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"How to become active":

Experiences and responses on climate change in Milan, Italy

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To my family and friends in Brazil and Italy. To Pablo, especially.

Introduction

The object of this thesis is the experience; particularly, it is about the experience of living in times of climate and environmental changes and the experiences of responding to it. On climate change, there is no shortage of data: it is a very well documented event in human history - as we can see in the work of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations (UN). We can say the same thing about the actual situation of ecological collapse. Obviously that is not enough. How is it possible that despite everything, these events have not also become the most important one - one that depends on billions of human lives, and so many more of all living beings that will suffer its consequences? As Danowski and Viveiros de Castro (2014: 11) have observed, different ethnographic registers today have recorded a variety of ways in which human cultures have imagined the disarticulation of the spatiotemporal frameworks of history. This is a synthetic way of saying that climate change disrupts the physical and metaphysical continuity of the always situated entanglements of nature-societies. For those who feel implicated by these events, it is a double challenge: avoiding the worst and learning to live in an unpredictable world - as shown by the most recent IPCC report published in 2022. It seems to us that Walter Benjamin's image returns with all its force: we need to pull the emergency brake¹.

My own personal experience became the object of investigation and showed in practice how the dissociation between "concern" for climate and everyday action could take incompatible directions. Not that this work became an exercise in auto-ethnography, but this everyday experience, looked at closely, seemed to offer an interesting and important point of observation. The experience was that of finding oneself 'trapped' in something larger, which prevented a performance compatible with the current state of the earth's ecology and climate (Lenton et al, 2019; Lenton and Dutreil, 2020). My own experience was obviously not enough to develop a factual work. So I started to look at what was happening in the city of Milan. From the beginning, I had decided that I was not interested in pursuing research on governance at any level. But not because it's not important. My question was to know what people were doing about climate change - and where governance issues obviously become part of this experience as well - how they reacted, how they made future plans, how they imagined the changing world, that is, what, in the end, changed in their lives. I can say that

¹ "Marx says that revolutions are the locomotive of world history. But perhaps it is quite otherwise. Perhaps revolutions are an attempt by the passengers on this train – namely, the human race – to pull the emergency brake."

² These are 'fragments' of conversation taken with different activists in different moments of this research.

my intention was to make explicit what remains invisible in some narratives. It was about adjusting analytical tools to accommodate the practices, narratives and perspectives of those who were 'becoming active'. I was lucky enough to propose this research at a formidable moment in the global climate movement. Even if we cannot assess the consequences of these events, the year 2018 and 2019 will be remembered as a moment where something happened. And something was also happening in Milan.

Between 2018 and 2019 I could follow dozens of climate change events in the city, talk to so many people and follow the way they sought to situate themselves in this event. But the diversity of groups and themes initially provoked an analytical difficulty. How could I keep these experiences relevant if they could not all be interpreted from categories derived from the literature on social movements, activism and collective action? The solution to this diversity was pragmatic: this work focuses on the experiences of becoming active, which also includes activists who, more traditionally, could be identified as such (Beveridge and Koch, 2017; Yeats, 2014; Marchat, 2011). And precisely by making experience a central aspect of the work, it was necessary to focus on what went on in it; that is, that of knowing how these experiences were made and not least, with what things. This aspect is fundamental: it was not a question of defining in advance a category of engagement or participation, but of verifying how forms of participation and engagement emerged from problematic situations and how they were defined by the subjects involved.

If the direction taken seemed to distance me from urban studies it actually turned out to be appropriate to make explicit how urban materiality becomes problematic, in the sense attributed to this term by the pragmatist philosopher John Dewey (2016): those who become active and seek to respond to climate change do so under particular conditions (institutional, material and subjectivity) that resist. They are 'locked' in the business-as-usual of fossil reproduction. Fuels do not only run through the cables and pipes of cities; they are not only in cars or household appliances. Fossil fuels generate fossil socialities (I will turn to this category in the first chapter), that is: practices of personal and collective production that are generated and sustained with/by them.

And it was in this way that the minimal conditions for the development of my fieldwork were defined. My initial intention was to carry out a participant observation of these experiences to verify how they were made and, at the same time, how the urban materiality - as its infrastructure - became problematic for those who became active; and who therefore started to take the form of a heterogeneous public that not only expected answers from the public authorities, but experienced, themselves, how alternatives to the business-as-usual that

sustains the collective life in cities could be built. The health emergency suppressed numerous possibilities for empirical research in presence, forcing us to seek data, information and experiences through other means. Unfortunately, for some forms of observation online research cannot replace that of presence. In the year 2018 and 2019 I was able to attend different events and being present allowed me to explore not only the content that was presented, but how it was presented and this, from an empirical research point of view, matters.

For this reason, in this research I had to diversify the sources of data. My observations in attendance started in December 2018 - at one of the first demonstrations in Piazza Scala by what was to become the local Fridays for Future group - and continued, intermittently due to the pandemic, until 2021 with Pre-COP 26 that was held in Milan. They relate to demonstrations and protest acts, meetings, assemblies of activist groups, and conferences; but much of the fieldwork was made following other kinds of activities, as workshops and voluntary work relate with urban gardens and forests. On several occasions the roles of researcher and activities from a certain 'safe' distance, but participating with interest in the observed activities: that is, he takes part. The moment of writing, however, allows us to control the observations with appropriate analytical instruments: one that is attentive to situations of encounters and mismatches, of provisional, precarious or stable *agencements*.

I have tried to keep the form of a narrative by which it is possible to follow, in the words of the subjects themselves, how they sought to respond to climate change and what difficulties they encountered.

Work organisation

In **chapter 1** we will follow some of the analytical challenges that climate change generates in the interpretative frameworks of the social sciences. Our aim is that of forging categories that do not exclude the more-than-human agencies and thus allow it to be included in social analysis. In **chapter 2** we will present some aspects of the 'resilient city' that has emerged in recent years. Our aim is that of offering a reading key to follow the formation of what we call 'climate citizenship'. In **chapter 3** we will follow some experiences that seek to 'enrol' the agentivity of trees and plants for the activation of social-ecological and climatic functionalities. This will be done either through the urban forest programme or through the

transformation of the domestic environment into an ecological housing module. In chapter 4 our attention shifts to the 'green common good' that has been proposed by activists to politically contrast the proposals coming from the 'resilient city'. In this chapter we will present the territorial struggles in defence of green areas in the city. In chapter 5 we will analyse the formation and practices of the Milano per il clima network that aggregated dozens of organisations and associations active in climate change debates in Milan. Our analysis focuses on following how they defined their own practice, the challenges posed for the production of a collective action from a diversity of subjects. Chapter 6 continues the analysis of climate activists' practices, but this time focusing on what we call practices of disruption. In it we select some situations of the political articulation of these groups that show the heterogeneity, divergences and conflicts regarding the practices considered legitimate and appropriate for the transformation of the business-as-usual of climate policies. In chapter 7 we will present two experiences of generative practices. Our aim is to follow how the people gathered around these experiences seek to make more-than-human agencies a vector for subjective and political transformation, offering, not without ambiguity, a language that seeks to escape not only the apparatus of fossil support, but also that of the management of ecological functionalities.

Brief note on data collection

Much of the data gathered here was collected in the form of face-to-face fieldwork and therefore follows the negotiation practices required for this type of research. Others were collected through social media and chat messaging. The choice to use this data was a consequence of the limits imposed by the health emergency. Unable to proceed with participant observation I found myself obliged to find other ways to make meaningful and relevant the experiences I considered emergent - and therefore appropriate to be described and incorporated empirically and theoretically in urban studies in general, and of climate-activism, in particular. However this choice brought some complications - mainly ethical. Even though I had introduced myself as a researcher at the beginning of the research, my initial intention was not to turn the chat into a data source for data analyse. For this reason, I decided to omit the names of the participants. The omission of the name had to be done at other times as well. As they go through several situations of political confrontation it seemed

necessary to us to preserve the privacy of the subjects from possible retaliation due to the positions taken.

Chapter 1 More than human agencies and the social inquiry

"The constructivist question I have asked is 'what makes these human beings, these producers of the knowledge we call 'experimental' become active? In other words, 'what is the uniqueness of the adventure in which they become engaged?' 'What matters to them?' What does success mean to them?" (Stengers, 2011: 20)

"For animals, as well as plants, there have never been individuals" (Gilbert; Sapp; Tauber, 2012: 336)

When we ask ourselves what kind of changes need to happen to address climate change we should not expect only a change of human 'consciousness' vis-à-vis a 'natural world' - a kind of adaptation of secondary qualities to primary qualities (Latour, 2014; 2017; Clark, 2021; Viveiros de Castro, 2014); every response to climate change can be gleaned through its material dimension, as an agency (activity of others agents) that spread from multiples sources (Kohn, 2021; Stengers, 2020a; Latour, 2017; De la Cadena, 2015; Kirksey, 2012).

Our thesis is that looking at the material aspects of these responses allows us not only to observe them from a different angle, but also provide us with conditions for an effective 'engagement' of social theory in the era of climate change - one that not only look at the secondary qualities of human consciousness but one that allow to become an inquirer of the generalised agentivity that are part of our immediate present.

A plant growing on the house balcony dies: it is significant about the "lack of care", but also the result "of a heatwave"; the plastic bottle "is full of oil", just as the "car is a climate agent"; to "buy a product through Amazon" is to corroborate the chain of dependence that runs through people and things at low or uncalculated cost, which arouses "mistrust and incredulity about someone being an activist and buying and depending" on these distribution chains at the same time². Materiality becomes communicative, but also the object of everyday life investigation, emitting signals that reveal its insertion in an environment that 'holds'

² These are 'fragments' of conversation taken with different activists in different moments of this research.

some practices while inhibiting others (Gabrys, 2020). They became a "matter of concern" (Latour, 2004) as a "matter of care" (Puig de la Bellacasa, 2017).

What is normally understood as 'individual responses' must be situated in an environment where they acquire meaning; that is, which offer conditions by which these responses, interpreted as individual, are possible - this is what we will call a socio-ecological perspective derived by the work of Isabelle Stengers: to 'hold' something is always 'hold' in some places under some conditions and not in general:

"Here it becomes clear why ecology must always be etho-ecology, why there can be no relevant ecology without a correlate ethology, and why there is no ethology independent of a particular ecology. There is no biologically grounded definition of a baboon which would authorise not taking into account the presence or absence of baboon predators in the environment. And, in the definition of what an ape might be, we even have to include the kind of speech performance some of them are able to produce in very specific human environments. In the same way, I would venture that there is no identity of a practice independent of its environment." (2005: 187)

Classifying them as individual becomes possible by the simple fact that they have been produced in that way³. As noted by Debaise and Stengers (2021), nothing is more dependent than the modern individual. This environment is not just a background for multiple agents: it is a milieu that provides 'the hold' for agents to produce and reproduce themselves (Dutreuil, 2020). For this reason we prefer to use in our analysis the notion of person rather than that of individual - and we will use 'personal change' and not 'individual change'. What we were able to observe in our fieldwork does not refer to individual change, but to the transformation of people's techniques of bodily production (and reproduction) and the ways this body is attached to the social, technical and energetic apparatus (fossil) that sustains a particular form of behaviour and not others. We chose to situate it in an milieu (sometimes call also as environment) and not in a context - since context has a weight in the tradition of sociological studies that delimits it as a background indifferent to the actions of other non-human agents, exactly what we reject - as the climate crisis shows how this perspective had produce devastated consequences (Crutzen, 2002; Lenton, 2016; Steffen et. al. 2015). They act in a specific place; we will show in this work that this aspect counts; following Stengers' work, we prefer to say that they act in a populated, composite milieu; an milieu that is not the fixed background for human stories, but that reacts and intervenes:

 $^{^{3}}$ And that it is not a universal invariant of the human. Individual autonomy is just the effects of the chain of dependence.

"Endurance cannot be explained by any virtue of an individual that endures; it depends first and foremost on the dynamics of infection. Everything that manages to endure has managed to infect its environment in a way that is compatible with this endurance" (Stengers, 2011: 182).

Ecological and climate disruption, according to our thesis, stimulates the *explicitation work* (the art of noticing as predicted by Tsing, 2015) to/from those conditions that guarantee, enable or favour living beings and their relations - sociotechnical chain of dependence and relations of interdependence. But we must explore those who act in the consequences of this event, whom we will call climate-activists: if we can consider that some persons can transform the conditions of their own reproduction this does not mean assuming that they can be isolated from the encompassing conditions of their particular and concrete milieu that hold them up. Rather than speaking of individual responses it might be correct, instead, to define it as an *agencements* (Deleuze and Guattari, 1987) that individualises responses: responding as an individual is what remains when fossil socialities encompass these subjects, materially and subjectively in a fossil chain of dependences. But by treating it as individualisation we can take the dichotomy between micro and macro a step back by considering that it is under shared and (in)stable socio-material conditions that acts considered micro are not only possible, but inevitable.

The specificity of this mode of becoming active can be clarified when we put it in contrast with non-modern modes of existence. The category of becoming, as noted by Biehl and Locke (2010: 317), borrowed from the work of Deleuze and Guattari (1987), can highlight the "human efforts to exceed and escape forms of knowledge and power and to express desires that might be world altering". A contrast that becomes evident from the analytical constructs of individual and society - the modes of abstraction of the entities that make up a relational field - just as it has been mobilised historically by anthropologists and sociologists to describe the non-modern as well as the already modern or in the process of modernisation (Viveiros de Castro, 2015). Living beings cannot be described as detached from an environment that ensures their sustenance and reproductive viability. As Strathern (1990) shows us in her ethnographic work, the division between the domestic space - reserved for the biological and sexual reproduction of individuals - as opposed to that of the public spheres - endowed with a generality and importance superior to their parts - sought precisely to define the relations between distinct (scale, gender, etc.) but integrated (as a whole) spheres; the problem, according to the anthropologist, was both a generalization of Indo-

European concepts to peoples by which they made no sense, from the point of view of the native conceptual imagination itself, and they attested to a particular Indo-European difficulty in conceptualizing the relation between part and whole - which led to the surprising conclusion that the individual should be integrated into society (Strathern, 1988). The point we want to underline is that these categories are forms of abstraction that seek to produce systematic descriptions of empirical reality as well as to provide the analytical tools that will allow a comparison between them - as well as a historical assessment of their formations and their future development; it is a form of abstraction of relations that translates the attempt to relate part and whole, something that persists in the contemporary analysis of modern societies - in the climate change case, particularly, by the insistence dichotomy of individual and society, as that one between individual and systemic change.

The problem is always that of selecting a relevant aspect - established in a certain scientific field - as a general criterion necessary to interpret all the other practices; this is why we should speak of an ecology of practices (Stengers, 2005), in which the criteria of pertinence of each practice are not equivalent, but which, in any case, obliges them to share, not without conflicts, a milieu that makes them refer and related - positively or negatively - to each other. In the experience of becoming active, one must consider everything that enters as a vector of problematization for personal and collective transformation.

What we call a milieu is that which guarantees endurance through which living beings learn what is necessary to survive and reproduce. Sociology, if it wishes to become part of the common enterprise that seeks to redesign the modes of abstraction and the modes of existence in the critical zone (Latour, 2020), must therefore abandon certain presuppositions that do not allow it to communicate with other fields - mostly of the scientific disciplines of climate science. Without falling into the notorious misconceptions of sociobiology, the investigation cannot, however, ignore the fact that the persons for whom we seek to provide images, models and abstractions about their modes of existence are always eco-biological beings (immersed and emerged between/from a heterogeneous 'agencies') and as such possess the need for an environment through which their reproduction can be guaranteed - what Mauss (1934) defined as the development of bodily techniques that allows the enduring constitution of persons but also the transmission of these techniques.

From our work on 'becoming active' we seek to offer a point of departure that places the relation between part and whole, between 'individuals' and 'socio-material and economic system' in a way that allows us to articulate becoming active, personally and collectively, as

a practice of disruption⁴, disconnection, disassociation from fossil socio-materiality; rather than starting from an analysis of the world-system to assess the limits of individual actions ("We are not interested in individual change, we in political ecology believe we must offer a systemic critique" - Collettivo Ecologia Politica Milano Statale - 16/06/21),⁵ we will go the other way, but obviously not to redefine the world-system; we will start from what is defined as personal actions to show that they are immediately collective (Lapoujade 2020a) - in that they are part of discursive and material, concrete and particular agencements - and that the systemic connections pointed out by their advocates are modalities of partial capture materially effectuated in a given territory - which will be defined, following Tsing (2015) and Stengers (2020b; 2021), as chains of dependency.

In this case we align ourselves with those who in the field of the anthropology of infrastructure have shown us, in a concrete way, how this systemic dimension should be conceived as a socio-material construction - and not just as a discursive or evaluative dimension disconnected from any material substratum (Anand; Gupta; Appel, 2018; Larkin, 2013). It is not that materiality should be read as an effect of something else; it does something, at the same time as it makes something happen. It is this agency that is lost when, instead of questioning it from the particularities that it allows or blocks in a given milieu (Earsterling, 2021), one chooses to transform it into a simple expression of political and economic interests.

We speak therefore that we should consider sociality in a given environment - an environment that is partially captured by this sociality- which allowed Urry (2011) to to define as high-carbon, characterising a particular form of dependence on fossil fuels made possible by the construction of socio-technical systems to sustain personal and collective production/reproduction. The "geological turn" (Maniglier, 2020:62) that we must consider in a pragmatic way - in relation to its consequences and to what it allows us to do - thus refers to our modes of sociological imagination in relation to the modes of imagination of those who become the object of our investigations. These are two aspects that cannot be confused: those concerning the conceptual imagination of those we address, not always in a civilised way, and the critical balance of proper sociological investigation and description. The conceptual imagination of our 'informants/collaborators' can help us to situate the critical debate - rather than simply be situated by it - in a way that allows us to evaluate our empirical data as well as our analytical categories themselves; it is precisely this movement that we propose to follow.

⁴ The disruption as a descriptive and analytical conceptual as take and development from Grasso (2022) ⁵ https://www.facebook.com/events/483224626279261?ref=newsfeed

To do this we will start from the process of becoming active, which encompasses persons, things, objects, living beings. Becoming active will be used as a neutral category (without previous evaluation if it is good or not), being only an instrument that will allow us to cross the dichotomy between micro and macro from a location in the middle (Deleuze and Guattari, 1987): becoming active is a emergent performance that is not limited to humans.

Certainly someone becomes an activist through other peoples; but this is not enough. It is also through others (of non-human agentivity), radically diverse, that the subject becomes an activist: in his practice molecules, living beings, technological devices and so many other materials are mixed together, something that situate him distinctively as someone who seeks to respond to the climate event - but also as someone who emerges from these particular *agencements*. This more-than-human agency however must be considered in the diversity of its modes of existence (Latour, 2013). As Kohn (2021:176) and Marisol de la Cadena (2014: 254) notes, assimilating artefacts and non-human living beings within the same category implies ignoring the generative particularities, at the same time as those conditions that are necessary for their 'endurance'.

Both positive and negative evaluations are defined exactly through this dichotomy, considered as an a priori which found all other categories (domestic/public; private/ political) by which analysts will evaluate and judge individual acts, showing a symmetrical inversion about it. In our description the distinction between personal and collective is based on Strathern's definition of sociality (not society) as inherent in the definition of person; "people have the potential to relate and are at the same time always embedded in a matrix of relations with others" (Strathern, 1988: 239). It is this matrix of relations that seems to us the key point to activate other situations where it will be possible to welcome, in an interesting way, the perspective of those who 'become active'. People are produced through modelling associations (material and subjective attachments) of/with other people, things, materialities and nonhumans living beings. Their endurances lies in the permanence of the very milieu that offers standardised means of reproduction that are embodied (experienced, transmitted) as effective data for personal and collective normative orientation (How to move? What to eat? What is acceptable to live well? How to drive a car in the city? How to reduce my environmental impact?). We will call fossil socialities the relational matrix (made of material and immaterial dimensions) generated through fossil fuels. It is through this matrix that people and collectives are generated and for which fossil fuels constitute a sine qua non condition for their reproduction. This includes the exercise of individual autonomy

(Charbonier, 2020) only possible through the extensive use of natural resources, fossil or not (Mitchell, 2011). We can say that it is an extractive autonomy.

But this environment was until recently thought of as stable. The 'exit' from the fossil sociality (and the modes of existence offered by these socialities) is not effected through a change of consciousness, but through modifications of existing *agencement* of personal production and relation: replacing a diet, activating alternative consumption practices, moving differently, but also creating different kind of sustaining infrastructure (Butler, 2015) that could provide a 'hold' to low-carbon practices. It is not that, from 'concern' follows practice, as subjects are immersed in a flux of events and in different ways of assemblage these fluxes (of organising them, of making them circulate). All this may seem small. But, nevertheless, it is these practices that are part of 'becoming active' - which does not exclude or block other actions whose scale is distinct. Liberal or even conservative adherence to this perspective seems to us an indication of its transformative potential - and that it must therefore be captured, contained and controlled within limits that do not force a change in the encompassing socio-material composition of the milieu.

But different from these perspectives, we will make the always situated positionality of those who have become active a means to activate descriptions that can glean the pertinence of what interests them in the problematic situations in which they find themselves; but also an occasion to define in what way these non-fossil socialities can be generated by practices that are embedded in a fossil materiality. We should therefore speak of experience as that which synthesises 'a new foothold', a new possibility for personal and collective action. This experience, in the concrete situation of becoming active in the city of Milan, can be considered as unifying what are considered as counterposed dimensions between individual and systemic. Everyday reproduction in this setting offers numerous examples. Feeding, moving, heating oneself show the immediate connection between the personal body and the great socio-technical apparatuses that guarantee the "life support systems" (Sloterdijk, 2015) as well as those that allow it to reproduce itself in a certain way - and how this 'certain way' is constituted has all its relevance regarding a 'lifestyle' that is seen as threatened by an excessive collective interference regarding decisions that should be private (Oreskes and Conway, 2010).

Following experience and experiments therefore require a definition of a setting; the problem is that the definition of what counts in an experimentation will receive different qualifications depending on who it is addressed to - and also what kind of analytical categories we use to relate these experiences.

1.1. Following 'becoming active'

"With the notion of 'availability' the signs that mark the world and that mark the subject are redistributed in a new way. Both are active and both are transformed by the availability of the other. Both are articulated by what the other 'makes him/her make'." (Despret, 2004: 125)

An investigation into the forms of climate activism has several starting points, just as there are numerous aspects of everyday, institutional-political, economic life that could constitute an entry into the topic. Different agents must be included, including those non-humans. But each of them implies pay attention to the concrete situations where they are articulated, situations that will define their relevance and their particular modes of existence: we cannot - for empirical reasons - reduce the field between those who advocate a systemic change (change the system not the climate) and those who prolong business as usual (change the climate not the system). Climate change has become a vector of problematizations (Stengers, 2021) that cut across collective life without offering a common horizon of political unification (Latour, 2018; Latour, 2020; Danowski and Viveiros de Castro, 2014).

This is an important point. The political challenge signalled to Gaia's insistence (Stengers, 2015) invokes the collective capacity to respond appropriately to it. But how should this be done? Our intention is to bring this political problem to empirical investigation, while rejecting that there is an existing model to solve this problem. We therefore take the position of those who consider that climate change, precisely because of its encompassing and pervasive aspects, presents criticalities relevant to political activity itself. The relevance of this event compels us to consider politics beyond the institutional or antagonistic boundaries where it may be limited. By keeping politics only in this register, we argue, many aspects become invisible and therefore negligible (De la Cadena, 2015). In following the effort to institute new conditions for personal and collective life, or to actively guarantee the continuity of situated *agencements*, we must explicitly recognise that in this activity of production of collective life we can always recognise a particular capacity of activation or deactivation of more than human agency. These are the reasons for choosing to 'become active' and not just 'become an activist.

One must respond to what has caused this intrusion as well as to the consequences of this intrusion. But recourse to a form of general response, driven by the urgency of the present

challenge ('it is necessary to act quickly'), produces its risks: among them that of supposing the possibility of ignoring the question of the relevance that they can generate in particular situations. The idea of moving from the general problem to the general response makes a leap, in which mediations are restricted rather than expanded. Obviously, this problem calls to mind the image of a parliament of things advocated by Latour in 'We were never modern' (1994). That is, how to bring into the public sphere what until recently was relegated to an exterior indifferent to our actions? But what we find aggravating is that we must consider not only new agents but also agencements. Because the agent, whatever its nature, depends on the stability of the conditions of its environment in order to reproduce and actualise itself: it presupposes an environment through which its reproduction can find a way to "making a living" (Kauffman, 2000: 20).

Let us think for example of those populations already affected by climate change. In the ethnographic accounts available the reference to the critical situation is that of threatening the order of reality: it is not only about the glacier or the forest, but about the set of relations that it allows to take place. In defending the forest, it is a multitude of agents and practices that are referenced and not the forest as a mass of vegetation whose functionality of carbon capture and oxygen production is essential to living beings: the melting glaciers (Crate, 2011) as well as the forest burning and savanization will be both a geophysical and a socio-cultural event (Kopenawa and Bruce, 2013), or as we say before: a physical and metaphysical crisis.

Considering in terms of agencements allows us to keep associated what purification aims to isolate - the passage from verification methods pertinent to experimental situations in the laboratory to those situations where pertinence differs in a relevant way, since it involves agents who intervene to contrast the proposed experimental scene (Pignarre and Stengers, 2002)⁶. When we refer to the situation of urban activism in Milan, the point of departure is the ubiquity of fossil agencements. Activism seeks to create a contrast.

The investigation into the modes of existence of climate activism runs two connected risks: one of reducing it to mere points of view relativized in front of universal facts; the other (connected with the first), of claiming a privileged position of observation that would allow judging *a priori* what is relevant in what these agents do and do not do. The agents consider the matter extremely relevant to be relegated to a mere 'vision'. Insofar as 'being concerned' entails practical, material, bodily and subjective, personal and collective

⁶ The difference could be that of the development of GMOs in the laboratory and that of their dispersal in agricultural fields. If in the laboratory it is possible to isolate the destabilising factors, in the field these GMOs mix together and generate a variety of situations not foreseen in the laboratory.

transformations; at the same time that this relevance concerns the production of consequences that affect concrete *agencements* (just think about the campaigns for the construction of bicycle paths and urban forestation) and that therefore affect both those who engage and those who don't: as philosopher Didier Debaise (2008: 09) observes "For living societies to be interested means that they 'orient themselves', 'choose', 'search'- essentially that they perform an activity in relation to the environment in question". These activists feel the weight of a past; a past that is not imposed in a fatalistic way, but that constitutes virtualities (Lapoujade, 2020b) that may or may not be realised; the so-called 'Greta generation' inherits the weight of the choices of modernization and economic growth founded on the fossil economy (Mitchell, 2011)

The sociological work developed in this paper is inspired by the pragmatic definition that Stengers (2020:58) seeks to delineate as appropriate to sociological enquiry: "Et, en sociologie, cela signifierait que, s'ils veulent obtenir des réponses dignes de ce nom, les enquêteurs se devraient de ne poser que des questions rencontrant les préoccupations actives de celles et ceux qu'ils interrogent". These climate-activists are heirs of the 'Great acceleration' that had removed attention to the disastrous consequences of detachments from physical constraints - in the name of freedom from ecological bonds and infinite abundance promised by the market economy (Mitchell, 2011; Mcneill; Engelke, 2016; Charbonnier, 2020).

This is the central point to start describing this climate subject and its practice of transformation. Two aspects that can be formulated as the problem of interdependence and of a personal and collective post-abundance life. The climate and ecological crisis becomes a crisis of presence as well as a crisis of reproduction: habits that were generated in the 'golden years' (Schultz, 2020) of modernisation become harmful and criminal, in short, objects of moral condemnation. The forms of everyday socialities acquire the character of predatory modalities that subtract the chances of survival from other forms of life - reducing even their own. The big question that will permeate the discussions, efforts, and experiments will be that of building other forms of mediation, other modalities of articulating habits in an endangered environment - but also in a dangerous environment that may capture this becoming in forms of ethno-ecological closure.⁷ It is in this sense that we will define the practice of climate activism as one that must disrupt (Grasso, 2022) the continuity of fossil

⁷ The discussion about 'ecological fascism', or about extreme right-wing responses to the ecological crisis point to this: they start defining a vital space that must be protected from predatory demographic pressures. See: https://www.newstatesman.com/science-tech/2018/09/eco-fascism-ideology-marrying-environmentalism-and-white-supremacy

socialities. Instead of conscientization, we can say that activists seek to contaminate the environment in order to create other climate subjects: which explains the definition offered by activists of fossil socialities as toxic⁸, that creates materially and subjectively a predatory behaviour.

The world becomes active and in becoming active it transforms the relational space where practices and subjectivities are generated; in what way might this key point, in turn, transform the way in which we can investigate this process of simultaneous activation? We can define our approach as one focused on agencies - including human - and on the forms of classification and activation by which what we will call climate activists - which will define not only a type of political subject but also a form of activity - find themselves shuffled between different registers: scientific, informational, political, moral, economic, etc, but also with multiples agents. The climate event brings modern modes of abstraction to a crisis (Debaise, 2017), as the distinction between an objective reality apprehended by an autonomous subjectivity is unable to account for the activation of agencies other than just human ones.

The past weighs on the present either with its ingent, invasive and superabundant fossil materiality, and by the forms of classifications that are part of this environment and that transform it. Humans make history but always on the basis of conditions and classifications inherited from the past. That is why the responses to climate mutation can - and in our view must - be described through the experimentation of new agencements of bodies as well as collective enunciation (Deleuze and Guattari, 1987). No materialities without justifications of those involved, nor discourses without their material attachments. Our starting point is the meeting point where, from problematic and problematising situations, these specific subjects emerge in specific places to force a breach in the great 'anthropocene machine'. If our conclusion will not be that of observing the march of a "revolution of almost mityc magnitude" as Mike Davis (2010: 38) said, it will not even be of a disempowering fatality. It is necessary to "stay with the trouble" (Haraway, 2017), and our path will be that of understanding how the problem itself concerns a creative activity: these subjects must learn to live differently against an milieu that favours - through material and discursive conditions the continuity of fossil socialities. The problem is inseparable from the delimitation of a territory where solutions must be found/created (Chapter 5, 6 and 7).

⁸ Alice (Extinction Rebellion - XR), 06/2020.

Activists will be characterised here through what they do - including with whom and with what means, instruments, materials they do it. The theoretical dimension of this work is established from an attention to the dimension of the experience of becoming implicated in a problematic situation and what this entails. Empirical work is not just another half of theoretical work, but is precisely that which allows theoretical work to develop from particular situations. It considers the modalities of deterritorialization as well as those of reterritorialization (Deleuze and Guattari, 1987), and how the climatic event is interpreted at the same time that new *agencements* are produced.

The researcher is active in this setting as the concepts operationalised in the research delimit the possibilities through which 'become active' will be situated - what they can or cannot do and how this action will be qualified depends on how the researcher will characterise the field of reference to they activities⁹; he delimits a 'setting' in which these activists respond to his questions and hypotheses. In this sense, the delimitation of the setting tends to function as the arrangement of an experimental space where hypotheses will be tested and the responses - the trajectories - of those being questioned will be evaluated not by a right or wrong, but by the possibilities that they help to create.

1.2. Suspension: two very instructive interventions

When I started the research I decided to contact a well-known Polimi (*Politecnico di Milano*) professor of environmental engineering and science disseminator to learn more about how the climate issue was being dealt with in the city. Very helpful, he took my call and answered my questions with a mixture of surprise and irritation: I was addressing a specialist with questions that he could only answer based on what made him a specialist: public policies, international agreements, national energy policy and numbers. My questions were obviously badly formulated - it was unstructured and sought to probe the field; but the poor outcome of the interview provided a first inkling of how the climate issue could be approached - but how it could also be approached differently and definitely how I would not like to approach it. But in any case, the expert's impatience at what he felt was my lack of

⁹ Something that has happened also in other fields, as for example the symbiotic perspective in biology: "These discoveries have profoundly challenged the generally accepted view of "individuals." Symbiosis is becoming a core principle of contemporary biology, and it is replacing an essentialist conception of "individuality" with a conception congruent with the larger systems approach now pushing the life sciences in diverse directions. These findings lead us into directions that transcend the self/nonself, subject/object dichotomies that have characterised Western thought (Gilbert, Sapp, Tauber, 2012: 328)

clarity must equally be regarded as something significant. It was something that mattered to him and of which, according to him, I should inform myself better - with international treaties and agreements and energy plans - before starting my research. Or rather: that was where the climate issue should be located, according to him. My hesitation was opposed to the clarity of what should be seen and done and was expressed as an aspect that disqualified me as an interlocutor - the engineer asked me surprised where where was I doing my doctorate and who was my supervisor - probably thinking of the intense work that should be done by my supervisor to correct my research path.

In one of my first field research activities with the activists, this aspect could emerge in all its problematic dimensions, highlighting a difference between my questions and the field I considered pertinent, and that of the activists and their field - something that first emerged in my meeting with the specialist above. When I intervened in a meeting of the Resilient Gap group - a student group active in Polimi - I observed that their proposed actions did not take into account geopolitical conflicts, class struggle and capital domination as an encompassing dimension of everyday life which required - according to my analysis - a perspective centred on radical political struggle. The activist (Pietro) calmly answered me that their action did not exclude these aspects but required, however, to consider in a concrete way "both the big and the small interventions": that is, what was defined as a pertinent activity passed through the reformulation of the problems in terms of what the activists are 'forced' to do in a situation that defines them as a student collective in a city like Milan; moreover they "acted in a national and international context (belonging to the European Union) that allows and favours legal, institutional and peaceful forms of political struggle". On that day they talked about the activities they organise: cleaning expeditions; a game on how the international climate policy works in schools, activities of the Milano per il Clima network and awareness raising activities on climate and environmental issues in the city of Milan.

And it is at this moment that we must pay attention to neither add nor subtract what is part of the activists' experience as well as that of the experts - and of the whole of those who consider themselves 'interested' in the climate and ecological crisis. What had begun with the climate expert's disqualification of my research ended with my sociological disqualification of the activists' own practice. The disqualification was activated in these mismatches where the relevant field was defined and the problems that were sought to be solved - anyone trying to define what is important by their own modes of abstraction of what can be found in experience. These two moments became too significant in the field to be ignored. It is precisely the difficulty of defining how climate change affects those who feel involved and how to respond to it in an unequivocal or, ultimately, unambiguous way that brings me to a critical reformulation of my research - but also of some general ideas in the climate field research that we take for granted. We will make these differences not a reason for disqualification ("the scientist thinks that...", "activists don't think that...") but an aspect that creates obligations/constraints. The first of these is not to turn these differences into a demonstration of an error about what matters; the second is that of turning these differences into a motive (leitmotif) that allows us to follow "what is demanded by the position whose legitimacy it expresses, of what it recruits to endure or propagate, and of the way it is liable to be affected by the encounter with another position" (Stengers, 2011: 513).

And in urban environments - as in others - it is a matter of articulating new relations regarding encounters and coexistences. Evoking the exteriority of carbon as well as the ubiquity of capital does not authorise us to ignore that those who must respond to these two forms of transcendences (Stengers, 2015a) always do so from concrete situations, with the problems they pose concomitantly to those that are posed in other instances and other places - or that are pose to them; moreover they translate this event from and by the situations that they are part.

1.3. Experiences of problematic situations

"What is required by your hold?" "from what wager does your success proceed?" (Stengers, 2011: 518)

But this experience does not concern only the object of investigation (activists, specialists) but also involves the investigator: it is what marks the difference between investigating a problem and investigating problematic situations - whose definition of problem is that which is disputed between various interested parties. In the first case, the researcher would start from some concepts regarding what an activist is and does and from there would evaluate if the concrete object in question corresponds to the characteristics defined conceptually - adding, displacing, subtracting. In the second case, 'thinking with activists' means starting from the concrete experience of those who define themselves as activists and seeking to conceptually elaborate not only a modified definition of their practice - and of what can be

included in the definition of activist - but also of the problematic field that its activity refers to and without which activism would lack an object of intervention (to which situations do they refer?): but the problematic field is not the same for the activist, the environment engineer and the researcher; the confirmation of this difference is one of the aspects that emerge in the empirical research on how to face, respond to, fight against climate change and that leads us directly to the crisis of abstraction that Debaise (2017) points out. It is about disorientation regarding not only what to do, but how to do it about something that presented itself only by mediation of technology, materialities, other non-human agents or as extreme climate events (hotwave, droughts, storms etc.). The specific position of the involved subjects matter.

It is not about knowing who is right or wrong, but about raising the question of the possibilities that this difference that may disqualifies each other, can become an occasion for a collaboration that will drag everyone along - that will allow the engineer to become part of the activities of the student collective, just as the collective will disseminate the activities and studies developed by the teacher call him "our favourite disseminator". Climate change affects what these people say and what they do. They cut across these experiences in destabilising ways. The quantification of greenhouse gases (GHG) does not show us how they will enter into what is the becoming aware of the subjective experience and how this will be transformed into collective action: how it will be able to cultivate alternatives; the subjects are not faced with a purified objective situation, but with one where fossil fuels cannot be detachable from the materiality that sustains and is part of situated socialities.

It is in these smaller forms that we can also follow the emergence of responses to climate change; but to do so these responses must be situated in an environment that provides the means and the language through which they will be codified and problematised. This is why it comes as no surprise that solutions to fossil socialities acquire features that seem like déja vu of some past experiences, from the counterculture to the current slow food movements. Experiences supplanted by the modernisation front (Latour, 2013) are reactivated in a key that makes them contemporary - rescued from past tradition to offer pertinent answers to actual problems.

But it is not simply a question of qualifying them as extemporaneous: these subjects must inhabit the interstices of the fossil urban machine and the ruins of capitalist modernisation; the alternatives that present themselves are those that exist in the form of marginal territories, or of commercial circuits that manage to remain partially outside the chains of fossil dependence. Many of the experiences we will look at in this work are located in abandoned spaces. Learning to inhabit these territories forces them to find other references that do not exclude them from the possibility of there being a value, or of becoming a vector of experimentation beyond fossil sociality and urban cementation. Experimentation can be understood in the form of bricolage practices (Viveiros de Castro, 2019), insofar as they must invent their own means from available materials.

But this does not even take away the originality to which it belongs, since the operation it undertakes is precisely to propose solutions to the problem of a 'social' that must be produced by subtracting that which threatens the conditions of personal and collective, human and non-human habitability. Responding to climate change will be translated into practice as technical learning to dismantle the 'Anthropocene machine'. Fossil materiality cannot simply be abstracted from the political subjects generated through it and, equally, we cannot consider these subjects abstracted from this materiality. The empirical demands allow us to define our approach from the theoretical and methodological postulates outlined by the pragmatism philosopher William James (2003: 22) as to "neither admit into its construction any element that is not directly experienced, nor exclude from them any element that is directly experienced." In this sense we can ask: what is given to the experience of these subjects if we neither add what is not experienced nor exclude what is? The political urgency to act cannot become a slogan that neglects what counts in the experience of those who become active. The invisibility of the infrastructure of extraction and production does not therefore prevent these subjects from tracing the contours of their modes of production and consumption; it is through everyday (personal and collective) experience that they identify the fossil chains of dependence.

The activities that have been pursued in this research attest to the insistent explicitness that the personal dimension is inseparable from fossil agencements, whether as produced, but also as invested in the reproduction of these agencements. People depend, therefore, on what Sloterdijk (2015) defined as "life support system", showing that even the most deterritorialized dreams of space exploration were possible from a complete, complex and costly apparatus that allowed human and non-human life to be maintained in extraterrestrial conditions: it was necessary to produce an atmosphere adapted to the reproduction of the human body and to take care of any technical detailed that can be a life or death question. Autonomy, as Charbonnier (2020) shows us, presupposes that subjects can detach themselves from the constrictions of their environment: is an effect of the fossil apparatus. The abundance they crave is that generated by the value of unlimited growth *in an environment that should offer unlimited opportunities*. The activist who turns to local fossil agencements

finds the chains of dependency that operate over long distances. He will struggle with the interconnected mechanisms that allow extractivism to become a system. The system that must be changed, must be redefined in the light of this concrete everyday and immediate dimension that captures but that can at the same time be targeted by disruptions practices. We can therefore accommodate the conceptualization of activists while rescuing the systemic definition from the dichotomous counterposition that often appears in theoretical elaboration regarding climate action.

