Garden Politics Matter

ACCATTONE

The model and the text are part of a collaborative research project which involved UR (Gaétan Brunet, Chloé Valadié: architecture and urbanism), Peaks (Charles Aubertin, Camille Dupont, Eva Maloisel: architecture), Altitude 35 (Benoit Barnoud, Clara Loukkal: landscape and urbanism) and ZEFCO (Florian Dupont, François Peyron: environmental design), with contributions by Marie Cazaban-Mazerolles (literature), Julien Claparède-Petitpierre (philosophy) and Antoine Espinasseau (photography).

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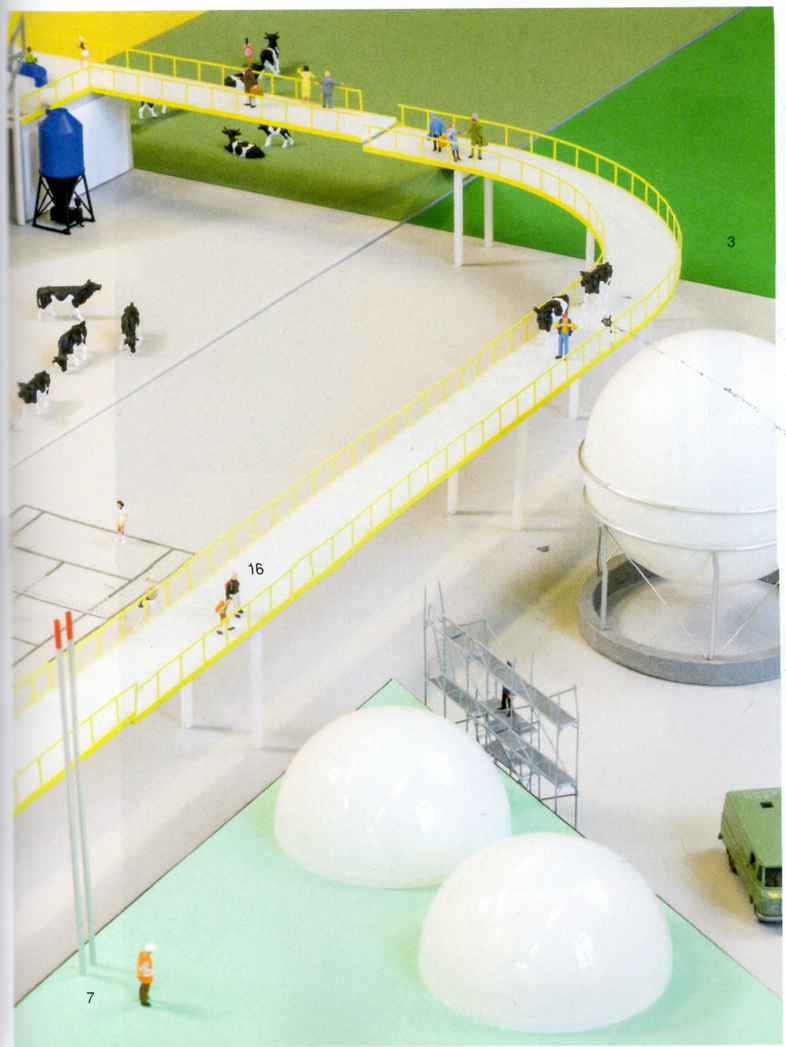
The text was written jointly for Accattone by UR, Marie Cazaban-Mazerolles and Julien Claparède-Petitpierre.

Model photography by Victor Bellot.

The roof collects the rainwater (1). It is transported by gravity into large reservoirs that provide a stock sized to supply an aqueduct. This one draws in the territory a linear infrastructure (2), itself the support of flows that run at its feet: cycles and light vehicles. The water reaches a second reservoir that serves to irrigate agricultural areas (3). Crops are governed by a five-year rotation system that preserves the agronomic quality of the soil by combining a year of alfalfa, rich in nitrogen, three years of cereal cultivation, and a year of fallow pasture (4). Bordering the fields, a cannery (5) enables the storage and processing of food for local use (housing, local services, etc.) or to be transported to other places in the city. Energy autonomy is ensured by harnessing solar energy and storing it in rotating concrete wheels that operate according to the kinetic principle (6). A base for the production and distribution of hydrogen (7) benefits from field wastewater.

