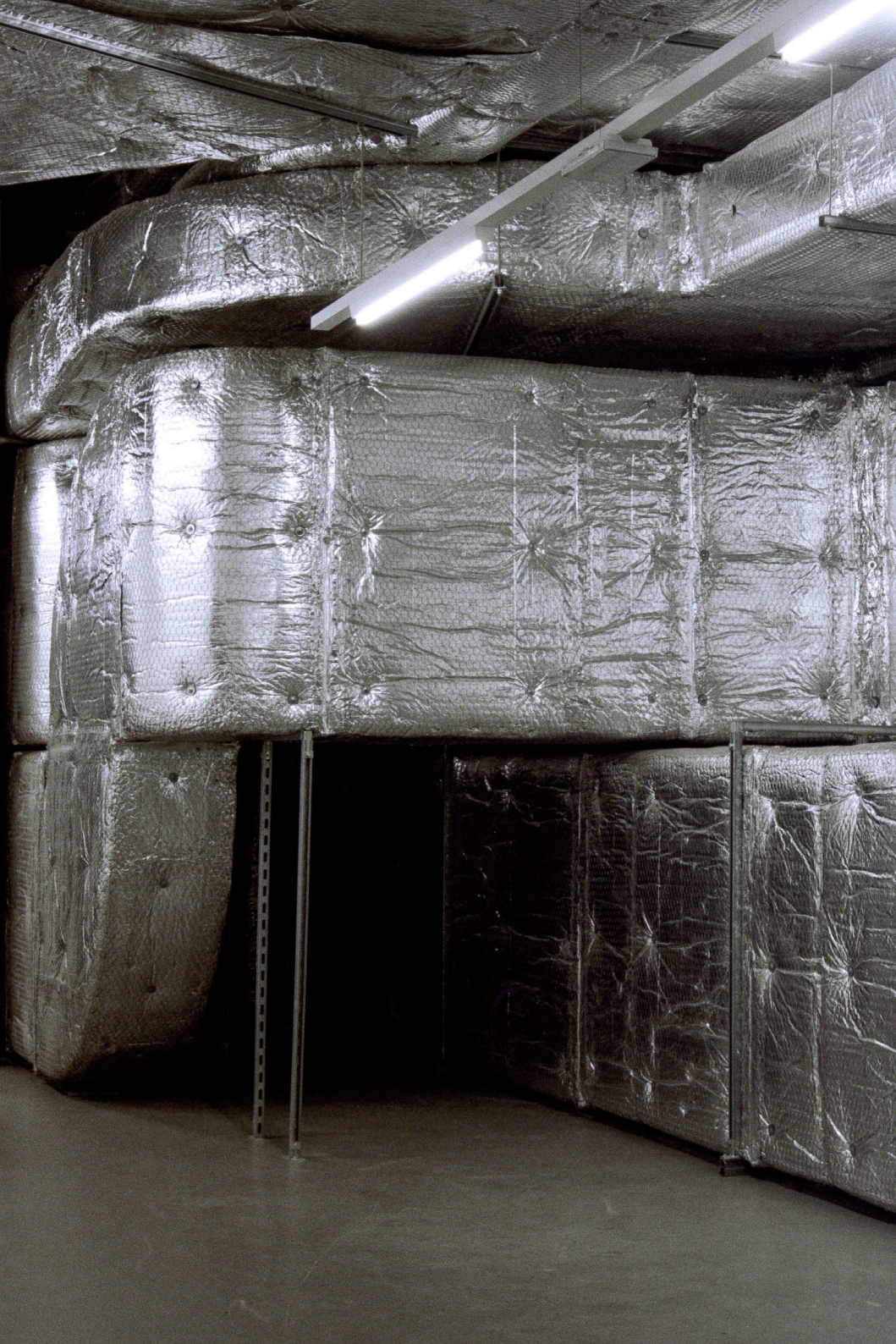
The distinction between the environment and the milieu is similar to that between *Design for Environment* (DfE), which is content to modify our *poiesis* or the environmental impact of our technologies, and *Design for Sustainability* (DfS), which attempts to modify our *praxis* or our relation to technologies.[1] In the world of architecture, this structuring division pits environmental engineering, made up of certifications and standards, against vernacular architecture, architecture without architects. It can be illustrated by the opposition between the autonomy of the technological object or device (Alexander Pike & John Frazer, *Autonomous Housing Project*, 1972) and the autonomy of the technological subject, which is what the non-specialist Global Tools (1973–75) was trying to re-learn.[2] Within this school, the architec-