1.4. What can an activist do?

This first confrontation with activists and experts allowed us to re-elaborate our working hypothesis; activism cannot be analysed from a set of defined attributes; much of the analysis on strategies regarding what these activists should do, how they should organise and how they should fight is based on the assumption that this politically engaged subject can be clearly defined - that is, that there is already a set of attributes by which one could judge what the 'real fight against climate change' would be; or that it possesses a form that allows it to articulate its political struggle regardless of the situation where it finds itself. And this is where the central aspect that we will develop in this thesis lies. The event of climate change cannot only be appropriated by half. In a world that we recognise as becoming active - something that has never ceased to be, but which according to Chakrabarty (2020) was the last to be recognised as such - defining all situations as equal, as the stable background of our histories, does not exactly accept the consequences of this generalised activities. *Not all places will be affected in the same way, just as the capacity to maintain the conditions for sustaining a population in a given territory will not be the same either. By this way, the agent's performance cannot be detached from a generalised activity in a specific milieu.*

The problem with the perspective of a 'stable context' is that it does not allow us to explore the empirical experimentations that interest us in this research and that are important for the public that emerges from situations considered problematic (Dewey, 2016): the entry is made through visible and invisible materiality. Our aim is to follow how climate change 'enters' certain situations and how it is responded to. In this research, activism will be linked to urban materiality so that we can formulate questions that we consider relevant to the field of investigation and that will involve several disciplinary areas.

• How does urban materiality favour or inhibit activism?

• What can be changed?

• Is it possible to address this materiality to understand how personal and collective practices emerge?

In this sense we start from what is considered by activists as pertinent and from which they seek to formulate answers, translating the climate event in the concrete and situational dimension in which they find themselves, changing habits, transforming the urban space, occupying the roads for conflict and artistic performances, planting trees, promoting exchanges of used goods, teaching each other how to create a low-carbon lifestyle - learning to live, in short, 'in the end times' of a version of history that allowed us to ignore the incessant activity of living and non-living agents - the high-fossil modes of existence.

If we look at the variety of experiences, collective subjects, associations, that have joined the 'Milano per il clima' network, we can draw some lessons that do not discredit the way they justify political commitment, but that allow us to identify the difficulties for the production of a common world - instead of relying on the easy unification of interests in the face of a common threat: there is not a automatic unification. Our thesis is that when we look at climate activism, we must necessarily consider what it becomes the object of its attention and 'concern' for (Latour, 2004; Puig de la Bellacasa, 2017). Activism is not about a form of engagement, but it is entirely situational, or even multi-situational and therefore heterogeneous - without disqualifying it for a supposed error regarding the analysis of structural facts. It emerges from the translation of planetary climate change into concrete and practical situations that they find themselves locked-in - that is, the milieu generated by fossil fuel infra-structure and products.

Thinking through the milieu has two consequences: establishing the concrete situations faced by these activists as the field of investigation, but also that of considering the concepts elaborated by activists and researchers as inseparable from this milieu. *It will be through the experience given in this milieu that activists will problematise dynamics that are evidently extra-local.*

Therefore, beyond the modification of the concept of activism, what these experiences can teach refers to the environment considered problematic, from which activists seek to elaborate answers and from which the researcher can extract new perspectives regarding what should be considered relevant. What can climate-activism do against business-as-usual? Many things, we can say. What these activists do, and the question of what they can or cannot achieve through their practices, lies in the dimension of the possible of which no one could

claim its uselessness or usefulness as a starting point. We propose to consider, from the importance attributed by the climate-activists themselves, aspects that are part of the experience of these activists, that which offers itself as a vehicle for their concerns (that matter to them): as proof of a crime against the planet, as an example to be followed, as the invention of new forms of personal and collective existence. We should situate these activists in a path in which objects, living beings, and technologies - living and non-living materiality.

1.5. Life experiences in fossil socialities

But how can this experience be traced? Below are some personal communications that I collected throughout the research and that allow to show that climate politics should be observed also through an becoming active of objects and materials, able to provoke, to 'make other agents do something':

"I live day by day. I know that the climate situation is serious, but it's not that I think about it all the time. It worries me, but I don't know exactly what to do. When I go into the kitchen to get some water I find the climate issue on the plastic bottle. It makes me think. I feel guilty. I am looking for solutions to install a filter that turns tap water into sparkling water. Then I shouldn't buy all these plastic bottles." (L., Anthropologist, 37 years old, January 2020)

"I contribute to emissions. Sitting using this computer contributes to emissions. I currently cycle and don't use plastic bottles anymore. But the problem is not just individual. If we do not confront the power of the oil industry it will not be enough to change lifestyle" (M., Geographer, September 2019).

"Today I had to buy an iPhone for my daughter. There, obviously the disposal of the products, the short life, the whole material and human cost came to my mind. But what should I do? She broke her phone. And she asked me for another one" (**F**., Anthropologist, October 2020).

"Performing the simplest daily tasks has become cumbersome; I always assess the impact; how it was produced, whether it used oil, whether it used chemicals. It's all critical; there's always a climate dimension that you can figure out." (A., student, 26 years old).

Accounts like this can easily be found in any conversation stimulated by an explicit question regarding how one is personally situated in time of ecological and climate changes. One of the theoretical aims of this thesis is to create a place where these accounts can be welcomed without disqualification. They pose various aspects. They all refer to 'things': objects, resources, technologies; they refer to common practices, like drinking water, but also

to relations - "should I buy this for my child", "what should I dress" that put the relation between fashion and climate change. Objects that used to bear the mark of progress can now be labelled "objects of the Anthropocene" (Chakrabarty, 2020).

They provide, moreover, evidence of a business-as-usual that is not only prolonged by a personal and subjective resistance of the 'masses', but by a resistance that is produced by the socio-technical milieu - infrastructures whose lifespan is extended, urban planning decisions taken decades ago that condition the limits by which one could invent new modes of being together, amenities that are made possible by the intensive use of fossil fuels, and obviously the great fossil fuel complex (Grasso, 2022) that controls the energy sources.

Unlike the direct actions of trade unions at the height and fall of the carbon economy (Mitchell, 2011; Malm, 2016), the long distances of fossil fuel production and circulation networks impose confronting their power in a different way. This is a step through which we can investigate how a concern with forms of consumption, mobility and so on, becomes an occasion to transform the *agencement* around them. From the image of a perfect socioenergetic system, of a resilient and protected territory, the concern and practice of activists offer another perspective: one that is invaded by non-humans, who become capable of breaking through the resistance of business-as-usual and proposing new relations - that is to say, that they establish the occasion for new opportunities for collective living (which obviously includes non-humans) to emerge. They erupt as a minority becoming - in the interstices - and must invent the means by which both problems and their responses will be formulated and experienced.

But they involve what Tsing (2015) defined as the arts of noticing, or in Deleuze and Guattari's terms, as minor sciences, less interested in reproducing the same thing in any circumstance and more in translating situational specificities into opportunities of situated knowledge (Haraway, 1988) and engagement, i.e. to create conditions from life detached from extractive agencements; on this path they are drawn into experimenting with whatever they find at their disposal - meditation, yoga, veganism, bicycles, gardens, etc.

They mobilise a great variety of theoretical reference whose provenance helps us to delimit the set of problems they seek to answer (provided it works¹⁰) as well as the scientific knowledge of those disciplines grouped within the climate sciences from which activists appropriate that which can communicate directly with what constitutes their interest and

¹⁰ - we will see in the case of the syntropic farming technique developed in Brazil through the pioneering of a Swiss agronomist who goes on to codify ecology and healing practices in a park abandoned by industrialisation on the outskirts of Milan;

concern. Ideas as well as people circulate. These subjects resonate with activists' struggles in other countries, making conflicts present through an ecological reading (as we will see with Rojava, Amazonia, El Salvador, Colombia and many others) which focuses on interdependencies, and through this ecological reading they find a point of support to criticise the extractivist political economy. The critique is formulated by drawing on a state of the world understood in terms of interdependence and belonging to a heterogeneous bio-social co-existence.

We should not mobilise a psychology that reduces becoming active as a phenomenon limited to its individual expression of 'awareness', but also not as simple resistance to an encompassing biopower. The subject becomes active, but only to the same extent that - in an always situational way - part of what he experiences also becomes an active part. The experience does not take place in the same social world, identical to everyone, since it will depend on the milieu that will become active or not. This is the conflictuality proper to the New Climate Regime, of what Latour (2018) defined as a dispute between moderns and terrestrials.

1.6. Performances of activation

With climate change we see the increase of non-human agentivity being translated into devices, technology, and body techniques (Hawkins, 2011; Marres, 2012; Gabrys, 2014). And as we will show in this work, urban spaces constitute various points of passage where the chains of dependence as well as those of interdependence relations mix, overlap or negate each other.

The answers we will find here should be considered as versions that will put in place - in the sense attributed to the practices of experimental sciences - what we will call performances of activation. These performances must be understood as partial insofar as they depend on the present situations, which can be activated but also deactivated - which may be pertinent in some situations but in which in others would have no opportunity to be useful, or would be irrelevant, incapable of finding an active respondent on the other side.

It is from this difference that we will present our work: our thesis is that climate activism a politics of activation of the world and not only of subjects - can be defined not only from its programmatic political ideas, but mainly through what will become active in the milieu: problematic situations create opportunities for performances where previously inert or indifferent materiality - that is, incapable of reacting and introducing differences - starts to play the role of vehicle of problematization ('what is the ecological cost of a plastic bottle?') and engagement ('I must change my ways of consumption'). It is possible to draw numerous consequences about these performances of activation - as they articulate the construction of subjectivities, material politics and collective practices - that cut across diverse practices and that place the problem of material participation as central (Marres, 2015). Through the notion of performances of activation we will be able to verify that the responses are differentiated from two vectors: one of reinforcing 'chains of dependence' from which it is possible to ignore the intertwining of living forms and whose attention will be directed to the aspects defined as central of climate change on local level; another through that of 'relations of view considered relevant for a composition of social practices in a territory that has become active - a point of view that will be extended to other living forms and other territories.

This duality serves as an instrument of differentiation but should not be considered in an exclusive or static manner. This is because in the first case, even chains of dependency must include an extended 'agentivity' if they are to produce relevant effects, and relations of interdependency do not do without the institution of stable chains that allow the circulation of beings and low-carbon goods: in both cases it is necessary to establish continuity. But they can coexist and that is what urban climate activism will show. The political struggle will be a struggle about processes of activation and composition with this more than human agencies and not just between humans.

The Milanese activists (Chapter 5) articulate themselves in different collectives that unite them in some situations (and this aspect is important and will be explored elsewhere) but divide them in many others. How should we consider these differences? Should we use a single point of view to assess all these differences or constitute these differences as providing different points of view? That is: instead of assuming that this is a relativisation of truth, to consider it as the truth of the relative, as Deleuze and Guattari remind us? This dispersed public that emerges with the consequences of climate change are attached to concrete situations that engage them at the same time as they are engaged by them: to specific, not general, material conditions; the planetary climate phenomenon is captured in a chain of translations (Edwards, 2013) and it is only in this way that it can make ingression as a problematising presence; it is through these problematic situations that one responds; and one responds from the resources, instruments and means available in a milieu rather than in a general way. In taking the second option we cannot make use of categories that could explain away incongruities between the reality 'out there' and different points of view; a notion such as ideology would tend to disallow the practical efforts of activists as 'missing the mark', or as not being 'sufficiently aware' of the challenges they must face. It would be a way of extending the bifurcation of nature between primary and secondary qualities, making the social sciences an apparatus for research on secondary variations.

Our choice leads us however to propose to these activists other questions that do not concern the elaboration of a long term or extension programme, but from which we will be able to end this work with new challenges and new questions. It is about investigating what is going on in climate activism when they try to make the climate and ecological crisis present from problematic situations encountered in urban space. Acting in the 'presence of collapse' requires suspending habits in order to make explicit the conditions by which they are possible in the first place; it is an experimentation that concerns bodies, subjectivities but also the materiality of the world, non-human living forms, energy sources as well as infrastructures, institutional and political forms that should offer answers to the demands of public concerns. But even this presence should not be considered in a general way; these activists are not only fighting against 'global warming', but making present the particular and specific conditions that constitute Milanese 'life support conditions' - which is not the same as, for example, London; the constraints under which they fight are not the same as, for example, those of the indigenous peoples of the Brazilian Amazon, but they can make them present for the inhabitants of Milan, through campaigns denouncing the fires in the Amazon forest and the complicity of companies and the Italian state with the exploitation of the forest - that is to say, translating the apparently distant links through the explicitness of the networks that connect them and that are part of Milanese daily life, such as the bresaola - as did by Legambiente¹¹.

This is just an empirical example of what seems to be lost when we try to define the event and its responses in a univocal way; but it is where an important part of the theoretical controversies about the epoch we are currently living and who are the responsible agents is located.¹²

¹¹ https://www.changeclimatechange.it/azioni/nemici/societa-jbs/

¹² On this point it seems interesting to us to report on the conceptual and artistic research regarding the efforts to define this epoch after its first nomination as Anthropocene. They followed this route and from the analysis of thousands of abstracts contained in articles published since 2000 they arrived at the number of 113 variations on the theme. See: Hallé and Milon. (2020). The infinity of the Anthropocene: a (hi)story with a thousand names, 44-45.

1.7. Becoming sensitives: how to follow agentivity in active world

Climate change as a problem for humans does not exist outside monitoring networks, the various scientific practices that continuously add new data to this event; it must be translated from observable sensitive data to exist (Edwards, 2013). But they are also present through their translation into the design of new objects, the transformation of some practices - just think of the use of plastic in shopping - and technologies, change architecture practices and urban planning thought: these practices make us sensitive, i.e. affecting not only in terms of values but also in terms of corporal new possibilities or restrains - which does not mean to say that we are affected in the same way or that we will respond in the same way. How to get rid of what constitutes itself as a condition of reproduction of the present, which marks progress and signals an imaginary whose possibilities of realisation depend also on what causes ecological collapse and climate emergency (Chakrabarty, 2008)? How to produce within a fossil relational matrix an alternative to it? This is the impasse. By considering the responses in what we will generically call urban spaces our intention is that of describing and demonstrating how projects for the transformation of this fossil matrix are articulated.

Our project work is the inverse of what constituted the 'ethnographic paradise' of the anthropology of the non-modern: isolated populations in situations of relative material and technological simplicity. With this we do not wish to introduce a value judgement on the differences, but only to point out that these differences are relevant for the production of subjects. To produce oneself within the 'machine of the Anthropocene' implies considering this technical and machinic milieu in a positive way - that is, that faire-faire - and not simply as an economic and political context. Subtracting oneself from the machine, breaking it, evading it, sabotaging it: all these aspects that are present in the language and practice of those who have become active. If the 'primitive' populations formulate their political actions as practices which allow them to guarantee the sustenance of the eco-cosmological conditions which permit their enduring reproductions (Kopenawa; Albert, 2013), in the case of activists in urban areas, these efforts are turned precisely against the milieu which produced them. But as observed by Hage (2012), this does not only take place in the form of an anti-politics against the system, but as an alter-politics that seeks to create spaces of experimentation that allow the evasion of these socialities.

Explicitness, however, constraints not only considering previously ignored aspects, but also composing new relations with them, making them also part of what the proposition of a common world should address, but of which we do not know how it will resolve. In saying that people become active from concrete situations does not mean, however, to say that the consequences of this decision are identical for all of them; there are many ways and consequences of becoming active - including that of knowing how and what other things become active at the same time. And it is here that we might begin to delineate a sociology of climate activism whose attention lies precisely on what becomes active with this kind of engagement: it is as if we were to move from a sociology of an inanimate world to an animate one - which requires another sensibility about what becomes active in situated fossil socialities.

To the first differentiation between chains of dependence and relations of interdependence we must add others. In the first place we must say that these forms can coexist in a given space - this is exactly what we will see happening in urbanised spaces. Second, that the performances of activation performed in urban spaces appear ephemeral. This is a consequence of their immersion in fossil socialities. The activist-climate must continuously produce occasions where performances of activation are possible - and where everything that is present to his experience becomes an opportunity for him to modify his attachments or to be interpelled to do so ("should I continue to buy from Amazon?"). The problematising situation puts the subject and the material attachments in crisis; he needs to adjust the ways of coexistence between 'chains of dependence' and 'relations of interdependence'.

It is for this reason that we have decided to follow how urban materiality - consumer objects, infrastructure, non-human living beings - become the vehicle of this presence: it is through this materiality that the climate event can be translated in practical ways into processes of personal and collective transformations - a active materiality that produce consequences. Part of this research seeks to respond to the political problem posed by climate change, but it seeks to explore it from other dimensions of personal and collective life - and from which the collected material may provide us with some reading keys as well as elaborate other hypotheses. Performances of activation seek to draw out the implications of the concept of material participation in an expanded space. While Marres (2015) defined it as a performance activated explicitly by objects and technologies in domestic spaces, our aim is to extend these performances beyond the domestic space in order to articulate it - in all its ambiguity - to the overlapping urban spaces. Being low-carbon becomes a practice of articulation - but also of confrontation - whose success passes through subtraction from the dominant chains of dependency in urban spaces - which could very well characterise them as such: as socio-technical systems whose weight lies precisely in the possibility of making less of the complex processes of ecological interdependence necessary to sustain situated modes

of existence - which sustain themselves precisely through their dependence (and extraction) on the 'services' and natural functionality provided elsewhere.

Ours is an investigation of Milanese climate activism at the same time a conceptual experimentation that seeks to contribute to imaginative capacity in social research in order to 'hold' these practices without disqualifying them a priori - 'they are limited', 'they do not understand', 'they are naïve'.

1.8. A city of many cities

One Saturday morning (02/2020) I decided to follow two simultaneous events in Milano on climate change and the perspectives of political, collective and institutional action. The first was an event promoted by the Arci circle¹³ where representatives of the Democratic Party - the political force behind Giuseppe Sala's administration - would be presenting the party-line regarding the energy and ecological transition in the EU. The aim was to present the proposals and challenges of the ecological transition across Europe, and how the party's MEPs were working to promote the ecological turn in the European Union. The second event was that of a group of students - mostly coming from the Resilient Gap collective of Politecnico di Milano - residents, members of the Milanese Greens (*Verdi*) and curious people who met in the square for an event-act against the destruction of Parco Bassini - by decision of Polimi and connivance of the municipal administration.



1.1 protest 'Bassini affair'

¹³ The Italian Recreational and Cultural Association, abbreviated to ARCI, is an Italian social promotion association founded in Florence on 26 May 1957. It generically recognises itself in the ideals of the anti-fascist centre-left.

These two events are related not only by simultaneity in time but by a counterposition that produced two responses regarding climate change, ecological transition and the role of politics. In the first event a synthesis phrase allowed establishing the solutions and the problematic field to which they referred: "it was necessary to abandon youthful naivety and propose sensible and responsible answers". Young people, the Milanese MEP recognised, "had been important in pressing for a change of course; but now it was necessary to leave to politics the commitment to translate the cry of protest from the streets into concrete legislative procedures". A few weeks earlier the mayor of Milan had said that one could not be an "environmentalist only against; one had to be an environmentalist also in favour of". His speech is also situated at the time of what I will call the "Bassini affair". Several demonstrations followed in the period between December 2019 and February 2020, when the health emergency prevented the mobilisations from continuing.

But like the Bassini case, there are many others that have deserved attention and engagement from activists: the Goccia, the San Siro Stadium, the Baiamonte case. All closely related to real estate expansion projects, to green architectural projects, or as defined by the activists Federica, "of increased land consumption and cementification of the city of Milan"; in short, what is defined by them as the 'Milan Model'. The emergence of covid has interrupted what promised to be an interesting articulation between young climate activists with various territorial committees defending what was defined by them as 'green common good'. However, Milano has stood out nationally and internationally for its commitment to expanding green areas, improving the heat generation and conservation system, tackling air pollution, reducing car traffic, encouraging the use of bicycles, instituting food security policies, valuing urban agriculture, urban recycling, among others. And this apparent dissonance should not be considered a contradiction. The administration that cuts down trees is the same one that plants new ones.
Chapter 2 Resilience and climate urbanism

"The mansion of modern freedoms stands on an ever-expanding base of fossil-fuel use. Most of our freedoms so far have been energyintensive" (Chakrabarty, 2008: 208)

"D'une façon plus générale, les menaces qui pèsent sur la biosphère, la poussée démographique mondiale, la division internationale du travail conduiront les opinions publiques urbaines à penser leurs problèmes particuliers sur fond d'écologie planétaire" (Guattari, 2013: 35).

"Whatever the verdict, we have thus to envisage, borrowing Anna Tsing's expression, living in capitalist ruins, that is, in the ruins of the socio-technical infrastructures that ensured our business-as-usual life" (Stengers, 2021: 82)

In this chapter we will follow some performances of activation of non-human agencies and how the explicitness of these agencies redefines some local territorial *agencements*. We will propose different sets where we can follow the problematic emergence of a threatened and threatening environment as well as of a particular type of subject, who should respond to it, the climate citizen. Climate citizenship is configured as a set of rights and duties through which seek to (re)define the appropriate relations between subject and territory. Climate citizenship, however, is a performance that includes technological devices as living beings. The chapter is constructed as a collage of events: they are official events of the municipality of Milan, official documents, as well workshops. It stretches in time between 2019 and 2021.

2.1. Becoming 'climate citizens'¹⁴

The historian John Foot finished his book dedicated to Milan in which he revealed his perplexity about how little attention the environmental issue had received from citizens and the municipal public administration: "A dramatic pollution situation was also looming, despite the closure of large factories. Massive private motorisation and the failure of local administrations (...) had only exacerbated the situation." (2015: 201 our translation), to conclude that the city experiences an ecological-environmental catastrophe every day (idem: 206).

Since the publication of his book to this day, it can be said that many things have changed. The environmental quality is still terrible, but it cannot be said that the municipal administration and its citizens have not made efforts to reverse this situation. Administrators in many cities around the world are adopting adaptation and mitigation planning (While and Whitehead, 2011; UN Habitat, 2011; Marvin and Rutherford, 2018; Madsen and Hansen, 2019). It cannot be said that citizens have remained passive spectators of this process. Just to cite an example, we can take the actions of a group like Citizens for the Air (*Cittadini per l'aria*) has promoted since 2015, actions that are not only counter-information campaigns about the terrible air conditions in the city.

For those living in Milan, the name 'Cittadini per l'aria' has probably already been heard on a few occasions. An association that has been active in the last seven years that defined themselves by a particular form of activism. Because while we are used to the idea that activism translates into mass collective action in the streets, this does not mean that every collective action takes place as a mass demonstration (Knox, 2020). Looking at the Milanese territory - at its particularities and problems - and following how 'Citizens for Air' seek to intervene in public issues that affect personal and collective well-being, allows us to explore, sociologically and politically, other questions and perspectives on what it means - and what forms it takes - to become active, as well as that of what it means to activate a sensitivity to dimensions (as the air quality) common to the community that are continually threatened. Dewey (2016) had a particular definition of what constitutes a public. He said that in talking about the public we should not assume their existence separate from the issues that affect them and make them exist. For him, talking about the public was no longer a question of

¹⁴ Our exploratory definition of climate citizens is inspired by the work of Andrea Muehlebach (2012) where she show how the rise of voluntarism (sometimes called by her informants as "citizens with a heart") gives shape, by differents practices and dispositifs (legal, economics and political), of a particular form of citizenship that she call neoliberal.

talking about the public in general, but always about this or that public, inextricably linked to particular situations that affect and make them 'interested' in an issue or problem. The public, according to him, emerged precisely around unresolved problems, specific problems generated by actions - unregulated - whose consequences affect the entire community - or at least a part of it - without the state, in turn, taking it upon itself to resolve them.

In other words, the public emerges from a problem in which some citizens are not its direct cause, but by which they are directly affected. From a dramatic situation of pollution with devastating effects on human health in the Milanese area, 'Citizens for Air' set themselves up as a public directly concerned with solving this problem. The harmful consequences are experienced in a particular way - they are linked to a certain territory and can affect its population unevenly¹⁵; the way a public can respond does not necessarily follow a manual on what would be efficient or not. It depends on the public, but also on the milieu and the means it has at its disposal to claim a solution to the problem at its source. In the face of the continuous production of life-damaging conditions, there are several ways to become active and intervene in issues that, initially, do not seem to concern us.

In relation to urban pollution there are of course different ways of dealing with it. Each of them has to activate a particular set of actors and procedures to solve it: that is to say, a legal action is not the same as a political mobilisation, it does not aggregate the same actors and does not go through the same procedures. Similarly, if we think of scientific research, we have to consider that scientists investigating air pollution identify significant correlations that make it possible to establish a causal link between human activities, particles and molecules and chemical transformation of the atmosphere. But this linkn can be followed by a reverse pathway: starting from the current chemical composition of the atmosphere, one could identify how the human body interacts and is affected in a highly polluted environment. What this science cannot say exactly is how these humans will solve the problem. In this case, the answer can be considered an invention: it is necessary to invent the means by which all these heterogeneous aspects (where human and non-human agents are present) can be articulated into an expansive collective action capable of forcing those responsible for the problem to solve them.

The 'Citizens for Air' association transforms the generality of the urban pollution issue into sensible-concrete forms; they make the phenomenon visible and measurable; they add technological devices to the daily lives of citizens in order to transform this everyday life into

¹⁵ https://wsimag.com/it/economia-e-politica/50675-cittadini-per-laria

an 'experimental set', capable, therefore, of providing relevant data on the effects of air pollution in cities, through their streets, their neighbourhoods and their bodies. An action to raise awareness, certainly; but perhaps it is correct to say that these are actions that make others aware, transforming everyday experiences into opportunities for socio-ecological monitoring¹⁶. The subject becomes active at the same time that he moves on to consider the 'agencies' of the environment: he begins to live in the cities considering their visible aspects but also the invisible ones that surround him and that, until then, were considered as a non-problematic background to his life: it is a practice of making explicit the ecological and climatic urban conditions.

Becoming active on a problematic issue, in the practical way we see carried out by 'Citizens for Air', translates into the creation of technical and material means by which other people can become sensitive to the correlation between air pollution and collective malaise. They show, in practice, that activism can be achieved in various ways and, perhaps most importantly, through various means. The common good is a work of creation. And as observe by Isabelle Stengers, about the fact that "there is no common without a doing in common", whereby it is not a matter of simply adhering to an idea, but of shared practices around something that is important for a community - that is, for those who meet around something common that makes them think and act together. "Capacities", as note Dewey, "are limited by the objects and tools at hand" (2016: 226)

In the city of Milan we will see the administrative and legal procedures through which the environment and climate are becoming more and more the object of public policy, no longer as an externality, but as an active part that interferes in the present and the future of the city and its residents, and users, culminating with the Aria-Clima Plan (ACP)¹⁷ in 2021 - that by the opposition of centre-rights parties, was not approved. Our aim is not to analyse the document, but simply to explore some of its consequences regarding what it proposes to experience and the capacities it presupposes. We will follow a growing interest on the part of the local media, the succession of exhibitions in museums and artistic events; but the

¹⁶ Citizens by air are not alone. Other groups have also been activated to become able to monitor the air by selfbuilding air quality control devices, as for exemplo, OffTopic, an occupied social centre that made different workshops in the research period.

See: https://www.offtopiclab.org/workshop-autocostruzione-centraline-al-lambrock/

¹⁷"l'ostruzionismo messo in campo giovedì 15 luglio dall'opposizione in Consiglio Comunale ha avuto la meglio: 300 emendamenti presentati e la scelta, permessa dal regolamento per un provvedimento all'anno, di non contingentare i tempi di discussione della delibera. Il risultato, viste anche le elezioni alle porte e le prossime sedute del Consiglio limitate, è stato quello di costringere la maggioranza a sospendere il piano e rimandarne i lavori alla prossima consigliatura." https://www.ecodallecitta.it/milano-salta-lapprovazione-definitiva-del-piano-aria-clima-in-consiglio-comunale/

development of the resilient city cannot be considered only by an exclusive point of view, being of administrative mechanisms, political conflicts or scientific controversies.

We could go so far as to say that it is an entire climate citizenship that is being produced, and to this end all the means at hand are considered useful to its material, subjective and political manufacture. It's not just energy or pollution problems. Food, mobility (with electric cars, scooters and shared bicycles spread in several areas of the city), leisure, urban agriculture, commerce, among others. All aspects of urban life have been touched, and any of them receive a new definition, a new set of performativity capacities according to the levels of energy consumption and greenhouse gas emissions. But these are not isolated actions, and the 'climate citizens' involved are many. Between the end of 2018 and 2021 I could count more than 100 activities carried out in the city of Milan that had climate change as their theme.

And here lies the interest of the resilience proposal that from its origin as an analytical category to assess the carrying capacity of a certain ecological niche (Holling, 1973) become a technical instrument of urban design, part of the current language of the most varied events and scientific fields, a political program, and an ideal of collective future. From the point of view of this research, this category, in the way it is mobilised by climate urbanism, will be considered as a proposition from which it requires a codified field in terms of distribution of things and which thus allows modulating its connections to produce the functionality of the urban ecological system. Resilience does not explain anything, but becomes that which must be explained from the other concepts and the techniques and technologies it presupposes: that of guaranteeing reproduction conditions by resisting extreme events.

In one of my research activities I was able to talk to some members of the Resilient Cities Office (RCO). I had asked for this meeting, the first one, as an opportunity to introduce myself and to get to know the work that was being developed and to sound out the possibility of carrying out part of my field research within the project management. During the more than 24 months in which I was able to follow the activities on climate change in Milan, the project and its members featured in events, reports and seminars that discussed the climatic and ecological risks to the city as well as the plans and challenges posed to provide the city with the means to cope with extreme events¹⁸.

¹⁸ On the website of the comune di milano we are given to know that the strategies were "launched in December 2017 when, as part of the international project 100 Resilient cities (a programme that the city joined in 2014 under the Pisapia administration) promoted by the Rockefeller Foundation".

The resilient city must be built piece by piece. It is not only about the modification of the urban code, or the establishment of new measures to assess sustainability which produces cleavages between those who fully or partially support it and those who reject it all - through the justification of state control over private life¹⁹. But the cleavages are also physical between the territories. Using anthropologist Knox's image of 'thinking like the climate' the creation of a RCO allowed the administration to assemble ecological and climate data from a governance perspective of the effects of climate change (defined as shocks and stresses), of future scenarios for the city - if nothing changes - and of actions that can be taken to adapt and mitigate. But these data have shown how living in the same city offers differences that do not concern only those on the supply of services or proximity to infrastructure. The unequal distribution of heat, hydrological risks, contaminating particles in the air, access to green areas, risk areas for flooding has already been mapped - mostly by the Politecnico di Milano transforming the urbanists practice into a literal practice of socio-ecological and atmosphere design (Graham, 2018). As an office of 'Città resiliente', states at the Klimatfest (2021) the urban intervention "was an experiment that should wait for the results to be evaluated as fair or not." But the notion of experiment once again leads us to consider what is expected of those who should perform the experiment. Climate urbanism is inseparable from the production of 'climate citizens'.

How to situate the urban - its effects - in the climate change event? But this question could well be reversed: how to situate climate change in the urban areas? These differences will have distinct analytical and political consequences. In the former the focus would be on thinking about how urban morphology has produced climate change, while in the latter it would be about thinking about how the urban is affected by it. It would be tempting to think that they can be separated. The problem is that there are many answers that must coexist in a more or less tense way. If the future is urban, nothing more natural than to consider that the future will therefore pass through the attempt to situate this event simultaneously, the conditions of urban habitability in the midst of unpredictable climatic events. But as we have already observed, there are different responses, just as the effects and events will have different consequences: they may affect the infrastructure in an uneven way (with the interruption of the supply of services), as part of the city (extreme events that can make it uninhabitable) and its inhabitants and not all of them. The aim of this chapter is not to analyse

¹⁹ As a council of the municipality chamber from far-right Fratelli d'Italia party says, the administration wants to transform the city in the China of Mao-tse-Tung where everybody needs to move on bike. The same way with manifestos against bike line in the city.

the resilient city, but to offer a characterisation of the milieu that is built by the introduction of new devices - and new practices of living. I will say that it is a step that will serve to situate those who have become active and who will think and act collectively considering the particular conditions that surround and sustain them.

It seems to us that an analytical key to the ongoing processes can be read with the correlated categories of scalability described and analysed by Tsing (2015) and that of chains of dependence by Stengers (2020, article), which develops and extends the work of the former. Scalability and chains of dependency refer both to analytical categories used to frame ('read') ecological assemblages - abstracting them from the set of agents that constitute their particular milieu - while at the same time being properly operative, in that they effectively transform this milieu from the partial capture of 'resources' or 'goods'. As Tsing notes, "Making projects scalable takes a lot of work" (2015: 38). Scalability requires simplification, and for this to occur it is necessary to produce the *agencements* that make this possible from an operative and functional point of view.

According to Tsing "the ability to make one's research framework apply to greater scales, without changing the research questions, has become a hallmark of modern knowledge"; but as Tsing observes "the expectation of scaling up is not limited to science. Progress itself has often been defined by its ability to make projects expand without changing their framing assumptions" (2015: 38). We are here in the midst of the most intricate aspects of the 'hegemonic' responses to climate change and that seems to us to be a central aspect of climate urbanism, because "scalability, in contrast, is the ability of a project to change scales smoothly without any change in project frames (...) scalability banishes meaningful diversity, that is, diversity that might change things" (idem, 38).

What we can observe in climate urbanism is the attempt to operate through partial emphasis by transforming relevant aspects of other agents into negligible ones. According to Tsing the scalability model for industrialisation and modernisation would be that of the plantation: "They crafted self-contained, interchangeable project elements, as follows: exterminate local people and plants; prepare now empty, unclaimed land; and bring in exotic and isolated labour and crops for production" (2015: 39).

Our aim is not to claim that the two models are equivalent, but rather that the scalability of one model requires simplification and partial emphasis at the same time as the disinvestment of other agents in a given milieu. Scalability here responds not to a methodological imperative, but to a concern: to make scalable or maintain scalability is to ensure that an operation is not sensitive (and a risk) to circumstances. What is important in this preliminary presentation is that of defending the thesis that the scalability of the chains of dependency does not eliminate the existence of other agents that can destabilise it, whether they are human or not. It is not a question of resistance in the terms of the Foucauldian narrative, but rather of the emergence of events and agents that can do so. By neglecting what could disrupt scalability, the model is not endowed with the capacity to protect itself completely from unintended consequences.

When terrestrial agentivity erupts, scalability can only structure itself from tenuous and unstable condition²⁰. It is precisely the creation of territories, where conditions of habitability (not for everyone and therefore selective) and the circulation of goods and energy and material flows can be maintained (Broto and Westman, 2019).

2.2. "Living in Milan in times of climate emergency"

On 23/11/2019 I followed an event called "Vivere a Milano al tempo dell'emergenza climatica" organised by RCO in the festival "Milano Partecipa", promoted by Milan municipality and Cariplo Foundation²¹. The goal of the festival was that of "stimulate discussion and participation in public life and creating awareness of the role that each person can play, to nurture a renewed sense of belonging and community".²²

The event was organised in the form of a workshop, open to all citizens, so that they "could learn about the work of the 'resilient city' board and discuss measures to tackle climate change, at the macro and micro level", as one of its officers stated. This was done by discussing measures that should and could be carried out by the city administration, as well as by individual choices regarding mobility and food. But how exactly is the resilient city constructed? Two weeks later, on 13 December 2019, Pellizzaro was participating in another event with the same title where he talks with some representatives from Vino Va, Fridays For Future, Legambiente and Futuro Fogazzaro about climate change and local actions that can be effective²³. In this last event he can develop the administration's perspective regarding what could be done - and how - and what it was not up to them to do - zero investment in fossil fuels, "which would be an Italian state decision". What the

²⁰ As shown by extreme events that hit central Europe and China in 2021. See: https://unfccc.int/news/state-ofclimate-in-2021-extreme-events-and-major-impacts

²¹ The Cariplo Foundation plays a key role in supporting initiatives about climate change in Milan.

²² https://www.fondazionecariplo.it/it/news/istituzionali/milano-partecipa-tre-giorni-di-incontri.html

²³ https://www.youtube.com/watch?v=V-VrDYgjjIg

resilient city is showing is a division of tasks, which, although coherent, seems to us difficult to maintain over time.

In the workshop promoted by the resilient city project management in November 2019, some clues emerged on how the public administration formulated the problem of simultaneously transforming the urban energy-material flows and those of the practices of its inhabitants. The presentation model followed standard forms whereby they started with a brief explanation of the problems facing the city, followed by what had already been done and other plans to adapt the city to local and extra-local extreme weather events (which could in any way affect the functioning of the city). The dynamic of the presentation obviously followed the 'route' of landing global climate issues into their everyday tangibility at the local level. But it also showed the way in which the climate phenomenon was made explicit (visible) through numbers and percentages. The sequence is well known to those who have had the opportunity to participate in public events on the subject - but it can also be found in narrative form, in scientific or in articles for a large audience. First of all, global data is presented in a comparative time scale in order to verify the temperature variations correlated to the emission variations. The final objective of the workshop was to visualise these global data in the daily aspects of personal and collective life.

This modality of visualisation will in any case 'frame' the possibilities of responses to climatic events. The multiplicity of ways in which this presentation is possible takes on a performative aspect (Callon, 2006; Jasanoff, 2004) from the moment it defines the causal links of the changes and the various critical points that are considered relevant to confront the problem: it not reveals the reality as 'it is' but it does show in specific ways how this phenomenon materialises in daily life, in economic activities and in the norms that regulate the impact and responsibilities 'we have' about it. The data are isolated and then reassembled. The debate, however, is being captured mostly by the field of physics and economics, something that limits the possibilities of alternative narratives, mensuration and visualisation of the phenomenon (Urry, 2011; Jasanoff, 2010; Bonneuil and Fressoz, 2017). The territorialization of climate change is always already 'social' as Szerszynski and Urry (2010) points:

"Any description and prediction of climate change and its impacts is entangled with specific imaginaries of how society is, and how it ought to be; similarly, even the most likely technical of suggested responses will carry with it certain ideas of society. Climate change is always already

social; the social does not need to be added to it, just to be revealed." (Szerszynski and Urry, 2010, p. 04).

In addition to the outstanding role of natural and physical scientists, we are following a growing participation of urban planners and architects in the public debate on how to organise and design the anthropocene city (Dawson, 2017; Scott, 2016; Mostafavi, 2016; Turpin, 2013). This presence allows us to explore some 'clues' about the priority actions that are considered, as well the technical (and spatial) reference by which the work of transition, adaptation and mitigation will be translated and problematized. Urban planners, architects and designers must translate this data into tangible solutions, and an articulated materiality that could provide conditions for new practices.

In the city of Milan, in the context of the network of 100 Resilient Cities (Galderisi et al. 2020), five aspects were identified as problematic in urban climate policy: environmental degradation, extreme heat, lack of affordable housing, rainfall flooding and riot /civil unrest²⁴. This kind of intervention is based in spatial transformation as exemplified for some ongoing initiatives in city: in one hand we have some projects that require a scale of intervention that are intensive and extensive: these projects had as goal the urban regeneration of entire areas as exemplified by the Railway top (Scali ferroviari) of Farini and San Cristoforo; but also normative public policy instruments (food, energy, mobility); on the other hand we have the idea of some 'small' interventions based in "tactical urbanism" (Dawson, 2017) that can allowed benefits for residents (and in the values of areas) and whose focus is changes the usual local dynamics allowing to be used in other way: is a change in the functionalities of urban materiality. The most common cases are those of closing or limiting the circulation of cars as a way to allow other forms of use.