PROSPECTIVE SURFACE – MICRONARRATIVES

The model on which the micronarratives take place is a reflection of today's city, a surface in constant development, transformed by spatialities and processes. That is, a prospective surface, to be observed like a montage table, ready to receive old images and new perspectives: the micronarratives that take place on it are inspired by contemporary initiatives, old and sometimes lost methods, constructions or processes that today find, if not a certain topicality, at least a potential for reactivation in the spectrum of a *metropolis of alliances*.
The sum of these scenarios tends to draw what the image of a metropolitan society of the living could be. Their assembly proceeds by means of editing (selective and partial like any narrative), by opportunism (virtuous exchanges take shape), sometimes by accident. The surface that holds them together does not represent a specific territory and does not claim to represent an articulated plan of what the ideal city could be in the face of the unpredictability of a disoriented climate.
The cracks between the buildings are spaces of variable geometry, the places of all the relationships, sometimes close, sometimes distant. The distribution of the objects, the relationships and the narratives on this surface offers sequences of concordance and harmony, but also of dissonance. This is not a unilateral mechanism. It is probably appreciated more in the polyphony of the micronarratives that compose it than in the mega-project that might seem to take shape in it. This prospective surface is made by objects in relation, by beings and things that inhabit it, inform it of their exchanges, transform it by their journeys.