1 Victor Petit, 'Eco-design. Design de l'environnement ou design du milieu?', *Sciences du Design* no. 2 (2015), pp. 31–39.
2 Nathalie Bruyère, Catherine Geels and Victor Petit, *Global Tools (1973–1975). Eco-design: Dé-projet & Low-Tech* (Toulouse: Les Presses du réel/isdaT éditions, 2023).

ture of the milieu is fairly well represented by the territorial design of Ugo La Pietra. What is territorial design? The simple and fundamental idea that all design is relative to its environment (indissolubly natural and cultural), which is, however, always situated and singular. Finally, behind the opposition between environment and milieu lies a fundamental question of 'political technology': smart cities or smart citizens?

What brought [Buckminster Fuller] back to life was the people who used his theories. It was the hippies and droppers of the 1960s. People who had a very close relationship with the American subculture. People who were aware of their powerlessness and wanted to live outside the system used his ideas to create, for example, the Whole Earth Catalogue, Shelter magazine and the Dome Cookbook. If we think of Fuller in the context of a cycle in which those who used his ideas revived them, I think it is possible to rethink Fuller, and if we rethink Fuller in the context of such a relationship, I think there is surprisingly great potential in the movement of the cycle.

From Osamu Ishiyama, *Barakku jodo* (Barrack Paradise) (Tokyo: Sagami Shobō, 1982), p. 72.



CREST LINE(S)

Alexandre Monnin

Excerpt from *Politiser le renoncement*
(Paris: Éditions Divergences, 2023),
pp. 156–158.

In our view, the fundamental issue is rather the role that the countries of the North are likely to play. These countries bear a historic responsibility for the advent of the Anthropocene. What role should they play and what contribution should they make? As we have seen, a number of thinkers argue that the time has come to move beyond the point of view of modernists (Latour) or their naturalism (Descola) and to draw inspiration from other cosmologies, i.e. from other ways of engaging with the world, putting it on a different course. In this configuration, indigenous peoples are given a pre-eminent role. Witnesses to a collapse that has already taken place with the conquest of America by the conquistadors, these peoples are nonetheless the custodians of ways of life from which the peoples of the North should draw inspiration. As examples of 'earthly' peoples, devoid neither of culture nor technologies, nor living in primitive environments (as researchers have shown, the Amazon rainforest has been highly anthropized), they could provide a source of inspiration for overcoming the impasses of modernity.

However, this narrative leaves many issues aside. Starting with the dichotomy it fosters between indigenous peoples and Westerners, relegating to oblivion the former colonized peoples whose primary aspiration, as the Indian historian Dipesh Chakrabarty rightly reminds us, was, historically, to reappropriate modernity on their own terms. Moreover, this discourse lends itself to interpretations supporting an avowed exterminism, seeing indigenous peoples, considered uncivilized (an eminently debatable reading), as the only example of a way of life attuned to nature, and therefore viable, to the exclusion of all others and therefore of most of humanity. In other words, this discourse says nothing about the Technosphere, whose weight is such that it can no longer be confined to an anomaly, an artificial environment that simply needs to be erased. Ecology cannot be thought of as a return to nature (or to an earlier, pre-/post-industrial, pre-/post-civilizational era, etc.), because otherwise it will carry with it a Malthusian or exterminist background.