²⁴ Since 2009, the Municipality of Milan has been part of the international network C40 Cities Climate Leadership Group, constituted by the mayors of the world's major cities to promote the decarbonisation process at urban level. The Municipality joined the C40 "Deadline 2020" programme in 2017, committing to become a carbon neutral city in 2050 (with the elimination of fossil fuels), to help keep the planet's temperature increase at 1.5 ° C (in line with the 2015 Paris Agreement objectives). The initiative provides for faster and more incisive actions to mitigate climate change, with a Plan that has a horizon of 2050 and an intermediate target of 2030. (CAP, 9) "SHOCK STRESS- Flooding - Floods - Infrastructure system collapse - Deprivation and poverty -Phishing attacks - Hazardous materials accidents. Stress - Air and water pollution - Heat waves and extreme heat - Degradation of urban spaces - Shipbuilding management and temporary uses - Social exclusion and inequalities - Lack of decent and affordable housing - An aging population - Lack of security and possible terrorist attacks - Waves of migration - Riots or civil unrest (757). From the identification of these critical aspects, the plan was structured into 6 areas of intervention: Cool Milano: urban forestry, agriculture and climate change; Abitare Milano: social innovation, housing, youth and training; Milan City of Water: hydrogeological risk, governance, reopening of the Navigli; Circular Milan: urban metabolism, waste, urban and industrial economy; Safer Milano: emergencies, security and cyber security; Next Us: infrastructure, redevelopment and public space, underground services, immigration (757)



2.1 tactical urbanism in the municipality plans - 2019 - Polimi

Mitigation and actions to adapt the urban infrastructure are always permeated by projections, expectations and desires about the future, interrelated with materials, infrastructures and technologies (Anand; Gupta, Appel, 2018; Hetherington, 2019). This kind of projects can't be made without considering the simultaneous resistances and possibilities both from the subjects and materials (Rutherford, 2018). Accord with Pellizzaro, the Milanese chief of resilient cities,

"We work on the integration of climate risks, bringing a first level knowledge of what is happening into the city. Because, in order to plan a city with respect to climate impacts, we need to know how much temperatures have risen and what the rainfall trend is in the urban environment, for example"²⁵.

This type of data must be translated into projects capable of modifying the urban material and the relational fabric; the answers provided by the projects will in turn reconfigure the environment, endowing it with new premises and new dispositions by which the climate citizens will have to consider both their personal dimension ("how do I move in the city?") and their collective one ("what impact do my actions have on other

²⁵ https://valori.it/milano-crisi-climatica-urbanismo-tattico/

people's lives?"). To catch the imaginaries about the future of climate change we choose to use the concept of *sociotechnical imaginaries* (STI), create by Jasanoff and Kim (2011; 2015) and defined as "collectively held, institutionally stabilized, and public performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff, 2015, p.4). To locate empirically these insights Jasanoff points that "imaginaries can originate in the visions of single individuals or small collectives, gaining traction through blatant exercises of power or sustained acts of coalition buildings" (idem, p.04).

Adding a aspirational and normative dimensions of social order, this notion could captured the projections and experimentalism so much present in the debate about solutions to live in changed climates²⁶. In this case we need to consider both the 'climate urbanism' and 'climate activism' as immersed in unpredictable climate futures (Braun, 2014) where different imaginaries about how this future can be, play a very important role (Dobraszczyk, 2017). This means that different political ecologies will take form in the process of definition given by the agents - including the projects and action that take place in the city (Zierderman, 2016; Cohen, 2017). In this sense, the workshop presented the city of the future, where much of what exists today would be transformed - including the way of inhabiting the city, as well as that of acquiring new habits. Resilience devices should generate new 'climate citizens' and new evaluative skills that allow them to insert themselves in the new chains of dependencies that sustains the extrativist urban life.

2.3. Dispositif and disposition of resilience

As we saw in the brief notes on the resilient city workshop, the event should be translated into a set of descriptive and prescriptive data that could help citizens to become "climate responsible" (*RCO officer*) - for people whose skills and knowledge are very varied. In the workshop there were self-employed workers, public employees, students and retired people. Some of them developed activities that could be directly associated with the proposals of the resilient city - such as favouring the use of bicycles instead of the private car. And this seems an important aspect to us, since the need to simplify the discourse

 $^{^{26}}$ From a perspective of another global problem, such as the global justice movement, we can look at Graeber's (2009) ethnographic work, where the anthropologist made a strong argument about the political imagination against the state, looking at practices that tried to confront the neoliberal politics in the period between the late 1990s and early 2000.

based on the presentation of indisputable data may limit other ways of formulating the problem. As an accumulated sum of emissions unevenly realised over time,

"Once the whole number is established, we can begin to divide up responsibilities for carbon emissions reductions" (...) This has the powerful effect of making global climate change amenable to management at a variety of different levels - from the global to the national, local, institucional, and even individual levels (Knox, 2020: 47-48).

Our intention is not to simply criticise this approach, as it is part of the very scientific procedure that requires focusing attention on some aspects that allow establishing a causal chain of events. "In order to observe accurately", says the philosopher Alfred Whitehead, these practices "concentrate on that observation, dismissing from consciousness all irrelevant modes of experience. But there is no irrelevance" (1968: 74). The resilient city deals with phenomena that potentially matter to everyone, but it cannot define how their relevance will be experienced; as noted by Amin and Thrift (2017:27), "The city can only be known partially." The calculation of consumption and emissions is a valid abstraction, but in any case an abstraction that cannot claim general agreement regarding how fossil fuels are experienced and what problems emerge, from a personal and collective point of view, in abandoning them; but also, in insisting on their continued use. This is because even if the calculation passes through the workings of the milieu (by calculating how every aspect of urban life impacts the total consumption and emissions), this milieu is presumed to constitute the context of equal action for all who inhabit it. But this is not the case as we can see in so many episodes of resistance to consumption and emissions reduction policies. (as was the paradigmatic case of the *gilets jaunes* in $France^{27}$) - not to mention the differential impacts of extreme weather events.

The carbon-control goal provides the impetus for the design of new infrastructure networks and spatial adaptation that could reduce the energy consumption and emissions (Hodson and Marvin, 2010; Bulkeley, 2013; Blok, 2014; Mostavi, 2016). From the market solution perspective, especially in the so-called global cities, adaptation and mitigation become the common horizon of many urban administrations: instead of an insurmountable limit to business caused by climate change, it becomes an opportunity for capital accumulation (Whitehead, 2013). On the other hand, there are numerous criticisms of the hegemonic model (Goh, 2015; Goh, 2020; Dawson, 2017; Aylett, 2010a; 2010b; Cohen,

²⁷ https://www.dissentmagazine.org/article/the-yellow-vests-uncertain-future

2015) that is emerging in the last few years. The decision about the pathway to follow became a problem related with questions of power, resistance, of 'lock-in' and experimentalism. Focusing on the *dispositifs* that theoretically should guarantee the transition to a different model of social and ecological reproduction, these criticisms are based on the demand for a transformation centred on the notion of climate justice - what include not just evident aspects of climate policies but also those aspects that can be call the traditional objects of urban struggles: as the right to housing, transport, care and others. For Cohen (2017, p. 141), within the event of climate change is "no longer possible (or desirable) to deeply distinguish social from environmental politics". Outside the circuit of differentiated socio-technical networks - green enclaves - how are the transition processes experienced by those who this transition can have critical effects? We must consider that simultaneously to the emergence of the extreme climate events, emerges a heterogeneous public that problematizes it using different perspectives about social(technical) change. Many of these perspectives exist only as a potential horizon, as projects of the near future, and acquire an evident experimental character (Gareth and Bulkeley, 2017).

The focus on carbon control or low-carbons transition shows a great diversity of research strategies. Paterson and Mueller (2018) as Cohen (2017) propose to look at climate policies from an indirect perspective. The idea of the authors is that the direct effects of indirect policies can give the opportunity to see some contradiction in transition goals in traditional urban policies - respectively the case of intensification of density in north american cities and house policy in Sao Paulo (Brazil). The discussion of low-carbon policies can be situated as a development problem as made by Silver and Marvin (2018) about low-carbon and energy transition in urban Africa and by Luque-Ayala in the city of Guarulhos (Brazil) where the author discuss the "low-cost do-it yourself solar hot-water systems (2018: 226) from a post-development perspective. We can look to the conflicts, alliances and coalition building considering that it is these arrangements that will carry out the process of socio-technical transition: this is the case presented by Rutherford (2018) in the Paris municipality efforts to construct a energy policy with decarbonization goals and by Hodson et al. (2018) in the case of low-carbon transition in Great Manchester (UK). Emerge also some research about the circulation of this 'climate urbanism' as a global model develop by transnational networks: in a literature based in the notion of 'worlding cities' we can cite the work of Blok (2014) and Goh (2015) with their focus in the

production and circulation of "worlding model"²⁸ of urban mitigation and adaptation to climate change.

The Air and Climate Plan²⁹ was an attempt to establish an integrated plan that should articulate the need to reduce air pollution with those related to climate mitigation and adaptation policies, "enabling synergistic interventions that produce benefits on both fronts". The Plan aimed at producing a "zero-emission" city in an integrated way, also "from the point of view of environmental and social justice". The urban development model targeted by the Plan is in line with the one proposed to address the economic and social impact of the Covid-19 health emergency³⁰.

The relation between urbanisation, the expansion of extrativist market economy and climate change is intrinsically (Mitchell, 2011; Malm, 2016; Bonneuil and Fressoz, 2017). Is call the 'Great Acceleration' (post-1945) the period that indicates an unprecedented increase rate in the energy consumption, use of water resources, land changes use and deforestation. They are directly associated with the expansion of urban infrastructure, such as dams, transportation, telecommunication, use of fertilisers for agriculture (the 'green revolution'), just to stay on few (Steffen et al., 2015). As put by Hodson and Marvin (2010, p. 300) "cities are the material representation of today's energy-intensive economies where carbon-based energy systems—oil, electricity and mobility systems—have made the huge agglomerations of cities and modern industrial systems possible". This shows how all these aspects are part of the assemblages through which have organised and expanded what can be called the anthropocene machine: cities must be considered, as Amin and Thrift (2017: 34) note, the "one of the main products and producers of

 $^{^{28}}$ The concept of worlding is used by Roy (2011, p.10) "to recover and restore the vast array of global strategies that are being staged at the urban scale around the world. In some cases these urban experiments are closely tied to elite aspirations and the making of world-class cities; in other cases, they are instances of worlding from below (...) as laboring bodies circulate in search of survival, livelihood and hope".

²⁹ All documents of the Plan will be cited as ACP; the number of pages will be considered as shown in the digital document:

https://partecipazione.comune.milano.it/uploads/decidim/attachment/file/333/Delibera_79_del_21-12-2021_Adozione_del_Piano_Aria_e_Clima.pdf

³⁰ "Identifies specific actions aimed at integrating and consolidating pre-existing plans and measures: the Sustainable Energy Action Plan, the Territorial Governance Plan, the Sustainable Urban Mobility Plan, the General Urban Traffic Plan, the Urban Parking Plan, the Territorial Chronological Plan, the Local Food Policy, the Three-Year Public Works Programme, the General Plan for Services on the Underground, the Building Regulation, the Regulation for the Use and Protection of Public and Private Greens, the road provisions in Area B and Area C. Fulfilling the confirmation of Milan's adhesion to the new Covenant of Mayors, which relaunches the challenge of reducing CO2 emissions by 2030, the Plan also constitutes an update of the Sustainable Energy Action Plan approved by City Council Resolution No. 43 of 13 December 2018, which sets the CO2 reduction target of 20% by 2020, with regard to climate change mitigation actions. The Plan contemplates the time horizon 2025 for the return to the air quality limits and 2030 for the consolidation of a low emission city model, capable of facing climate change, through the implementation of adaptation actions., As a necessary energy transition towards a "carbon neutral" City for 2050."

anthropocene". The 'urban' becomes in this scenario a fundamental target to be changed. The first aspect is related to the central node in the resources and energy consumption (almost two third), generating more than 71% to 76% of the global greenhouse gases (IPCC, 2014). If the key sectors of urban infrastructure (transports, buildings, industries energy consumption) are the most responsible for the emissions, in the case of reductions of theses emissions we need to talk in an active policy of the mitigation and adaptation to guarantee the reductions of GHG gases in a situation of continuum increase in the flow of people, goods and capital (While et al., 2010) and at the same time prepare for impacts of extreme events and the disruption of some services (electricity, water, food).

The notion of resilience used by the administration is built on three pillars; their aim is to develop "environmental, social and economic resilience in the city by increasing the adaptive capacities of the Milanese urban system, strengthening governance and promoting investments in adaptation measures." (ACP, 2021: 744). It should be conceived as a

"proactive capacity, and not only as a reaction to an external stimulus, it can be considered as a premise for the development of a strategy that constitutes concrete and flexible implementationoriented actions through which to realise the objectives that the Strategy positions itself in terms of urban, operational and social resilience." (ACP, 2021: 751)

The concepts of resilience, as is used in urban intervention, is a translation in their practice of the system-theoretical resilience framework developed by the biologist and ecosystem researcher C. S. Holling (Meerow et al. 2016). An important reference in ecology studies on resilience, he will serve here as a starting point by which the category of resilience can be explored in its socio-spatial and political dimensions and as a systemic category in which the political-conflictual dimension is replaced by one of post-political regulation management of material and immaterial flows (Swyngedouw, 2010). According to Holding,

"resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb changes of state variables driving variables and parameters and still persist. In this definition resilience is the property of the system and persistence or probability of extinction is the result" (1973:17).

But the central aspect of this perspective is that of identifying how to produce the conditions in which resilience can be performed: "by maintaining flexibility above all

else". A population, he continue, "responds to any environmental change by the initiation of a series of physiological, behavioural, ecological, and genetic changes that restore its ability to respond to subsequent unpredictable environmental changes" (1973: 18)

And from this point we can close, with the notion of chains of dependence, the circuit just sketched. According to Stengers, "chains of dependency are fragile and often rife with conflict. They are imperatives, certainly, and demand that we neglect what they define as insignificant" (2020: 03). Each chain will "constructs an uprooted notion of dependence", but "as soon as the chains get bound to each other, they take on a power that none of them has individually, the power of creating dependencies that take on the appearance of inescapable necessities" (idem: 03)

This aspect is key to avoiding looking at the resilient city as a coherent whole. As we will see below, the statements and practices of climate urbanism can be dissected in different components; resilience seeks to articulate them properly as a system. As noted by Easterling (2021: ix), "not morphology alone, but the interaction between components, determine the richness of this loose and changeable assembly of part". It is a concept that guides practices as an effect that should be produced by urban socio-technical transformations. "The resilience framework can accommodate this shift of perspective, for it does not require a precise capacity to predict the future, but only a qualitative capacity to devise systems that can absorb and accommodate future events in whatever unexpected form they may take" (Holling, 1973: 21).³¹

Although we directly approached members of the project management team to verify their willingness to collaborate with my research, this opportunity was not allowed³². We are therefore unable to explore how the data made available was prepared or how the internal administration team members confronted the rest of the administration members. In one of the few conversations I was able to have with two of its members, they informed me that "I had encountered a great deal of resistance within the administration regarding a perspective that made resilience a cross-cutting operator in all sectors of public administration" (personal communication - December 2019). On the other hand, when asked about the continuous protests in defence of green areas that were taking place in the

³¹ Some authors argue that we are now seeing a transformation in the latest 'sustainable urbanism' model that marks a different approach (new policies, programs and initiatives) to address climate change in urban contexts. (While et al. 2010). Many cities, large and small, particularly in the 'global' cities, have shown a strategic interest in responding to climate change" (Luque-Ayala et al., 2018a, p. 03)

³² Officials suggested I write directly to Pellizzaro to ask for permission to follow the CR work but the email sent never received a reply.

city - largely motivated by the Bassini case (chapter 4) - the answer given by one of the RCO officers was that these protests were a consequence of the protesters' misunderstanding of the municipality's plans: "it was wrong because in the end the municipality will plant many more trees than those that existed in Bassini".

The Air-Climate plane traverses practices, subjects, materiality, where a point of view is outlined where it is about to "increasing resilience and promoting their ability to survive emergency situations." (ACP: 97). The resilience model, as an operative matrix of heterogeneous chains of dependence must contribute - in a material and discursive way - to produce subjects who know how to "question themselves and learn to be flexible and available in the face of innovations"; in the same way, continues the programmatic document, "the adaptation measures impose a certain change from our daily habits: to know how to give up their individual habits so that everyone, collectively, has a better chance of living well. Therefore, it is precisely from the domestic walls and everyday practices that social resilience can find fertile ground." (ACP: 767). We have already seen that the intention is that of crossing different practical registers so that non-human agentivity is internalised in order to be able to survive in the face of shocks and stress. This means that in the face of a virus, a storm or a heat wave, individuals, companies, but also the territory itself may have ways of guaranteeing its continuity. The 'individual' need to be articulated in the 'resilient machine'; but, as assembly of many parts, they will create dispositions, " a agency or potential immanent in an arrangement - a property or propensity within a context or relationship (Earsterling, 2021: ix). The individual response - or the response as 'just individual' - is manufactured by dispositifs and dispositions of the relational space.

Considering the risks to human life, to other species and to potential economic losses – such as the destruction of the productive infrastructure – the resilient model can be defined as a new technology of "government of the precarious" (Fassin, 2015) or of "environmental governance" (Luke, 1995; Scott, 2016) that emerge to regulate the relationship between climate, environment, population, and territory³³. The capacities to provide ecological services (wealth air, clean water), considering a spatial dimension that go beyond the perimeters of the city - as well as with the externalisation of natural services

³³ Borrow from the work of Michel Foucault (2017) the notion of governmentality it's being used frequently in the discussion about urban climate change exactly because it gives the grid to look to this work of 'conduction' of heterogeneous flux, material and peoples.

frontiers³⁴ - require the redefinition of the milieu and also an extended notion of ecosystem support both for local authorities as for activists. Hodson and Marvin (2009: 194) call Urban Ecology Security (UES) a configuration that marks these new techniques that try to "safeguard flows of resources, infrastructure and services (...) informing strategies to reconfigure cities and their infrastructures in ways that help to secure their ecological and material reproduction". In this sense cities are promote as viable and appropriate sites of climate mitigation and adaptation, the place where the protection of the physical and digital infrastructures of urban economies from disaster or extremes events relate with climate change become a priority (Hodson and Marvin, 2009, 2010; While and Whitehead, 2013; Luque-Ayala et al. 2018).

According to Long and Rice (2018) all the aspects described are leading to a major change in urban planning paradigms focused on the construction of "climate friendly cities" and "climate resilient cities". This shift is called by the authors as a *climate urbanism*. There is an important literature that is trying to investigate these new aspects that surround the governmentality techniques of climate change in urban contexts, related mostly with spatial and technological changes. The focus in local ecology and climate tends to invisibilise the great mobilisation of territories, people, goods, resources, non-human agents that is necessary to guarantee what Sloterdijk (2015) defined as "life-support systems". That is, to produce the conditions of local habitability it is necessary to capture (Deleuze and Guattari, 1987) other territories - human and non-human labour, as well as the materiality that is part of a particular mileu (water, soil, etc.) - which evidently raises critical questions regarding the conditions of multi-species habitability of those territories that become the object of the extractivism.

This is an aspect that will gain ethnographic visibility from the 'becoming active' of those who seek to respond to climate change while inhabiting the milieu structured by the urban extractive machine. The simple act of eating a hamburger raises questions such as the provenance of the meat, the degrading working conditions, the simplification of ecosystems for animal productivity, in addition to all the resources mobilised to produce it. And it was exactly an aspect such as food that was shown as evidence in the workshop of how "individual consumption practices contribute to emissions", and to the continuity of the socioeconomic model that produced climate change. And we cannot say that this identification is not correct, just as it would be if instead of pointing to individual

³⁴ The major urban afforestation programme has as its scale the metropolitan area of Milan and not only the municipality

practices, it was decided to focus, for instance, on the logistics of the international market, or the extrativist model of the capitalist economy. Obviously, we cannot ignore the contrasting effects that these two narratives can produce. This is why presenting climate change through strategies of inversion can be useful - as it allows to make explicit what remains invisible for some people (inhabitants of north-global cities), where to others is an explicit dimension of everyday life (the indigeous fight to stop the cattle raising in northern Brazil).

The infrastructure, from this perspective "not only has a politics but is a politics" (Amin and Thrift, 2017, p. 84) which means that the struggles about the networked infrastructure of the city become the object of interest of differents actors and institutions that want to shape and modulated they socio-ecological aspects (Hodson et al, 2018).

The incredible diversification of the extractivist urban machine will constitute the terrain where a multiplicity of publics will emerge; we will define them as been partially urban experiences; the partiality of the machine is that which is given to concrete experiences of everyday reproduction in a relational space modulate by infrastructures based on extractivism. What is being called climatic urbanism is the configuration of some dispositifs and dispositions to manage heterogeneous flows that circulate in the urban environment.

And these devices will be many: ecological certification of new buildings, such as public lighting bulbs; car sharing, bicycles and rollerblades (from the use of apps); control on the entry of polluting products in the territory, use of bio-compostable bags, green walls and roofs, use of durable bottles, sale businesses without packaging (25 counted); financial bonus for home renovation, control area on the circulation of cars, bike paths, low consumption appliances; besides all smart solutions, temperature control devices, among many others³⁵.

The resilience dispositifs should "bring out conscious and resilient individuals" (ACP: 5). The need to promote material and subjective transformations in cities from the injunction that "the climate changes and the city is obliged to change with it" (ACP: 761). But as Knox notes about similar plans undertaken in the city of Manchester the climate - and as evidenced by our DP CR informants - "climate change risked fundamentally unsettling methods of contemporary governance that administrators were familiar with -

³⁵ Here we can see some of technologies presented by Simon Marvin:

methods that built on imaginaries of the human population, markets, and economies" (2020: 18).

Resilience runs through bodies, but also the capacity for business innovation; it refers both to the capacity of the soil to absorb impacts, and the subjective dimension of standing up after a shock³⁶. But perhaps we can also speculate that the attractiveness of this category came to fill an existing gap in the instruments of governance which, as noted by Knox, did not foresee earth agentivity as a constitutive factor of management. He points to those unexpected encounters, and to the shared - but not equal - condition of precariousness. As a 'catchword' its semantic fluctuation reveals the difficulty of harvesting events in acts, as well as the multiple agentivity that becomes evident.

Resilience became part of the 'growth machine' that functions properly in an abstract mode, insofar as the calculation of resources is carried out through the exclusion of everything that can be a source of value to the inhabitants - or that can disturb the scalability; in these aspects can be complete remove from the resilient city, as we could attest in the insistence of the activists protests: "we need to transform the current development models".

In this sense, it is convenient to consider that these conflicts around the 'resilient city' (Chapter 4) will not emerge only in terms of conflicts between social classes. We will see the emergence of various problematic situations regarding the 'innovations' to be introduced. These innovations will become the object of diffuse concerns (introduction of monopathins and shared electric cars; replacement of the energy implantation of popular homes and the economic cost of the energy transition for the poorest populations); the transformation in the socio-material fabric will affect distinctly, constituting a cause for concern, being relevant for collective action. As the modification of this socio-materiality will produce countless problematic situations, it seems appropriate to pay attention to how various publics will emerge from them; publics that are connected with various aspects that make up the anthropocentric urban machine. In this sense we considered that

"democratic publics are not the expression of some pre-existing community, such as a nation or a city, but groups of strangers who share only one thing, being affected or concerned by the indirect consequences of others' actions. Such consequences, and the problematic and controversial

³⁶ "Del resto dagli eventi traumatici e negativi si può sempre imparare: ecco la pro-attività associata al processo di costruzione di resilienza adattiva". (ACP: 894)

objects, things and issues in whose shape they materialize, thus enable public life." (Blok and Farias, 2016: 6)".

It should be clear that these transformations are not just an output of urban planning. The ecological and climatic re-reading of social practices starts to 'contaminate' all aspects of everyday life. It becomes present not as a representation of events, but physical-material presence, as experiences that introduce new aspects into the milieu and are at the same time modified by it. Companies as associations, public agencies as design practices, artistic practices as well as advertising, political parties as companies. It would be difficult to find a place that has not been affected by this event - which is not to say that the responses are all equally effective, that they are equivalent or that they have the same capacity to modify the urban material-relational fabric. In any case we can say, from the empirical research carried out in Milan, that climate change, in all its various forms of 'be present', assembles the practices that populate the urban space, being an aspect that by making inroads into experiences of their inhabitants, transforms them as well as their milieu. It is not only that urban materiality is used for certain purposes. This, for example, is a central aspect of the various versions³⁷ (Despret, 2002) about transition practices. These versions are not only different visions, but perspectives that emerge from the particular articulation of the milieu that is attached, and whose analytical aim is that of highlighting, "la signification de termes (...) des situations concrètes" "car on n'abstrait jamais en générale, toujours sur un mode déterminé" (Stengers, 2020: 27).

Returning to the elaboration of resilient *dispositifs* - as outlined in the municipal administration's proposal - we see that it is articulated in three pillars, each with its own specificities, as it seeks to rationalise the diversity of 'agentivities' it must consider in a functional manner. Environmental resilience produced the injunction that design practices should provide answers " to the various climatic and environmental issues that arise (rising temperatures, flooding, air pollution, etc.), in particular by returning a significant part of the city territory to vegetation and permeable surfaces, and trying to rediscover the importance of nature in the urban context, also at the level of the well-being of the population and the increase of biodiversity." (ACP: 760). In the case of social resilience, it

³⁷ "According to Latour, a theory or a device can be defined as 'occasions' for a version, or to take up his terms, they are constituted as an 'offer of opportunity' addressed to a phenomenon (...) a device can be considered as an offer of opportunity to phenomena which, in other devices, would have no chance of existing (...) there will no longer be a body left to itself which is asked to react, but a different scene which is filled with 'offers of opportunity'' (Despret, 2002: 23)

should be understood as "the capacity of an individual to generate biological, psychological and social factors that allow him to resist, adapt and strengthen himself, in the face of a situation of risk, generating an individual, social and moral outcome" (ACP: 762). The last pillar would be that of economic resilience,

"defined as the ability of an economic system to return to its initial state after suffering a shock or after a disturbance. It can also be defined as the condition in which the system contains within itself the adaptive capacities that allow it to spontaneously reorganise, after a shock, its structure from an economic, institutional and social point of view, and to find new paths to growth" (ACP: 772).

The introduction of dispositifs and new dispositions in the urban milieu should contribute to promoting "survivability in emergencies and reducing repair costs" (ACP: 262). As we have seen, among the aspects considered critical, we have those of the serious social consequences that can be triggered by disruptive events - Covid being one of them. Thus, it soon emerges that an "urban system cannot be considered detached from the community that inhabits it and, consequently, even when it comes to issues such as climate change adaptation, one cannot ignore the need to contaminate communities with a resilience paradigm." (ACP: 763). And this contamination occurs through the multiplication of devices by which responses to climate change can be performed: 'climate citizenship' cannot be achieved without the means to do so. This involved a great variety of dispositifs that can give a hold to the subject practices: but in the other hand we could follow differents 'grassroots' initiatives that try to activate other minor dispositifs, as permaculture techniques, guerrilla gardening and common spaces, agroforests; or to use the new cycle paths as infrastructure that allowed dozens of cyclists to gather publicly so that there would be enough cyclists to block traffic in the central area of the city - a action that was call 'Bike Strike'.

In the case of minor dispositifs we think that they can be situated in what Schlosberg and Coles (2015) call the "new environmentalism of everyday life", concerned with "sustainable materialist focus on collective practices and institutions of provision of the basic needs of everyday life" (2015: 166). The emphasis in materialist aspects is important because create a bridge between the importance of socio-technical aspects in the discussion of 'climate urbanism' and the experience of everyday life that become a focus (and concern) of these movements and activism: not just a question of 'consumers behavior/choice' but also of the production, circulation and reproduction of flows by which they try to confront problems of power and inequalities. The concern of these movements with the flows of everyday life represent a new materialist politics (Schlosberg and Cole, 2015) and can help to understand the "embodiment" solutions of subjectives and social change related to a perspective of low-carbon transformation - which according to us is the missing point in recent analyzes on the subject³⁸.



2.2. Strike for the climate/2019 - image from Facebook - Milano per il Clima

Some of these 'experiments' can be found in the example of "transition towers". Barry (2012: 115) argues that the transition town movement illustrates a 'creative adaptive management' approach to building more resilient communities. They are based on the "basic belief that communities of people can shape the conditions (socio-ecological and social) for their own flourishing". To North and Longhurst (2012: 1424) transition initiatives working at a "city, town or grassroots level to develop community based

³⁸ Evaluating these political actions requires a conceptual distinction about the agents, goals and the means that are mobilized to effectuate their actions: in this case seeing to us that a very important distinction had been made by some scholars about what is call the *green*, *gray* and *luxuries* ecologies. The *gray* ecologies is based in interventions as infrastructure and on the built high-tech environmental strategies that produced little pollution; the *green* ecologies is defined as more traditional policies as green areas, parks, urban forests that could improve quality of air water and well being (Cohen, 2017; Wachsmuth and Angelo, 2018); the *luxury* ecologies denote projects and developments aimed principally at benefiting the "professional class and associated businesses, especially finance, real estate, and the firms that assist and surround these" (Cohen, 2017: 143). These scholars are trying to forge a framework that could give density to the collective experience that have as a goal lowcarbon transition that don't end in the production of more inequalities and vulnerabilities of disempowering people. Based on ethics and normatives issues of equal rights, a idea of democratic ecologies that emerge, from our point of view, need to go beyond a just-between-humans approach of traditional political and social science to include in a more explicit way the position of non-humans in this new urban assemblages - or as observe by Centemeri (2018: 299) as "multispecies commons" that can be take as a speculative proposition about possible trajectories that diverge from the anthropocene model.

strategies which aim to reduce dependency on non-renewable energy and reduce greenhouse gas carbon emissions, over time, by creating fulfilling low carbon livelihoods in localised economies". In both analyses the point is to modulate sociotechnical and spatial changes by the 'embodiment' (Schlosberg and Cole, 2015) of low-carbon practices and goals in local and everyday level.

The problem of social change in the local and everyday level puts some questions that are related to the problem of scale. In the specific case of some experiences of transition (North and Longhurst, 2012) or adaptation projects (Goh, 2015; Braun and Wakefield, 2014), actions can be considered punctual in terms of scale and ambiguous with the results. Some authors have pointed to the risks of producing new forms of inequality (Davis, 2012), exclusions (green gentrification) and green enclaves through the bypass (Graham, Marvin, 2001; Hodson and Marvin, 2010; Cohen, 2017; Hodson et al., 2018). An intervention to reduce emissions, to capture CO2 from the atmosphere (as proposed by urban forests), to invent new techniques of risk management (digital sensors systems) or to promote a 'circular economy' should therefore be considered as actions that will always operate from a defined socio-spatial dimension; this means that it act in a field composed of a multiplicity of actors and interests, coalitions and hegemonic forces capable of conducting these processes that will shape urban socio-ecological aspects (Zeiderman, 2016; Cohen; 2017; Wachsmuth and Agnelo, 2018). Thus, as Blok and Farias notes, "the kinds of struggles made visible are those that result from the irruption of ontological and epistemic uncertainties, whose resolution involves the invention of new political arrangements." (2016: 7), something that cannot be reduced to structural conflicts between social groups.

The aim of this chapter was that of exploring the resilient city from the dispositifs and dispositions it should produce. There is no resilient city without resilient citizenship. This aspect has been neglected in urban studies due to the priority focus given to public policy and economic aspects. We do not think that these aspects are irrelevant, but we consider that the time has come to look at what personal and collective practices these devices and dispositions have generated.

Chapter 3 The urban forest: green infrastructures in the resilient city

"All the architecture that we know of is architecture of the Holocene. Architecture has had to deal with a lot of unpredictable factors, but the climate of the Holocene has always been an assumed constant."³⁹ (Wark, 2017)

"Infrastructure itself is a political" (Von Schinitzler, 2017: 129)

3.1. The forest for Anthropocene

As we saw in the previous chapter, that is an imperative that has become common: it is necessary to make explicit the climatic and ecological conditions that sustain life in order that these conditions could become the object of planning and interventions. In this chapter we will focus on how the forest becomes a device considered central to respond to the climate and ecological crisis of our time and how it was translated as dispositif for a green living - in this case, to be put in private houses. The data presented here were collected between the years 2019 and 2021 and focus on official public events where the urban forestry plan of the city of Milan was presented, official documents, newspaper articles, and artistic, architectural and design events where trees and plants in urban planning was discussed.

Our aim was that of exploring forests as a dispositif that should be installed in the urban machinery to contain some of the worst effects generated in the local context by this very machinery; this will be done by "empiricising concepts, [to] examine how weighty problems of knowledge, politics, and the real acquire their significance in specific settings" (Marres, 2015: 160).

As noted by several analysts, the issue of forest in cities is no longer just a practice of activists committed to regenerating/reforesting areas (or creating collective gardens): it has become a mainstream instrument of urban policy in times of climate change (Myers, 2019; Blok, 2014). The proliferation of vegetation cover becomes a component - a part of this urban

³⁹ https://www.e-flux.com/architecture/accumulation/122201/from-architecture-to-kainotecture/

fabric - characteristic of contemporary challenges to which different forms of urbanism will respond (Hobson and Marvin, 2010).

As announced a few years ago by Mostafavi (2016: 17) "we need to view the fragility of the planet and its resources as an opportunity for speculative design innovations rather than as a form of technical legitimation for promoting conventional solutions". From the need to reinvent the cities various actors began to speculate about what this new city should look like:

"The municipality accepts the challenge: it will be one of the "Reinventing Cities" taking part in the call for proposals launched by the C40 network, the network of leading cities in the world, calling on architects, designers, entrepreneurs, associations and artists to regenerate five areas of its territory from an environmental and urban point of view.⁴⁰

This response to climate mutation is being built around the notion of a pressing challenge to transform cities. At the end of 2018 an international exhibition opened at the Triennale di Milano directed by Stefano Boeri - a character who is extremely relevant in how this model has been formed. Called "Broken Nature: Design takes on Human Survival", the exhibition brought together several works that gave shape to this variety of experiences. And this is what it was all about: climate change needed to take shape, to be named; they needed to acquire existence by translating the planetary event into speculative but tangible forms. The climate changes acquire form, being situated between the collapse and imaginaries about a possible future. The sensitive/aesthetic beings are generated in order to affect the milieu and become a public concern; but at the same time they serve to solicit speculative acts (personal and collective) as alternatives to the fossil-modernist narrative.

"Under these circumstances, it is not enough anymore for designers to be politically and chemically correct. "Organic," "green," "environmental," and "sustainable" are buzzwords that have been applied in earnest to design—including food and fashion—over the last two decades, as have the terms "ethical" and "aware." Yet, despite these noble intentions toward humans, animals, plants, and places, we are still—as individuals and communities—tracking a course of destruction through overconsumption and disregard for countless forms of life, including our own (...) *Broken Nature* thus demands us all to collectively apply our resources in order to constructively repair the damaged ecosystems that we inhabit and shape. The monitoring and reparation process will require

⁴⁰<u>https://milano.corriere.it/notizie/cronaca/17_novembre_17/milano-5-quartieri-reinventare-parte-bando-internazionale-8f73cc78-cb03-11e7-bd3e-51a6bf213dd1.shtml</u>

concerted efforts by interdisciplinary and international teams, by companies, industries and governments, and at grassroots levels. (...) The aim is to reconsider our relationship with nature beyond pious deference and inconclusive anxiety and instead move toward a more constructive sense of indebtedness to the environment."⁴¹

But as we will see in this chapter, the way in which this new relationship with nonhuman agency is being constructed does not necessarily mean a break with its extractive logic - to the extent that it continues to depend on resources extracted from outside its territory. The forest is planned for life in the Anthropocene (Myers, 2019) and not against him. Urban forest doesn't mean getting rid of the chains of dependence. In 2019 the Milan architecture week⁴² seeks to elaborate from the architectural and urbanistic language the challenges that were posed; the same with the design week, with the fashion week. Practically every major 'creative' event in the city became an occasion for experimentation with language and forms. They produced responses from particular expertise and for a varied audience. Data on the state of the climate is not enough in itself. It seems to us that herein lies one of the reasons why the recurrent recourse to the notion of cognitive or political deficit is fallacious: that of presupposing a passage without transformation of information in different registers. Communicating the crisis requires putting scientific data and speculations about current and future consequences into sensitive, i.e. present, forms; but this means that there will be various ways of translating the climate event into forms, objects and technologies that will compose the milieu and generate new social practices. The intelligibility of the urban forest should be sought from how it is articulated in the particular conditions of the Milanese milieu.

⁴¹ http://www.brokennature.org/exhibition/theme/

⁴² https://triennale.org/eventi/talks

TREND PIANO PIANTUMAZIONI 2016/2019



3.1 Tree and shrub planting trend graph 2016-2019 in Milan - source presentation Piero Pelizzaro, Chief Resilience Officer, 2019

But why start with these short stories on design and architecture? Our attempt is to provide some indications as to what kind of transformations urban space is invested in and how this transformation must perform an agentivity capable of resisting the impacts of climate change and the consequences of fossil socialities; these responses have been elaborated within urbanistic and architectural practices which may help explain the characteristics it has taken on: as part of the specialisation of professionals the urban transformation has been guided through the possibility of quantification and visualisation of the climate change phenomenon in terms of scale; it is obvious that this quantification is important; however, when it comes to investigate which social practices it can generate and which *agencement* are produced in the territory, it seems to us that these questions are not properly considered by the analytical devices of the urbanist field.

In an interview with the Italian newspaper Corriere della Sera, Boeri⁴³ returned to the argument by pointing directly to the need to change the way cities are produced.

"Only from the urban fabric can concrete solutions be found to solve the problem of global warming. This is why we must bring nature back into the cities. The Vertical Forest - with all its emanations - is nothing more than an attempt to make metropolises greener. Where it is not possible to do so with large parks - Central Park with its 20,000 trees was created in 1857 - we can design vertical and super-concentrated forests".

⁴³https://www.corriere.it/cultura/18_novembre_23/museo-design-stefano-boeri-triennale-salone-milano-shanghai-c2e2899e-ef49-11e8-9117-0ca7fde26b42.shtml

After every 'bad weather' that hit the city the newspapers reported the events, which made the activists angry, who would rather see in the calls of the newspapers the correlation of these events with the transformation of the earth system. As put by **M**., "words are important, continuing to talk about bad weather legitimises people to do nothing because 'it's bad weather, it was there yesterday and it will always be there'; talking about the effects of climate change imposes a responsibility" (23/10/2019 - chat). In a report from Legambiente, we can read that Milan, from 2010 to 2021 had a total of 30 events, is one of "the urban areas that has suffered most from the consequences of extreme climate events."⁴⁴



3.2. Extreme events in Milan – 100 Resilient Cities

But the tone of the narratives is one of appreciation for the direction Milan is taking. It is necessary to protect itself "without losing attractiveness, without excluding growth and without harming business" (Reinventing Cities event - Triennale/2019). In this sense the adhesion of the municipal administration to the networks 100 resilient cities and C40 is taken as a positive sign:

"There is no subject that is closer to my heart," the mayor swears. He recalls his commitment within the "C40 Cities" network, the association that brings together the world's largest cities. There," he explains, "we are all extremely convinced that this is the most sensitive issue for the future of our communities. Unfortunately, it is also the most neglected. Everyone says they are

⁴⁴ https://www.legambiente.it/wp-content/uploads/2021/11/Report-OsservatorioCittaClima2021.pdf

aware of it, but few are willing to make sacrifices of their own. (...) For Lombardy's centre-right, the solution is already in place. "Paolo Grimoldi, regional secretary of the Salvini party, replied: "Let's speed up the path to autonomy. "Let's do it quickly, so that an organised region like ours can have more means to monitor its territorial areas at higher hydrogeological risk and prevent and limit the damage caused by bad weather, which, with global climate change, is no longer an isolated exception."⁴⁵

There is no general response to climate change and the consequences of these responses will gradually configure the milieu that other agents must necessarily take into account in order to act. As we can see in the characterisation set out in Corriere, political cleavages will shape long-term strategies, which in turn may affect how one might live in a time of permanent climate emergency.

One of the outputs of long term planning was the Forestami. The project was created in 2018 as the result of a working group from the Polytechnic of Milan whose objective was to study forms of intervention in the arboreal component in the city of Milan and the metropolitan area. Forestami is the project promoted by the Metropolitan City of Milan, the Municipality of Milan, Parco Nord Milano, Parco Agricolo Sud Milano, ERSAF and the Milan Community Foundation, which provides for the planting of 3 million trees by 2030, to clean the air, improve the life of the greater Milan and counteract the effects of climate change. Born from the research of the Politecnico di Milano thanks to the support of the Falck Foundation and FS Sistemi Urbani (Train State Company) the funds for the tree planting is based on a public-private partnership. The program also includes different fundraising campaigns aimed at Milanese citizens, such as donations, but also in the form of a gift of a tree. "The best gift is to contribute to the growth of your city's natural capital. Birthdays, anniversaries, graduations or simply to celebrate a special moment".⁴⁶

The aim of the project was to identify "measures to increase urban vegetation (in its various forms: from afforestation to green roofs and walls) and drainage surfaces in order to respond to rising summer temperatures and reduce the risk of flooding from extreme weather events". (ACP: 118). The municipality, however, is not alone. Several others have joined the large Forestami programme, as well as the Lombardy region itself since 2017 has funded the construction of green infrastructure, whose aim is "to safeguard and improve the rural

⁴⁵https://milano.corriere.it/notizie/cronaca/18_novembre_05/allerta-maltempo-sfogo-sala-rischio-climaticoadesso-basta-98128f6e-e0eb-11e8-b7b1-47f8050d055b.shtml

⁴⁶ https://forestami.org/regala/

landscape environmental system through the creation of new forests and complex green systems"⁴⁷.