Hydrogen is produced on site naturally by using water and sunlight according to the latest experiments currently being carried out in research institutes. A 'bat tower' (8), an old, forgotten process, tends to eliminate pests without resorting to pesticides. Bat droppings (guano) are used to fertilize the soil. The agricultural land is protected by the presence of energy corridors that weave large unbuildable areas over the land of Île-de-France. The soil is enriched by the introduction of sludge from the water treatment plants and organic waste produced elsewhere. This 'waste' is collected in places that provide a new experience of 'useful' public spaces: very precise sorting and storage spaces (9) reopen the controversy linked to the invention of dustbins by the prefect Eugène Poubelle and encourage a better sharing of waste. Pigs and chickens feed on organic waste (10), thus tending to drastically reduce the quantities (11). They are adjacent to inhabited greenhouses (12). They offer, under a single climate, spaces dedicated to housing and to gardening and animal husbandry – a space of paroxysmal cohabitation in the *metropolis of alliances*. There are the 94 plants (73 herbs, 16 fruit trees, 5 textile and dye plants) identified by Charlemagne in the *Capitulare de villis*, but also species resulting from a globalization of the flora. Here too, pigs and chickens directly consume organic waste, thereby reducing by 150 kg the amount of waste per person per year. Their presence reduces children's allergies. The production of the inhabited greenhouses and agricultural areas is sold or exchanged under a light roof (13). The covered area is activated by markets, moments of conviviality, direct sales opportunities. This space refers to the 350 direct sales outlets that currently exist in Île-de-France. Behind it, a bald peak (14) evokes the exploitation of Île-de-France subsoils, in particular gypsum seams and gravel beds. These quarries create a cut-out framework of open spaces and extend the system initiated at the Buttes Chaumont and perpetuated more recently at the Parc des Hautes Bruyères (Villejuif) and on the Butte des Châtaigniers (Argenteuil). These belvederes are the sites of a visual spectacle towards the metropolitanized continuum of Île-de-France. Breathing spaces where you can also admire the skies and clouds.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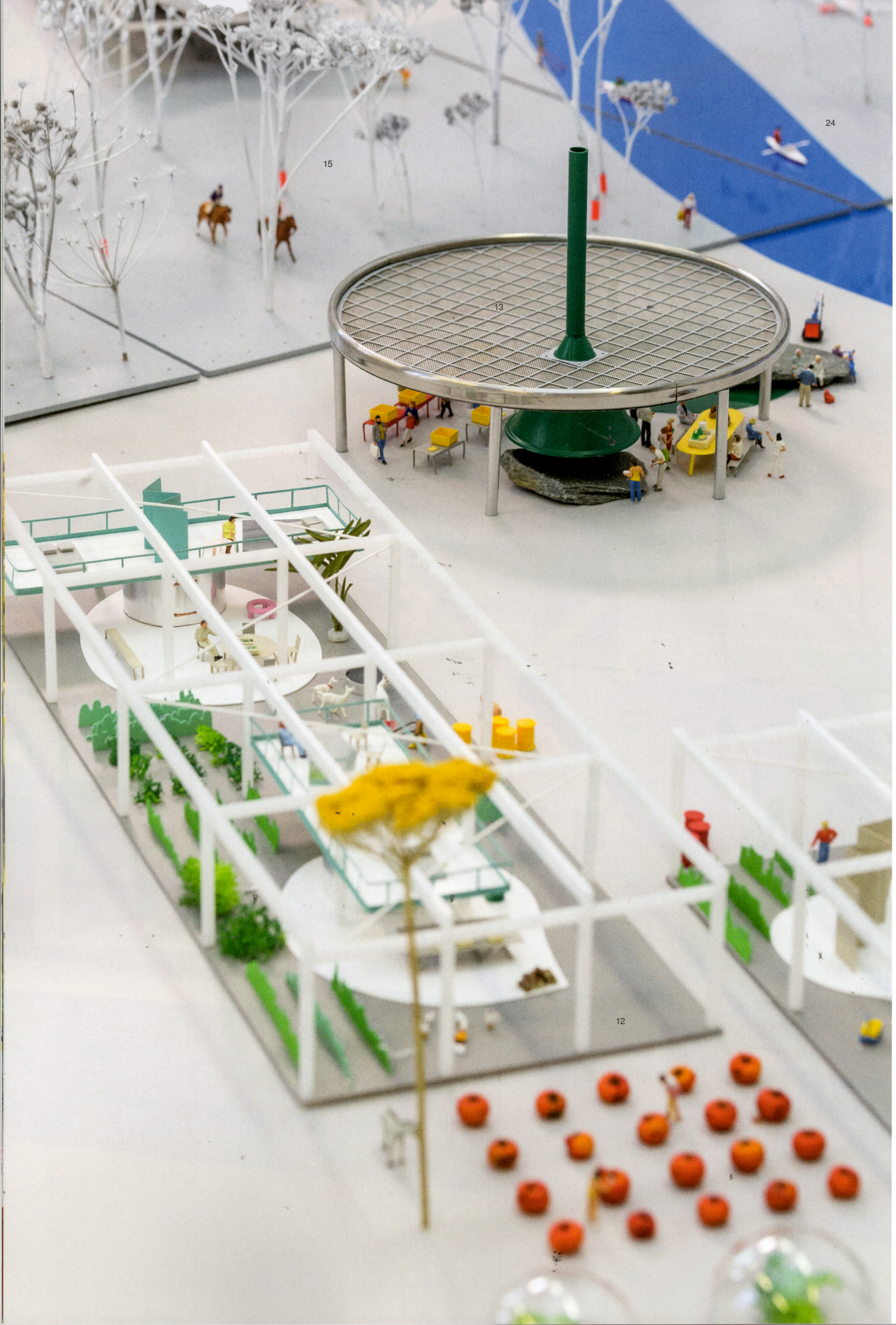
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At the foot of the mound, a silvicultural strip (15) represents a *process to improve soil quality through phytoremediation. This* long-term strategy takes advantage of the biological life of the soil, the degradation of pollutants by micro-organisms and the creation of a layer of humus to restore fertility to leached or polluted soils. A footbridge (16) is used to cross the polluted soil. It traces in the landscape a figure with a strong urban character and distributes on its sides the most polarizing points of the sector. Its dimensions enable pedestrians, cyclists and animals to co-exist. In the long term, the soil enhancement system will allow the planting of edible fruit species. As plants grow, sludge stemming from wastewater treatment plants contributes to soil manuring. According to the most recent experiments, it significantly increases the growth of the trees and of the low strata. The nearby sewage treatment plant (17) is used to treat wastewater. It is surrounded by public spaces and becomes a demonstrator of this new actor in the 'natural' water cycle. The transport channels are suspended above the activated soil and possess both an educational purpose and an aesthetic value (18). They cross a space generously planted with tall standards. These trees provide shade that serves a controlled public climate (19), an island of freshness in the city's densest areas. Their very high habit does not obstruct the mineral and very open public experience. In the background, the more fragile silhouettes of hydroponically grown plants (20) stand out. The building that houses these nourishing species, an architecture 'free of humans', is like a symbol for the densest spaces in the region. A bit further on, a public space is sprayed with water (21). It offers a pocket of freshness in the city and a common area. Opposite it, a geothermal station (22) pumps the boiling water and steam present in the Dogger aquifer (Île-de-France is the leading region in Europe in terms of geothermal production). The technicality of the work is visible and accessible to all. Open-air pools are heated naturally by water extracted between 1500 and 2000 m deep. They help to activate a recreational and leisure area along one of the region's many rivers. The beach is accessible by rail transport.