Its challenge now is to be an ecology of the impure environments in which a growing part of humanity is evolving which seeks to negotiate a narrow passage between two pitfalls: the sudden and immediate abandonment of the infrastructures, technologies and models – what I call negative commons – which this growing part of humanity depends on a little more each day, which could not be done in the very short term, and the maintenance of these same realities in the medium term. Between a Malthusian exterminism and an exterminist carbo-fascism, there is no other choice, as we have said, than to keep them at equal distance and work to carve out a passage between these two hydras, a line of flight between Charybdis and Scylla.

Archizoom Associati, Remo Buti, Casabella, Riccardo Dalisi, Ugo La Pietra, 9999, Alessandro Mendini, Davide Mosconi, Gaetano Pesce, Gianni Pettena, Franco Raggi, Rassegna, Ettore Sottsass, Superstudio, Ufo, Zziggurat et al., *Global Tools. Laboratori didattici per la creatività individuale*, 1973–75

Arkitekt Jonas Løland, *Norwegian Eye*, 2019 (unbuilt)

Arkitekt Jonas Løland, *Egyptian Chair*, Oslo, 2022

Arkitekt Jonas Løland, *Digital Spolia/Dress Study*, Norway/Ghent/Sevilla, 2022

Atelier d'étude et de restauration de la vallée du M'ZAB, *Survey of a Mozabite house*, Ksar de Ghardaïa, 1973

b+, *Mäusebunker*, Berlin, 2022 (ongoing)

Sammy Baloji & Filip De Boeck, *The Tower, A Concrete Utopia*, Kinshasa, 2015

Baukunst, *Kiosk*, Zurich, 2022 (unbuilt)

Baukunst, *Bastion*, Geneva, 2016 (unbuilt)

Baukunst, *La Défense*, Paris, 2019–25 (ongoing)

Schlaich Bergermann Partner, *Prototype of a solar chimney to produce electricity*, Manzanares, Spain, 1982–89

Max Bondu, Truant School, *4.5 cm² of Cosmic Particles*, 2024

Max Bondu, Truant School with Julien Rippinger, *Weather Prediction, Capturing National Oceanic and Atmospheric Administration's Satellite Signal*, 2024

Vanessa Boucher, Fiona Genatzy, Félix M. Roy, Capucine Rombi, *Sun Tower*, Brussels, 2023

Andrea Branzi, *Agronica*, 1994–96 (unbuilt)

Central ofaau + Juliette Simeone, *Mutant glass technology and the planned obsolescence of the sealing joint*, 2024

Sophie Dars & Carlo Menon (Accattone), *Magasin/Magazine*, Parfondeval, France, 2023 (ongoing)

Kris De Decker, Marie Otsuka, Roel Roscam Abbing, and Marie Verdeil, *Low-tech Magazine*, 2007 (ongoing)

Theo De Meyer, *Meet Me at the Fountain*, 2024

Élodie Degavre, *La vie en kit*, 2022

Maxime Delvaux, *Untitled (Rio Tinto)*, Huelva, Spain, 2023

Arnaud Depeyre, *Poteau utile*, Parfondeval, France, 2023

Nicolas Dorval-Bory, *Atacama Desert*, Chile, 2019 & 2022

Nicolas Dorval-Bory et al., *Publications*, ÉNSA Versailles, 2019 and 2023

Nicolas Dorval-Bory Architectes, *Models of networks and devices*, 2022–24

Buckminster Fuller, World Energy Map, *Conservation of Resources*, reproduced in Herbert Bayer and Container Corporation of America, *World Geo-graphic Atlas, A composite of Man's Environment*, Chicago, 1953

Alice Grégoire & Eléonore Morand, 'Atelier du désert', *Architectural devices*, ÉNSA Versailles, 2024

Solène Hoffmann, *Zombie basements*, EPFL, 2024

Osamu Ishiyama Laboratory, Ryozo Umezawa structural engineers, Takashi Kyogo Co. Ltd, *Setagaya-mura*, Tokyo, 1997–2001