From landscape planning to ecological restoration of ecosystems, how the forest enters planning calculations are various. As Myers observed, what is needed is to "make sense of the ways that garden designs variously inform, sediment, and disrupt the very infrastructure of plant-people relations, especially in cities." (2019: 116) It must not only enrich the forms of ecological interaction in the territory - in a perspective of enrich, protect, create resilience - but must also respond to the challenges of atmospheric control and CO2 absorption that are produce in the same space; in the 'urban fabric' the tree are reframe as cleaner technology for human and nonhuman well being. The urban forest can be many things and it would be wrong to define it based on just one modality (recreation, environmental services, aesthetic character). It is always part of an assemblage - composed as intentional (object of the urbanists' design) and not intentional (through its spontaneous rhizomatic expansion) interactions: will be a device to re-design urban and climatic aspects, but also of personal and collective everyday life in a micro-scale of emergent interactions of high-carbon and low-carbon materialities.

The issue of the urban forest when transformed into multifunctional bio-technology requires a social-spatial dimension to 'socialise' vegetal beings: a place where they should be associated and where they can proliferate, improving their 'functionalities' at the same time changing the human-nonhuman associations. The trees/green need to be assembled in new semiotics and material fields (Bataglia, 2017). Is articulate in different socio-technical imaginaries about future transformations of society and the earth-system. Its shape will emerge from the relationship with a sociomateriality already given or about to be formed up: can be a tool to adapt the business-as-usual of high-carbon socialities to extreme events but also generate new possibilities to everyday lives infrastructuration (Nolan, 2018; Carson, 2019). This is the case of the urban forest as a "technologically enhanced garden-in-themaking, built by workers interpreting architectural designs. This was a garden that would have to be tended, weed, and watered to keep it thriving" (Myers, 2019: 116).

Trees have been the subject of a long codification of what it is capable of doing. As a living being it interferes with the living conditions of other biotic and abiotic beings (Coccia, 2018). This seems to us to cause an analytical problem for the social sciences, particularly evident in urban studies. One of the reasons may be exactly the fact that in urban studies the

⁴⁷https://www.bandi.regione.lombardia.it/procedimenti/new/bandi/bandiByTitolo?titolo=Infrastrutture+verdi

problem of materiality cannot simply be ignored. But this materiality will become the effect of something else, such as economic or political power, or both. From this perspective, the forest is instrumentalized to achieve an end; it is an accessory for the materialisation of a political project or an alternative vision (Angelo, 2019a; Angelo, 2019a). We do not deny that the design of urban forests will configure fields of possibilities at the same time as it will block others, acquiring a performativity that we could define as political. Its 'functionalities' will surely have particular effects, the consequences of which can range from an improvement in the quality of life to the configuration of what Nixon (2011) calls 'slow violence' - from the expulsion of territories due to price increases by green gentrification process.

Just as Tsing identifies in the plantation the model through which it was possible to give scalability to the industrial processes of the factory, the anthropologist James Scott (1998) identified in the emergence of forestry a paradigm which would guide state actions to rational planning of the territory and its resources. According to Scott, it was a matter of following the forms of rationalisation as the material and discursive articulation of a new territorial landscape; that is, which did not only presuppose a model by which to think, but a matter to be thought. It was necessary to transform, in the case of forestry, a 'disorderly' forest into a stable and manageable whole for the production of essential resources. To capture the multiplicity of interactions of heterogeneous agents - with distinct development temporalities - in simplified and, therefore, become scalable. According to Scott's (1998) analysis of German silviculture, this practice was driven by the issue of centralised control and management over timber reserves and stocks. Instead of managing species or individuals with several growth phases, forestry (the planted forest) allowed (and intended) the rationalisation and optimisation in the production and administration of resources.

These initiatives of "social engineering" (Scott, 1998: 04) constituted an instrument of modulation and design of a manageable environment. According to him, the new forest science "was called cameral science, an effort to reduce the fiscal management of a kingdom to scientific principles that would allow systematic planning" (Scott, 1998: 14). The need to manage natural resources will imply the selection of appropriate species to provide the goods deemed necessary; this in turn will produce another movement, that of the delimitation of those species that will be defined as wild or considered pests; but to create the forest as a system it will be necessary to engage scientists in the investigation and experimentation of manageable species associations. The more uniform a forest, the greater the possibility of centralised management. It would be possible to measure and calculate its elements by

simplifying its whole. This would enable the articulation between advance planning, species selection, planting, management, and commercialisation. This forest enters a circuit and will be continuously over-coded - as raw material, as an energy resource, as natural beauty, heritage etc. A heterogeneous mix of agents (micro-organisms, animal and human plant species) associated at different times for the organisation of a wood-producing forest. But besides associating, it will also function by dissociation and elimination; it is also exclusionary with regard to the elements that could disturb the 'system' that has been built, as well as of the different uses that could be made of/with the forest. Theory and practice are mixed together to create a form, that is, a trajectory for a set of agents that will also undergo a sort of classification regarding their attributes and whether these attributes will be manageable within the limits of the planned systems.

What we consider adequate to consider is that both urban and forestry planned practices have changed, and they have changed precisely through the 'intrusion' of agents (human and non-human) capable of disrupting rational planning. But this does not mean abandoning the purpose of scalability; it must be redefined, and the resilience perspective serves precisely to articulate the dimension of disturbance and stress in these plans as a 'normal' aspect. The prominent role of urban planners and architects seems to us to derive from the need for the massive installation of these plants in an extremely heterogeneous milieu from the point of view of their material constitution. In urban areas plants and trees must coexist with cars and buildings, infrastructure and roads, each generating particular 'affordances' (Easterling, 2021) for plants, animals and people.

The urban forest as a device - made mostly in urban scale by urbanists and architects - whose goal is the *infrastructuraction of a protective milieu to resist extreme weather events*. The relationship between crisis (climate) and infrastructure (green) can be read as an injunction to build chains of dependence that allow the protection of extreme events in the perspective of security (the imaginary of the social-ecology collapse⁴⁸), but also it could be considered as an opportunity (that we will see in chapter 7) for the production of multi-species assemblages that could give life to relational matrices that evade the fossil socialities generated in the "Great (Anthropocene) Acceleration".

The forest, situated as repairing bio-technology of anthropized urban environments, generate (and not only materialise) different political perspectives on how to respond to Gaia's insistence on our unstable and vulnerable collectives. The distinction that Leigh Star

⁴⁸ https://www.cairn-int.info/article-E_CRIEU_013_0088--the-splendor-and-squalor-of-collapsology.htm

had promoted between background/foreground as an effect of an implicit or explicit existence of infrastructures maintains its relevance insofar as it allows us to verify this movement of concealment/revelation as a relational effect: that is, it depends on how they are associated, used or inserted in the practices of human agents.

3.2. New agents and the re-design of urban assemblages

The climate becomes the object of explicit techniques linked to the socio-material and energetic conditions. In the management approach perspective the forest/plant /vegetal acquires an indisputable relevance. The forest returns as a thermostatic regulator and a protective barrier. As defined in the Aria-Clima Plan, the trees could

Mitigate heat waves and floods, and provide the city with new resilience ecosystem services in order to reduce the "heat island" effect; Reduce air pollution ($30 \mu g / m3$ of PM 2.5 particles, 3 times the WHO safety level); Reduce energy consumption dictated by air conditioning, aiming for an 80% reduction in greenhouse gas emissions by 2050 (net zero emissions 2050, C40 cities); Ensure social inclusion and cohesion through community projects to upgrade periphery factories; Increase green and blue infrastructure and ecological connections; Significantly increase the number and biodiversity of living plant and faunal species. " (ACP: 801)

The language of adaptation and mitigation finds in the tree/vegetation a way to materialise the response immediately, making it an infrastructural device - with dignity (although not consensually shared) comparable for example to the road and hydrological infrastructure of the urban space. The climate responses of the city of Milan must be placed, therefore, in the perspective of the experimentation of techniques and good practices that circulate through models of climate urbanism (Goh, 2015; Blok, 2013; Blok and Meilvang, 2015) disseminated through some of the most important international networks - of which the city is a member.

But we cannot even consider that the device of forests could have a univocal normative performance: plant beings will acquire diverse agentivity depending on the assemblage of which they are part (Marres, 2015). As noted by Pellizzaro

"Forests are a solution, they are lungs that help absorb pollutants. But in an urban context it can be much more effective to plant 10 trees in Via Vittor Pisani (the avenue leading to the central station, surrounded by buildings) than 10,000 in the Parco Nord. Because those 10 trees in Via Vittor Pisani reduce the temperature of the pedestrian space, of the pavements, casting shadows on the surface, and also on the surrounding buildings, thus improving their energy performance"."

It is not only about considering how people (residents, tourists) see this 'green', but how they are articulated to it. Not only what thing they do from the green, but what thing this green makes them do.

As we could follow in our research, this means recording the mayor of Milan who plants trees, as well as activists in an occupied social centre doing the same⁴⁹. If in the first case trees can be inserted as functional components in the local ecology and climate; in the second it obviously cannot be restricted to this function: it could be defined in the dynamics of an 'antagonistic political forestry' that tries to break the cementation of the territory - done without authorization and in open defiance of local urbanistic policy; samething where the FFF-MI activists decide, in a demonstration, to plant a tree in Baiamonti square without authorization of the municipality.



3.3. Antagonist urban forest

The urban forest is defined through the municipal administration, together with other institutions, as part of a green infrastructure. And the way it has currently been codified -

⁴⁹ https://www.facebook.com/mutuosoccorso/photos/4120398171420256
see for example the working group of the European commission⁵⁰. One can define infrastructure as a network of areas distributed over a territory capable of providing a wide range of services. To the EU commission,

"Green infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation".

Despite the codification based on functionality, we can say that each point in this network will be articulated in a particular way with the territory where it is located: a periurban green area will not be articulated as a green area in the city centre.⁵¹ The performativity that it will produce in other agents will not be the same. This pluralism does not concern only the variety of its forms (materiality and 'goods'), but is motivated by the empirical realisation of the variety of attachments. There are specifications made about geographical areas (central and peripheral areas), about the use of existing devices (parks) or about new platforms such as ceilings, and walls and balconies, and others such as the streets. But there will also be so many ways in which these plants will be involved in problematic situations, in political actions, in exemplifying virtuous actions of companies, as a architectural innovation. This definition as infrastructures may provide us with a reading key that allows us to follow the way in which the urban relational space is redefined and how non-human agentivity is territorialized in it.

In the case of the urban forest it seems to us that the boundaries between what is infrastructure and what is environment become the "artefact of the constant organisational work (discursive, scientific, technical, physical) required to make and maintain connections in a living, encroaching world" (Carse, 2019: 102). But this also will be the point where the official forest will find a different perspective from activists.

The urban forest is a generic term that translates into the increase of vegetation cover in several scales: public parks, internal spaces of buildings, areas defined as urban and rural. We can say that the process of forestation seeks to create an infrastructure - to the extent that it is guided by the conceptual and practical perspective of an articulated and interdependent functioning. This will be accomplished either through public or private initiative.

⁵⁰ https://ec.europa.eu/environment/nature/ecosystems/index_en.htm

⁵¹ This was one of the reasons that led the municipal council to announce that in central areas the priority would be given to green walls and roofs and not through the planting of trees.

"to understand in what way global climate change influences the local urban climate, highlighting the areas most exposed to heat island phenomena, or to monitor the evolution of soil consumption, identifying the most impermeable areas of the city where the positive effects of green roofs would be most noticeable" (PGT, 2019: 35)⁵².

As Carsen notes (2019: 103), "nature can become infrastructure through concerted investment and management - that is, infrastructural work". The aim of the working group of Aria Clima plan was to trigger the functionalities of afforestation for "significant and targeted vegetation in more urbanised areas that cools the areas most vulnerable to heat waves and peri-urban forestry measures in some underdeveloped (agricultural and/or residual) areas, strengthening a green belt that can reduce the temperature of the urban system as a whole" (ACP: 120). This can be a very efficient example of what Marvin call 'atmospheric disconnection' from the meteorological commons;⁵³ to the geographer Stephen Graham (2018:251) "one future focus of urban design on a urbanising and warming planet should be the weather itself."

Forestami exemplifies how urban planning translates the simultaneous challenges of climate and ecological crisis into particular material forms while re-design the local sociomaterial assemblages - inclusive the atmospheric and climate conditions and the problems that this inevitably puts. Considered ambitious even by the authorities responsible for similar projects - as said by the person in charge of the Bloomberg association of New York in a event in Triennale that I take part⁵⁴ - the project has given rise to perplexity in some (abolition of parking lots) and hopes in others (solve the pollution problem). The project aims to create a new urban ecology from the massive introduction of trees and their association with private and collective life: in this sense, among the objectives is the reduction of heat islands, the reduction of subtle particles in the air, thermal regulation, hydrological security (ACP: 760).

Through the planting of trees, the intention is to influence energy consumption habits (reducing the use of air conditioning in the summer), leisure activities, aesthetic enjoyment, mobility, and volunteer activities; through its performance, it is considered that the forest would be capable of constituting a means by which new socialites could emerge:

⁵² https://www.pgt.comune.milano.it

 $^{^{53}}$ The intervention of Marvin can be see in this video (56:23).

⁵⁴http://www.gdapress.it/it/index.php/73135/architettura/triennale-milano-world-forum-on-urban-forests-milano-calling-2019.html

"Multiplying the number of plants along streets, squares and courtyards, on the roofs and facades of our houses - is the most effective, economical and engaging way to slow down the global warming, reduce energy consumption, clean up the air that we breathe, improving the well-being of citizens"⁵⁵.

The forest as a technique for composing protected spaces that guarantee the enjoyment of optimised ecological services has become a mandatory device in the projects of land regeneration and urban development in the city of Milan - as in emblematic cases for the future of urban development - as show by competing projects in Reinventing Cities program (C40 Network) as those located at the old railway stations (that have a area of 1 million m2).

The urban forest becomes legible from the new urban assemblage being built. In other words, this new infrastructure, even if it is experimental, should be situated in the movement that links, in the critical observation of Milanese activists, "real estate speculation and greenwashing" (Davide, 30 years old, engineer). But we must explore this critical judgement: the forest, as I observed before, becomes an urban planning device, providing another sense to the ecological urbanism proposal: it does not represent a limit to the urban development, but becoming part of it, reconfigures its limits. But we think that the public issue that emerge with the urban forest provide the occasion to look to the design process as 'work-in-progress' that need to take account of many controversies around ho to deploy this infrastructure; Christian Nold offers a possible analytic key when note that of "an active methods of infrastructuring" where the target is "political assembling around an issues (2018:97).

The problem of biodiversity is brought into the cities, but this time, not only as green areas for recreational enjoyment of its inhabitants; it is employed as a mechanism that can contribute to the creation of an appropriate environment for the installation and habitation of other species⁵⁶. But as we said, the installation of these plant agents starts to complicate urban planning schemes. For example, the problem of where these trees will be placed becomes a matter of constant debate, bringing contrasting voices of support or protest; critical voices begin to circulate regarding the possible gentrification of these areas, with rising rents and purchase prices, making it unviable for the lower income population to stay. But it is difficult to find an evaluation of the programme in the newspapers. This has become the responsibility of the activists. The activists try to show the oscillations of objectives and means. In an article

⁵⁵ https://forestami.org/obbiettivo-2030/

⁵⁶ Ver por exemplo o design especulativo apresentado em uma mostra de 2016: https://milanoanimalcity.wordpress.com

on the subject, published on the FFF-MI website, Andrea Ascari mixes Forestami's story with those of the committees which were fighting for the preservation of green areas and the reduction of soil consumption. According to him one could say that "a 'common feeling' is advancing: the protection of plants in the city, combined with a need and demand for large green areas that provide cooling, CO2 absorption, drainage and reabsorption of rainwater; and, why not, aesthetic value too." However, the trees, at the end become "shrubs and bushes, with no guarantee of maintenance or irrigation, which means certain death in Milan's very hot summers." In the meantime, he continues, "the municipality continues to have hectares of trees cut down, as in Bresso and the Goccia, or to threaten to "redevelop" parks such as the Ticinello. Removing asphalt and cement to create large new green areas, without building any more: this should have been ForestaMi's real challenge!⁵⁷

Shopkeepers also raise their voices to protest against the possibility that the introduction of trees in commercial areas may hinder the flow of motorised consumers. The proposal to plant trees in Corso Buenos Aires, a commercial area in the city centre, was rejected by 72 per cent of the 127 commercial operators in the area. According to the president of Ascobaires and Rete associativa vie Confcommercio Milano:

"The vast majority of operators on Corso Buenos Aires have clearly expressed all our concerns: the elimination of parking, which is fundamental to Corso Buenos Aires; the widening of pavements that were widened a few years ago; the certain risk of neglect: just look at the sad spectacle of withered plants in Via Vittor Pisani. I would also add the total lack of maintenance work on the streets near the Corso, which have been abandoned to decay. We are thinking of proposals that aim, instead, to further improve Corso Buenos Aires and its commercial attractiveness: wi-fi, street furniture with street lamps, possible flower boxes, but well-kept.".⁵⁸

But so much is discussed about some aspects that reveal the position of this multiplicity of plant agents, through the need for maintenance. And this point seems to us to be practically absent from the forestation proposal. It is solved either through the employment of specialised labour or through the generation of forms of maintenance which we could call 'social', as it could be generated in the very process of urban forest formation.

⁵⁷ https://fridaysforfuturemilano.it/i-comitati-fanno-rete/

⁵⁸ https://www.greenplanner.it/2019/04/08/progetto-corso-buenos-aires-milano/

3.3. The green house as a machine for living

The proposal to plant three million trees in the metropolitan area of Milan has raised not only several imaginaries about the future of the city but has also allowed several experiences to be promoted from this imaginary; despite working perhaps in an unexpected way, the afforestation proposals have effectively managed to contaminate the citizens, but the way they have appropriated it, places some of these experiences directly against the Milanese model that promotes it. We cannot state obviously that they did not exist before; but we want to consider the tensions and conflicts that the formalisation of this proposal and the beginning of its implementation generated with dissident practices from the one established by the official urban forest programme. The urban forest issue became a theme for which several activities were organised. Scientific meetings as trade fairs; educational activities, as artistic exhibitions. Vegetable beings acquire a new status. Obviously, their explicitness as sustaining agents did not happen suddenly. It is part of the attempt to rethink and transform urban spaces that, we can say, accompany urban planning practice and urban activism in recent decades (Scott, 2016).

Our attention has focused on what we defined in the first chapter as the creation of milieu - which therefore requires not the formulation of an entirely objective and universally accepted perspective, but that of relating different views and practices on how to 'solve' the problems posed by climate change - as that of non-human agentivity. It is therefore a journey of recognition and identification of what had remained implicit: it is the work of explicitness, but this explicitness does not necessarily mean producing consensus. The municipality of Milan will fund dozens of projects dealing with the climate issue; workshops of a few days as well as long-term projects will be articulated based on those aspects considered a priority and on the analytical framework elaborated by the municipal management. From 2018 to 2021 I could follow several initiatives where trees were presented as an adaptive solution to climate change: we can define either as nature based solutions; as a device for domestic adaptation; as an agent to contain urban growth advance, or to break the urban concrete mesh; as a regenerative alternative for peripheral or degraded areas of the city. One of the consequences of this green turn has been that of articulating domestic spaces as green. According to the site, specialising in the sale of plants and items for gardens, Agricommercio and garden centre "in 2019, the value of Italian floricultural production exceeded 2.7 billion euros. After the contraction suffered by the entire sector for a decade, for the third year in a row the figures show the growth of

the sector: +160 million in value on 2018, +176 on 2017^{,,59}. Another website specialising in interior design pointed to the same trend:

"houseplants have been selling like hotcakes in the big metropolises, reflecting a mainstream trend in favour of biophilia, or re-connecting with nature. In addition, the vogue for micro-gardening bears witness to enduring changes in society as well as a growing consumer focus on well-being, the home and autonomy."⁶⁰

And so the Corriere della Sera itself, in its Living section, reported this new trend in the domestic spheres:

"At a time when people are spending much more time at home, alone or with others, the microgardening trend has literally exploded. To be fair, even before the pandemic, the phenomenon was experiencing a great renaissance, especially in big cities where there is less vegetation.."⁶¹

In times of pandemic and climate crisis the proliferation of indoor solutions seems to configure a particular response to the anxiety provoked by the event. We don't exactly see a discontinuity between the resilient city and the domestic spaces adapted to perform weather conditions that are not found outside. In a study that tries to synthesise several researches about the performance of plants in domestic spaces, Virgina Lohr (2010) pointed out to 4 important aspects of which three could be considered with a high degree of certainty: first of all the reduction of air pollution; air humidity; reduce particulate matter and acoustics, where the data did not allow concluding on their effectiveness⁶².

The way in which domestic space is articulated with networks of dependency matters as much as those of public spaces. Consumption practices are redefined from the condition of climate citizens. This implies paying attention to daily habits which may represent a continuity of high consumption. Switching off lights, avoiding food waste, replacing plastic bottles, and reducing meat consumption. They embody solutions offered by new devices made available by the market. All these gestures are interpreted as being part of the new skills acquired, on a personal level, to live in a period of permanent climate emergency. And here emerges another relevant aspect of the resilient city and its devices: they require already

⁵⁹ https://agricommerciogardencenter.edagricole.it/giardinaggio/il-florovivaismo-italiano-fino-al-2019-cresceva/

⁶⁰ https://nellyrodi.com/en/micro-gardening-the-new-lifestyle-craze/

⁶¹ https://living.corriere.it/tendenze/green/piante-online-micro-giardinaggio-millennial/

⁶² https://public.wsu.edu/~lohr/pub/2010LohrBenefitsPltsIndoors.pdf

existing skills or the acquisition of new ones. To move without cars or change eating habits, it is necessary that subjects are able to perform these new demands or injunctions as climate citizens. In the case of shared cars, bicycles and scooters, it is necessary first of all to own a smartphone, and to be able to operate its technology in order to access the necessary applications. In the case of eating habits, this implies, new costs, the existence of alternative channels and time availability to avoid the consumption of processed and long-lasting foods - the three major difficulties defined by citizens in a pool made by the municipality⁶³.

The investment of domestic space as an adaptive module offers us some interesting clues about how the resilient city is being constructed. We obviously cannot go through all the aspects that are being assembled in the domestic sphere (such as renewable energy, energy metres, the installation of purification filters, smart devices) and so many others that allow us to perform the dwelling from a reduction of energy consumption and CO2 emissions of each dwelling unit; but we can state that domestic space becomes the object of an explicit climatic design (Sloterdijk, 2015: 519) whose relationship with the milieu is a particularly interesting aspect.

Besides the architectural solutions available on the market, the domestic dwelling module can be assembled in such a way as to effectively perform a reduction in energy consumption and emissions resulting from the functioning of the module itself. But to achieve this it must rely on various technological solutions. The ecological house

"can also be understood as a device for performing the comprehensive kind of change that is involved in the re-ordering of social, material, technical, economic, political-and-son-on relations. Eco-homes are configured as devices for technological changes, the transformation of lifestyle, the democratization of environmental governance, the exploration of alternatives culture and so on" (Marres, 2015: 127)

The house designed to be low-carbon is part of the responses to climate change practised individually, familiarly or in small groups - in the case of houses shared by non-family members. The risk of the fragmentation of the unitary city (Graham and Marvin, 2001), and the construction of enclaves (Hobson and Marvin, 2010) acquires another relevance not only as a local territorial differentiation, but it can even be dismembered in the elementary units of the urban landscape, as the house. This is because performing in the domestic sphere a low-

⁶³Alguns dados podem ser acessados na pesquisa realizada pela administração municipal. https://www.comune.milano.it/documents/20126/126287263/05102020_Cittadini+e+cambiamenti+climatici_un %27indagine+esplorativa.pdf/c89cdaa0-41dd-fadb-b0d0-06cecfd7da9b?t=1602067034807

carbon choice costs. In a situation where fossil fuel prices can produce a cascading effect on several other goods, the adaptive module offers another example of how habitability must be understood in terms of ensuring means of sustenance in a given territory. The house as an experiential setting can open itself to the outside - as in the case where it is articulated to territorial initiatives in public spaces - or close itself as a system articulated only with chains of dependence. Once again, it is useless to seek a general theory on domestic spaces since it is always a matter of how they are articulated with other agencements and how they can guarantee a form of continuity. According to Knox (2020: 199), what people "were doing with ecohouses, even in the most experimental setting, was not creating universal truths but rather deconstructing, or disrupting, objects in order to reconstruct them anew"; inhabiting the domestic space becomes an opportunity to "relearn what a house is in thermodynamics terms (...) allow houses to be transformed into techniques of political intervention".

And this helps us to understand when in a workshop on domestic gardening the representative of an association that was present and part of the project, hear my description of some actions done by activists in occupied public areas with a certain discomfort, which she tried to get rid of simply by ending our conversation saying that "everyone could do what they wanted". What kind of public emerges from this experience of becoming active within domesticity? What politics of contrast to climate change is generated through the creation of adaptive modules limited to the family or monolocal nucleus? We are not in a position to develop all these aspects. The choice, as we shall see, was to respond to climate change but from a perspective that did not involve political confrontation with institutions or companies. "We cannot wait for political decisions to act", according to Simona, "the State has proved incapable of acting quickly to avoid the worst consequences of climate change". There was a criticism that pointed to those responsible for "poisoning the planet", but in the face of undeniable responsibility, it was necessary to create a certain autonomy in relation to these chains of dependence. In this way this workshop offers us an opportunity to see how autonomy is articulated in practice from the perspective of those that what to 'become active'.

In this case, the workshop was not only a moment of learning techniques for growing vegetables at home, but more broadly, a moment of technical instruction on how to create, in the family or individual space, an adaptive module designed to become autonomous in a "toxic milieu" (Simona, 65 years).

One of the consequences of the dissemination of green solutions is that of being adopted beyond the initially planned spaces. In this sense, we can follow a certain continuity regarding how these vegetal beings should act to transform the urban milieu. There were many initiatives that sought to populate domestic spaces with these plants, as well as several informants reported having modified domestic spaces so as not only to welcome them but to transform them into agents that could help modify habits and domestic climatic conditions themselves. In the workshop, Paolo (42 years) told me that he had recently started a garden on the balcony of his flat. According to them it was about "exercising my right to eat what I have taken care of and know what's in it". Faced with my question if growing on the balcony was enough to guarantee food sovereignty in the face of the food industry, he agreed that it was not possible, but that it allowed him not to depend on it completely, and that it also gave him "pleasure to know that he was eating something he had planted". The same thing with the two friends Anna (35) and Stefania (37) who lived together. In their case it was about sharing the house with different species of plants. They had followed some gardening courses and were experimenting with planting different species inside the flat and on their balcony. In their case, they said that this allowed them to "get a bit closer to nature". Anna said that the presence of the plants reminded her of her trips to Indonesia and Brazil, "where nature was abundant". According to Alice, in turn, the plants "made her realise how grey it was outside and how the city needed more trees, more plants, more green, more life". The plants are distributed at public events and even proposed for 'temporary adoption' before being planted in the ground - as promoted by many community gardens in Milan.

The workshop for the construction of a 'bioactive vegetable garden' was one of the activities of the project called "Forchette verdi e milano a tavola col Pianeta"⁶⁴. The event took place on October 20, 2020. Simona, the creator of the project - that had financial support of the Milan municipality - presented her intentions as follows: "each individual can contribute to the reduction of environmental impacts and the effects of climate change". The project consisted of creating an App (Wiseair) that could measure the ecological impact and emissions contained in consumer practices. This would be a way of "doing something without waiting for governments"; the second was to "transferring these sustainable food choices into actions" for the creation of community gardens on balconies and terraces using Bioactive Garden techniques that guarantee high quality nutraceutical vegetables, without chemicals, low water consumption, self-healing fertility and increased CO2 sequestration in the soil"; the third one was to use "Wiseair technology to monitor air quality, and thus closing the circle."

⁶⁴ https://www.produzionidalbasso.com/project/forchette-verdi-e-milano-a-tavola-col-pianeta/

According to Simona "food was the most immediate way to make it on its own"; the project should have an impact on food choices be it at the same time transforming the house itself into a possible food producer and air quality monitoring point.

But this is only one case through which we can discuss the way in which many people have begun to introduce plants/vegetable beings with the explicit aim of modifying the composition of the air inside their houses, of establishing a relationship of proximity with these agents and of guaranteeing partial self-sufficiency in food production without dependence on industrial food chains. But this introduction of plants/vegetable agents is the object of a properly speculative design that seeks to establish a milieu of multiples agencies interaction based on material, technological and vegetable articulations such as, for example, biotechnological assemblage (Bataglia, 2017). Design whose aim would be that of highlighting well-being and domestic autonomy⁶⁵.

The motivations are obviously many, so a characterization of the phenomenon would demand specific research on the subject. But we cannot avoid exploring some of the practical and political implications of the current experiences.

This project is inserted among many calls for practical intervention promoted by the municipality of Milan. These are small, time-limited projects aimed at promoting environmental awareness practices regarding food consumption. But defining guidelines, or themes to be worked on, does not exactly mean controlling how it will be done or how these activities will be appropriated in different interpretative keys by the participants.

One of the reasons that led Simona to develop the project was the "frustration over the little that had been done to achieve the sustainable goals of the millennium". According to her, it was necessary to "inform people and inform them better": for her account "changing the ways of feeding and practices in agriculture could reduce up to 50% of the production of greenhouse gases". The vegetable garden was built on the premise of not using chemical substances and as a small device for the production of healthy foods and for capturing CO2 from the atmosphere in the domestic space; but instead of being restricted to the house, it could be "extended from the experience of the house to the city".

The event proposed a practical demonstration on how to build a bioactive garden. The demonstration made by Luca, one of the organisers of the event and member of the 'Confederazione cittadinanza consapevole', consisted in the creation of strata in a recyclable plastic container (1 meter long) of clay (2 cm), earth (40 cm) and the introduction of seasonal

⁶⁵ One of these examples can be found here: https://www.ecologicstudio.com

species, in this case cicoria rosa and cima di rapa provided by a 'Gruppo di Acquisto Solidale' members.

According to his perspective, this would affect several dimensions: that of creating jobs, producing healthy food, and providing critical knowledge regarding the "greenwashing of poison foods" promoted by the bio-label of large distributors. In other words, this experience could not only be reproduced, but scaled. The group of people who gathered for the presentation of the project was varied: 12 people (all Italian), the vast majority over 35 years old and more than half women. At the end of the event a cocktail party was served with vegetarian food. In spite of the difficulty of approaching them - the event took place in the midst of the resumption of the covid emergency -it was possible to see that all were looking for technical means that would allow them to follow a path of affective-material transformation: the production of their own food was a means of affirming autonomy in relation to the agro-food chain (production and distribution). The domestic space acquired a relevance not only as a receiver of natural and energy resources and an emitter of externalities; in this experience it acquired new potentialities. If the house, as a "machine for living" as put by Le Corbusier, is the result of an assemblage through which as a dwelling unit it is connected to the urban modern infrastructure, the way it becomes problematic allows us to explore its future through the modification of the appliances that become part of it.

The domestic plant device can thus be articulated to the external ones, as a node connected to the different infrastructures that cross the urban territory. Another workshop that I could follow was carried out to build a 'community garden' inside popular residences. He was made in a popular house in Via Padova, a well known area in Milan, where many foreign people live. The idea was to "involve the residents of the building so that they could take advantage of the new facilities - for cooking - and take care of them". But no adult residents turned up, only a few children were interested. All the adult participants were from other parts of the city.

The laboratory was guided by a member of the Via Padova gardens (*Orti di via Padova*)⁶⁶ who provided all the relevant technical information regarding the procedures for choosing the pot, preparing the soil, choosing the species and daily maintenance. The justifications were manifold: beauty, company, food, sociality. The technique was the same as in the previous case. The functionality activated will depend on the proposed articulation. This vegetation

⁶⁶ https://www.facebook.com/ortidiviapadova/

becomes malleable to pragmatic re-significations, and may be incorporated and adjusted to existing *agencements*, but may also become a vector for the invention of others. What will be made of the domestic space will depend on what may exist outside it. That is, in the case of responses, the milieu that will be constructed, and how it will be constructed is more important than a generic recourse to the notion of context.

Perhaps the great difference between perspectives can be stated as follows: while in the eyes of planners and public administrators the space considered is limited by the extent of necessary functionalities and effective walls for the protection of the "internal environment", that of the activists opposes an extended space that it also includes the ecological imprint of distant territories, such as the exploitation of distant ecosystems for the production of individual consumer goods. We can face this difference from several (and not just opposite) ways of redesigning urban space, as well as the relational matrices by which associations between humans and non-humans are constituted and reproduced.

Our interest was to show how this world has been composed: how one lives, in which way 'public' and 'private' spaces are constructed in what we define as low-carbon socialities; where non-human agentivity are not excluded but, on the contrary, must be reconducted on particular relational spaces. Autonomy, in the end, runs its own particular risks. The availability of technical solutions capable of effectively enabling the performativity of a low carbon lifestyle speculatively offers us one of the possible scenarios for the near future; one where autonomy is not realised in relation to fossil chains of dependency, but is instead achieved through decoupling, partial of course, from the degrading ecological and climatic conditions present in your immediate milieu. Bunkers for a climate catastrophe⁶⁷ offer, like Sloterdijk's (2015: 299) space stations, the opportunity to make explicit the work of designing conditions that allow survival despite collapse, harmful atmospheric conditions, and the degradation of local conditions of habitability (Graham, 2018: 340).

The forest is only one of the devices mobilised to promote a transformation of the urban anthropocene machine into a resilient urban system - or at least to be a proposition in this sense; described as an investment capable of protecting and attracting investment, urban space becomes reterritorialized by systematically measuring all its material and immaterial components; but transforming the city into a forest in turn frees up other "lines of flight" (Deleuze and Guattari, 1987) through which subjects see the possibility of breaking the

⁶⁷https://www.theguardian.com/news/2018/feb/15/why-silicon-valley-billionaires-are-prepping-for-the-apocalypse-in-new-zealand

energetic mesh that connects them in favour of becoming differently (next chapter), in a minor mode: becoming active with plants against the cementification of the urban machine.

Chapter 4 Conflicts in the resilient city

"what do you do when your world starts to fall apart? (Tsing, 2015:1)

In this chapter we will contrast the resilient city with the proposition formulated by activists of a 'green common good'. Data was collected either through participant observation through social media, articles published on the internet and communiqués produced by those who were involved in the struggle for the 'green common good'.

4.1. Ecological cities and the proposition of the 'green common good"

But the Resilient City (RC) does not emerge without a plurality of interested publics constituting themselves from what they consider relevant to maintain or invent as a condition for a better collective life. Conflicts therefore arise between the official Resilient City and various propositions around what can be call Ecological Cities (ECs)⁶⁸, propositions which, in turn, cannot be abstracted from the milieu to which it belongs. This is a speculative exercise insofar as CR like ECs develop out of ongoing experimentations. Those who mobilise for ECs not only resist, but seek to invent and create other ways of inhabiting urban spaces - but they do not claim urbanism as a privileged category of action; indeed local urban boundaries 'blows up' in the face of the myriad relations of interdependence that they make explicit and the links that connect local actions with concrete effects in distant areas; they point to the need of reinvent relational space beyond humans. If, as Latour (2018) observes, it is necessary to land on earth, this moviment assumes a challenge of knowing the territory and orienting oneself from the existing conditions, but also of exploring how they could be diverse: this is because they seek to situate in an explicit way other aspects that interest them - while the machine of the Anthropocene produces invisibility of the impacts on extra-local

⁶⁸ We put it in the plural for one simple reason: the public will be formed from various fragmented apprehensions of this city.

territories and tends to close in on local economic and ecological circuits from the notion of non-human functionality.

There is thus a *minor* ecological and climate politics that seeks to reverse the capture of these territories in the terms of 'economic growth and progress'. For this reason, we cannot dissociate the orientation of personal and collective action without considering it part of *agencement* where semiotic, material and social flows are worked out (Deleuze and Guattari, 1986).

These climate-activists create narratives, slogans, public meetings, instruments of struggle; they produce collective practices through the 'remains' of the modernist city, the prospect of collapse and the hope of building non-barbaric responses (Stengers, 2015): particular subjects in particular situations of precariousness are seeking to reinvent modes of collective belonging beyond the human (Puig de la Bellacasa, 2017). And this seems to us a political issue of fundamental importance. What we have been able to follow since the beginning of this research shows itself in a fragmented way, as are the actions, the narratives and the means used to produce other agencements beyond human centrality. These are actions and forms of belonging that emerge in the interstices (Stengers, 2020) of the Anthropocene machine, in abandoned, destroyed areas, but also in small spaces that managed to escape from the 'death machine' of urban development. The chains of dependency extend, producing territories at the same time as capturing them; or rather, to capture them, it is necessary to produce these territories from the selective emphasis given to what is considered a priority. Political conflicts related to territories are imposed not by the diversity of subjective values regarding what matters or not, but in divergent modes of valuing the attachments that engender the agents (Latour, 2018; Nikolaj Schultz, 2020). Looking at these conflicts forces us into a movement of pragmatic attention to what is possible to produce from a subjective and political point of view; but it is also a decision about how to follow this emergence, as Pignarre and Stengers note,

"A veritable policing of thought and action: if an argument does not claim an authority that should force everyone to yield to it, then it is a simple opinion; if one cannot quantify the value of a landscape that people are struggling to preserve, those who struggle are nothing but sentimental imbeciles. The demand for a guarantee is the demand for a right not to have to take the risk of learning or of hesitating. It is the demand to be able to proceed with the assurance that follows on from the pretension to judge what we are dealing with" (2011: 47)

What chains of dependency presuppose controlled, can break out and complicate smooth calculations and the safe production of values; the scalability process is based in imperatives and demands that what is not include can be neglect "yet they do not have the power to make us forget" (Stengers, 2020b: 3).

The precariousness in which they move refers to the desolate landscape of modernist practices that nevertheless insists on the promises of material abundance and freedom from climatic-ecological bonds. This seems to us the trickiest challenge yet: how to imbue the importance of multispecies, interdependent relations in a milieu that is sustained through fossil chains of dependence - which allows access to resources? As Viveiros de Castro (2019: 296) notes some years ago, "This is an age in which new ghosts, new monsters, new fears, new hopes haunt the imagination of what used to be called "the future" but is actually "the present," above all for peoples of all living species and other Terran entities who endure in a large part of the world now."

4.2. The Bassini affair

The Bassini case can be considered as one of the ordinary events in the production of modernist cities, as described for instance by Scott (1998). The decision of the Politecnico di Milano (POLIMI) to build another building for the Chemistry department in an area that had been a park would have everything to be considered in terms of business-as-usual urban development. Codify a given space in terms of its potential investment value, eradicate what existed before, and set up a new local landscape. However, if at the height of the modernist city the idea of the transformation of spaces could be experienced in their positive value as the promise of progress (Anand 2018), this was not what manifested itself in the Bassini case. This aspect did not go unnoticed by one of the residents who came together in the 'Save Bassini Park' committee. They considered "a terrible mistake" that an institution like the Polytechnic continued to "promote urban transformation projects based on the same planning models of the 1970s - non-transparent and meaning an addition of concrete" (Mara, 15/12/2019). According to her, it was a misunderstanding that called into question the true commitment of the institution - but also of the municipal administration that was supposed to give permission - to the principles of sustainability. But what was Bassini? According to testimonies collected in our fieldwork, activists and residents argue that Bassini was a green area dating back to before 1722 - the date is imprecise - an area that had not been built upon

for centuries and therefore had "great ecosystemic value and a soil that managed to escape the urban march of the 20th century" (Sara, Committee). Preserving Bassini became a conflict that made explicit the differences between 'city models'. It was evident in statements and public events that the new building was anchored in a vision of the city as a space for investment, business opportunities and economic growth, that is, of a city "for sale", a coherent expression of the Milano Model, which sought to reconcile "growth and resilience" (Sergio, student, 01/02/2020). But something else remains, something that implies expanding the agentivity present in that situation.