They bring within reach of all Île-de-France residents the region's natural and preserved areas (in particular, its 25 per cent of forests). The stop fits soberly into an open architecture (23); recreational uses in relation with the landscape are proposed (beach, canoe, walks towards the mounds, etc.). Horse riders cross the forest whose soils have been restored over time by natural biological and bacteriological mechanisms. They ride along the river, whose main bed is designed to absorb the vagaries of the water levels. Here is a linear park (24). It combines human activities with the fluctuating life of the landscape.

Sheep graze (25) along the railway lines that serve these remote areas. They can be found along other infrastructures or in the city's wasteland. This is where they end their journey towards a small oasis (26). The recovery of the rainwater and the overflow that continuously feeds the ground provide the conditions for a singular vegetation, an opportunity to make the unique experience of the public space around a micro-landscape. The public transport line, now more open to the city, serves an urban logistics area. It enables the exchange of goods towards the metropolitan territories and towards more remote poles. It is located under a very open building. This minimal architecture houses a range of creative and productive functions (27): micro-industrial spaces (machines are becoming miniaturized and are slowly becoming more democratic), collective workspaces, more intimate offices, general services that can be orchestrated by a public body. These 'relay' production spaces form a possible synthesis of coworking (and other shared workspaces) and proto-industrial spaces (Lyon silk workers, watchmaking valleys, etc.). They tend to bring closer to the residential spaces an offer of equipped and connected productive spaces. The deployment of this type of programme makes it possible to reduce commutes in the metropolitan area (they can be organized in existing office buildings). The heat from the servers is extracted and is used to feed the vertical greenhouse in order to develop particular climates there. Above, a roof.

The roof collects the rainwater (1) …


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The October 2018 IPCC report appended to the flood of harmful predictions a sentence that will now colour the policy choices facing us: 'avoid the unmanageable, manage the unavoidable.'[1] The crisis invites us to rethink our way of being in the world. In doing so, it enjoins us to renew its representations and, to use Nelson Goodman's fine expression, to invent new 'ways of worldmaking' today.[2] These new representations must enable us to requestion not only our 'weak' share – to quote Peter Sloterdijk[3] – in the exchanges between anthroposphere and biosphere, but also to connect what the 'great divide' had disconnected.[4] Step by step, humankind has detached itself from its environment and has sought to make it an exterior to be tamed, to be controlled. We now know that there is no way out of such a treatment of the land we inhabit and the atmospheres we breathe. 'Nature' organized in fact by modernity recovers, in the coming climatic order, a legitimacy and more broadly modalities by which to surface in the overly anthropocentric debates on the construction of metropolises as artificial universes. Even if we wanted to close the door on nature, it would find a way to sit at the table with us. Therefore we might as well invite it as a new actor in the metropolitan project and consider a system of alliances and a mutual commitment to protection. Indeed, climatic changes represent a terrible and stimulating opportunity to glimpse, behind the old divide, the possible pairings and coalescences that establish the first lines of a weaving of the common world.

A roof that collects and stores rainwater to irrigate agricultural areas; a building with multiple activities (services, workspaces, micro-industry, logistics) in the heart of residential districts, in order to bring together production and housing; resilient and reversible developments in the major bed of a river; a public swimming pool set within a geothermal power plant; a soil depolluted over time through agroforestry; water networks exposed above public spaces; habitats shared by people and animals … Such could be the microstories taking shape in the hypothesis of an ecological city: a metropolis that agglomerates and associates species, that mutually enhances objects and functions, that takes advantage of the multiple scales and times that shape it by striving to constantly produce spaces of the common. This is the hypothesis of a fundamentally *ecological* perspective on the contemporary city, a perspective liable to face the challenges of a habitability that is currently in crisis and that would seek in this unprecedented condition a desirable and intense horizon.

1
Filippo Giorgi, a member of the IPCC (Intergovernmental Panel on Climate Change) and head of the Earth System Physics Section of the International Centre for Theoretical Physics of Unesco, October 2018.