Osamu Ishiyama, *Projects and publications*, 1973 (ongoing)

Kuehn Malvezzi, Pettetier de Fontenay, Jodoin Lamarre Pratte architects, *Metamorphosis of the Insectarium*, Montreal, 2014–22

Lucie Lanzini, *Reversed Skin*, 2021

L'Atelier Paysan, *Catalogue des outils à motorisation alternative* and *Catalogue des outils à autoconstruire en maraîchage*, Renage, France, 2022

L'Atelier Paysan, *Plans pour l'auto-construction de divers outils et machines*, 2023

LIST and Hideyuki Nakayama (architects), Bollinger + Grohmann (engineers), *Frans Masereel Centrum's roof structure as a reciprocal frame*, Kasterlee, Belgium, 2014–19

MLAV.LAND, *Futurs anonymes*, 2022

Thomas Min and Egon Van Herreweghe, *Wood Stove*, 2016

Nicolas Nova & Disnovation, *A Bestiary of the Anthropocene*, 2021

Frei Otto, *Ökohaus* (Eco-House), Berlin, 1987–91

Alessandro Poli, *Zeno, una cultura autosufficiente* (Zeno: A Self-Sufficient Culture), 1972–80

Julien Prévieux, *Anomalies construites*, 2011

Cedric Price, *Inter-Action Centre*, London, 1977 (demolished 2013)

Marcel Raymaekers, Jos Witters, *House Kelchtermans and the cockpit canopies of Lockheed T-33 plane*, Belgium, 1970

Matt Stone and Trey Parker, *South Park: Joining The Panderverse*, October 2023

Sujets Objets with Pauls Rietums, *Soap Opera*, 2024

Superstudio, *Tavola Sinottica*, 1966–68

Anaïs Tondeur, *Noir de Paris*, 2017–18

Félix Trombe, *Laboratoire perché*, Mont-Louis, France, 1949

Truant School, *Vision de Nuages*, 2022

Truwant + Rodet + Hi. +, *Flexible Structure*, Basel, 2020–21

Truwant + Rodet + IMI +, *Uncertain Landscapes*, 2020–24

Oswald Mathias Unger, *Solar House*, 1980 (unbuilt)

Yositika Utida, Shu-Koh-Sha Architectural and Urban Design Studio, *NEXT21*, Osaka, 1989–93

Uri Wegman, Truant School, *Photogrammetric Cloud Captures*, 2023

PROGRAMME OF EVENTS

Monday 11 March, 6:30 p.m., fr
Opening lecture
by guest curator Sophie Dars

Monday 25 March, 6:30 p.m., fr
Impure Tech
Lecture by Alexandre Monnin
in discussion with
Charlotte Malterre-Barthes

Monday 15 April, 6:30 p.m.,
fr + english subtitles
La vie en kit
Screening followed by a conversation
with the film director Elodie Degavre

Monday 22 April, 5 p.m., fr
Guided tour by the guest curators

Monday 22 April, 6:30 p.m., fr
Wild Tech
Lecture by Nicolas Nova
in discussion with Tiphaine Abenia

Monday 6 May, 5 p.m., fr
Guided tour by the guest curators

Monday 6 May, 6:30 p.m., fr
Milieu Tech
Lecture by Victor Petit
in discussion with
Sophie Dars & Carlo Menon

Photographs
Solène Hoffmann, *Zombie basements*, EPFL, 2024
Technical installations that supply heating, air conditioning, ventilation, electricity and data storage.

p. 3 Technical installation of a central heating substation, basement of CO building

p. 9 Ventilation units filtering the air in auditoriums, basement of SG building

p. 15 Heat pump evaporators, *Centrale de Chauffe par Thermopompes* (Heat Pump Heating Plant), CCT

pp. 16–17 Technical gallery, basement of the CO building

p. 23 Ventilation ducts, basement of the SG building

p. 29 Alley of the DC2020 data centre, *Centrale de Chauffe par Thermopompes* (Heat Pump Heating Plant), CCT

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