4.1. Communications from the bassini committee

It was about claiming the right to the city, but to a city whose right to access and survival cannot be restricted exclusively to humans and cannot be thought of only as a functional machine able to provide services and goods to those who inhabit, work or visit - and especially to those who can live in a city like Milan. Climate activism in Milan produced various interpretative tools that allowed local actions to be situated in a wider frame of reference. Those who organised themselves as a public around the issue of Parco Bassini defended the personal use of residents and students, but also the right of residence of those trees in their territory. In proposing a plan of analysis where more than human agentivity can

obtain space, this implies, on our part, considering that these non-human beings become allies, or, agents to which they must ally and in which we must make room for their non-degrading presence (as will be the case of several dead trees in the forestami programme). It is therefore a question of considering this politics in the terms suggested by the anthropologist Ghassan Hage (2012), as alter-politics, a politics that is not developed just from opposition to our current systems or criticism of them, but is developed from the analysis of another way of being and which involves other living beings. This movement may appear to be a capitulation to the apparent lack of alternatives to the current socio-political systems; but in fact what it seeks is to situate itself in another critical dimension. To constitute a critical thought from these remains and fragments not yet entirely destroyed acquires a critical effects (Marres, 2015) because it operates an opening movement to the possible not inscribed in the devices of governmentality:

"Radical alterity is present everywhere. There is always an outside of a system of intelligibility, of governmentality, of domestication, of instrumental reason (...) There is always an excess to how one defines a social relation also: it is always more than a 'relation of power', a 'relation of domination', a 'relation of exploitation', an 'ethnic or a racial relation'." (Hage, 2012: 306)

In the various statements and communiqués published and distributed during this period, the committee (22/01/2020) stated that its intention was to "discuss alternatives for cementing the Bassini area, based on the assumption that the park should be preserved". The insistence therefore resided in the need to guide the production of urban space from the injunction to redefine what counts or not as a relevant aspect of its situated 'relationality'. One might ask as did Kohn (2021: 71), "what kind of politics can arise from this particular way of creating associations"?

According to the committee it was necessary to find an alternative site for the new buildings of the Chemistry department.

"In fact, despite the felling and suppression of the park's more than 50 trees, the ecological and social value of this area remains immense (...) This reason leads us to ask for alternatives to the reconstruction of the park. However, we believe that as long as the work continues, a free and transparent comparison will not be possible. The request of the commission is also - after the opening of the table - the immediate cessation of the works of over-elevation."

In this period, the Secretary for Urban and Green Affairs, Pierfrancesco Maran, convened a working group involving the Polytechnic and the Statale University to present a proposal for compensation for the destruction that occurred in Bassini and to prepare a green plan in Città Studi. The table had been a promise by Maran December 6 to convene a working group where compensation for the destruction of the park would be discussed,

"However, neither the meeting is about our requests, nor were we involved in the organisation. Only when the discussion was ready, Maran invited the committee to participate. We will participate today, but we will be there to reiterate that our request is neither an indemnity for the park, nor a green plan in Città Studi, but a real alternative that does not cover the Bassini area in concrete. That is why we will continue to be present wherever the problem is discussed to relaunch the requests of the committee".

Through the Bassini case several other aspects began to emerge; other local committees began to speak out, even foreseeing that they could become the 'next target', and of being deprived of the territories they had occupied. How to avoid the capture of territories in financial speculative schemes? How to protect areas of socio-ecological interest against the logic of economic growth and cementation? And the answers will be varied. But apparently none capable of stopping the 'tractors of progress' and alienation that "obviates living-space entanglement" (Tsing 2015: 5). According to Sara, the business-as-usual of urban development has produced a 'graveyard in place of a park'. We can see that what Sassen (2014) defined as 'dead land' allows us to intensify the characterisation of practices that occur within global cities and not just in distant extractive zones - as dead land can be explore exactly by the consequence of the destruction of muliples socio and ecological entanglements.

In the Bassini case, several conflictual repertoires were activated and several institutional instances were pursued. They strike us as an emblematic case regarding the 'Milano Model', with a movement towards building a resilient city while promoting its transformation from the same criteria that first generated the climate and ecological crisis - that of the modernist front and the 'Great Acceleration' (Steffen, 2015).



4.2. Cut and plant: the Sala approach

The decision to eliminate Bassini was take on October 2019, when "professors of the Polytechnic and the residents of Città Studi, abruptly awakened with the park closed by the fences of the construction site last 28 October" we can read in the statement of the "Save the Città Studi Committee".⁶⁹

On 14 November 2019, an extraordinary conference was held at POLIMI convened by Rector Ferrucio Resta to clarify the construction work of the new Chemistry department. Faced with contestation from various groups, the rector's response was that the project had followed the normal bureaucratic procedures and therefore did not lack legitimacy. Residents, students and teachers questioned the transparency of the decision insofar as only the interested departments had been informed of the rectory's plans. Events evolved rapidly. Some attempts were made to block the decision to proceed but it proved irreversible, and the majority voted for it to continue⁷⁰.

On 10 December 2019, students and residents managed to block and suspend the work by occupying the construction site; the threats were responded with mobilisations and occupations of the area in order to prevent work from resuming

⁶⁹https://salviamocittastudi.wordpress.com/2019/11/23/qualcuno-sapeva-e-non-ha-detto-

nulla/?fbclid=IwAR2u90SHjdgMwA05E2OFHTJcKFZMwND_4c3aRIddSKDtYmUJ_0V1xM1fLKM

⁷⁰ https://www.facebook.com/ResilientGAP/posts/2690771974485878

"This tree is mutilated but still alive because the preliminary 'pruning' preparatory to felling was blocked by citizen intervention. However, we must all mobilise, take part in the permanent garrison on site (7.30am - 5pm), write to the institutions, pressure the Polytechnic to review its project and save the park". (Salviamo Parco Bassine Committee)

It is a question of rejecting the justifications of modernisation based on a characterisation that highlights everything that the project and the method did not foresee. The struggle is against the alienation that Tsing (2015) spoke of, or that Kohn (2021) will define as uprooting oneself from the situated ecologies that are the neglected conditions of self-production of the Moderns (Latour, 2013). The recourse to blockade⁷¹ seems to be the common denominator of the most diverse struggles in the city of Milan; it is not a generalisation of a tactic, but it seems to us that it is a consequence of what they seek to avoid. The result of which will apparently depend on a diffuse capacity to sabotage at different points and by different means: in the case in question, by the presence of students and residents on the construction sites; by resonance in the alternative media circuits; activating the public prosecutor officer based on the non-observance of plans that could guarantee the survival of the trees; by the demonstrations in the streets and by the institutional work both within Polimi and in the city council - with the representatives of the Greens explicitly taking the park's side against the urban planning policy of the Sala administration that they politically support.

It may seem little, but nevertheless it is insufficient to maintain the narrative that continues to oppose excluding options; as Adrian Parr observes "Is it a revolutionary movement that opposes the current system? Or is it reformist, changing the system by working within it?". The problem with this judgement is that it imposes itself before even ascertaining how each situation is confronted - setting parameters through which practices should necessarily pass in order to be placed in one camp or the other. What the various reports on the state of the climate and ecosystems have reiterated is precisely that time does not count in favour, which in practical - and pragmatic - terms can teach us that every attempt to block the machine can acquire relevance in the consequences and effects on the design of the habitability spaces (Latour, 2018). Blocking cannot therefore be considered simply as anti-politics, in the terms formulated by Hage, as a tactic that aims to oppose a political force or political system deemed illegitimate; by shifting the perspective to an alter-politics, what becomes evident is the positive definition of practices that seek to open up to the action of agents and forces that are not necessarily included in the context of action considered usual and sufficient of a given

⁷¹ We can think of the Naomi Klein notion of 'blockadia'.

social order. The modernist front constitutes the analytical horizon through which the production of relational spaces has been closed off and oriented towards a simplification of the relevance of non-human agentivity - that is to say that it abstracts the living entanglement of local ecologies by highlighting them generally as 'natural services'. And it is precisely here that we can describe what these activists do in a positive, speculative way: they not only oppose the machine of the Anthropocene, but seek to establish conditions by which a relationality beyond humans ceases to be virtual and becomes effective; and in this public that "protest against a power to do harm to certain protagonists neglected in the definition of the state's concerns." (Stengers, 2020: 03)

We do not advocate an opposition between anti-politics and alter-politics, since the two can coexist - and indeed do coexist. Our intention is to reject the analytical possibility of using one of them as an evaluative parameter of the other - something that often occurs, especially when climate politics, due to urgency, tends to be founded on an imaginary of confrontation "against the system" in its entirety; it is necessary to consider problematic situations from their particular socio-logics. The legal system does not proceed in the same way as blocking the streets. The cutting down of the trees testifies "that there is something very wrong with our development model" just as progress and the promise of growth leave "a cemetery" in its wake. Are these expressions just a sentimental drift of the participants or are they delimiting another dimension by which we might think of alternatives to business-asusual? Were these ecological attachments just a "new opium of the people" or could they signal new unexpected consequences of political action in urban spaces?

As Debinska (2021: 446) notes in her study of climate-activism in Poland

"Climate change has acted as a common denominator for dispersed and localized environmental struggles, which have come to be framed as climate struggles. Local initiatives, such as the collectives that monitor and protest against the cutting down of natural forests and the destruction of nature reserves, have begun to emphasize the links between environmental destruction on the local level and global climate change. The climate apocalypse has become the horizon of almost any local environmental initiative. This has resulted in the growth and rearrangement of the assemblage of groups and people engaged in climate activism in Poland for noticing, monitoring and representing the effects of climate change on various planes: social, economic, environmental, political, psychological, etc."

The same dynamics also operates in the Milanese situation. The justifications put forward by the participants make reference to dynamics that include humans but that go beyond them. What they presented as counter-proposals were grounded through the notion of interdependence and effectively attempted to articulate local socio-ecological situations to the indeterminacy of the Earth's climate system. Business-as-usual was not just the continuity of the economic machine, but that of the devastation of ephemeral and precarious forms of interdependence that are articulated by it.

Polimi sustainability lecturer Arianna Azzellino (02/02/2020) who was on of 'Save Bassini committee' members noted that,

"consider urban green in its entirety (public, private, urban, peri-urban), regardless of the useful technical-managerial classifications (equipped green, special green, furnishing green, etc.), recognizing first of all its fundamental intrinsic quality: that of a living system composed of animal and plant organisms and regulated by physical, chemical, biological processes and by flows of matter and energy that interact with the biosphere at various levels and that are the very basis of life. Recognising the ecological dimension of green in the city therefore means not only ensuring the scientific rigour of the policies to be implemented, but also overcoming the conception of green as a purely qualitative urban standard and recognising its strategic value for integrated urban sustainability and climate change mitigation and adaptation policies"

This type of observation is obviously marked by its belonging to the natural sciences and systemic theories. Perhaps the insistent recourse to scientific language shows, in fact, a difficulty in politically elaborating a language capable of making this natural external a propitious ground for the re-imagination of politics itself: subjects activate themselves motivated by an agentivity that comes to disturb the existing order, but making use of a political grammar stuck to the conceptual and analytical schemes of a context where this politics was exclusively oriented by and for humans. On the other hand, other members of the committee sought to reap the consequences of this event:

"The magnolia is leaving we hope it will survive in its new home, despite the roots being cut off, the days spent in the weather, the repositioning in the hole during the agronomist's inspection. Insensitivity, obtuseness and petty human interests are tearing it away from its land, on which it had grown undisturbed for so many years'. (Save Bassini - 06/02/2020)

And despite their differences, these two perspectives are not mutually exclusive, and they communicate in a particular way insofar as they seek to include that which modernist urbanistic practice can ignore. Here it is a matter of establishing a different plane, that of experience, to be able to see the emergence of the problem and how all those included are distributed among the subjects.

"awareness of the fact that planning and managing public parks and gardens does not only mean dealing with aspects relating to a public work or service, but also necessarily involves naturalistic and landscape values and, more generally, environmental values, as well as meanings linked to the perception and wishes of the resident population, expressed both in purely emotional and aesthetic terms and in terms of the real need to use them." (Azzellino – 02/02/2020)

But we can return to a question asked by Kohn in the ethnographic context of the Runa of Ecuador: what politics can be born from this peculiar way of creating associations? It would be proper to ask that in an active world there can be no politics without non-human agentivity. This is perhaps the meaning we can draw from these experiences of become active, because if collective life is assembled and stabilised through association with humans and non-humans, then, in this case, every decision regarding the way this collective organises itself - that is, the forms of socio-material and ecological continuity it establishes - implies a particular articulation with those who have a place within it as well as those who do not.

The mobilisations continued even during the festive period between 25 December and 1 January:

"On Friday 27 December, the works of destruction of the Bassini park may resume at 7.30 (...) at 12.00 lunch with Christmas leftovers. During lunch there will be live music. Things to bring for the at bassini park: camp tables; camp chairs and not camp chairs (it seems we have a list of how many we have); all kinds of leftovers (sweet and savoury); drinks of all kinds; paper plates, cups and cutlery"

The situation, however, was concluded on 02/01/2020. Surprised by the large amount of police present in the area the residents and activists were unable to stop the tree cutting carried out at the site

"This morning at 6am a large detachment of police escorted the workers who were to cut down the trees in Bassini park to the construction site. The activists present to guard the park were completely surrounded to prevent them from blocking the works again. At the moment, the workers are felling

the park's century-old trees. Even the assurances of the municipality that had promised to obtain more in-depth assessments of the damage of the tree felling were useless."⁷²

On 02/01/2020 the existence of Parco Bassini was materially concluded. But this did not mean the end of the mobilizations. On the contrary, it was from the trajectory by which the decision was taken and the destruction carried out that various committees in the city decided to meet to discuss and act against the 'Modello Milano'.

As a result of the triggering event in Bassini, the threat to other areas began to be felt more dramatically. According to the activists, it was necessary to build a front for the defence of the "common green" from "all those who are fighting for the pieces of green" in the city; it was necessary to "slow down the processes of urban development" (D.). The coordination of these struggles will suffer a major setback with the health emergency that struck Italy at the end of February 2020. Other areas were destroyed at a time when mass demonstrations were banned, and when many people were out of town due to the coronavirus (in 'smart working' and distance learning in universities and schools).

Pietro, a member of Resilient Gap (deposition 30/01/2020) summed up the course of struggle in which he was one of the most active participants:

"The practice is always the same: projects are started and new planting is promised after the fact (as if parks could be quantified in simple "sums" of trees) and, when protests arise, protesters are accused of being against the social utility of the new constructions. Milan is the second city in Italy in built-up areas. Last year, concrete was poured on 11 hectares of land. Enough with soil consumption; enough with cement".

At the public assembly held 2 February 2020 the various assembled committees defined their demands from two main points: that the "Municipality of Milan prohibits the construction of new buildings in all green areas of the city" and that it "establishes a technical commission with each green committee, evaluating case by case the urban alternatives that do not involve greater land consumption". As noted by Paolo Pileri⁷³ in a website article that sought to reflect what had happened to Bassini,

"There have been emails, articles, discussions, petitions, assemblies, fortresses (I have presided), marches to the mayor's windows to try to review the decision, albeit formally legitimate, taken a few

⁷²The video explaining the event can be found here:

https://www.facebook.com/permalink.php?story_fbid=1205422446316315&id=968811149977447¬if_id=1 577960597973097¬if_t=page_post_reaction

⁷³https://altreconomia.it/perche-non-conviene-sacrificare-un-

parco/?fbclid=IwAR0wvQLM4OlmE1cAjJTXq5weJC1p2RP7TW9IlvYdmqmEJxZzNZF7A4TSL0k

years ago. But nothing can be done. In the early hours of 2 January 2020, protected by an unexpected cordon of local police, state police and *carabinieri*, the chainsaws went into action: 37 large trees fell. The construction site can now begin."

4.3. After Bassini

But what happens after Bassini? The groups that were activated to prevent the destruction of the park began to consider that this event signified a particular turn of the Sala administration's environmentalism that sought to imprint its particular ecologist vision. According to the mayor, those who mobilised were the representatives of the "environmentalism of the no", which could be translated as those who rejected Milan of big "events, real estate speculation and high real estate prices" as defined by T. (student, 27). A reaction of the mayor in the period of the protests against the destruction of the park.

Paulo Burgio, reflecting on the political aspects of territorial planning notes

"There is a lack of real will to allow citizens to participate in social life, as is clear when councillor Maran proposes a round table for citizens to define the means of compensation for the cutting of the trees in Bassini park, a table to which a representative of the citizens' committee is also invited when there is practically no point, the trees have been cut down and so be it. (...) The task and main function of a councillor's office dedicated to responding to these requests remains that of intervening to ensure that the right to participation in issues concerning the city, the territory and the environment is recognised and implemented, issues which are today crucial and unavoidable if what we are concerned about is the survival of the planet.⁷⁴

Already the "Comitato salviamo città studi" outlined a difference where it seems important to us:

"We, as *minor*, do not understand why this building site is in such a hurry to restart. The world is at a standstill, we are all rethinking our lives and our priorities in the face of a pandemic, so why can't the Politecnico (...) review its plan to destroy Bassini Park and declare the death of the two cedars? I am filled with despair, but above all with disillusionment, at these *maior*."⁷⁵

⁷⁴http://www.z3xmi.it/pagina.phtml?_id_articolo=13600-Cittadini-e-

Partecipazione.html&fbclid=IwAR12BiXXd4shH-t-xw8eDaI6Yd3tA-KFsMDzKW73o0Wl8i9PLcpOFztlNZc ⁷⁵https://salviamocittastudi.wordpress.com/2020/04/21/ubi-maior/?fbclid=IwAR2pSuqPC6Ghe75Ml-5x9c87eBTq-TZCguk4iy9lUsFP1xY-gZBbqZgB y0

As a result of the triggering event in Bassini, the threat to other areas began to be publicly problematised. Because of this, an assembly of the committees was organised to decide how to articulate these struggles around the 'common green', of all those that "are fighting for pieces of green" (*stanno battendo per pezzi di verdi*). On 16/02/2020 they met to discuss what could be done to block the advance of the milano model: Resilient Gap, FFF-Mi, La Goccia, Baiamonti Verde Comune, Comitati cittadini per il verde, Climate Reality Project, Off Topic, Core Lab, FFF-Monza were present. The proposal to create another coordination raised some doubts, since it was feared that it would be "ineffective", with the proliferation of organisations with little operative capacity. But the issue at stake was which approach should be taken to face the challenges. It was a matter of clarifying the approaches and articulating the different perspectives on how the actions to counteract the dynamics of the advance of the cement machine should be carried out.

According to M.,

"There seems to be no interest on the part of the municipality in evaluating alternatives for the Museum of Resistance. It continues with various interventions in Piazzale Baiamonti".

R., asked how the "resistance in Baiamonti" was doing, replied that they "continued to ask the municipality to build a garden instead of the Museum of Resistance, because it is a green area that should be preserved".

The group of people gathered recognizes that to face these reasons it is necessary to be able to produce a wider public. In view of the electoral calendar (which will be modified due to the health emergency and will take place in September 2021) for the choice of new municpal administrators and conselors, they propose some actions that could raise public concern about local dynamics as the dissemination of "green banks"⁷⁶ (M.) like the one installed in Città Studi was proposed; a member of the Goccia committee, A., said "that we are preparing for the elections, so it is the best time to talk about land use, on the radio, social media etc." Proper "communication was lacking" said F. of Resilient gap (RG).

To G., "The strategy can be to anticipate cementers in time, take action that maintains and protects them: try to focus strongly, from the organisation's point of view, on protecting green. Get people to live experiences to give places a different meaning". According to F.(RG) they need to take "actions in the city that have a very impactful communication point of view to generate engagement. It would be good to take forceful action."

⁷⁶ https://www.milanotoday.it/attualita/panchina-verde-parco-bassini.html

As we can see, different practices are proposed as valid, in order to produce a change in the local political situation, and at the same time affect other people on the importance of these areas. "Making a diverse experience of living places" seems to us an appropriate definition for the kind of engagement that would allow, according to them, to resist the advance of the urban machine. The spaces of habitability are always partial articulations. "Nobody lives everywhere; everybody lives somewhere. Nothing is connected to everything; everything is connected to something", as Haraway (2016: 31) reminds us. What is proposed is to produce the emergence of new subjects, subjects linked to and not alienated (Tsing, 2015) from the milieu to which they belong. The proposals presented had the aim of 'performing the crisis'.

"Off topic: we generated some territorial disputes, especially in Piazza d'Armi, San Siro and No Canal. Among the best actions was the double procession No Canal in swimsuit (about 3,000 people in costume). On the parade ground we did the banner (400m from the banner), the salamander parade (parade bugs), but all these initiatives must have a common thread. A starting point is to find something that unites (Zero land use? Zero tree felling?).

D. (Climate Reality Project): as you do, a good idea (from Extinction Rebellion) is to plant in front of parliament to rebel against a pro-coal decree ".

But the most obvious aspect is exactly that of being able to build an alternative regarding the type of city that is being produced; according to M. "we must challenge the argument that to manage the city we must accept money from the landowners. We need to find alternatives and propose them". To J. (FFF-MI) one important aspect was to "network with the green protection committees. Let's work together on the idea of a truly sustainable and resilient city. The 5th strike will see Milano for Climate organise the night strike, that day could be a good way to show the green committees and launch an idea of a city in 2030." In the end the demonstration was not held, due to the health emergency that a little later would come to deeply affect the actions of so many groups that in the city sought to build narratives and practices of contrast to climate change and the Milan model. But the articulations between the committees would continue, in the same way as the actions of eviction of areas considered of interest for urban development.

On July 8, 2020, another area that had been created in the city centre was closed so that work could start on a large building for the Museum of Resistance⁷⁷. The "Baiamonti Verde

⁷⁷ https://museonazionaleresistenza.it/progetto/

Comune" describes this situation as follows, highlighted the modus operandi of municipal administration,

"Why did Mayor Beppe Sala and Councillor Pierfrancesco Maran do this yesterday morning? Why did you use bulldozer logic and destroy everything we have created in the gardens? Why did you destroy the scene and the amphitheatre built by street artists? Why did you cut everything, including so many plants and flower beds we have looked after for a year? Why did you fence and lock the whole area again? What did we do wrong? maybe it's a crime to take care of an abandoned municipal green area? you healed and animated it? you created a space where we showed great films and hundreds of people passed by in a few days? a space where you could shelter in the shade and where you could have a picnic? an area where street artists created a little house to alternate in shows and rehearsals? and you destroyed everything!"

This first eviction did not mark the end of the space; the committee together with other activists (FFF-MI and other climate activists) opened the area and continued to develop their activities. On February 12, 2021, they held meetings with the municipal administration in order to negotiate a form of occupation that could continue until December 2022. Among the planned activities were: care for the greenery in the entrusted areas; children's entertainment with circus arts and games; exhibition of films and documentaries; meetings on themes of culture, science, environment; music and theatre events. On February 17, however, after only five days,

"We saw trucks, excavators and workers sent by the City Hall enter the gardens and we started to surround the area. We immediately went to the municipal offices to ask for clarification, and between one embarrassment and another we discovered that work had begun on the useless construction of the second Pyramid that will cost the citizens at least 17 million euros, deliberated unanimously by resolution of the City Council on September 11, 2020. They mocked us, but all this should not go unnoticed. That is the transparency of the current City Council. We probably won't be able to stop the excavators, but we will be able to inform the citizens of the reality of the facts. That cannot be stopped by anyone!"

Once again the march of urban development has produced "a cemetery instead of a park" (22/01/2021). In both cases what matters or is relevant for those who have activated themselves in the defence of the park is not the defence of nature in itself; the relevance lies in all the aspects that are ignore by the business-as-usual but that in anyway insiste to be put as something that matter: anti and alter politics are mixed, insofar as these political actions

are made against, but at the same time is developed from the possibilities of another way of being - and that involves other living beings (Hage 2012; Kohn 2021); it is a matter as we have already talked about on other occasions of 'widening the context'; we must take a further step to demonstrate that different contexts coexist, and that these are generated from the links present or generated in their actions. Both urban planning and activist planning define a context of action that links this non-human agentivity in a different way. But it is not only about seeing the same thing from a different point of view. A tree or a group of trees will not have the same position in the two contexts, and this difference is important in the production of relational spaces; there will be many ways of assembling bodies, flows and materials that are not equivalent and that will acquire a different performativity. The analysis beyond overly human contexts - focused exclusively on that which is defined exclusive of and by humans - allows us to empirically follow how these multi-species bonds are articulated; they do not just enter as post-material value, but are embodied in the web of material and immaterial and thus, in asymmetric modes of ordering (Law, 1992). The narrative of the 'death of the park' is shot through by the definition of a double alienation: the uprooting of the trees as well as the subjects from what their presence was capable of producing:

"How long will the 22 trees being uprooted from Bassini Park survive? After the felling of the first 35, the displacement works continue today, but photos show that the deep root systems developed over the decades by plane trees, magnolias and cedars are excessively cut and reduced to very small clumps. This one at the Polytechnic confirms itself as a construction site of death, which should not have been started and should be stopped immediately." (20/01/2020)"

"No one will bring them back to life. But the ground is still there, but the air still circulates, but no one has built anything yet, nothing of that monster of glass and concrete that will warm our summers and darken our winters. (Baiamonti - 14/02/2020)"

The Anthropocene machine continues its march, operating through the uprooting of bonds, of the territorial ecological and relational web. In the public assemblies held regarding the decision-making process, it was clear that the modus operandi left no margin for the effective possibility of intervening in its transformation. Residents, activists, teachers and students called for a re-evaluation of the project ; this re-evaluation should mainly take into account

"More adequate criteria to measure the environmental, social and ecological value of the park that the project intends to destroy and, from this quantification, have the opportunity to discuss alternatives, alternatives that the Rector Resta suggested have been evaluated, but of which there is no documentary evidence." (Azzellino, 25/01/2021)

The criteria according to them would be that of 'ecosystem services', capable of quantifying

"The value of ecosystems and their functionality and the improvement of the decision support of governance models, have never been used by the Municipality of Milan and will be the basis on which the compensation of the damage that will occur in Città Studi will be proposed. This seems to us a first small but important result, achieved thanks to the awareness-raising action carried out by the Commission. However, we would also like to reiterate that such a procedure should have been triggered in the context of the environmental assessment of the undertaking, i.e. *Before* the impact is generated, *not*, as is happening, *a posteriori* by the definition of the compensation measures are an integral part of the impact assessment and should have been taken seriously also at the Services Conference that last summer determined the approval of the Polytechnic project."

In a milieu obsessed with quantification, the qualification of 'environmental services' seems paradigmatic to us of how attempts to break the Anthropocene machine fall into the administrative (managerial) language of the market. We cannot know whether this meant a way of appropriating that language used to turn them against their promoters, or a capture of the political imagination at the limits of what post-political theorists have pointed out. In a milieu impregnated by the production of value at any cost, it proves difficult to find a point of support outside the logic that drags the production of the city. As Pignarre and Stengers (27) note

"For the everyday actors of capitalism - from the CEO of a multinational to the modest senior executive or consultant, without forgetting the politicians charged with its 'regulation' - it is always a question, first and foremost, of continuously reorganising its functioning, in such a way as to disempower any possibility of action that might find a reference point"

What seems important to us to underline is that by exercising the art of paying attention (Tsing, 2015) these activists attest and testify to the agentivity beyond humans that makes up the extended social bonds always in particular situations and conditions, and this has different consequences regarding how to formulate the problem and therefore how to respond to it. The distinction must therefore be situated, that is, specified. We are obliged to maintain these agents as 'agents-bound', whose conditions of personal and collective production cannot be dissociated from the particular material conditions that sustain them and which at the same time become ever more critical, undesirable, and unreliable: that is, problematic.

And the subjects find themselves in ambiguous situations, where at the same time as they 'struggle' against business-as-usual they cannot disengage themselves completely from its extractivist apparatus. The subjects find themselves divided between what they know and struggle for and fossil attachments that keep them as part of the reproduction of this machine. What could be called a dissociation, which is not cognitive, but is an example of the practical difficulties of transforming the very conditions that sustain particular forms of life. In a relational space sustained by fossil fuels any action that seeks to confront it may seem superficial. And it is here that anti-politics appears attractive, insofar as it articulates a discourse where the objective is that of transforming the 'whole system'; but when considering the socio-material conditions of sustaining subjects we must consider that when we seek to respond concretely, it is precisely the partial conditions of reproduction that are first problematised and not 'the system'.

And so with each new project, new protests were raised against the proposed urbanistic modality: the project to create a new football stadium, the requalification of a square in Città Studi district, the regeneration of abandoned railway areas. According to Ispra between 2006 and 2020 in the Metropolitan Area of Milan 2153.2 hectares of land have been consumed⁷⁸.

According to Michele Munafò, ISPRA rapporteur on soil consumption in Italy

"In addition, the current soil situation must be considered, with 58% of the municipal area, or 10,500 hectares, now artificialised: a territory in a clearly critical situation. Rome - to make a comparison - has consumed 23% of its area, even though the built-up areas cover a much larger area of 30,000 hectares."⁷⁹

And among the projects that particularly threaten the municipality are the San Siro stadium, the Goccia park, and the Seveso lamination works. Where 5 hectares will be removed from the first, 40 hectares of spontaneous vegetation from the second and 4 hectares from the third. The political struggle of those who have become active is crossed by a certain melancholy, in a situation where business-as-usual continues undisturbed with the related crises ongoing.

To the 'Save Bassini committee', "unfortunately, the institutions have not yet understood that this kind of development is now unsustainable. Symbol of our protest as conscious citizens will be the two remaining cedars, mutilated but still alive." (13 febbraio 2020) With

⁷⁸https://www.isprambiente.gov.it/it/istituto-informa/comunicati-stampa/anno-2021/neanche-la-pandemiaferma-il-consumo-di-suolo-speciale-roma-e-milano

⁷⁹https://www.firstonline.info/consumo-del-suolo-munafo-ispra-milano-non-e-tuttooro/?fbclid=IwAR2lq4ODRbBkql97EgtNeyldTkcPXJdTx0Pz7ID-Q R3lhhJ1erenZAYK2M

the Covid emergency the practices of destruction of green areas should demonstrate that it was necessary "a review of our development model, only this time it is not the usual environmentalists who are pointing this out, but doctors (4/03/2020).

These are the 'common understand' of many of the milanese activists that capture in emergency covid the result of the material ecological transformation of the territory (1 febbraio 2021)

"It is absurd to believe that - despite pollution, pandemics and the climate emergency - we can continue to consume land, to build, and to cut down trees and nature. It is absurd to believe that a park does not have a fundamental public function. Bassini Park was not just a small wood. It was a little piece of the future that we gambled on."

For the members of the Comitato Goccia (2 ottobre 2021) after an exploratory visit by Sala and Maran in the occupy area of Bovisa affirmed that, "We firmly believe that Goccia is an opportunity to overturn the point of view on the design of the city, giving the opportunity to think about a participatory transformation path from within the area, through the real involvement of the inhabitants." The San Siro defence committee (25 January 2021), for its part, was doing the maths with the threats surrounding the new stadium: "yet another pour of concrete is planned with the excuse of the new stadium. And yet it is possible to renovate the Meazza, the project has been filed, you just have to want it. The future has changed and Milan's planning has to be changed. In the same line note the "Baiamonti Verde Comune (26 february 2021)

"Sala promises a serious environmental turnaround, the Greens believe him and are going with him to the local elections. In the meantime, however, another rare green space in Milan, which is also a place of beautiful social interaction, is about to be sacrificed to the construction of a glass and concrete pyramid, the second in the same square. What is more, it is breaking a pact with the citizens who were promised management of the space until 2022."⁸⁰

In the end Giuseppe Sala was re-elected (September 2021), this time as a member of the European Greens and within a broad political coalition. We could conclude this chapter by speaking of an obvious defeat of the activists against the urban machine, but we have decided, despite all evidence to the contrary, to speak of what resists this defeat. Because these defeats do not signal the definitive closure where new possibilities can arise. What they

⁸⁰https://www.radiondadurto.org/2021/02/25/milano-il-comitato-baiamonti-verde-comune-contro-la-giunta-sala/?fbclid=IwAR1Xly_eNBJs-W95kOvBihIUL-y5LcF_j7oPy53_ZdksIIuaElNg1LDzKNw

show is that all aspects considered irrelevant by administrators and planners can support other practices of collective life and be be support by theses practices.

Chapter 5 What is to be done?

"Much has already been written about the Anthropocene—and we have barely started—yet one wonders how little of consequence has been said about "what is to be done" (and undone), not to mention the little that is being done." (Viveiros de Castro, 2019, S296)

"N. recounts his experience of Milan for the climate to date: it brings together more or less radical realities, it is difficult but it is the only way not to be insignificant. According to V. Milan for the climate was born because the various realities have realised that they do not weigh enough on their own, so a common denominator must be found. **D.** recounts the birth of Milan for the climate: the aim was to tackle the climate crisis. It was known that the various realities had different approaches but it was necessary to unite and diversity can be a resource. According to I. we have to give ourselves rules because ideally diversity is richness, but in reality it has created so many problems and some people don't come here anymore". (02/02/2020 - M4C - meeting document)

5.1. Climate activism and the problems of political action

In December 2018 I started the observations of what would become one of my research fields: those of the subjects who became active. After the start of Greta Tunberg's Friday strikes also in Milan was beginning to move through the initiative of a US citizen 30 years of resident in Italy, called Sarah Marder:

"Whoever you are, wherever you are, we need you now to stand outside your parliament or local government office to let them know that we demand climate action." These words, pronounced by Greta Thunberg on December 12, 2018, changed my life. Greta is the sixteen-year-old Swedish

activist who has made headlines and captured the hearts of people of all ages around the world who are fed up with the lack of climate action on the part of world leaders.³⁸¹

At first, as acknowledged by several newspapers and the activists themselves, those who gathered in Piazza Scala - seat of the municipal administration next to Milan's cathedral in the central area of the city - were few.

"When I heard Greta Thunberg asking for everyone's help to join in this battle, I decided to try to organise a climate strike in Milan too,' Sarah explains. 'The first time I went on strike following Greta's example was on 14 December last year. At the beginning I was alone. The following Friday there were six of us, the next Friday there were twelve of us and so on, and so on, and so on. A lot of cities are mobilising now, there's a lot of excitement everywhere.".⁸²

On 15 March 2019 two imposing demonstrations crossed the city centre of Milan. Over 100,000 people attended the morning demonstration organised by the Milanese section of Fridays for Future and a second one in the afternoon where over 40,000 people were present. The climate activists were euphoric. It was the largest climate demonstration in the country's history, leaving them hopeful that this event was an omen for great transformations. At the end of the afternoon march, a loudspeaker placed inside a cart attached to a bicycle announced a future assembly to discuss how "Milanese groups that are active in the climate change debate could be articulate for common action at the local level". It was the beginning of the articulation that would result in the formation of the network '*Milano per il clima*' (M4C). Since then, dozens of events have taken place up to the time of writing this thesis. Information about the network began to circulate in forums on social networks as well as in the alternative media; at the end of April I subscribed to the network's private facebook group and requested to join the network's Whatsapp chat, introducing myself as a PhD student carrying out research on climate activism in the city⁸³.

⁸¹https://www.pressenza.com/2019/01/environmental-optimism-over-despair-cities-are-key-to-fighting-climate-change/?fbclid=IwAR3I9UERupVHa_suBY4QTba7Sq_1qv96yWa2_eWUwRoMeoDvmp1-E3BN8UI

⁸²https://www.ohga.it/climate-strike-a-milano-grazie-a-fridaysforfuture-si-sciopera-contro-il-cambiamentoclimatico/

⁸³ The main source of this chapter will be the material collected in chats and internal documents of the Milano per il clima (M4C) network, a group to which the author had access, omitting, however, the names of the activists so as not to create problems from a personal or legal point of view to these subjects. These data are added to the ethnographic notes produced during participant observation to events, meetings, public discussions or to conversations and interviews with activists.
5.2. Milano per il clima (M4C)

As we said in the introduction, the material we will work on in this thesis was collected mainly through digital platforms along with ethnographic notes taken at events such as gatherings, demonstrations and meetings. The three main ones were facebook, the communication application Whatsapp and Gmail shared document deposit (Google drive). This form brings us drawbacks - to the extent that it is limited to those discursive aspects. To remedy this limitation it is enough for us, however, to transform this material into testimonies about how these agents seek to transform fossil urban sociomateriality, what difficulties they encounter and how this is explicitly employed to produce broad political effects, that is, as a way of 'contaminating' the milieu in order to transform the chains of dependency that sustain fossil socialities.

The use of these media is differentiated from the actors' point of view by the functions they should provide: the Facebook page should provide news, general discussions and events of the groups and associations promoting Milano per il clima - although it has become the object of constant discussions regarding what was published and the control that some groups within it might be exercising. WhatsApp would be the tool for quick communication and internal articulation regarding assemblies, meetings and positions on events and issues relevant to the local, national and international situation (despite discussions regarding the level to which the coalition should stick). The focus of this chapter will be these documents, as they allow us to know which organisations and people were participating, which themes were discussed, the critical analyses made on the coalition itself, the responses from other actors (institutional or not) and the perspectives for future actions. They cover 24 meetings in the period from May 2019 to September 2020.

The adhesion to *Milano per il clima* was very simple: the response to the call placed on the Facebook page constituted the means by which one could be inserted into the Whatsapp chat and the Facebook private group, thus being 'in the know' of what was happening. The chat was not the best place to check on organisational problems because it contained an average of 60 to 70 participants: these were discussed in meetings, as were more complex issues and internal problems. The last count of adherents showed 73 entities, NGOs, formal and informal associations, student collectives and social centres, but also private adhesions (*a titolo personale*).



5.1. M4C members

But despite the imposing number, the coordination meetings - according to the documents drawn up at the Verbale meetings uploaded in Google Drive - ranged from 5 to 15 entities. Even the attendance at the meetings varied. The meetings functioned through the identification of referents for each association - but many associations presented themselves with more than one member. Many activists participated in more than one organisation, for example: referents of university student collectives (as Tempo Zero, which brought together a group of physics students from the Università degli Studi di Milano Statale) and members of Fridays for Future - Milano (FFF-MI). The same subject could be part of several collective organisations at the same time. One of the aspects that will be worked on here is how to keep together many heterogeneous agents. One of the hypotheses of this work, which we will present below, is that insofar as responding to climate change takes the form of diverse proposals for socio-material transformation (and of socio-technical imaginaries) the confluence of groups - small alliances within the network - depends on the way in which the problem is translated into the specific and particular conditions of a given social field: it is about the disruption of business-as-usual, but this does not mean any consensus on how to do it. The importance of always referring to situations will be exemplified here through the

fieldnotes of the assembly of the FFF- Italy⁸⁴ held in Milan on 13-14 april 2019, after the great demonstration on 15 march, 2019.

5.3. "The time has come; and now, what to do?"

In the first assembly of the FFF-Italy, we were able to gather, from participant observation, the way in which activists from all over Italy sought to justify their own commitment, as well as to interpret the challenges and paths that had to be taken.

The relationship between science and politics appears at various moments; in all of them it was a question of contrasting the robustness of the scientific data with the weak response given by politicians. The representative from Genoa declared that "the strength of science and the need to follow data and conclusions"; according to the Monza group they need "to be based on scientific evidence'; to the Piacenza group, "science as the foundation of action"; Val de Susa 'to base policy on scientific data'.

The insistence on transforming politics through the robustness of scientific evidence will return continuously throughout our fieldwork; scientific data are mobilised to transform politics and existing institutions; they become instruments for the transformation of collective habits; but they also become the object of peculiar claims: that of pressuring the media to transform these data into didactic and informative content for the largest number of people; data are dramatised in the form of spectacle, and the academic event itself becomes a mode of dramatic presentation of the collapsing world, but also of the virtuosity of human invention and creativity.