2
Nelson Goodman, *Ways of Worldmaking* (Indianapolis: Hackett, 1978).

3
Peter Sloterdijk in *Les atmosphères de la politique, dialogue pour un monde commun*, Pasquale Gigliardi & Bruno Latour eds. (Paris: Les Empêcheurs, 2006).

4
Philippe Descola, *Beyond Nature and Culture* (2005; Chicago, University of Chicago Press, 2013).

5
Paul Shepard and David McKinley eds., *The Subversive Science: Essays Towards an Ecology of Man* (Boston: Houghton Mifflin Company, 1969).

The Metropolis of Alliances

UR (GAÉTAN BRUNET & CHLOÉ VALADIÉ) WITH MARIE CAZABAN-MAZEROLLES AND JULIEN CLAPARÈDE-PETITPIERRE

ECOLOGY

A term coined by German naturalist Ernst Haeckel in 1866 from the Greek noun oikos *(the home, the house as well as all its human and non-human inhabitants) to designate the study of organisms as they exist in relation to their environment.*

Although this definition is widely known, it nevertheless conceals in the modesty of its enunciation what makes ecology a profoundly 'subversive' science.[5] Revealing that no organism exists autonomously, yet is never anything but the labile product of the exchange of matter, energy and information that it engages in with its environment, ecology revolutionizes what we called 'being'. Against the old representations that populated the universe of very distinct, separate, inward-looking entities, persisting in time and well defined in space, ecology exposes a world in which every living being is a permeable and metastable knot, subordinate to the events, flows and configurations that make it, transform it and break it. Hence: an ecological worldview does not know 'objects' and gives ontological primacy to relations and processes; an ecological vision of humankind does not grant us any regime of exceptionality and re-unifies with to a world that, much more than just surrounding us, co-constitutes us.

CRISIS

The climate changes already underway, and which tend to increasingly disrupt the atmospheres and environments that make up our habitats – whether gaseous or material – are creating a world without assurances and without any predictability. Making this painful observation means recognizing that the practices that seek to determine what in the future will shelter and hold us together have been hit by a crisis of action.

In a world governed by Newtonian forces, thinking of any construction solely in terms of power relations, it was enough to build a dam powerful enough to hold water, a pillar armed enough to support buildings. But the mechanical order is part of a broader and much more unpredictable ecological order. In a world where the butterfly effect is a real possibility, where the improbable is the norm, anticipating is almost absurd, if we still understand this notion in the terms of bygone centuries. At the end of the eighteenth century, Pierre-Simon Laplace still hoped to capture in its entirety the history of the universe with three Newtonian equations; we now know that it is impossible for the most powerful computers to predict the weather in two weeks' time. To predict is not, in this case, to make assumptions about the meaning of history and the trajectory of progress. More modestly, predicting becomes listening, being attentive, cautious, even subtle. The aim here is not to erase the human being, but on the contrary to move beyond the era of mechanical sciences in order to open up the intellectually more ambitious and pragmatically more harmonious era of practices renewed by an ecological conception of nature, allowing us to listen to our non-human partners and a better understanding of what to inhabit means.

THE EXPERIENCE OF HABITAT

According to many environmental historians, permanent habitat is a historical matricial milestone in our relationship to 'nature'. Indeed, during what we now call the 'neolithic revolution', humanity gradually abandoned the nomadic lifestyle of hunter-gatherers to form sedentary communities of herders and farmers. It was then that, as Roderick Nash put, 'lines began to be drawn – on the land and in human minds.'[6] With the first houses and villages, previously non-existent borders and distinctions emerged: those that discriminated between interior and exterior spaces, and that which opposed the human domain to a 'nature' that was now kept at a distance. This modification of the habitat structured our experience according to a disjunction intended to durably inform our relationship to the world: 'The newly acquired concept of "house" irreversibly changed our views of the world. Moving inside the house meant that we began to conceive nature as that which lies outside and beyond the village, rather than something of which we are an inextricable part.'[7] According to American ecologist and philosopher Paul Shepard, the simultaneous development of animal rearing and agriculture also encouraged these new sedentary people to think of themselves in an antagonistic relationship with an environment redefined as savage and which from now on had to be controlled and dominated.[8] With walls and enclosures, the village thus began its great evolution towards anthropocentrism —understood as a representation of the world that not only places humankind at its centre, but also distinguishes it from a non-human universe over which it asserts its power.

For architects, urban planners and landscape architects, one of the current challenges is undoubtedly also to succeed in undoing this initial knot and to reorientate the imagination of construction, that of the village and all the more of the city. If it is indeed true that our first houses and our first architectural communities helped to create the illusion of our exteriority and heterogeneity to an objective world called 'Nature', those of today and tomorrow probably have the responsibility – but also the power – to correct such a mistake. What is at stake is not only establishing connections rather than segregations, permeable interfaces rather than tight borders, alliances rather than subjections—but also to make them sensitive. Because the maps we inhabit also impress themselves on our minds, it is important that our cities know how to stage these relationships in order to nourish an imagination that regularly reminds us that we are, and remain, nodes in a web of interrelationships, living beings among living beings.

FROM SPATIAL PLANNING TO THE CAREFUL HANDLING OF RELATIONS

Nineteenth-century biology showed us a reality made up of organized bodies, complex physiologies, subtle balances and organized ecosystems. The raw space of ancient 'nature' devoid of intellect, beauty and goodness has faded away to reveal a polished, autonomous and interconnected living world. *'Ménager plutôt qu'aménager'* (to handle carefully rather than to plan): such is the proposal put forward by Marielle Macé in *Nos cabanes*.[9] Here, the elision of a single letter (the 'a' of *aménager*) suffices to upend a slogan that had remained unquestioned for thousands of years. The very phrase 'town and country planning' resonates with the ambition of vertical, excessive and blind interventionism; the verb *'ménager'* (to handle carefully) muffles its echoes and invites more humble modes of action, taking into account what is already there and resolving to take care of it. *'Ménager'* includes restraint as one of its positive methods, without giving up either existing or manifesting oneself—*'ménager'* is still to act, it is not to escape, withdraw, abandon. Let's go even further. Let us give this other verb another object and explore the possibilities raised by this new inflection: let us handle 'relations' rather than the territory. To put an end to this ontology of separate and distinct objects that ecology has rendered obsolete, to avoid

6
Roderick Nash, *Wilderness and the American Mind*, preface to the 5th edition, (1967; New Haven & London: Yale, 2014).

7
Giovanni Aloi, *Art and Animals* (London: I. B. Tauris, 2011), pp. 14–15.

8
Paul Shepard, *Nature and Madness* (Athens: University of Georgia, 1982); *Coming Home to the Pleistocene* (Washington DC: Island, 1998).

9
Marielle Macé, *Nos cabanes* (Paris: Verdier, 2019), p. 17.

reintroducing into the equation something like an inert, distant nature or environment, a compilation of 'bald' objects[10] that we could manipulate from afar, let us assert that we only ever act on relationships of which we are often one of the terms—and that it is these relationships that must be promoted. Handling relations carefully means ensuring that the good of one pole does not benefit from the harm of the other, seeking mutual benefits and virtuous circles everywhere.

FOR A PROJECT DIPLOMACY

If 'the primary purpose of geography is to wage war,'[11] contemporary cartographies and information can avoid the old bellicose pitfalls. They can help us to find ways to designate things and forms of action to establish a more common, hospitable world.

In a contemporary reading of territories and their inhabitants, there is no longer any need to classify them according to a schematic and reassuring symmetry. There is no longer any need to oppose the urban to the natural, the metropolis to the territories, the centre to the periphery: the population is very largely urbanized (if not by its home, then by its urban culture);[12] all territories are affected by metropolitan phenomena (issuers and recipients of a globalized production of goods and knowledge); the co-dependence of all territories, from the most connected to the most remote, has grown considerably, following a logic of ever faster and more efficient exchanges.

Faced with the multiplicity of exchanges, financial and information flows that cross metropolitan areas at every moment, the climate crisis invites us to reveal and intensify other forms of exchanges and co-valuations. It urges us to broaden the relational field of metropolises and to turn everything, beings and production, into the active agents of a new policy. On this account, all material states – solid, liquid and gaseous – that make up our world are called to the table of the common: human beings, fauna, flora, objects, architecture and other habitats (regardless of who their inhabitants are, trains or burrows), fluids, telecommunications, networks, water, atmospheres and winds. This expansion of politics is the challenge of our time. The year 2100 is a beacon, the horizon of our century, the one that will probably see the establishment of a new way of acting in and with our environment.