According to the representatives of Campobasso climate activists should be guided by anti-fascist and non-partisan values, and they should protect themselves from any form of instrumentalisation; according with Siracusa group it was necessary to remain outside the "logic of political parties and avoid the presence of people holding political positions" within grassroots organisations; these organisations should be structured horizontally in order to resist possible capture as a legitimising factor of policies harmful to climate and ecology. Mobilisation should be carried out from below, starting from the territories, from the local dimension which could take the "form of open assemblies as a body for coordinating activities" (Molise) and for "outlining proposals" (Casale Monferrato). The activist practice

⁸⁴ https://fridaysforfutureitalia.it/report-assemblea-nazionale-milano/

"should have an itinerant dynamics" (Bolzano) in order to collect the local specificities that could be problematised from the ecological and climatic point of view, becoming the "interpreter of a diffuse feeling" (Roma). In this way it would be possible to "support local causes" (Vittorio Veneto) and "defend territories" (San Donato). It was necessary to become the "voice of the territories" (Campobasso/Molise).

The relationship between scientific research and political practice has been prominent and problematic in current climate activism - but not a historical novelty when it comes to moving data or facts directly from the field or experimental laboratory into collective political life. Science and technology studies as well as other theorists close to it problematize this passage from a varied set of experiences. The specific problem of the relationship between science and politics, as we will see, must be articulated with the next two: between the emergence of a diffuse public that must face problematic situations that the existing institutions are incapable of responding to in a way that is considered satisfactory (Dewey, 2016) and that of situating a space where the planetary dimension of the global data can find support in concrete situations allowing, in this case, the practice of disruption and the emergence of alternatives - even if *minor* ones. Activists refer mainly to the set of studies developed by the IPCC in 2018 on the 1.5°C limit to temperature rise. Therefore, it is not about proceeding to a deconstruction of these data, but to consider them as relevant aspects that inform and contribute to form the 'climate citizens' and climate activists.

The question of the use of science to construct responsive politics has been the subject of an important but nevertheless generalising discussion. One of the most influential perspectives is that of post-politics; this line of research argues, through this category, that founding a politics of contrast to climate change means in practice giving up intervening in the very formulation of the problem, renouncing politics itself; this would be captured within the confines of a technical-scientific framework and remain relegated to mere management by an elite. And if we look only at the pronouncements of the activists, the messages pronounced in public, the posters of the demonstrations, we might think that this would be the case. But in fact, the way in which scientific objects enter into the experience of becoming active does not possess the capacity to reduce dissent; to pronounce that "ecology is the new opium of the people" is a type of synthesis capable of putting in agreement both a so-called radical left and the denialists.

"This post-political frame is structured around the perceived inevitability of capitalism and a market economy as the basic organizational structure of the social and economic order, for which

there is no alternative. The corresponding mode of governmentality is structured around dialogical forms of consensus formation, technocratic management and problem-focused governance, sustained by populist discursive regimes" (Swyngedouw, 2010: 215).

Although we consider this approach relevant and pertinent, we believe that its importance lies less in a general diagnosis and more in underlining the risks that derive from a possible trajectory of capture of politics by the language and institutions of natural resource management: that of nature as business interpreted in terms of supply and demand. We share the diagnosis that this risk exists and this logic that depoliticises is already in operation. Secondly, however, we consider that this diagnosis does not allow us to describe the diverse responses that have been formulated in spaces other than those of national and supra-national bodies. Activist politics cannot be restricted to a dispute of existing spaces, insofar as its claims presuppose the creation of new instances in which the consequences, intended or not, may (or should) have a collective response.

The problem with post-politics is that it hinders the positive evaluation of those who seek to respond to climate change. Despite what we consider its limits, the notion of post-politics in some ways, and correctly, shows itself to be a critical reflection of actual technocratic management practices to which we are witnessing its emergence. Our intention is that of saving these experiences from the disqualification of existing power, as well as from the critiques that claim a privileged position to judge, a priori, what matters or not in a problematic situation; finally, no positive description can be made of this terrestrial politics (Latour, 2018) if we are not willing to follow it as an invention that is justified in reference to new situations, that imposes limits on what is experienced in practice.

5.4. Become a climate activist

Those who self-identify as activists do many things, among them, including that of entering areas considered legitimately political - the same ones used by the PD's Euro Parliamentarian (Introduction) to mark the difference between youthful impetus and institutional responsibility. And this contrast between modes of doing politics can help us clarify how to consider what counts for those who become active, but also how the materiality of everyday life becomes continuously invested with political relevance.

As Knox (2020: 213) notes

"When it comes to climate change, critics are right in pointing out that climate activists are deeply entangled with technocracy. However, approaching their actions from the perspective of thinking like a climate rather than from a dematerialized view of political thought creates the possibility of seeing that this entanglement is not about a narrowing of politics but rather an opening to a version of the political that is capable of incorporating the communicative capacities of nonhuman and human forms by attending to the way they are described by science"

Political practices in this case will be explicitly linked to socio-material and energy transformations - how to move, consume, but also what energy sources would be adequate to reduce emissions, and how this implies changing the infrastructures that sustain economic activities as well as social life. But all these problems must be discussed; it is one thing to identify and recognise that a problem exists; it will be another thing how such different subjects can articulate a collective action that can guide these transformations.

We should return to some points worked on previously. Activists become active on the basis of experiences situated in a particular milieu. As Stengers (2020: 78) observers, "ce sont les faits obstinés, capables de faire obstruction, interrompre impitoyablement, la marche d'un raisonnement". And it is these conditions, capable of obstructing but also of favouring a particular course of action that we must pay attention to.

That is, we should not consider a subject disembodied from the particular milieu to which he belongs; but rather one who has emerged from it, with all the subjective and political, personal and collective consequences this may have. The milieu is relevant to action. Its particularities become vectors of engagement and reflection for those seeking to respond to climate change. We must radically reject the idea that we can think of climate politics where disembodied individuals must confront a global threat without considering all the mediations that are present and the attachments that articulate them at the same time that offer a 'hold' to their practices. At least where climate change is concerned, social theory seems caught between the global event and the individual subject abstracted from all that sustains it. Our intention is to look at these experiences in a way "that suspends all evidence-based argument and demands that we accept the need for experimentation, that is, that we risk being interested by concrete situations in which the precarious beginning of trajectories of apprentice-ship may be discerned" (Pignarre and Stengers, 2011: 44).

The problematic situations that activists encounter in their daily lives start to question them, putting them permanently in the position of having to situate themselves with respect to their own knowledge of the climate situation and of what they do, as what they should do; without knowing exactly how to do it, they must, in one way or another, find an answer to this question: "in the face of the ongoing catastrophe, how do I respond to this injunction?"

The way these activists elaborate their own experience of 'becoming active' is apprehended from distinctions between planetary aspects and those local: is a located experience of different personal and collective, material and immaterial attachments. But rather than just being a detached reflection of this environment, this conceptual apprehension interferes with how the experience of becoming active will be made, the conceptual apprehension will become part of the experience itself. This conceptual elaboration is not only the work of specialists; those who become active engage in the work of understanding the local and nonlocal conditions of their actions seeking to extract, from the explicitness of past and current links that constrain the experience in certain trajectories, general concepts that can make intelligible the construction of this environment as well as the possibilities of transforming it.

They also analyse those structuring forces - as the chains of dependence - capable of interfering in this environment so as to transform it in a lasting way; they cast doubt on the institutional capacity - and will - to seriously take on the problem of climate change in order to reduce its impact. Every policy at international, national and local level is assessed on the basis of its connection with other aspects of this fossil machine ('greenwashing' and 'green painting')⁸⁵. Local (or national) actions of, for example, will be placed in relation to chains of dependence and interdependence relations that can only be identified in their extra-local dimension. They must identify, in this way, the extent and the connections existing between territories, infrastructures and local and non-local ecologies.

Among those organisations, student collectives, associations and committees present in the 'Milano per il clima' network, we can see that the scope of action is varied. In annex 1 it is possible to verify the spheres to which these activists are dedicated. We obviously cannot provide a genesis of the formation and development of each of them. But we can, considering a limited temporal dimension, extract the meaning they give to what they do and how this is articulated with 'becoming active'; considered therefore relevant to respond to the problems produced by climate change and the relations between human practices and living beings in a particular milieu.

We must therefore consider what is part of the experience of becoming active, rejecting an a priori distinction of relevance - given by experts of the most varied origins; this seems to us to be the hallmark of debates on what to do about climate change, where contenders align

⁸⁵ Green painting was a definition given by FFF-MI activists to criticise resilience plans based on the device of open squares (one of the most used by tactical urbanism), characterised by painting the asphalt.

their arguments with various 'objective' data in order to support action, hoping thereby to produce an alignment between objective conditions and subjective responses, between individual apprehension and collective political action, between primary and secondary qualities, between facts and values.

With the documents of the meetings, the fieldwork notes, and with the discussions originated in the M4C chat we will be able to extract the more general aspects which guided the debates and the difficulties of political articulation between the groups. The problem could be formulated in one demand: how to transform the multiplicity of subjects involved (and affected) in a unitarian political force? We decided to quote complete parts of these documents as well as the chat to provide a description in the actors' own words - recorded in the form written by a rapporteur or identified by the messaging application - and for the importance it may acquire for other researchers. The tactics and the conflicts around them will be presented in the next chapter.

5.5. Where to land?

"Connaître, c'est toujours connaître quelque chose qui endure et tant que capable d'endurer. Mais connaître un être, c'est être situé par lui, par la manière dont il valorise son environnement dont fait partie celle qui cherche à connaître - c'est apprendre quelles questions cette valorisation rend pertinentes" (Stengers, 2020a: 97).

How to situate climate change, and moreover, how to situate oneself personally and collectively in the face of this event? And above all, what are the consequences of this event in the constitution of collective practices of contrasts, whether in terms of the anti-politics or that of an alter-politics identified by Hage (2012)? One of the first steps we should take is that of following what is defined as relevant for those who have become active and who have constituted themselves as public (this seems to us the only way to avoid the analyst imposing from outside what should or should not be taken into account); these agents act because something affects them; but this something will be locatable in particular situations, where empirically verifiable aspects of fossil sociality may become a object of 'inversion'.

Our research strategy was to let ourselves be carried through what interested the activists and what mattered to them - as it made them think and act together in order to create an uncertain collective subject⁸⁶. As we will see at the end, they themselves did not know whether the group that was born in 2019 was a network, a movement, or a platform for the group's activities. And this vagueness was being generated from very pragmatic questions regarding how to respond to climate change in a collective way, as well as that of how to transform their claims and actions on broader regional, national and international scales; but also how to think of collective ways of living that were articulated less by 'chains of dependency' and more by those of relations of interdependence.

The experience of becoming active should generate a milieu in which they can flourish. Responses to climate change should be followed 'in the making', which means not extracting them from those conditions where these responses are formulated from particular 'constraints', is what we defined earlier as our 'experimental setting'.

We will therefore follow - not exactly in a chronological order - the instances of problematization; these instances emerge in particular situations (meetings of the network, but also events such as that of the destruction of the 'common green'). The critical perspective⁸⁷ the one they pose could well be defined as transversal, insofar as no aspect of personal and collective life remains immune to being evaluated from its adherence to climate-altering socialities, and to its mechanisms of bodily-subjective production. And it is impossible not to think of these 'critiques' of the current activist groups with other movements that preceded them, not even in the division proposed by Boltanski and Chiapello, between aesthetic and social criticism, when referring to the radical practices existing in the 1960s and 1970s in France. Would it not be possible to situate the current debates on the basis of a similar division, between critique of labour, productive organisation and social justice (translated as just transition) and that which promotes the necessary personal-subjective transformation (to overcome alienation from the limits of the earth and the climate) as an indispensable aspect for the rejection of climate-altering fossil sociality?

In one of the first documents shared in the M4C network chat one could find the following remark: "Local-global. How do we position ourselves with respect to the actors in the territory and what vision do we want to give with respect to the global context"; to which is

⁸⁶ All activists' names will be presented with bold initials only, as we already mention in the Introduction.

⁸⁷ "The formulation of a critique presupposes, preliminarily, an unpleasant experience that gives rise to complaint, whether it is experienced personally by the critic or whether he is moved by the fate of another" (Boltanski and Chiapello: 72)

added another requirement, that of giving "the importance as a network of citizens to help promote the value of science in the fight against climate change" (Meeting 08/07/2019).

But we found so many others. This network was an extremely heterogeneous constellation of subjects - already part of some organisation (formal and informal). These were not exactly organisations that existed for the sole purpose of 'fighting climate change'; working in the interstices of the environmental question, *lato sensu*, they felt directly called upon to mobilise and act to address the issue, and they began, each in its own way, to re-signify their own practices on the basis of planetary climatic and ecological conditions. But for this they cannot simply wait to find a ready-made answer on how to do it. The problem is how to articulate these responses - which cut across different moments in social life and different practices, scientific or otherwise.

A response produced in a specialised area and whose results are promising for that area does not necessarily have guarantees that it could work in other areas. From the moment it leaves the particular 'experimental setting' where it was produced and is inserted into the environment outside it, it is not possible to be sure that it will answer the same questions asked by those responsible for its invention or whether it will have the same consequences - as those delimited in the protected environment of the laboratory (Stengers, 2015b). Activism will be done in a milieu where different responses are claimed to be just or relevant.

If we take the position of considering the experience produced in fossil sociality, the establishment of new collective forms does not exclude anything that is part of this experience. Institutions, but also market, science as well as neighbourhood committees; gender issues as spirituality; Milan, but also Brazil, Russia, Australia, Rojava; the city council as the assemblies of the United Nations⁸⁸. The difficulty for them will be that of knowing how to cross, occupy, transform these spaces, change their rules and their forms of composition; forge a language that manages to aggregate people, technologies and non-human beings in a disruptive movement.

Many of the groups that have demonstrated an active role in the coalition are of recent formation, many simply originating after the 'Greta Thunberg event'. They perfectly exemplify the emergent dimension of the public, and the emergent dimension of climate politics, not only in its character as anti-politics, but also in that experimental one of alterpolitics - not to mention the ever-present risk of a simple mercantile management post-

⁸⁸ Dozens of demonstrations have been held at various consulates in the city over the past 3 years.

politics. They organise themselves primarily from the territory of their practices and follow processes of alliances by which they can extend the space of action.

5.6. Paths of activation

In their first year, these activists sought to experiment with different forms of activation, whether of themselves or of other agents. They participated in meetings with municipal and regional administrations, met political figures, established contact with companies and other associations; they tested different formats, such as the typical university conferences, participation in events of other associations; they organised two festivals for the climate⁸⁹ with different institutions; produced many materials on the climate crisis and various proposals on how to respond to it. Reports, analyses, discussions, banners and posters; demonstrations in squares, large parades, online protests, on bicycles; direct actions and occupations, theatrical and musical performances, exhibitions. They sought to infect the environment so as to create a suitable terrain for the low-carbon transformations they considered necessary. These events must be considered in the specifics of their practices and in relation to whom they were directed. We cannot issue an assessment as to whether they are valid or not. But they can all be defined as practices that seek the disruption of the consensus and the 'attachments' that guarantee business-as-usual. To Simpson (2020: 17)

"the ensemble of ways that urban space is made and remade to facilitate and conform with the dictates and accumulative logics of fossil fuel industries. Fossil fuel extraction and consumption have given rise to carbon cities that are underpinned by (and extend) forms of racial, colonial, capitalist, gendered, and environmental violence and injustice. These exploitative and harmful relations are the conditions of possibility which enable the production and reproduction of urban space."

They try to become a reliable interlocutor with the city administration in order to intervene, pressure and help, according to them in the 'elaboration of a new city vision' (ref. the moments where this happened). This process can be considered up to the 'Bassini Case' that will provoke a change of perception regarding the commitment of the city administration to changes to undo what can be call the fossil urbanism (Simpson, 2020) and move towards a form that could broaden the aspects considered relevant for the planning and transformation of cities⁹⁰. The difference between climate urbanism and fossil urbanism is that, if the former

⁸⁹ That at the end of 2021 became an association. https://www.klimatfest.org/2021/

⁹⁰ In May 2019 the municipal administration approved in the council a climate emergency declaration.

provides the analytical tools to understand the ongoing socio-material transformations of urban interventions on climate change, the latter provides critical instances for apprehending it as a fossil artefact.

The difficulties of being heard or considered as relevant voices for the public debate on climate change led these activists to seek some kind of dialogue with the municipal administration. But how to find a way where they could be heard? And perhaps most importantly, with what language to speak in order to be heard? For them, this meant getting into the administration's documents and plans and learning their management and technical language. In this sense they started (04/10/2019) to think of actions that could be done to establish a relationship with these institutions as a competent subject: the first step would be to study the Action Plan for Sustainable Energy (Piano di Azione per l'Energia Sostenibile (PAES); other, was the idea to invite experts to make formative seminars to members of the group about the topic;

"Propose a series of questions to be asked to the municipality (e.g. how will decarbonisation take place, why did we only reduce by 11% when the target is 20%, how to improve communication with the PAES; 4. To have a relationship with citizens, the idea could be to make a path of deliberative assemblies; on this the process should be designed and also a testing phase of the same."

In other words, as we have already said, climate activism crosses languages and spaces in order to act to change the business-as-usual path. Among the proposals presented in one of the meetings (20/10/2019) three emerged: that "interview the institutions" (**P**. Resilient Gap); write "an open letter to Mayor Sala by 20 November", together with FFF (**J**. Tempo Zero); and the proposal that the M4C thematics groups of technical and relations with institutions could work together. (**D**. Climate Reality).

The relationship with political agents, the need to think of a widened action that could include other subjects outside the associative or student realities was the reason that led the activists to organise two demonstrations during the climate march - an atypical situation all over the world according to them - instead of just one; the goal was to create "opportunities for workers and the link between two different categories: students and workers, citizenship in general" (24/07/2019 - documents). This point brings us back to the remarks made by Sarah Marder at the beginning of the Climate demonstrations. Most of the people who gathered at the Friday Strikes in front of the town hall were not exactly young people. Throughout the demonstrations it was clear that the one in the morning was organised by FFF

and the one in the evening by M4C. But even in the open assemblies of the FFF the presence of people over 45 was evident.

One of the initial questions put to the activists - that is, the ability to activate and attract others to the demonstrations and how this could contribute to taking a public stand on the climate situation - was an extremely relevant issue:

"It stresses the importance of involving small territorial associations and also re-evaluating traditional forms of involvement (banquets, gazebos, etc.). It is a parallel work of equal importance to the institutional plan. Take root in the territory, raise awareness, broaden the base. The ability of those at the banquets to involve and communicate complex issues in a simple way is necessary - so we propose training sessions for these people focused precisely on these skills". (24/07/2019-documents).

However, bringing heterogeneous realities into relationships brought practical difficulties in the articulation of a shared common perspective.

"We are a network of associations that have no experience in the streets, apart from the students, the perception is that there is no associative line. A manifesto is proposed. Is there a will to do? Yes and No. The widespread feeling is that we are chasing events and working only to organise something in conjunction with FFF. We are "an event machine". Perhaps M4C is moving too far towards being an association rather than a network? (07/10/2019 - documents)

To solve this problem they propose moments of "political confrontation, structuring, dates are needed. Course to become facilitators (Meeting with a facilitator) self-training/political assembly/public event. Deliberative assembly" (07/10/2019 - documents). This is an important point; on several occasions the question of what type of organisation should be formed was put on the agenda; the network sought to articulate diverse heterogeneous subjects, with diverse organisational characteristics, origins, and modality of action (formal and informal groups, professional activists). They were to be that emerging 'public'. Their task would be not only that of constraining policy-makers to act, but also that of proposing some solutions to the problems arising from climate change⁹¹.

⁹¹ This did not exclude attempts to 'control' the network's organisational and political line; constant conflicts occurred, many of which revolved around the use of social media for the publication of events, the publication of activists actions in Europe and articles, and mostly about the methods deemed necessary for the disruption of business-as-usual (creating a clear division between those who advocated direct action and others who did not).

To this end it was necessary to take advantage of important events or dates in the city's calendar to introduce a counterpoint to the debates on climate change and not limit itself to the simple and routine mass demonstrations. Despite the massive demonstration of the first year, it was clear to activists that it was not enough. To counter business-as-usual they had to take root in the material fabric but also in the imaginaries of its inhabitants; to counter it required a presence that provided new possibilities to a common life. One of these was 'Black Friday'. As reported in the Milanese section of the newspaper 'La Repubblica', on 29/11/2019, young activists gathered in the city centre to protest against what they defined as a date of consumerist celebration:

"Hence the decision of the young people to use today to protest against "consumerism and overproduction, which are also the causes of the current environmental situation," explains another organiser, Alessandro Silvello. We decided to call the day 'Block Friday' precisely for this reason, to highlight our protest and bring to everyone's attention the effects of consumerism taken to extremes, of which Black Friday is a symbol: I'm thinking of the reduction of the rights and salaries of many workers employed in this system. ".⁹²

These "consumerism dates" (S. – 30/11/2019), like other dates (Christmas; Easter), was chosen so as to produce an inversion of its meanings. We could even say that it is a process analogous to that present in the inversion of infrastructure, but in this case the political objective is that of making explicit the chains of dependencies - and their consequences - necessary for the production of this moment of collective consumption and its imaginaries in daily life. Other dates are chosen as opportunities to take advantage of the public concentration in order to 'ask the municipal administration for an account'. But even this gesture produced divisions between groups that sought to avoid direct confrontation with public authorities:

"During the last meeting, the possibility of organising a public assembly during Climate Week with Milan Climate Action and institutions was discussed in order to have a confrontation with the administration on what is being done and what has been done for the climate emergency.

According to what was recorded in the documents, regarding the possible relationship between activist and local administration, two "contrasting opinions" were put forward. The

⁹² https://milano.repubblica.it/cronaca/2019/11/29/news/fridays_for_future_black_friday_milano-242190222/

first was that which "some would not agree because it could offer a easy side to mediatic use of the initiative and also there are already elements for the administration to act and it just has to do it"; the second one was that "others are of the idea of building a moment of confrontation in which associations and administration come face to face to express requests and possibly proposals". The decision, concluded "is referred to the next meetings".

When we observe that becoming active 'activates' a process of explicitness by which 'everything' must be considered, we will see that activists begin to collectively ask themselves questions whose non-resolution requires crossing different spheres of action. They swing between autonomy and commitment, between critical political engagement and the risks of being "instrumentalized" and co-opted. The practical difficulties make it clear that taking the view of the climate and ecological crisis - in terms of thinking like the climate (Knox, 2020) - in turn creates a blurring between what is political and what is not.

The problem is that the experiences of those who become active do not dissociate these aspects. These experiences include everything that makes up the experiential field of the subjects and not something as exclusive economic or exclusive climatic. In this sense they must "se familiariser avec, pister, enquêter, essayer, induire per analogie, découvrir - comprendre peut-être, mais jamais en general, toujours relativement à une question, une préoccupation ou une situation" (Stengers, 2020:79)

We could even say that this is a criticism of the limits set by experts - be they economists or engineers - who, by circumscribing an aspect considered relevant to their own practice, seek to impose themselves as a general criterion of valuation. In this sense, they point out that it was necessary to "understand the concept of development" (**P**. RG 20/10/2019), as well as that of understanding how one could "push policy to really engage" (**F**. RG, 20/10/2019). But it was also placed as an injunction where it was necessary to produce a minimum consensus through which actions could be organised. According to **M**., this could be done by structuring a programmatic document based on the limits pointed out by the IPCC report published in 2018 that sets 1.5°C as the limit temperature that the Earth's climate system could withstand without "entering a completely unknown territory". As we have seen in the national assembly of the FFF, the issue of the limit of temperature increase to 1.5°C was also a limit for the possibility of collective action: it was the lowest common denominator that could bring such different realities into agreement:

"I like the structure of the point "target 1.5°C". Add a chapter on what we want to do. We need this work above all; **G**.: the "so what do we want to do?" is missing. He proposes to structure the document in "our values, our requests, our method; **J**.: add a reference to

migration; L.: suggests not to stop on the pillars (the foundations) but to go ahead and ask the purpose of this work; S.: suggests that we define which areas we want to focus on: only energy and mobility, or else?"

Activists are drawn into other spheres from the moment they start asking questions about the links between consumption and emissions. It seems to us to mark a difference that inevitably leads them to elaborate a political perspective that cannot be limited only to a confrontation with the system - along the lines described by Hage (2012) as anti-politics.

These doubts, therefore, are reflected in the definition of the problem they must face (with its multiple connections) and the tactics that could be pertinent to disrupt business-as-usual. As we will see in the next chapter, the decision to take up direct action tactics is rejected by a part of the group, mainly an activist linked to The Climate Project Reality (international NGO founded by the ex-vice President of USA, Al Gore) who rejected a priori any direct political action; the conflictual repertoire activated by the activists was seen as erroneous and above all dangerous - for which it is constantly associated with the antagonistic practices of the Italian extra-parliamentary left of the 1970-80 period (Balestrini and Moroni, 1988). The defence of an absolute pacifism (Malm, 2021) delimits the modalities of action as a practice of persuasion and dialogue - which, according to some of them, would increase public support to push ever harder for an energetic transition.

In this case, there was a deep division between a strictly institutional line and another that sought to 'contaminate' all aspects associated with the urban fossil machine, with the values associated with it and that they saw in the disruption of normal daily flows an opportunity to affect the business-as-usual as well as the consensus that sustains it. Faced with a proposal to hold a traffic blockade, the Climate Reality activist articulated his rejection describing it as deprived of effectiveness and in which he risked losing existing public support; according to him (04/10/2019)

"Particularly for Climate Action, if it emerges that you want to make a blockade. As already said I am against blockades; in fact I consider them counterproductive: the only "advantage" I see is that it's media-friendly; for the rest we make an enemy of the majority of the population and the institutions will not want to listen to us or talk to us. So if we want our pillars to be realised, from my point of view, blockades are counterproductive. I call for an official vote on what to do: blockades or no blockades? For me this is a decisive point, so I need to know what is decided. Co-organisation (of a

demonstration) in the morning is not feasible without authorisation, as it is incompatible with the code of conduct of many associations."

In the end, the decision to take part was rejected and according to J. (Tempo Zero/FFF-MI), was "understandable that if associations are not close to conflictual practices, people can participate individually." The tactic of a blockade and direct action was proposed by the student collectives; received with the silence of the majority, or with messages of support or disapproval, it meant interrupting the flows (communicative, administrative) in such a way as to put in crisis, and to make explicit a critical dimension of the continuity of business-asusual. It was common to hear in the demonstrations the slogan if nothing was done, the protesters would blockade the city - something that never happened. In conversation with some activists it seemed clear that the blockade of the city would be technically feasible, as it would be enough to "block some of the nerve points of the city to make the traffic collapse" (D., 29-year-old student, personal communication - 08/02/2020). Even if the critical position to this tactic should not only be considered from the point of view of individuals opposing the bloc, in fact this division is not exclusive to Milanese activists - as demonstrated for example by Malm (2021)⁹³. Explicit political strategies and tactics are linked in turn to how the sociomateriality that constitutes the field of action for them is defined, its weaknesses and vulnerabilities.

From 2020 other actions start to be proposed in the group: they will be the '30 actions for the climate' (the idea was to show many practices that someone can take in daily life, "good actions to reduce one's own emissions" as defined by **S.B.**)⁹⁴, events on sustainable tourism, training for adults - always in a way to "involve people from outside the network who are already knowledgeable about certain topics."(19/01/2020)

By insisting on the efforts to create a 'group', we can exploit 'native' terms to describe a situation that involves the effective formation of a new agent, the climate activists, in relation to a particular milieu. Such will be for example the connection between climate activists and neighbourhood committees in 'defence of the green commons'. The relationship with these committees provided concrete conditions to critically place the activists' position towards the Milano Model, its green mechanism, Forestami, and the city urban development plans. It was

⁹³ https://www.lrb.co.uk/the-paper/v43/n22/james-butler/a-coal-mine-for-every-wildfire;

https://newrepublic.com/article/162247/andreas-malm-blow-up-pipeline-climate-direct-action;

https://www.thenation.com/article/environment/andreas-malm-interview/

⁹⁴ Greenpeace milano, Manitese milano, ER milano, M4C, Resilient GAP, CTG, Diciassette, Climate Reality Project, CORE-lab, Climate Engage, Comitato Ciclamini Mimose, SeiGAS, IPR: "aiming to involve as many people as possible in daily actions to reduce their emissions" (05/03/2020)

a process that gained visibility with the Bassini case and that would continue until the interruption of public face-to-face activities with the health emergency.

5.7. "I cancelled everything": a pandemic arrive⁹⁵

The health emergency made the previous practices of confrontation and public exposure impractical. Submerged by personal problems, by the veto to leave home and to demonstrate publicly, the activists begin to evaluate the setbacks that have befallen the network. The members begin to speak insistently of the need to restructure it. After a year of existence, the coordination of the groups loses strength, participation is reduced and the euphoria of the last year gives way to the realism that the difficulties are greater than the enthusiasm shown in the first year. According to F. "the problem is that participation in the assemblies has fallen"; it was necessary to revive by writing to the groups present formally to find out if they were interested in continuing to participate. But even this simple formality was not received in an uncontested manner. For L. "there was no point in sending communication without the existence of a project: "An email saying that we are preparing a document for the municipality is a way of getting involved. To have a structural involvement it makes sense to have a structural project." Collective articulation should be based on concrete proposals. The difficulties that emerge from concrete attempts to organise collective actions that can contrast climate change show us perfectly well that it is not enough to gather around a 'common problem'. For N., "either there is something to do together and people see a point in participating; but if the role is not clear, there is no reason to participate and they don't. We need to propose a project rather than a simple email. I don't have a concrete proposal, but we need to think about it." The problem of participation, involvement and coordination of efforts needed, according to him, to go beyond the mere formal existence of meeting spaces, such as the one formed by M4C. The existence of M4C favoured dialogues, updates and collaborations (F. RG), but it was necessary to "understand who wants to dialogue with us, to understand what happens in our "choir". L. pointed to an apparently participatory aspect of the network: "dialogue, true, but also true that those who spoke were few. Until now, they never involved the network as a whole more than that. A structured project is needed."

⁹⁵ Recent published research shows, at least in terms of interactions on social media, a correlation between the progress of the pandemic, with an increasing number of cases in certain regions, and a decrease in the number of mentions of climate change and global warming on the same networks. This serves to situate how the consequences of the pandemic have dealt a 'hard blow' to the nascent collective organisation and raises important questions about how to act in emergency situations.

https://journals.plos.org/plosone/article?id = 10.1371/journal.pone.0256082.

After a year of intense demonstrations, activities, and debates and after a few months of the emergence of covid-19 the 'climate' in the group was one of doubt and uncertainty regarding the ability to act in a relevant way. For **D**. (XR) "If the idea is to give life to this network again, this is a unique and crucial moment when the need for a united front for a common problem is most felt." For the activist it was necessary to "catalyse everything on the basis of a common desire to raise the stakes, to create some kind of unity". According to him, this could be done, in the first place, through knowledge between the various subjects that made up the network. Therefore, "it was necessary to create a space for discussion and dialogue that revolved around a common theme: how to work for change?" Therefore, he proposes moments of dialogue that do not have an operational character, "but rather a circulation of ideas, something that could help to understand what they need to do, and how to deal efficiently with the crisis". The proposal was received positively, but it did not seem sufficient to take the network to its previous level; there was "the fear that the large associations (as Greenpeace and Legambiente) did not want to participate" (**L**.), which could further diminish the relevance of the network.

The activists found themselves in a difficult situation. The common problem did not provide 'objective conditions' for a mass and transversal anti-politics. During the period that followed the first health crisis we will see the multiplication of actions that pointed to the deepening of territorial actions; they involved an aspect of alter-politics: mutual aid networks, such as the 'Voluntary Brigades for the Emergency'⁹⁶ - where various student organisations (Tempo Zero, Resilient Gap) present in the M4C participate - and actions on the creation of collective gardens.

⁹⁶ https://www.facebook.com/brigatevolontarie



5.2. Urban garden event

The articulation among the groups, based on the explanation of their own differences, became an essential movement to verify which possibilities effectively existed for the continuity of the network

"But if we first try to strengthen ourselves by organizing a meeting where we introduce ourselves and talk about the urgency, the problems and let off steam, it is better. (...) Conclusion: we write emails with ideas from L. and P. with who we are and what we want to do, saying who we are invited to a next meeting to talk, discuss and renew ourselves and talk about the challenges we face now." (**F**., RG)

How to keep these heterogeneous groups together? How to produce collective actions? These empirical accounts show us how far we are from assuming an "already given matter" on which it would only be necessary to imprint a particular form (Deleuze and Guattari, 1987) of political structure and organisation. The debates - and difficulties - demonstrated by the Milanese activists take us to the heart of the political debates regarding what to do to avoid the climate catastrophe and show us how the formation of a collective organisation that can face business-as-usual must be considered from another language, as an emergent property. A very active member of M4C, **F**. (RG) concluded that "we are going to take the first step which is to call the first meeting to understand who we are, and understand and bring up the desire to do (*far emergere la voglia di fare*)". Until that moment, according to **L**., "from within the M4C there were many things to do, but the moments of more substantial confrontation were lacking". Protests, blockades, occupations, as well as debate events took place in an intense manner throughout 2019. The climate of mobilisation and engagement seemed closed. After a year of its creation this was proving unrealistic in the face of

resistance from business-as-usual as well as the health emergency. But this resistance did not only occur in the 'inactivism'⁹⁷ of politicians and companies, but was also manifested in the daily life of the population attached by fossil fuels for sustenance (and reproduction).

It was necessary to start all over again and for this it was necessary to technically produce the means of articulation of these differences in order to produce, once again, a force that could confront what seemed an reflux. In a meeting on 11/06/2020 the activists started a journey of questioning their own identity, "whether a subject or a platform", what things they could and could not do and tried to establish "some rules for partnership, dissemination and participation" (**M** and **GP**). It was necessary to "create a narrative for M4C" (**M.M.**) that could situate it as a reference while allowing freedom of movement for the various groups. Activists were uncertain about what to do and how to organise themselves to continue over the years, acting concretely in formulating responses to climate change and confronting relevant public and private actors. The platform seemed adequate for the moment and for the current forces themselves" (**C.** SaIZ); but if they could gain agility, at the same time the M4C "almost disappeared as a subject" (**M.**). To *A*. "M4C brings value because it has the ability to act as a connector, without soon this energy will fails". To **N.**, was the opposite:

"I think we always call ourselves a network, but we act very much as a subject (meeting once a week is an example). Before tonight I had more the idea of it becoming a subject, but listening to you I changed my mind. Maybe the current phase is better that it becomes a platform. It means anyone can propose something, everyone proposes an idea and the others decide if they want to participate or not. But we also need periodic (maybe monthly?) reflection moments where we try to think a bit more at a higher level (like municipal etc). I thought that, for example, next year there will be municipal elections and, for example, we could propose ten points to the candidates. I would combine a platform-like structure with moments of reflection."

The options seemed to oscillate, it seems difficult to find a 'middle ground'. A. (Ridef): "either we go towards a formal structure or a totally informal one open to all". To M. "if we decide that it becomes a platform, what would it come together to do? What would be the purpose of the meetings? If we are not willing to give up the idea of a strong subject/

⁹⁷ Inactivism was created by the climatologist Michel Mann to define the new tactics of fossil fuel companies and politicians: "I call them 'inactivists'. They have moved away from outright denying climate change because it's just not credible anymore. We can all see that climate change is happening. Just look at what happened in Texas recently and other devastating impacts of unprecedented extreme weather events. It can't be denied, so instead the inactivists have turned to a whole new set of tactics. Because ultimately they don't really care about why we remain addicted to fossil fuels – just as long as we remain addicted to them. See the complete interview here:

https://www.ews-schoenau.de/energiewende-magazin/zur-sache/michael-mann-i-call-them-inactivists/

network, even without putting the most active associations into play, they are free to create something more independently."

In the face of initiatives by more active groups - such as FFF - M4C activists note that the "network is no longer listened to" (**M.L**.). The low participation, according to **N**. "is linked to a lack of concrete things, which is why people stop participating"; one of the possibilities was to create "moments of confrontation from which ideas are born and from which concrete projects can be born." The attempt to articulate from concrete goals was to receive as a feasible solution to the collective action:

"M.: as a goal, having a very generic objective (for example: what can we do to transform Milan in 10 years?), That would allow us to connect much more with the reality of the city. That gives us much more capacity to understand and interface.

P.: The target should be the city of Milan, because Milan is where the strategic choices are made in terms of mobility, soil, energy and so on.

M.: After defining a goal, what matters is how to put it into practice. I'm not very convinced to make a concrete and very specific objective, like the one of the territorial committees. I opt for joint initiatives, not concrete projects, as has been proposed but not carried out. M4C is not very representative, we are not heard, it makes more sense than reality because the committees organise the initiatives and M4C relaunches. Now we don't have the strength to propose concrete projects.

N.: Being that we are a network of environmental associations, we can't do much; by coming together we can think of something that can have a citizen impact, from where ideas are born and then those who want to join, join."

The movement/network/organisation begins to dissolve; a form has been sought, acquired through the adhesion of diverse realities; formats have been used that could articulate and keep these heterogeneous groups together: it is no longer known who can join, all or only those who are part of some collective group. The meetings seem extremely formal, i.e. inappropriate for a group that is moving in search of another format.

"M.L.: What can we do in these meetings? It seems to me that here there is someone who proposes and who wants to join, specific meetings can be held about this and communication channels can be activated. Meetings can be held about individual projects.

S.: It is not enough to have a chat to know if the platform is working, the meetings serve to talk to each other, the messages get through better, you can't do networking without meetings.

M. M.: I prefer to call it a sharing space rather than meetings. I agree that there should be moments when people on the platform can meet.

S.: We can find a catchy name to relaunch the "meetings", if for example you only have one meeting a month, you can think about organising it with a certain quality.

M. L.: What should we do in practice after the meeting?

V.: define this objective which is not a project (main objective), a meeting space which will no longer be called "meetings" but which will be less frequent. (21/06/2020)

But what could be done in this meeting space? According to **P.** (RG), they would give the opportunity to focus on "tactical objectives that would concern the reality of the territory". It is a matter of establishing an environment that allows for the continuity of actions at the same time as expanding beyond the existing groups.

"N.: We already have our objective in M4C, we can launch a meeting in September about, for example, "How can we launch the ecological transition in Milan?", or, for example, "How can we make universities become Carbon Neutral?", or, for example, in another meeting: "How can we push A2A⁹⁸ towards transition? Encourage everyone to reflect, for example, with one meeting a month.

S.: I approve of what **N.** said, it might help us to humbly put ourselves on the same level among the associations. Maybe send extended meetings to the various associations.

M. L.: define a list of channels where M4C will exist, a list of positions that must be filled (e.g. social channels), on the meeting times I like **N.**' idea, he can be smart if we make these meetings coincide with Klimatfest, on the days when the speakers will speak, then a week later the associations get together and draw up a kind of manifesto."

The question of organisation appears less as a question of the application of a model (or a defined strategy) than that of the establishment partial territorial *agencements*: it is necessary to follow the various subjects, the problems they formulate (to the extent that the situation questions them) and through them describe how they seek a transformation of the existing conditions. For this reason, it seemed appropriate to follow the wanderings of these activists in order to verify how they sought to act collectively, but also how they sought to articulate the various particular practices which defined them as active subjects in certain areas. As the context remains open we can see the way in which they try to circumscribe a space for intervention. M4C moves from a network where large and small groups coexist to a space of articulation; but what this whole journey shows is how there are no ready-made solutions that could be applied.

⁹⁸ A2A, an Italian multi-utility company, operates in the environment, energy, heat, networks and technology sectors.

Chapter 6. Disruption practices

"a world revolution for climate justice has no clear historical precedent (...) we have no previous model to go by" (Mann and Wainwright, 2018: 178)

"Tout se passe comme si la densité des modes d'existence, la pluralité des relations que nous pouvons entretenir avec les êtres qui forment nos milieux et qu'ils entretiennent entre eux, l'hétérogénéité de nos savoirs, cette « surabondance du réel » étaient la cible d'un leitmotiv: une seule logique pour l'hétérogénéité des savoirs, un seul mode d'existence pour la pluralité des êtres, un seul cosmos pour la diversité des mondes." (Didier and Stengers 2021, p.130)

When looking at the experiences of becoming active, we must stick to what "communicates with immediate facts"; however, it is not a question of claiming these facts as having a privilege against others; it is simply a question of noting that there is experience and that therefore comprehension is required (Stengers, 2015b: 711). A simple search in one of the most widely circulated Italian newspapers with local sections on Milan demonstrated this. Only the year 2019 has the same number of mentions as the years 2005 to 2017 combined.⁹⁹ Events were multiplying at a pace that was difficult to keep track of them all. "The year 2019 was the momentum" (**S.** personal communication - june/2020) that would be seriously compromised by the emergence of the Covid-19 health crisis in February 2020. The problem of climate change was discussed in the most different spaces, always from a re-reading of what was usually done on the basis of current climate data. It was based on personal and collective experiences that the various subjects re-elaborated and re-defined what they did based on its consequences in relation to all living beings and the long-term effects on the state of the climate. They defined themselves as climate activists and in this way sought to compose new links - material and affective - that would allow them to 'leave' the fossil

⁹⁹ Quick search with keywords: climate change - Milan. Period: 2021(112) 2020(159) 2019(180) 2018(59) 2017(54) 2016(26) 2015(37) 2014(23) 2013(16) 2012(14) 2011(10) 2010(14) 2009(21) 2008(22) 2007(11) 2006(6) 2005(2).

socialities. And this process was not restricted to the younger generations as one might think. The 'climate' of open discussion gave rise to interesting confrontations between generations: in this way I was able to follow an event on december 2019, where members of the *Gruppo di acquisto solidale - Lambrate* had invited members of the local Extinction Rebellion group to ear about ideas, practices and proposals to face the climate and ecological crisis. The self-defined 'elders' were suspicious about the possibility of a great social transformation through acts of civil disobedience as advocated by the group. According to them, it was necessary to build a mass political movement; but what attracted most attention was a question asked by the 'old men' to the young activists. One of the Gas members questioned whether the members of XR participated in a Gas network, how they bought their food or which markets they prioritised. From the negative answers (which at that moment they depended on large distribution), the Gas member said that this was a point that should be seriously considered: "how was it possible to disarticulate business-as-usual if one continued to reinforce these chains through non-critical consumption?"

6.1. Unlocking fossil socialities

But what was the activists' goal? It would be difficult to summarise; for this reason we must look at the points of collision where divergences on methods can gain an explicit characterisation. As we will see, the problematic situation of climate change is not enough to unify perspectives on what to do. In a problematic situation we must consider critical moments, where doubts about the meaning of action and how to be coherent and about how to act in a changing climate world - where each action can be read as contributing to its acceleration or deceleration - arise.

The analytical categories will be employed here with the intention of capturing the particularities of political action in an active world; an active world that nevertheless continues to be captured by extractive and fossil chains of dependence. Continuity in unstable climatic and ecological situations seems possible through an exclusive dependence on a technical and technological apparatus capable of guaranteeing the circulation of goods and people and providing the conditions of sustenance for socio-economic and political reproducibility. But we do not consider it sufficient to presuppose the existence of a defined collective subject that could break the dominance of the fossil fuel complex or even that some practices would be considered relevant while others should a priori be relegated as inefficient.

We should consider that an "ecosystem of practices and tactics" exists¹⁰⁰. Many of the practices we were able to follow up with climate-activists in Milan, however, should not necessarily be considered pertinent to this city alone. The contrast is in relation to the sustaining infrastructures that permeate urban extractivist-fossil socialities - and not only. The great struggle against the system must also consider that it is necessary to deactivate its efficient mechanisms, to block its flows; to reject becoming part of the psycho-economic reproduction circuit; to refuse to collaborate with the destruction of ecosystems, with violence against animals, against the aggravation of climate mutation. These practices are called practices of disruption (Grasso, 2022), effected in the "local unity of experience" (Debaise, 2017: 56). The subject, extending this perspective, also produces itself, step by step; its experience coagulates with/through fossil devices, extractive space, chains of consumer goods; subjectivity emerges from these chains of experience which, if they cannot be reduced solely to their fossil or extractive origin, are articulated to it.

Disruption will be used as a pragmatic category for those practices whose reference to their milieu becomes a vector of engagement. The practices of disruption - as will be described here - do not concern only a personal awareness, but the transformation of the very milieu where it is sustained, produced and reproduced. Moreover, it allows us to follow these acts through which they seek to dismantle the consensus, the chains of dependence, the circulation of fossil fuels in the form of final consumption, in short, to the fossil-fuels assemblages through which everyday reproduction assumes its aspect of normality attached to and by a *extractivist infrastructural apparatus*. In this sense, there is no single strategic direction in which all those who have become active should follow in order to break the fossil domain; but rather as many points that can serve to disrupt it, materially as subjectively.

We have selected here some cases through which we can show how these activists try to confront the almost undisputed hegemony of ENI (National Hydrocarbons Agency/Ente Nazionale Idrocarburi) in the Italian public debate on climate change and energy transition. But this confrontation is complex, as it does not only involve a strategy of denunciation or frontal attack, but is articulated in different forms of collective action, direct or not. ENI's actions are transversal insofar as they do not only seek the continuity of its role in a market that does not seem to be threatened in spite of everything; it is necessary to ensure that these activities can be reproduced in legitimate ways, i.e. by guaranteeing consensus regarding their beneficial role; this is where the activists come in.

¹⁰⁰ The expression "ecosystem of tactics" is from Benjamin Kunkel. Ver:

https://newrepublic.com/article/162247/andreas-malm-blow-up-pipeline-climate-direct-action

Against unbridled consumerism they will organise clothing exchange events (Block Fridays - Make Friday's Green Again) as well as local food markets (Gruppo di acquisto solidale - GAS/Lambreta); facing an ever more cemented city they will engage in the production of an agro-forest (Parco della Vettabbia), as well as in the defence of green areas - (Bassini Park, Goccia, Baiamonte); in defence of a new policy for urban mobility they will block urban traffic with bikes and their bodies (Bike Strike); by occupying RAI (Italian radio-television public broadcasting company/Radiotelevisione italiana) they will make public their opposition to the journalistic coverage about ecological and climate crisis; occupying the electricity distributors ENEL (National Electricity Board/Ente nazionale per l'energia elettrica) to demand an energy transition plan; or by carrying out protest, demonstrations and direct actions against ENI-ENEL during the annual meeting of its shareholders held every year in Milan.

In this section we will follow a description, in the form of a *enquetes*, of brief moments that allowed us to show that we should not only consider how activists should follow the network of knowledge of climate change and translate it into local situated forms; the disruption of fossil *agencements* imply these subjects in decisions that interfere with the conditions of personal and collective reproduction - unequal of course. They produce diverse affective, political and ethical trajectories. They include different groups and institutions extending from 2019 to 2021. The information that we presented came from different sources; because Covid emergence some part of them comes from social media (facebook, twitter) chats (whatsapp, telegram) and part from participant observation since the beginning of 2019.

6.2 Transversal politics?

Two months after the largest climate demonstration in the city of Milan (15/03/2019), activists gathered in the *Milano per il Clima* network debated the pertinence of taking part in an initiative that sought to contrast the rise of nationalism and racism in Italian public life. Call *Gran Galà del Futuro*, organised by Nemumadimeno¹⁰¹ and Milano antifascista antirazzista meticcia e solidale¹⁰².

 ¹⁰¹https://nonunadimeno.wordpress.com/2019/05/17/18-maggio-gran-gala-del-futuro-indietro-non-si-torna/
¹⁰²https://www.facebook.com/milanometiccia/

The event was to coincide with the closing of Matteo Salvini's election campaign on 18 May 2019 and would be attended by the well-known French far-right leader Marine le Pen in Milan. According to the statement of the organisers,

"All those who cultivate the dream of going back to fascism, to strong national borders, to the supremacy of the 'white race', to the condemnation of homo- and transsexuality and to the return of women to the home to take care of the family or to the brothels, reinforcing the image of the mother or prostitute will be present.

While an entire generation is on the streets denouncing that climate change is taking their future away, the European right-wingers promote the unconditional exploitation of land, bodies and territories, foment war between the poor to avoid class conflict, promote the persecution of Roma and Sinti, deny universal rights by not saving lives at sea, finance countries like Turkey and Libya that exploit and torture migrants and open administrative detention centres.

To counter this reactionary wave, we want to organise a day on 18 May that brings the fabulous Milan to the streets to say no to the return of nationalism and all forms of fascism in Europe and the world: we want to give life to the GRAN GALA DEL FUTURO, because there is no going back!"

Despite apparent support from most of the groups gathered there, some objections were raised. Firstly, the method was questioned; to the extent that the support was not unanimous, joining the campaign could not be done in the name of the M4C network; according to the account of one of the participants (a member of a student collective from the University of Milan (Statale)

"First of all we are a network and joining as a network implies that all the adhering realities (or at least the majority) have expressed their support. This did not happen, as we well know; and since we have not even set up the working groups, there has not even been a decision by an internal body of M4C that is delegated by everyone to take such a decision. It follows that if those who are participating in the current discussion make this decision, the others will not feel represented and will not really feel part of Milan for the Climate."



6.1. Gran Galà del Futuro

Secondly, the commitment of the campaign to climate and ecological issues was questioned: to some activists it seemed that this campaign sought to instrumentalise the climate and ecological crisis to attack the ruling group of the Lombardy region (Lega, rightwing in the first place) - of which some of the members of the M4C network had institutional relations. According to a message posted on the network's message chat

"However, in addition to the question of participation, M4C is a political but non-partisan network. This means that we take political positions on our issues, the environmental ones; but the event of 18 seems to me instead something more against particular political formations than in support of a particular theme. True, in the description there is a reference to climate change and it is also true that some (not all) sovereign realities are negationists; but frankly it seems to me that the thematic centre of gravity of the event is not the environment. It follows that joining the event implies, in my opinion, taking sides unconditionally against the League and its allies (who also govern in the Region and we have an open table with them) and this, in my opinion, goes against the non-partisan nature. A demonstration on environmental issues against the government would be different, because in that case there is a link with our activism, but it seems to me that this event does not have a lot of environmental issues."

Other associations added to this assessment by explicitly asking that the initiative not be published by M4C communication channels. The reason was always the political character of the event: "I wouldn't like the political aspect as an association" (E., Naturiamo). The division between specifically climatic and other political spheres was the major reason for the dissensus, a dissensus that will run through and return in several other moments of M4C's collective activities. The distinction however will help us in the end to outline some of the

impasses that climate activism faces and the difficulty of building a common perspective on what (and how) to do. But it is important, above all, to verify how, from the activists' point of view, the spheres of action are distributed, who is responsible, as they think, for effectively transforming the current conditions that produced climate mutation. What exactly are they defending? And how? How do urban conditions imply specific practices and how do they hinder others? How is the appropriate political engagement defined?

6.3. Performances of mass demonstration

In the preparations for the upcoming demonstration on 24 May 2019, some information about the event started to circulate. The idea was to throw some balloons during the demonstration so that messages could be carried on them that one could hardly do simply by climbing on the buildings. The problem, told one of the organisers, "was how to reach a height of 8 metres without risking death or having to climb ladders." Having been approved at the meeting on 14 May, it was communicated to the other participants that the balloons had been ordered. This service communication triggered a long exchange of accusations about the incoherence of the choice. The first to speak out was a member of Greenpeace:

"Excuse me, but when were the balloons decided? It really is a contradiction to our fight. We are all fighting against disposable plastic and we show up with 200 plastic balloons? Sorry, but no. Let's remain consistent?"

How to transmit the message without using means that may contradict the message itself? How to accept a decision taken by the majority present at a meeting that seems to contradict minimal concerns about the impact on the environment and people's assessment¹⁰³?

"It was said that it would be biodegradable plastic and that we would do our best not to disperse it. I was also sceptical, but this is what the majority decided on Tuesday."

"I can say that dissent is normal, but it is also normal that decisions are taken at the meeting, with those who are there."

The representative of Legambiente sentences "After a quick collection of opinions, Legambiente says no balloons. It is precisely the concept of disposable that is wrong"

 $^{^{103}}$ "And above all, once the action has been carried out, both balloons and posters must be removed so as not to risk criticism" (E.)

Those who had proposed the action justify it by saying that they are biodegradable bladders and that they will be collected at the end, nothing however that can placate the growing condemnation of the choice:

"I would just like to point out that biodegradable does not mean non-damaging: an animal that eats one of those balloons dies without too much trouble, and we expose ourselves to a huge media risk by putting balloons in there.."

It was necessary to maintain 'coherence' between the message, the means and the relationship with the public,

E.: Elio Balloons, all highly polluting things, I know you're trying your best, but then a message of incoherence might get through.

G. P.: We have to think of some kind of action. The posters don't seem to have much impact.

These small gestures make explicit the differences in which public action should be taken. An attention in which the message about the climate catastrophe should be carried out without the use of fossil materials. The same dynamic occurred because of an artistic performance at the demonstration on 19/09/2019 in front of the Duomo di Milano where a representation of the globe was set on fire. The action triggered the fury of some and showed ever more the internal divergences in the network.



6.2. Performance of a burning Earth on 19/09/2019¹⁰⁴

¹⁰⁴https://milano.corriere.it/notizie/cronaca/19_settembre_27/fridays-for-future-sciopero-clima-cortei-milano-manifestazione-studenti-adesione-5f3f9a8e-e0fd-11e9-a633-17aa10b50ecf.shtml

One of the major points of internal discussion within the network was the position of FFF. As an autonomous organisation and undisputed organiser of the morning demonstrations, M4C put itself in a position where, while seeking to trace a path that would involve the largest number of subjects, it nevertheless ended up following the actions of the FFF or feeling called upon to respond to it.

As explained by **J.** (Tempozero and member of FFF) the action had been decided at an FFF assembly: "FFF has open assemblies and if these things pass, these things are done".

It is in these seemingly minor moments that we can see the distribution between simple facts and matters of concern; it makes explicit this problematic materiality and the way in which political practice is not only constituted around material questions, but is also traversed by a materiality that is often simply considered as given and unproblematic; it is as if it did not matter how it is actually carried out, but depended only on its normative orientation. This is an aspect that various theorists have insisted on and of which contemporary ethnographic attention is generating various insights regarding the materiality of politics itself, in the form of objects, the way of meeting, the conflictual performances, the infrastructures that guarantee its exercise among many others that could be considered as "sustaining infrastructures" (Butler, 2015) that enable different kinds of political performance.

These two vignettes allow us to explore different dimensions of activists' anti and alter climate politics. We cannot, however, offer an in-depth classification that allows us to establish a clear difference between the groups from their positioning in relation to problematic situations. Even because the positions are not irreducible. As we will see in the next vignettes, the great division occurs through the discussion on direct action or not, and on the definition of what would be a violent action. In the case of the objects used for the realisation of the conflicting performances, it seems evident to us that the question is about the consequence of the acts: on one side, the attempt to produce a strong message to the public, without considering, however, the climatic and ecological consequences produced by the choice - or considering that these impacts are small in comparison to the one produced by the business-as-usual; on the other side, the one of considering that these consequences should have precedence in the definition of how these messages would be conveyed. If in the case of the balloons there was not necessarily a clear difference between the groups - as the decision to use it had been taken in the group meeting - in the case of the burning globe it was clearly shown that this division could be clearly demarcated between activist groups belonging to the student milieu and those from NGOs and other collectives that did not share their 'provocative intention'. For the latter, the urgency to 'carry' an impactful message could

not neglect the means that were forged for this result. It was necessary "to maintain coherence", and not to convey messages that could be considered contradictory by the public and the media.

These activists knew that it was not enough to present data on climate change. The problem can be formulated as follows: there is a need to broaden the consensus on the need for action, but the construction of this consensus oscillates between two positions. For the first, the emphasis should be on coherent communication that is not dissociated, in public appearance, from a practice of numerical expansion: when more people know about the phenomenon, there will be a 'tipping point' that will transform climate policy; the second opts for disruptive action (material and subjective) and direct action. The risk pointed to the latter is that of alienating possible new participants.

A first characterisation we can point to is that of gradualism as a practice of collective action that corroborates the division between functional spheres; the disruptive one presupposes the permeability of these spheres to actions produced by external agents seeking to force their way into non-permeable spaces. This, however, is not a problem that concerns only the Milanese situation. It refers to how to act politically considering the political and legal conditions existing in each country, region or city. The situation, as noted by many analysts, is paradoxical: in the face of the irrefutable evidence of an unpredictable climate mutation underway, there is a lack of political subjects able to confront and modify the correlation of forces or the hegemony of the fossil fuel complex (Mann and Wainwright, 2018; Latour, 2017; Danowski and Viveiros de Castro, 2014). The march of business-as-usual continues, accompanied by ever more strident alarms about the inevitability of climate and ecological collapse. How to confront the material-cultural hegemony of the Fossil Fuel Complex (Grasso, 2022) so as to break the dependence on fossil fuels and the capture of politics to the interests of the fossil industry? How to engage others in the climate movement? What is legitimate to do?

6.4. Occupy or not occupy?

But how to pressure the operative agents of fossil sociality? Those responsible not only for the extraction of fossil fuels, but also those who distribute them, to sell them, to make them consumable? The seemingly limited scope of these activists' action nevertheless reaches into important dimensions of the political debate about what kind of action should be taken and, perhaps more importantly, what actions are considered legitimate. What is the limit to political action? Legality, legitimacy? Dialogue, confrontation? On 22/05/2019 FFF activists in which members of the student collective Tempo Zero - one of the organisations that joined M4C - participated announced

"We have occupied the Enel headquarters in Carducci street, corner of Cadorna, and whoever can come to support us, even if only to say hello. We'll probably sleep inside, pass the word around

"Things to take to Enel as soon as possible: banners, tarpaulins, used posters, spray cans, PowerBank, food, water, today's printed communiqué and 24 leaflets, sleeping bags, scotch and string".

Immediately several groups began to position themselves regarding the action, many of which called for the action not to be published on M4C's communication channels, and where others particularly dissociated themselves from the method, the choice of target and the date chosen to carry out the action.

"Guys, Mani Tese disassociates itself from sponsoring this event. We don't agree with Enel's occupation".

"The Climate Reality Project has also disassociated itself from the event.

"Msoi disassociates itself from sponsoring the event. The action was not discussed in the assembly "Also for Resilient GAP the action should not be sponsored by the page"

The rejection of the action surprise the promoter that try to justifies saying that is autonomous action and no association with M4C was made

"It seems to me that we are worrying about nothing. I understand the objections of those who are against it (I have some too, although it seems to me that the action has a point), however I don't feel that anyone is associating M4C with ENEL's occupation. And in any case, even dissociations, as long as they remain in this group, can serve to reaffirm a position, but they don't reach the public."

The fear of some of the M4C members was that with an action of this kind they would scratch themselves effectively, something like a "noexpo due" - the 2015 demonstrations against the universal exhibition held in Milan that year. According to various members, the fear was to see an action considered violent associated with the whole climate movement in Milan. The way such a gesture would be narrated by the media and received by the general public was a permanent cause for concern.

"**D.** (Climate Reality): Without wishing to perpetuate eternity, and seeing (in my personal opinion) that Enel's choice is questionable, I wonder what one can agree with, but anyway. There is a detail. The news headlines "occupation for emissions and in view of the strike". So there is an association with the strike, yes, but anyway..."

On 26 May 2019 the European Parliament was symbolically occupied by an international group of FFF activists and the activists responsible for M4C's communication (Tempo Zero and FFF-MI members) posted the news on the group's facebook page. The dynamic is repeated: **D**. shows his disagreement and accuses Tempo Zero members of monopolising communication for particular political purposes - that of giving visibility to FFF and of promoting tactics not shared by the other members of the group:

"He is using the position in a propagandistic way by not guaranteeing equal access to social"; the practice of occupation was unacceptable, especially that of an institution " that cost the blood of two wars"

F.C:"But where have these people gone? I mean, from the photos you can see it looks like they have put up a tent, like in front of the entrance. But what are they doing?"

D.: "The occupation is a method that is not totally shared by everyone".

When questioned as to why the occupation could not be considered a valid tactic of political struggle, **D.** argues that firstly it is illegal and secondly that it was an end in itself. But not everybody saw it as a violent attempt to impose the own will against institutions:

M.: "Well, I'll give my opinion on the news that has generated all this controversy. As far as I can see, FFF did not occupy the European Parliament, preventing the work (which is not taking place at the moment), but only the space in front of it. It therefore seems to me that they are behaving like a movement that is taking action to draw attention to a particular issue and this seems to me to be entirely legitimate."

Discussions on the organisation of the next demonstration get mixed up on how to reconcile what has become evidently explicit to all. Concomitant with the 'Venice Film Festival' in 2019, a group of climate activists decided to take advantage of the situation of high international public visibility to carry out actions calling for climate change to be contrasted immediately: a member of the group wrote a long account that we consider opportune to leave it in full:

G. (a member of the Movimento 5 Stelle - M5S): Yesterday on the Lido, I arrived on the forecourt of the film exhibition and found the sit-in. They rhymed the slogan "we are all anti-fascists", then hurled criticism at the new government and insulted the police. There was a banner supporting migrants and dozens of flags of the "no big ships" committee. (...) Banners on the climate? I saw very few. I wonder what idea the people there had of this "event", especially the people from the Veneto region, who voted for the negationist Salvini. In any case, since the risk of being exploited and slandered by the press is well known, it seems to me that the FFF and the climate movement in general come out rather badly from this rather chaotic mix with other demands, some of which are in themselves worthy, and especially from this homologation and with a certain left-wing and its methods. The deniers have a great day: environmentalists equal communists. For these reasons, yesterday's sit-in, with partial blocking of access for a few hours, creating some discomfort, did not seem to me a good gesture towards an institution that is trying to make a contribution, in its own sphere, for a better world. If the aim of the sit-in was to obtain media visibility, exploiting, in a somewhat opportunistic way, an event of international importance, it seems to me that this should never be the attitude and style of the climate movement, which more than ever needs to arouse sympathy and not distrust around it. It was announced as a climate march and it should stay that way. With hindsight, if during the eleven days of the exhibition a couple of gazebos had been set up in the area adjacent to the screening rooms, with well-chosen information material, it would have been possible to sensitise many of the people from all over the world who stop in the area with nothing to do in the intervals between one film and another." (chat - 09/2019)

It is precisely a complete refusal to consider as valid any act that may be considered disruptive by those who suffer it: the blocking of traffic, to the extent that it as it prevents the passage of car drivers, would be unacceptable because it impedes and creates difficulties and discomfort for the who must get to work, home or simply move freely through the city; this intervention is followed by other comments on how changes can occur only in a peaceful manner.

"Non-violence (as opposed to physical psychological verbal violence against people or things) and democracy and freedom of speech. If these are lacking I don't think there are any extenuating circumstances or interpretations or more or less different views".

"The problem is that they are conceptually questionable ways of fighting. The great lesson that history has taught us is that non-violent struggle leads to vastly more significant results than violent struggle. If we want to have a future, we cannot ignore this factor. The majority of people, fortunately, still condemn violence in all its forms". (chat - 09/2019)
But not everyone was unyielding. That was "the hallmark of M4C" and probably the reason for its break-up:

"I think it's the wrong approach to the problem. If "people" make these questionable equations you need to work on educating them, not attacking those who follow antagonist practices that even if we don't agree have the same goal as us. If you like, it's the same thing, in reverse, as the dialogue with 'green' parties/institutions/companies: you may find this path futile and/or even harmful, but there is no point in attacking those who do, regardless of who is right, and fight for the same reason. Arguing about who is better between x and y is old and sterile, and only plays into the hands of those who are against both." (chat- 09/2019)

6.5. Fossil culture

The ENI seems untouchable. Excluding a few critical reports, it would be very difficult to find a newspaper article that critically points out the contradictions between the transition discourse and business-as-usual practices. ENI's Innovation Sector even has a regular journalistic column in the sustainability section of one of Italy's largest newspapers, Corriere della Sera.

Activists from a wide variety of backgrounds have called for greater media attention - especially that of public concession to report more frequently on the causes and consequences of climate change. To break this consensus, climate activists, coming from social centres (Lambretta) and student collectives (Tempozero), FFF-Milano and XR-Milano occupied RAI's headquarters on 20/09/2019 in Milan to protest against news coverage on climate change in Italy. The motto of the occupation was "Tell the truth - Act now - Change the system" (*Dire la verità - Agire subito - Cambiare il sistema*). In their public statement jointly signed by FFF and XR, they stated

"Public television is already trying to tackle the problem, but it has a duty to tell the truth to everyone, abandoning the current narrative based on the rhetoric of emergency and contingent history (...) Any news must be contextualised in this historical phase: the climate crisis. Every person using the public service needs to know what we are up against and what they can do in their own way to change."

Within the M4C network, the issue was once again strongly contested by those who considered it an act of violence. According to one of the network activists, whoever organised this act was naive and put the whole movement in a very bad light.

G. (M5S) "It had already happened with the demonstration at the Venice Film Festival. If they can't stop doing one protest a month, at least pick the right targets: there are many oil companies besides Eni (...) there are automakers who are marketing new electric models at unjustifiably high prices. Please, a little clarity! "

To this comment, another activist noted that

"No one today can question the great power that the media has, and so if we all agree that the climate crisis is a terrible thing and of the utmost urgency, what is wrong with asking (we must hope!) that it be dealt with properly? If you think it is more useful to move the internal channels of the company and have a more interlocutory approach, asking for meetings and sitting at the table, you can do it with one of our associations, or even with all of them, if you wish . The movement is right to make the movement! Enough of counter interlocution and contestation, please. I also appeal to those in this group who repudiate any mediation. Different subjects exist precisely because we can take different paths. To confuse them and even to oppose them means to play the game of those who oppose both."

On 21/10/2020 activists from the Milanese section of XR sought to make ENI's material and cultural dominance explicit and did so by confronting the institutions that host ENI among its funders, thus giving it visibility and legitimacy. At a Fondazione Giangiacomo Feltrinelli event, the activists interrupted a discussion on climate crisis, territory and pandemic - which hosted philosopher Timothy Morton - to read a statement pointing out ENI's role in the current climate situation and asking Fondazione to take an active role in this debate; according to them Feltrinelli could discontinue the partnership with Eni as long as it does not effectively commit to the energy transition. The activists asked Feltrinelli "to use his prestige to put pressure on ENI".

Fondazione justified its relationship with ENI as a "free cultural institution that must listen to all points of view, for and against the use of fossil fuels". According to them, the kind of funding they received "served to produce studies and events of cultural relevance and remunerate numerous researchers", making the foundation a national and international reference. The aim was to stand alongside citizens and build culture; the Fondazione rejected any pressure aimed at interfering with its mission.



6.3. Fossil culture

This is a point we would like to underline: the activists who build alternative food distribution markets are the same ones who organise demonstrations and direct actions against the big oil industry. There is no cut-off between the micro-local and the macro-global, between the personal and the structural: the question is how they are articulate. To the slogan "change the system, not the climate" we can add, as an instance of problematization, the statement of an activist at the first national assembly of the FFF held in Milan in April 2019, that "we are the system" which in that particular situation could be translated not into the general definition of the Anthropocene - where everyone is equally responsible - but in the sense that 'we' are linked to the material and subjective chain of reproduction of fossil fuel socialities; the disruption of the omnipresence of fossil fuels therefore includes the body and its sustain materiality, and of which the disruption of its circulation is a key aspect. The different vignettes we present are distributed in time; activists transform particular situations from domestic to institutional spaces - into occasions to show the complicity with businessas-usual. Becoming active in a problematic situation is the result of a permanent explicitness of the conditions that sustain terrestrial habitability beyond humans: the one that transforms a previously passive environment into an active one and claims responsibility for its present and future consequences.

Chapter 7 - Become active in the end of a world: regeneration and care



7.1. Vettabbia area

"The present of extra-modern peoples may be a prefiguration of everyone's future." (Viveiros de Castro, 2019, s304)

"Régénérer n'est jamais une affaire générale, car il s'agit de créer ou de réactiver des rapports de proche en proche, toujours tentaculaires, toujours partiaux, toujours à cultiver, c'est dire à reprendre sous le signe de l'absence de garantie, et aussi de la douleur lorsque le perte est irrémédiable". (Stengers, 2020:196)

When we talk about imaginaries of the end of the world, it must be clear that we are not only talking about a diversity of end-of-the-world fabulations, but also about a diversity of worlds. But these imaginaries, in order to become explicit, must be situated; and the inverse is equally valid. In order to be situated, they must be explained on the basis of everything that enters into the process of fabrication. In any case, it is on the basis of them that an attempt is made to establish new conditions of personal and collective life. The end of the world is gathered amidst the premonitory evidence (events of the past, present and even the future, as we see with climate science models). They also indicate belonging. In our case study, we will look to two collectives constituted around practices that we will call - from the definition of the subjects themselves - socio-ecological regeneration, and which seek to formulate the problem of climate change in terms of the invention of new forms of material attachments (Latour, 2018). We are interested in the end-of-the-world imaginary as a socio-technical imaginary, as it relates not only to the moral aspects of how the world is or should be, but also about the materialities and technologies that make up the horizon of their practices.

Here, rather than the temporality of the end, it is the spatiality of the end - the end of the world as the end of relational space - that is the focus of our reflection; a spatiality that is the object of practices that we will define as political and in which the horizon of crisis and extinction leads not only to despair, but also to the effort to create dissident territorialities. The apocalypse of space is revealed through relational corrosion in the broadest sense; which transforms territories and ecosystems - as in the case of desertification, salinisation, in the production of what Sassen (2014) defines as 'dead land'. In this perspective, the daily reproduction of high-carbon socialities - those spatial and relational forms produced in the "Great Acceleration" - are defined as a progressive impoverishment of habitable spaces for humans and non-humans, or in the terms described by Alice (XR activist), this milieu is "toxic". It is this toxicity that those who become active seek to rid themselves off. They know that this toxicity has created a "dependency of people on fossil fuels" and that now "a detox is needed". It is as if they need "a rehabilitation" in which they can learn to live without the continued use of these fuels.



7.2. Oil lifes

We place this collective of practitioners as climate-activism. But instead of focusing on the different ideological-political strata of Milanese activism, we have decided to look at the effects generated by a specific activity that is directly inscribed as a response to climate change: those of regenerating socio-ecological relations through gardens and agroforestry in two areas on the southern outskirts of Milan. The grammar of regeneration tries to serve as a general analytic capable of situating the subjects - of the relational point of view - within the more general economy of fossil sociality. It is not, of course, a matter of defending the grammar of regeneration as a solution to climate and ecological problems; it is simply a matter of 'taking' seriously what those who become active in particular situations say and do, how they try to make sense of climate and ecological events, and the prospect of an ever-worsening situation. "Each cry demand the recognition that it imports, and there is a speculative obligation to give meaning to that demand" (Stengers, 2011: 281)

What they do can be situated in what has been termed the new environmentalism of everyday life (Schlosberg and Cole, 2015). This environmentalism is a way of linking the immaterial and material dimensions, but also as material participation (Marres, 2015); the practice of these activists shows us that the materiality of social life (objects, technologies, non-human living beings, energy flows) can be understood as *agencements* (Deleuze and Guattari, 1987) that inscribe and prescribe forms of subjective and relational performance.

But this is not to say that these activists lack a long-term strategic vision. Perhaps it is a question of understanding how perspectives of political transformation are themselves

transformed by the horizon of extinction and the end of the world, and how they invest in the construction of spaces of care and regeneration. Self-defining themselves as agents of regeneration it will be around practices of healing and regeneration beyond humans (Puig de la Bellacasa, 2017) that the becoming active will be codified. But the agro-forest or garden, as we will see, can be considered as the main device of aggregation of a regenerative collective in which other practices will be added, called self-construction, sociability, encounters and learning: these agents are involved in practices that aim to extend not only their action but also their more-than-human agentivity. Its main effect is to be a device that allows multiplying the resonances of this multiple 'agentivity'. It resonates with what Debaise and Stengers defined generative devices as "modes d'agencement intentionnels, fabriqués collectivement, qui tout à la fois présupposent et induisent la capacité de celles et ceux qui y participent de faire sens en commun à propos de situations qui les impliquent." (Debaise and Stengers, 2021:136)



7.3. Auto-construction event

The two experiences¹⁰⁵ presented here are not equivalent, since they are different cases even from the legal point of view - one taking place in an area granted by the municipal administration and the other occupying an abandoned area owned by the *Ferrovie dello Stato*. But several other aspects allow an approximation between what was sought to be done in both. These practices should work on the local reality, that is: instead of the imposition of a

¹⁰⁵ These are two groups that I could follow from April 2019 to December 2021 with different intensity and presence. With the Regeneration Heroes group I was able to develop a long participant observation, effectively involving myself in the group activities and sharing different moments of interaction and dialogue. The second was done through some visits to the area and through the material published on the internet. My information came mainly from a participant I got to know before my research activities started.

previous plan that will aim to modify its 'ecological mesh' (Kohn, 2021), they should immerse themselves in this 'mesh' in order to contribute to its complexification. But it was not only a question of inserting new species, but of transforming from the assemblage of local materials - in order to exemplify the possibility of dispensing with the use of fossil chains of dependence - spaces of sociality more than human ones; we will follow these practices always as situated gestures that should recompose the more-than-human agentivity, but also to open up these subjectivities to new experiences of becoming-with (Haraway, 2016).

This is the point where we will be able to differentiate between the climate citizenship of the resilient city and these more-than-human subjectivities that, emerging from local ecological webs, are nevertheless open to the unpredictable relations of local and extra-local interdependencies. This chapter will follow the activities of the two collectives and will propose an interpretation of what they do based on their justifications and values - always referred to situations that made them get involved and think collectively about how to respond to the ecological and climate crisis.

In this experimental space other practices find an environment where they can emerge and be welcomed - information about wild plants that can be ingested¹⁰⁶; cultivation techniques; construction, mobility; knowledge is shared and new skills acquired. Instead of the notion of awareness, perhaps the notion of contamination and imitation is better, insofar as the person comes to be affected and must learn, physically and affectively, to situate him/herself in an environment full of intentionality and consequences. It would be that which the modernisation front defined as 'animism' attributed to those so-called primitives: that of discovering that matter is not inert, that it traces its own trajectory that will affect its environment and that it possesses the capacity to interfere in the trajectory of other agents - something that was defined by Latour (2013) as "modes of existence". Perhaps this is one of the most important aspects that contemporary sociology must face: that of finding a place for the action of these other agents; that is, moving from a sociology of the Holocene to a sociology of the Anthropocene, or of critical zones, which invites us to think, speculatively, what kind of social sciences is adequate to an active world.

¹⁰⁶https://fresche-ribelli.yolasite.com/?fbclid=IwAR1qn8g9pvtbvA0imt4helEpAbfSFW6AM-_rsF6WIj6D2SCOQxskTZB_Wew

7.1. "Following Greta's footsteps... towards the social nursery"

At the beginning of 2019 it was common to find several activities posted on the social network Facebook that showed concrete projects to deal with the climate crisis in Milan. One of these that caught my attention was promoted by the cultural and urban agriculture association Cascinet. The association had received the right to use an area located at the beginning of the *Parco Agricolo Sud Milano*. This area was divided between two groups: one of them was to create a commercial urban vegetable garden (Vitabia); the other would be dedicated to the creation of an urban agroforestry. Why an agroforest and not just a forest? The aim was that of "rescuing compatible agricultural and forestry practices that existed before the green revolution transformed agricultural practices in Italy and practically everywhere else in the world" (Alessandro, 09/019). Despite the apparent simplicity of the project, it was inserted in an extensive urban regeneration network promoted by the municipality of Milan - *Milano Porta Verde¹⁰⁷* - together with differents local partners and Universities: Agriporto, CasciNet, Algaria, Terzo Paesaggio/Az. Agr. Davide Longoni, FioreUrbano, CURE, Deafal ONG) and the University of Milan and Politecnico di Milano.

The agroforestry project for Vettabbia was part of the initiative promoted by OpenAgri, an innovation hub (which includes the municipality of Milan) whose aim was to develop solutions to articulate rural and urban agriculture practices in the Milanese area.¹⁰⁸ Accord with Alessandro, one of the main responsible for the project,

"We believe that involving citizens in the formation of an aware and active community in urban agroforestry projects can be a lever for the development of a new civic sense that acts as a link between issues such as food production and consumption, protection, care of the soil and the territory, restoring the sense of authorship of the agricultural landscape to citizens-farmers. The agriculture of the future, integrated with ecology, maximises economic and social resilience as well as providing solutions to counter the effects of climate change." (Alessandro, 5/09/2018 - fFacebook)

¹⁰⁷ https://liaison2020.eu/ambassadors/milano-porta-verde/

¹⁰⁸ The Municipality of Milan participates in UIA - Urban Innovative Actions, a European Union initiative promoting innovative actions in cities, together with 15 partners including universities, associations and companies with the OpenAgri project. Financed by resources from the European Regional Development Fund, UIA aims to directly involve urban areas in a large-scale experimentation laboratory to identify 'innovative' solutions. In Milan, the focus of the project is the creation of new job opportunities and development in the Porta Romana-Vettabbia area.

Our intention is not to check whether these projects achieved the objectives set by them or their funders. What caught our attention was how this project was able to attract different kinds of subjects, aggregate different activities and give opportunity to the expression of concern about the present environmental situation, as well as to experience possibilities of personal and collective, emotional and material transformation. This experience offered a contrast with the fossil urban sociality and seemed to allow a possible encounter with the ecology of the territory normally invisible in the grey everyday life of Milan.

In the case of climate activists, Alessandro was explicit in saying that the arrival of activists linked to FFF and XR had transformed the field and "revitalised the activities, contributed to give a new relevance to these regeneration activities". This is because in addition to the activities that were developed there it was inevitable that the public meetings would become moments where the regeneration activities were discussed in relation to those of the local and extra-local climatic and ecological situation. The agro-forestry was presented as a practical example for a different city:

"On Saturday before joining the Milan Strikes for the Planet! - Strike for the Climate we prepared the ground for *Agroforestiamo* - an act of regeneration. We believe that the Regeneration of territories and people is the starting point to mitigate the effects of Climate Change." (17/03/2019)

"Next meeting on 15 June with our friends from Friday For Future and Milano per il Clima to understand why Agroforestry can mitigate climate change!" (15/06/2019)

The marginality of the experience - in the political but also in the geographical sense - should not mislead us to consider them as a simple continuity of experiences found in counterculture histories. Marginality is a consequence of the encompassing character of fossil urbanism. The spaces that have been transformed by experiences similar to this are always those temporarily forgotten, abandoned or neglected by the agents of real estate speculation. In the paradigmatic case of the Scalo of San Cristoforo, this means, going from abandonment to the strategic interest of urban development, destroying the mesh of inter-species relationality that had been created - despite everything - in that territory (and that constitute our second case). But in turn, as happened in other areas of the city (Goccia, Baiamonti) people had found themselves around these small territories not captured by the urban machine and it was from these territories that they sought to apprehend and rehearse alternatives of more than human sociality that could resist the advance of the 'cement'.

The activists knew they had to be on their guard; the fossil megamachine encompasses and lurks in all directions: it is a machine of capture; the experimentation of a dissidence was not free of ambiguities since Vettabia's experience in the end was inserted in Forestami's area of action - codified as mitigation and adaptation dispositifs. If it was possible to 'plant trees to save the planet', as one participant put it, this did not mean freeing oneself from the links to everyday fossil sociality or completely moving away from the exclusionary risks that are created by the Resilient City - it is worth noting how little foreigners participated in this experiment, the participants being mostly white Italians (a part few from South America, France, and Spain).

Participants engaged in the regenerative practices at the same time that they could not claim autonomy from the fossil attachments. But, it seems to us that these practices can be read as bricolages (Viveiros de Castro, 2019). Objects belonging to the 'green revolution' are adapted to the purposes of regeneration - which seeks to respond precisely to the consequences of this 'revolution', as the agentivity of the territory itself affects the experience of subjects and becomes an occasion to new experiments - as collects spontaneous plants to eat. And perhaps this is a key reading that looks less at the heroic enunciations of transformation without compromise and that, instead, seeks to pull out of this machine fragments that allow the institution of becoming that partially escape from fossil *agencements*. Is a partial practice.

These subjects inhabit a milieu articulated by fossil attachments, but this does not mean capitulation or connivance; these are the conditions of their experiences of 'becoming active' and it this always problematic aspect - from the point of view of the subjects - that they seek to transform on a daily basis; and it is in the midst of this specific milieu - modern, non-modern, obsolete, in ruins - that these activists experience the production of partials moments of a life out of fossil fuels; it is, therefore, from this experience that their particular response can be observed and followed.