In an ecological vision of metropolises, strategy – from *stratos*, army and *agein*, to lead, so literally the art of leading the army – can give way to a diplomatic regime. Possible alliances are envisaged on the basis of the opportunities already provided; partnerships are set in motion on the basis of the mutual benefits that could derive from them. And it is finally in the spaces opened up by this weaving that the project can be inserted. It occupies the intermediate spaces; acts as an interface between several actors (it can transform one's 'waste' into another's 'resources'); it creates the conditions for co-valuing between functions that modern thought of space had dissociated.

This way of acting involves all scales and opens up a new field of action and new tools on most metropolitan issues: complementarity of hyperconnected (access to culture and services) and rural territories (access to agricultural production and to the landscape) ; a preservation logic combined with development in the urbanization-agriculture interface; recycling and circularity on the scale of one or more buildings; animal feeding in neglected infrastructure or thanks to biowaste produced in residential districts; alliances between agroforestry and construction companies; use of the fatal heat from data centres to supply buildings, swimming pools or agricultural greenhouses …

This refined approach makes it possible to engage in a renewed form of projection, in particular on the so-called peri-urban territories, which are today undergoing a dual crisis: social and cultural on the one hand, and environmental and energy-related on the other. This expression of the contemporary city – the most readable since the most recent – is now widely criticized because it is eminently carbonated and dependent on fossil fuels. It developed in autonomous fragments, without a guiding vision nor a logic of assemblies with its neighbours. At best we managed to arrange – yet another tactical art, from the Greek *taktikos*: the arrangement, organization or alignment of troops – its various functions in areas that were sealed off from each other. If the 'urban' form of the dense city has, in its history, been able to cope with all crises, the widespread climatic crisis towards which we are headed could most probably upset its old balances. On the other hand, cacophony and opportunistic development on the periphery of large metropolitan areas most likely represent the metropolitan 'material' most capable of resisting and of flourishing in the new challenges posed by the coming crisis. Indeed, it conceals many spaces and potentials to design and set in motion this project diplomacy. And it is potentially these territories, the least 'sustainable' today, that tomorrow can serve as a model for a metropolis of the living, a metropolis of alliances and intricacies.

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Bruno Latour uses the term in *Politics of Nature. How to Bring the Sciences into Democracy* (1999; Cambridge & London: Harvard, 2004), in which he distinguishes between the ancient 'bald objects', without risk, from the new 'hairy objects', asbestos being one example, and which hang on to us, are stubborn, refuse to be manipulated passively, but answer back.

11
Yves Lacoste, *La géographie, ça sert, d'abord, à faire la guerre* (1976; Paris: La Découverte, 2012).

12
'The most important development to which we wished to draw attention was the profound change that the very concept of a city had undergone. For some time the modern metropolis had ceased to be a place and had become a condition; it was the state of being that was uniformly circulated throughout society by consumer goods. Living in a city no longer means inhabiting a fixed place or urban street, but rather adopting a certain mode of behaviour, comprising language, clothing and both printed and electronically transmitted information; the city stretches as far as the reach of these media.' Andrea Branzi, 'Radical Architecture', in *The Hot House. Italian New Wave Design* (Cambridge: MIT, 1984), pp. 63, 66.

Admittedly, here again, the measures must be refined, the co-presences well planned and the balances examined. If such an *(a)ménagement* takes place, we can be sure that urban spaces will become places whose quality of life will not be less attractive. In this respect, the radical redefinition of diplomacy between humans and our living partners can constitute a powerful framework for reinventing the human community's ways of living-together. Far from being a renunciation in a logic of nostalgic back-pedalling, the proposed horizon constitutes an expansion: 'The radical expansion of life forms to be considered and the agreements to be built, that is the main point. […] It is the enlargement that has to be inhabited, it is in the enlargement that we have to build, on this map not only extended but expanded by the attention paid to all. […] Enlarging is not only expanding, but also knotting, reconnecting: what do you want to surround yourself with, what do you want to connect with, what do you want to immerse yourself in?'[13] The ecological vision of the city offers a renewed space of opportunities, mutual enhancement, an amplification of possibilities as long as they are reasoned with a wider range of actors and with an ear to their feedback. If the objective is to survive the global environ-mental crisis, this survival must not be imagined as a reduced, amputated post-apocalyptic existence, but rather as a more abundant, diverse and intense life for being shared.

13
Marielle Macé, ibid., pp. 77–78.