My first trip to the field coincided with the beginning of agroforestry in that area. Part of the initial planting work (between 2019 and 2021) had already been done. Hundreds of new trees had been planted. It was necessary to carry out maintenance so that these plants would not be suffocated by other species. The work on this first visit was to be carried out using an ancient technique used in Lombardy that consisted in pressing the emerging vegetation with a wooden pole attached to a rope, without cutting it. On that day there were eight of us, most of whom had little or no experience in this type of activity. And so the activities continued throughout 2019 and 2020 - taking into account the constraints of the health emergency. Maintenance activities but also planting, laboratories and courses on agroecology, on collecting species. A group of people ranging from 18 years old to those in their 60s. The

majority were university students, precarious workers, architects and artists. The creators and main responsible for developing the work there, Alessandro and Enrico, were also precarious. Being responsible for the Cascinet project (of which they were members) it was common to hear them lamenting the uncertain situation they had to face. Carrying out this work which required commitment without the certainty of the possibility of continuity served to change the mood of the activities. Passionate about the work of the Swiss agronomist (Ernst Gotsch) in Brazil, they kept coming back to these experiences and what they were able to find there. Not only the technique itself, but the agencements that were produced, the distribution of the land, the place of other living forms, the relationship with the manuality of work and with the formation of political subjects capable of establishing new relations outside the logic of capitalist productivity - in this case the experiences of the Landless movements (Movimento dos sem terras - MST) was something that matter to them. From their point of view, these experiences offered an example that other socio-productive paths were possible. The technique of syntropic agriculture, insofar as it bound living forms together as a process of co-involving complexification, offered to these subjects new possibilities of association - but also other demands. According to Ernst Gotsch,

"In Syntropic Agriculture we work on the design of the arrangements with different species, going through implantation and then continuing at each step in the management of our plantations so that they produce their own fertiliser. To this end, we plant high density trees, grasses and herbs that have in common the characteristic of easy and vigorous regrowth after pruning. And you manage them accordingly. The effect of that pruning, periodically done, results - besides driving the supply of light to our crops - in organic matter in large quantities which, placed on the soil, creates prosperous life in it and, indirectly, fertiliser for our plants"¹⁰⁹.

Developing these perspectives in an urban area represented a relevant technical challenge, while the results obtained in the last two years show that it was feasible. Following the forest succession implied, for those without knowledge of the technical details, carefully observing how different temporalities and characteristics slowly emerge from a territory that was previously a rubbish dump. According to Carlo (22/05/2020), one of the participants in the activities, this involvement "transformed you. You start to pay attention to these differences and follow the variety of life that can emerge".

¹⁰⁹ https://agendagotsch.com/pt/diferencas-entre-a-agricultura-sintropica-e-organica-2/

As we noted in our introduction to this work, 'becoming active' is neither the sudden awareness of a situation in which one was previously indifferent, but not even that of considering an identity acquired once and for all - where one can consider oneself a true activist, thus distinct from those who are not. It is probably in this way that we can understand the definition given by Knox, that of "thinking as a climate": by making the act of explicitness permanent these subjects make reference to particular situations that involve them in a way that has become problematic. And it is always in a situation where they will be confronted with objects, technologies, fossil products - with an active, and therefore communicative, materiality; which continues to emit signals amenable to interpretation from the point of view of their location in a specific ecology and in climatic conditions that are also specific - which therefore refer to an environment whose activity is distributed and whose inter-action not only influences other agents, but has the power to define their conditions of existence.

From an assertion referring to particular aspects in events in Vettabbia's field - "plastic packaging must be banned" - these subjects move on to follow the circulation of these objects and the conditions that allow them to be produced in the first place. As we saw regarding 'Block Friday', they discover the production chain, and seek to find reasons why they continue to function and to produce the desires of the objects of the Anthropocene, as Chakrabarty (2020) put it. Consumption, desire and bodily production are codified ('read') from their relation to the exploitation of natural resources as well as their part in the causal chain of climate change. But again this experience should not be considered only as an awareness. The doubts, the feelings of guilt are experiences that these subjects go through with their bodily, moral and political implications. It is about changing the flows, blocking them, denying them: about eschewing capture by the fossil apparatus. But also a process of regeneration, capable of transforming subjects from their relationship with this 'agentivity' beyond humans.

From mid-year 2019 and 2020 (despite Covid) many who considered themselves climate activists started to attend the activities; at the same time those who did not regularly participate in any activist group or organisation did not stop situating themselves as activists either: what would allow to be defined as such was exactly doing something, or undoing something: becoming active qualified them as agents who interfere in the ecological and climatic situation as in the materiality that create normative dispositions regards everyday life reproduction. To Alice (XR), it was necessary to reactivate historical experiences that show that cities can be different. She takes the example of Paris

"where there were thousands of gardens in the 19th century. This meant a relationship with the land, which was maintained in quality, provided enough food. The need to understand that humans are part of nature, they are animals. The idea brought by covid that humans are a virus is an entirely destructive perspective: humans can also create, collaborate, help nature." (18/06/2020)

The question that was always demonstrated in a practical, physical and affective, personal and collective way, could well be this: how to become capable of doing something that modifies the ongoing climate-changing relations? No action escaped the evaluation of its consequences. Preparing a pizza became an object of negotiation, whereby the diets of vegetarians and vegans had to be respected. The pizza oven, built of raw earth, was almost entirely constructed from local materials. The idea was to show in practice the possibilities that exist locally to solve everyday needs. The participants were visibly impressed. The work was intense: 15 carriages of earth, excavated from the land itself. Transporting material, mixing earth with sand, with hay. The work involved at least 20 people. The atmosphere was festive, despite the fact that it took place in the period of the covid emergency. According to Anna, "it was beautiful to be together with other people who were trying to do something about the climate, but did not know exactly how to do it". This opened up "a new horizon of possibilities". Mercedes, a well-known human rights activist and musician, brought her solar oven to demonstrate that it was possible to cook food without the need for fuel. People were interested and curious.



7.4. Solar oven

In defining Vettabbia's space as an experimental setting, our aim is to show that nothing was definitively established there; it is a matter of learning to acquire technical knowledge that allows for the exercise of autonomy beyond fossil materiality, at the same time as it constitutes an open relational space. What is possible to do in a global metropolis like Milan? The soil is contaminated by various heavy metals, the working tools, adapted from a previous generation, were of little practical use. Those who had to work continuously did so mostly without pay (which is different from saying that it was voluntary), and the people who gathered there, each in their own way, often had to start from scratch - which required time to get used to the work that had to be done.

It was a space of ruins that, however, seemed like a prefiguration of the future. And it was this affective and political experience that these subjects were willing to become part of. Regenerating became an act of hope - fleeting, limited though it was, one that was at least capable of provoking a transformation in the way these subjects situated themselves in relation to the fossil milieu. It was not a matter of naivety, but of learning to live in these ruins with the fear that new catastrophes would surely come. It was neither about an inordinate hope that a solution would finally be found, nor a fatalistic pessimism that nothing more can be done. It is really about 'staying with the problem', as Haraway (2016) observed. The more important difference is how this might be done. It seems to us that the distinction between chains of dependency and relations of interdependence offers two categories that allow us to capture the ambiguous differences by which they are ultimately articulated in urban spaces dominated by fossil infrastructure. These imply situating oneself relationally and therefore refer to the particularities of concrete situations. The ambiguity is not of the subjects, but is generated as a result of the existing materiality and how multiples more-thanhuman agencies are articulated.

But it is not necessary to go that far to verify that these differences and pretensions end up operating even in a limited case like Milan. Changing one's diet or abandoning the use of cars cannot constitute a general answer. What alternatives are there to make the same journey without a car and in a reasonably similar time? Or how can we change our diet without increasing costs - compared to the low cost offered by the big supermarket chains? It is not possible for us to answer these questions, but we should at least admit that this kind of problematization is not absent from the debate among activists - as it was possible to witness at the table on urbanism and climate at the first Klimat Fest in 2020. Performing a low-carbon life required infrastructure to enable it. "How could someone who lives in the hinterland

abandon his car if there was no public transport system that would allow him to get around without using a car", asked a listener at the table dedicated to the topic.

The lack of infrastructures that could perform an alternative to the fossil sociality also in the sphere of food and consumption led them to give importance to these small experiences of community and urban gardens - and that becomes recurrent in events promoted with the theme of food and climate change. This return to gardens seems to indicate to us - more generally - the relevance of looking at the interstices, those gaps in which activists seek to create dissent, even if limited and ephemeral - in contrast to business-as-usual.

It is a matter, as we have already noted, of considering responses in material terms without excluding, however, the practical consequences in terms of the different capacities they produce - insofar as the modification of *agencements* implies a new bodily and subjective disposition; in the urban case this means gaining access or being blocked (Easterling, 2021) whether it is a question of the emergence of a 'climate citizenship' simultaneously with new regimes of local and extra-local governance. The strong presence of the food issue in the city of Milan cannot be dissociated from the commitment shown by the city administration to forge a food policy - one of the outputs that emerged from Expo 2015, but it cannot even be considered a direct result of it. But beyond the institutional commitment we can say that there is a historical continuity¹¹⁰.

The gardens in the Milanese metropolitan area amount to more than 2,000 units¹¹¹. This means considering a variety of ways of using space in a very large area. The classification we have available differentiates the types of gardens into two: those in which horticultural and productive practices prevail (predominant throughout the territory of Milan, mainly in the south of the city and the metropolitan area); and enclosed colonies (located mainly in the north of the municipality of Milan, and the metropolitan area), defined by a very heterogeneous set of private or privatised open spaces, associated with different practices and methods of use and living not necessarily linked to cultivation. Most gardens (including the occupied area) are fenced gardens. Another differentiation refers to the management: between those managed by associations, organisations, and municipalities and those managed by individuals and informal groups. The predominance of gardeners is male. In private gardens,

¹¹⁰ As put in the Air-Climate Plan "As far as the municipal reality is concerned, for the city of Milan the theme of agriculture is of noteworthy importance in relation to Food Policy, sustainable territorial planning and urban forestation. It is interesting to note that the city of Milan is the second largest agricultural city in Italy with 2900 hectares of cultivated agricultural land (ISTAT), a figure that demonstrates the relevance of the theme for the Milanese territorial system and the adaptation measures to be undertaken (ACP: 786)."

¹¹¹ Our date came from the reserach made by Mario Cucchi, Daniela Gambino and Antonio Longo. *La citta degli orti*. coltivare e costruire socialità nei piccoli spazi verdi della grande Milano. Macerata: Quolibert, 2020.

the role of women is usually linked to support activities, care and organisation of group meetings (parties, meetings with friends). In the case of the gardens managed by associations/municipalities, the role of women is more significant, but in any case smaller. The predominance of the over-60 age group is the result both of the availability of time and of a public policy geared towards priority availability (in services) for the population in this age group. Therefore, there is nothing naturalised (vegetable gardens as activity of the elderly people). Regard the technical competence, the vast majority are self-taught (family tradition; direct work on the land and learning by working in groups)¹¹².

As already discussed in chapter 3 the explicitness of climatic conditions and chains of dependency lead these subjects to a type of empirical research where it is about following matter, its connections and its *agencements* - in that rhizomatic modality that Deleuze and Guattari counterposed to the 'royal' model - and whose relevance can be followed by the continuous formative workshops. They will meet other agents and other stories as well as different experts, models and scientific theories: and it will be in this process that the inhabited area becomes critical, full of hitherto unknown activities, active to the point of interfering and changing habits and practices, perspectives and attachments.

7.2. "We must reach the Duomo": agroforestry as a peripheral strategy

"A hectare where peach, apple, cherry, fig, plum and more than 2,500 other small fruit trees coexist. Between the rows of vines, currants, jostaberries, raspberries and other lower plants grow in harmony with the local vegetation."¹¹³

In the Corvetto neighbourhood, southern suburbs of Milan, at the beginning of the Parco Agricolo Sud, a project was launched in 2018 to create an agroforestry system less than 15

¹¹² 80% of the vacancies are provided by the public administration. Two resolutions (1143/2012 and 451/2015) seek to frame the creation of new gardens within a multifunctional perspective. Therefore, precisely to open up to other uses of public interest, and to make gardens spaces of innovation for new practices of living and inhabiting the city.

¹¹³https://www.ilfattoquotidiano.it/2021/12/14/milano-cosi-i-campi-abbandonati-del-parco-vettabbia-sono-stati-recuperati-con-laiuto-dei-residenti-ricreato-lecosistema-di-un-

 $bosco/6421940/?fbclid = IwAR2GT31BG6pGmorGXPE3aPpAaH2PW_Q5r07Ch_d3tRq984ykybm0AhYBKvc$

minutes from the city centre. Born out of the concession of the use of the space by the City of Milan to Cascinet, a social promotion and urban agriculture cooperative, this project has developed a peculiar practical and discursive repertoire to address the ecological and climate crisis in urban spaces.

The creation of the agroforest had two main objectives: to increase the forest cover at Milan's southern gateway and to produce varied and healthy food¹¹⁴ through an approach that involved building a collective of practitioners; the aim was to involve the residents of the neighbourhood and transform urban space that, according to residents, had been abandoned. According to Alexandro, one of the main promoters of this experience, "Agroforestry represents a low-cost solution to purify the air in our cities and counteract the effects of climate change" (12 September 2018). Preparatory activities started in 2018 mainly with group members and friends; in 2019, planting started with a few people (around 10-15), but over the months - along with ongoing climate mobilisations in cities all over - participation in activities increased and diversified (attracting many local activists). Meetings with activists from Fridays for Future and Extinction Rebellion have multiplied - the latter has become a constant presence to the point of using the space in Vettabbia for the group's meetings and action planning.

The activities developed can be divided into three types: planting and maintaining trees; courses about the selection, collection and planting of seeds; and expansion of the infrastructure through self-building workshops. There were 4 workshops: the first was the construction of a hut to store objects and protect themselves; then a wooden bridge linking two areas divided by a water course (currently without water); the construction of a raw earth oven using local materials (which took 4 days of intense work, very participative and predominantly young and female) and, finally, a workshop for the construction of a bio-lake using techniques adapted from permaculture.

These practices and knowledge were presented by Pietro (member of Cascinet) as "sustainable devices" that would allow the construction of a certain autonomy of the subjects with respect to high-carbon devices: the space, degraded and abandoned, is re-appropriated in a broad regenerative key: not by a statistical evaluation of how much CO2 will be absorbed by the atmosphere, or how much food it will produce; these alternatives are affectively experienced as attempts to defect from the fossil sustaining infrastructure. According to

¹¹⁴ A problem as the soil is contaminated, something that provoke a conflict with the other group, Vitabia. The fact that one of use concession was to produce food, Vitabia are trying to take back the money invested because they don't know that the area was inappropriate to food production.

Carlotta (XR member and active participant in Vettabbia) it was necessary to 'learn how to live in a climate catastrophe'; learning how to make a bakery, how to create a vegetable garden, how to produce a bio-lake, all came into the definition of technical accomplishment that can be useful in dealing with the collapse of collective means of support - including of course biodiversity and extinction.

The difficulty of planting and maintaining the trees "taught that it was necessary to be patient" (Andrea, 38 yeas old) but also that it was necessary to learn the resistance inherent in the particular trajectory of the soil and plants. As Andrea said, "it was necessary to synchronise the rhythms without trying to impose oneself violently", something that can be codified by what the anthropologist Tim Ingold (2019) calls "learning by doing" and as a social and subjective experiment of being involved in the art of producing not only objects: we need to consider them as experimental practices to regenerate relations of interdependence.

Technological tools were converted for purposes other than those for which they had been created: the brush cutters of the 1960s, and the remnants of the modernisation of Lombardy's agricultural landscape, came to inhabit these new territories; there they were triggered not in view of a productive rhythm that they might not be able to satisfy - the tools present were constantly undergoing maintenance or simply broken and in disuse - but with the aim of experimenting, spatially, what could be done. They had to demonstrate, performatively, what body-object-soil *agencements* needed to be achieved in order to properly dig the soil, choose the plants, sow the seeds and maintain them. It was necessary to absorb the non-human activity, synchronising one's own body with the resistances and particularities - the type of soil, the type of plant, the presence of bees, but also the temperature, the humidity; aspects that can be ignored by the extractivist industrial agriculture techniques.

In one of our meetings to check the growth of plants, which soon turned into a long debate on what to do to transform the city as a whole, a active member in Vettabbia suggested in a serious/funny way the idea that the experiment carried out there needed to be expanded: "it was necessary to start a decentralised agroforestry guerrilla action"; to learn the "techniques and expand the autonomous actions to occupy abandoned areas of the city until reaching its centre", which in this case was identified through the Duomo of Milan.

This comment, despite being made in a lighthearted moment, aroused the interest of those present, insofar as it constituted a call to think about ways of scaling up regeneration practices in an antagonistic key; its conflictual dimension made explicit the resistance of the status quo and posited the need for a collective action capable of breaking through the

material urban infrastructure, literally, at 'hoe's blow'. Regardless of the intention to fulfil such an action, what is most important is that this situation (the fossil urbanism and the desire to transform it) exemplifies the dilemmas that climate activists must face. The local sphere is in an ambiguous position in that even if it can become the stage for major social mobilisations, its transformation depends on extra-local dynamics. At the end of this chapter, based on what has been presented here, we will propose a reading that does not deny its relevance but does not overestimate it either: it is necessary to restore its importance - avoiding the 'celebratory' tone of the importance of the local - without ignoring its limits. In any case, it seems clear to those gathered that the challenges crossed different instances and that responding to them implied articulating them. With some XR activists present, a sort of consensus was being built that civil disobedience strategies could effectively serve to destabilise the hegemony around fossil fuels.

The meetings in the Vettabbia Park became opportunities to circulate knowledge and devices that could themselves become part of everyday life. These activists engage in a politics of proximity, demonstration, contagion and imitation. This implies considering the body-materiality linkages from the emotional and political effort from which these activists seek to embody alternatives. "Knowledge", Enrico observed, "did not just pass through the head, but was learned from nature, touching it": knowledge had to be corporatised in order to provide subjects with the conditions to orient themselves in socio-ecological systems. Manual labour could establish a direct relationship with a materiality that acted, in turn, to modify the affections and bodies of the activists, producing a subjectivity that in turn sought to bring out other potential worlds (Ingold, 2019). The goal was to provide opportunity to more-than-humans agencies.

The regeneration practices served to 'hook' the subjects, albeit in a temporary and spatially limited way, into a technical path - planting, tending - that allowed the configuration of other relational universes. Perhaps this is the aspect that makes it possible to reach and maintain a collective that varied from 15 to 40 people (or more) in each activity: that of showing, through examples, concrete construction, the direct relationship with objects, with materials, with non-human living beings, that it was possible to inhabit, produce and live in a city like Milan differently. Would be wrong to neglect these micro-experiments in favour of an exclusively macro perspective: this kind of engagement through material politics guarantees the subject a point from which he can begin to reformulate his relationship with a world and, in this sense, to imagine others. In this sense it configures a territory that partially stands out from the fossil ubiquity; and it seems to us that it would be appropriate to take up an

observation by Debaise and Stengers that points to the resonances of the activists' experimentations with Guattari's notion of existential territory:

"Ce que Félix Guattari nommait 'territoire existentiel' peut désormais entrer en résonance avec des pratiques multiples d'apprentissage qui conjuguent résistance active et expérimentation des moyens de régénérer ce qu'on pourrait appeler une culture de l'interdépendance." (Debaise Stengers, 2021:135-6).

Vettabbia's experience will not be deprived of ambiguities. In the end this experience will be inscribed and codified within the limits and plans established by the municipal administration. But we cannot consider (as we have seen in chapter 2) that it has the last word on how the constitution of a resilient city will be imprisoned and experienced. More than the Vettabbia organisers themselves, what brought us to the southern agricultural fields was the desire to follow the heterogeneous group of people who had provisionally joined them with the aim of learning how to escape from the mechanisms of the fossil machine.

7.3. Regeneration practices in the Resilient City



7.5. Scalo San Cristoforo

Grasping the agentivity of an 'animate world', as I have been able to verify in fieldwork, is not a phenomenon of unveiling meaning; it is not a matter of a naked subject facing a world revealed in its fullness; in an increasingly expressive world, i.e. one that reacts to and interferes in human affairs, this agentivity must be grasped and translated through its particular and territorially circumscribed material manifestations; these subjects 'become sensitive' to non-human agentivity through specific devices and through other living beings situated in circumscribed relations of interdependence and chains of dependence. They are therefore trajectories - and stories - of particular encounters in particular territories. These encounters, even if partial and precarious (or mostly, because they are partial and precarious), become occasions for a narrative elaboration that engages them with the territory in explicit contrast to the disembodied narratives of modernisation, progress and economic growth. Those who become active must therefore learn to 'read' these manifestations, articulating the smallest daily activities to the complex climatic and ecological interactions in a particular environment.

By situating this 'becoming active' in the Resilient City, our intention is to produce contrasts that allow us to follow the attempts at personal and collective transformation promoted by these activists. By following these activists in their activities against climate change, we were able to record that it extended to a wide variety of targets (energy, food, mobility, consumption, etc.): that is, to all the technical and subjective conditions of reproduction generated by fossil support infrastructures; it was what we define as the situated problematization of the material and discursive attachments existing in the urban milieu.

This urban is composed of an animated materiality that is problematised, manipulated, accepted and rejected. This materiality interferes, modifies, '*faire-faire*'; it constitutes both an obstacle and a vector through which conflicting trajectories can be pursued - the risk is permanent, as these subjects describe their position in relation to this urban machine as in a trap, which requires constant attention in order not to be caught. The 'world', however, can become active in different ways, and this challenges the very notion of a stable context or an existing common point of view.

Seeking to escape from fossil sociability, those who have become active must permanently create situations where encounters that promote interdependent relationships and the generation of new associative forms may have the opportunity to emerge: welcoming this 'animated world' into an urban relational space implies the production of other shared personal and collective meanings - what Stengers (2020) calls sense-making in common - and which are centrally oriented by the theme of regeneration. They seek to reactivate the interspecies relations through which these non-human agencies can acquire relevance in territorial agencements (discursively and materially).

What I define becoming with plants seeks to circumscribe this process of engagement with trees and plants in order to situate itself coherently in the new climatic regime - that is, as a

situated response located in a milieu that is distinguished precisely by fossil "chains of dependency". But in Milan this also means contrasting and coexisting with urban forestation initiatives promoted through public-private partnerships, such as the city administration's Forestami project, which are 'embedded' in the current logic of regeneration as an engine of urban development and economic growth - what has been defined as climate urbanism.

The case we will discuss is that of the activities of a group initially called 'Scalo regeneriamo urbano' and currently 'Il Olmo in fiore'. The group was created in 2017 from the desire to regenerate the San Cristoforo railway yard that has been abandoned for 30 years - the area is located in the administrative boundaries of the municipality of Milan with Corsico. The group of young people - aged between about 18 and 29 - decided to occupy the area owned by the state railways to transform it into a collective garden and a community space for events and socialising.

Regenerate or recuperate, in the empirical conditions of our research, can be understood as making this 'animation of the world' present - stimulating the proliferation of living beings in a limited territory. These practices have been activated as healing processes for "ecological and climatic disturbances as well as personal-collective ones" as told Matteo, one of the collective members. They sought to acquire a sense of presence in which non-human 'agentivity' became part of a becoming that allowed it to evade fossil socialites, opening up other possibilities for coexistence and relational transformation of urban space: socio-ecological regeneration emerges as a response to these kinds of local problematic situations.



7.6. Learn to look

Talking with Matteo, he told me that the aim of the group that occupied that area was to " take care of that place and to create a community". In a publication in the group facebook page they wrote "We have installed a new notice board at the entrance and repaired the one already present inside the oasis, where we can leave traces, messages, ideas to better experience the Scalo and offer indications on our initiatives. We periodically try to clean up the area from rubbish and abandoned objects, plastic and dirt; we did it also last 25 April, celebrating in our own way the Liberation, because - if you look closely - choosing to take care is the exact opposite of the terrible paradigm of "I don't care", anathema of fascist irresponsibility".

This area, however, had been put up for sale as part of an international competition linked to the C40 network - called Reinventing Cities. The masterplan to that area is to turn it into a 'natural park' in contiguity with another area of the dismissed railway - this one to be residential - where a new building designed by Stefano Boeri - scientific director of Forestami - called "Bosco orizzontale" should appear by the end of 2022, with the price per square metre already estimated at ϵ 6,000. In other words, self-defined regeneration projects operating from very different perspectives and with obviously different practical consequences. We cannot discuss both in detail; we can only point out that the presence of plants in the city cannot be assessed in an abstract way; but rather that, from each experience, it is possible to extract the modes of existence that these plants may acquire, where they will be confined and what potential they will encourage or block.



7.7. Bosco Orizzontale (Boeri Studio) and the Scalo San Cristoforo (Reinventing Cities)

The first time I visited em 2019 the members of the collective were preparing the ground for the flower planting event; the dynamic of the occupation was similar to others I have visited in the city - such as the one at Vettabbia considered an inspiration for them. It was first of all a matter of cleaning up the land - which had become a rubbish dump after 30 years of neglect. But this clean-up had to preserve the spontaneous ecology that had emerged. Working with Gilles Clement's (2015: 55) notion of the third landscape as to define "all those residual landscapes, resulting from the organisation of spaces and omitted by it", these activists sought to suspend the forms of naturalistic judgement that prescribe to this ecology a minor role in the dynamics of the multi-species diversification of the territory. Paths were built to allow a winding route through the remains of ruined urban modernisation - in the shadow of an architectural heritage considered of great historical and aesthetic value. According to the members, the regeneration of an urban space is not done with concrete, but with people, culture, ideas and plants

"To regenerate soil fertility and prepare it for the oasis to come, today at the Scalo we sowed subterranean clover, which is able to fix nitrogen and self-seed. We piled up the clippings left on the ground from the spring, discovering a land that is already browner and more inviting than elsewhere. Here, in irregular shapes and curves, we sowed. Spontaneously, grasses are growing in this area, mainly *Sorghum Alepense*, which we hope will be good companions".

The activity of the members was to mediate between the territory with its characteristics and dynamics and the relationship of the residents of the area. Some of the residents in the neighbouring buildings saw the collective's occupation of the land as a way of avoiding situations of 'social degradation' - as drug dealing. Inside Aldo Rossi's imposing unfinished building, an ever-growing population of foreigners frightened residents. A man walking one Sunday morning with his imposing Rottweiler told me that his "dog was black because it only ate black people". Seeing my expression of horror, Matteo, a member of the openly antifascist collective, assured me that, as I could see, they had to engage not only with the plant species, but with the local ecology of which they were a part. They had to mediate and experiment with ways of association that could foster the emergence of new relationships. The members of the collective, for their part, were in constant contact with the inhabitants of Aldo Rossi's building in the Scalo, of which they said they were on cordial terms. Ecology and urban development, environmental quality and migration policy; regeneration and economics. No one can predict exactly how regeneration practices will be codified in the everyday experiences of those who are affected by them. For this reason, the members of the collective sought to emphasise the need to open up to experiences that cut across these aspects

"Here we are, ready to take charge of planting new small trees at the Scalo and sowing grasses beneficial to the soil. Come on Wednesday 14 November, we will be there from 3pm until sunset, it will be a way of sharing, of acting together. Or stay at home and enjoy the GDP, worry about the spread, be afraid of migrants, surely that is more important than the fertility of the soil." (facebook page)

The collective in recent months decided to approach the owners - Ferrovie dello Stato (FS) - of the Scalo trying to find a negotiated solution to their situation. After initial contacts in which they were polite, according to them, the FS immediately broke off all negotiations and decided to close the already regenerated area, and turn it into a warehouse for materials that will be used in the regeneration of the *Scalo ferroviario* (railway yard) as part of the Reinventing Cities competition - create by the C40 network. Following the Scalo towards the centre of Milan, the forest codified in the language of climate urbanism is presented as a device for regulating the urban climate. Boeri's project has given rise to numerous pages dedicated to yet another real estate development with "great potential to promote a cascading effect throughout the area" and to attracting more investment:

"The facades will also feature lush greenery: 170 trees and over 8 thousand shrubs. Plants and trees, however, will not just be decorations but a sort of green cooling system: "Climate change will increase the number of hot days in cities in the summer, which is why for a number of years we have been working on new architecture in which greenery is not a decorative element but a structural one", Stefano Boeri explained during the presentation. According to a study cited by the archistar, the foliage of the trees will help reduce solar radiation on the structure just as it does in the "Bosco": "A study of the buildings in Porta Nuova revealed that the leaves of the trees filter out most of the sun's rays and this allows a reduction in heat on the façades of about 30 degrees. In Bosco Verticale the air conditioner is practically not used during the summer because the cooling system of the plants is efficient".

Trees and shrubs are introduced as a technological component of architectural and urban design, forming a functional green infrastructure. The issue of infrastructure raises several questions as already widely studied in the field of infrastructure anthropology and scientific and technological studies. What interests us in our case is its effect of disappearing into the background and as a service-generating device. But the forest as a solution to local climatic and ecological problems has generated other perspectives in which current urban development policy can be opposed and criticised. As in so many other experiences in the city, the tree becomes an ally in the co-production of processes of subjectivation and collective action beyond the logic that abstracts it as functional; in a perspective, in short, that is oriented to produce a multi-species space - even if ephemeral and precarious.

"Regeneration also starts from the soil, from its balance, from its silent and proactive microbial population. It would be easy to buy bags of soil, to bring in an "allogenic" product, to enrich the Scalo by taking what is needed elsewhere, ready for use. We prefer, however, to opt, when possible, for a different, subversive, stubbornly and proudly inefficient solution for our time (and our times); recovering raw organic material, such as organic waste and dry vegetable residues, to produce new compost with consumer products that come from the very neighbourhoods surrounding the Scalo, from the local Saturday market, with the addition of ash from the ovens of the nearby pizzeria and residues from wood processing. The urban path of collecting these ingredients from neighbourhood businesses, gardens and vegetable gardens is slowly consolidating its stages, giving us the opportunity to convert waste into a resource. Thanks to the synergies of the community around us, we are transforming a waste into a fruitful asset, in a virtuous circuit made up of a large network of people and relationships".

In this chapter I have tried to show some aspects of becoming active in an active world. In the end, however, what I consider fundamental is to return to an aspect I mentioned at the beginning, that of the context of action.

The problem of 'context' as we have seen, in a sense, remains open: it is not enough to presuppose the existence of general empirical data capable of circumscribing a universe relevant to experience - that is, providing general points of view through which it would be possible to evaluate the relevance of personal and collective action: the context is open because it is the object of contestation as to what does or does not count for those who experience becoming active; it constitutes the problem to which activists try to respond, and not the solution that could provide the reasons for these responses.

Considering the precariousness of the world makes it possible to change specialist interpretive habits to accommodate the work of producing the conditions of multi-species interdependence. If the milieu is active, there is no point in continuing to use it as a stable point of reference and as a sufficient analytical reason to clarify the logic of collective action. Collective action in this case generates a context in which it must act, and this is achieved through the modification of existing chainings. The explication of non-human agency will have important practical consequences, both on a personal and collective level. The problem (of how to respond to climate change) is immanent to situations and concerns those who are dragged along by their consequences and who must find adequate responses in the conditions given in their present. Find a response without knowing whether these answers are fair or not.

For expository reasons, this work focuses on examples to show this plurality and how it can reveal to us the various agencies through which conditions considered good for collective life are produced - assemblages that could resist the stress of interconnected crises (ecological, social and political). Precisely because they are situated experiments - that is, whose territorialization requires a specific spatial dimension to these experiments - they must be considered as vectors for the construction of responses to climate change and ecological collapse. Facing a perspective that becomes a dominant - or major key - paradigm, we must necessarily look at those experiments that seek to build other forms of association: forestry acquires a political-affective dimension for the manufacture of low-carbon socialities; forestation, in this case, becomes a medium (medium) by which other forms of production and reproduction of oneself can be explored. When it is the fossil assemblages to be defined as climate-altering, the prospect of adaptation and mitigation does not pass only through interventions that protect the materiality of the urban fabric (or through the energy transition), but by the continuous infrastructuraction (Nolan, 2018) of dissident relational spaces: the figure that we can sketch, from our field research with the Milanese climate activists, is that of the deserter of the 'anthropocene machine'. The circulation of good practices among activists is a way of disseminating and contamination through example: it therefore institutes new relational matrices where objects, materials, technologies and non-human living beings are articulated in order to allow/elicit a low-carbon transformation, subjective-personal and collective; but these objects, devices and non-humans also become vectors that 'influence' the practice of the subjects as they demand a process of learning how to live in precarious climate-ecologies; this mean that they are engage in how cultivate, reproduce and maintain liveable conditions: aspects that are constituted only from the direct and material relationship with more-than-human agencies. If it is given to the plants the opportunity to develop new associations forms - within an anthropized space - to humans this is done through the opening of new trajectories that deterritorialized the business-as-usual continuity of fossil everyday lives.

8. Final remarks

In this work I have tried to conduct an empirical and speculative work regarding the process of becoming active and responding to climate change in Milan. The result can be considered both for its potentials and its limits. As with all overflights, it covers a large area, but there is not enough time to go into detail on each of the topics covered. But an option for detail would not allow one to escape the opposite risks: that of concentrating exclusively on one detail while ignoring everything in its vicinity. The aim was to cross it and make it resonate from its partial connections and its differences; for this it was necessary to register the practical consequences for those who seek to think with and from the climate. The health emergency contributed decisively to the option made in this work. The veto to leave the house and the domestic complications originated with the lockdown prevented the initial project from being followed. The solution was to transform a constraint into an opportunity.

As demonstrated throughout the work, the route chosen should in any case provide interpretative keys to the variety of practices; it was necessary to define them on the basis of an aspect common to all of them: the notion of responses was this common aspect that allowed us to approach, during the last 3 years, the great variety of experiences in the city of Milan. Experiences that in turn should also be qualified. In this case, the choice of 'becoming active' turned out to be very useful. This not only because it avoided the risks - so often unnecessary - of having to define what activism would or would not be. Secondly, because in this way I could situate it in its pragmatic dimension, as producing personal and collective consequences; and lastly, because it opened the field of empirical investigation to a wide variety of experiences that go unobserved if the researcher previously delimits what would be important or not - an analytical choice that prevents him from being affected by what affects his 'object' of study.

The second intended movement was that of situating the social sciences in the midst of a redefinition of more-than-human agencies - which runs through other sciences in stimulating and innovative ways. This second movement led us to explore how the social sciences, too, should become part of these transformations so as to circumscribe a relevant space of theoretical and empirical inquiry in precarious worlds. The result of the thesis points precisely to a multiplicity of 'experimental settings' that the social sciences could, authoritatively, interrogate. This engagement with the engagement of those who seek to respond and become active could contribute decisively to shed light on various contemporary collective dynamics.

The third movement was that of situating these responses, following the 'becoming active' in the multiple socio-materiality and more-than-human agencies of Milanese urban space. Therefore, we sought to transform the limit into an advantage. If it was not possible to proceed by a comparative analysis in different places, we decided to follow diversity through local proximity. But most importantly, by situating ourselves in this socio-materiality, our aim has been to show that responding to climate change is not done in general, in the name of a common cause. Climate change multiplies (and intensifies) problematic areas of social life. These responses are generated by and necessarily refer to local and extra-local agencies: to technologies as to objects, to infrastructures as to non-human living beings, to atmosphere as to temperature, to insects as to fossil fuels. In general, this socio-materiality is maintained, and this maintenance requires that the conditions that allow its continuity be reproduced - that is, the fossil hegemony that runs through personal and collective life and that reconfigures the conditions of other non-human agentivity in a given territory. And this is not realised through the use of local resources.

The conditions of sustenance are maintained through the chains of dependence and, as we have seen in this thesis, it is these that become the object of critical explicitness in the practices of 'becoming active' and that can have critical effect. Gradually these subjects begin to delineate other territories for their practices. As the chains of dependence modify the earth's climatic and ecological conditions, these activists begin to orient their actions and generate new values from the relations of interdependence, transforming themselves into agents of regeneration. And this shows us that political responses pass through the generation of material and enunciative *agencements* that open themselves up to these more-than-human agencies in order to welcome it in its constitutive specificities. Politics is territorialised and became an affair of materialities and multispecies compositisions. Because ensuring the conditions of habitability goes far beyond ensuring conditions of safety and consumption for humans. Subtracting from the fossil machine territories where conditions of multi-species sustenance can emerge becomes a specificity of Milanese activist-climates - and perhaps it can be defined as a characteristic of urban activist-climates in more general aspects.

We do not intend to make a defence of these practices as sufficient to tackle the ecological and climate crisis. Our intention is not to produce a major theory, but rather a minor theory, or a theoretical exploration in a minor key that moves through the injunction of 'thinking par le milieu'; the pragmatic consequences of this decision are that "Ce fait demande plutôt que nous apprenions à nous entonner des modes de composition, d'intra-action, d'agencement, que requiert ce mode de socialisation" (Stengers, 2020a: 96)

We fully understand that in the face of climate threats and ongoing crises, this decision may seem like a capitulation. But I believe that threats are not a sufficient reason - despite their gravity - to turn an investigation into a judgement or condemnation of what these arte trying to do to. What we can conclude from an adventure that was also ours is that those who have become active are learning how to "make room" (Latour, 2013) for a myriad of more-than-human agencies that the 'modernization' front vetoed from appearing in collective history. These are practical questions, very practical questions. And it is these emergent geostories that deserve to be told: how situated people are seeking to respond, and what consequences seem to emerge in their present and future.

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10. Annex - Milano per Clima

> AISA sezione Milano-Bicocca	Science portal on environmental issues
	Navigli Canoeists Association
> Angeli dei Navigli	
> Area Ridef (27/09)	Renewable Energy Association (Polimi
> Associazione Giacimenti Urbani	Sustainable living
	Cultural association: reflections and
	experiences on the relationship between
	human, and children in particular, and
	nature
<u>> Bambini e Natura</u>	
	Lifestyles and daily practices, the vital
	relationship between town and country
> Cascina Cuccagna	
	Education and training project
> Centro Turistico Giovanille	
> Chiesa Pastafariana Italiana	Religious freedom
>ClimateEngage	Podcast about sustainable lifestyle
	Popular Committee for the Defence of
> Comitato Stefano Rodotà	Public and Common Goods
> Coordinamento No Logistiche Sud Milano	Land defence south milan
> Coordinamento No Sonda	
	Human resources consultancy and
> CORE-lab	development
> Diciassette	It deals with territory
<u>> ECOREBEL</u>	Sustainable lifestyle
	European Geography Association for
>EGEA Milano	students and young Geographers
	Artistic collective
> Fonc	
> Fridays For Future – Milano	Climate movement
> Greenpeace gruppo locale Milano	Environment NGO

	Independent space for socialising,
	music and culture
> Lato B	
> Legambiente Lombardia	Environmental NGO
>LIPU Sezione Milano	Environmental NGO
	Association for the Protection of Air
	Quality
> Mamme No Smog Sud Milano	
	Combating poverty and social exclusion
	and promoting sustainable local
> Mani Tese Milano	development
> Milano Bicycle Coalition	Advocacy for cycle mobility
> Milano Cop26	Group for the COP-26
	disseminating the culture of
	internationalism among young people and
	students
>MSOI Milano	
> Orto Comune Niguarda	community garden
	Social housing activities; work
	reintegration and cultural enhancement.
> Progetto Mirasole Impresa Sociale	
	Association working on the issue of
<u>> RECUP</u>	food waste and social exclusion
	Lifestyles: consciousness and
	nomadism
> Repubblica Nomade	
> Resilient GAP	Socio-environmental activism (Polimi)
> Rete della Conoscenza Milano	Education network
> Seigas Gruppo Acquisto Solidale	Food and market of proximity
> SITmilano	Social Innovation
	University collective: mitigation
	adaptation (Statale)
<u>> Statale a impatto zero</u>	
> TempoZero – Cambiamenti Climatici	University collective (Statale)
> Altruismo Efficace	"group of altruists in constant search of

	how to 'do better'"	
> ATLAS Onlus	Network to think global act local	
> Banda degli Ottoni a Scoppio	Artistic collective	
>Fondazione Casa della carità "A. Abriani"	Social and cultural foundation	
> Cittadini per l'Aria onlus	Air quality	
<u>> Consultorio CEMP</u>	Sexual and gender rights.	
> CrowdForest	Urban forest and environmental problems	
Earth Strike Italia	Young collective	
> Edizioni Sonda	Publishing house (nature)	
> educazione ambientale e culturale AEA Demetra	Green innovation and technologies	
> energetica - associazione di promozione sociale	Sustainable and social association.	
<u>≥ è nostra</u>	Cooperative supplier of ethical and sustainable electricity created and managed by the user community	
> FIAB Ciclobby Onlus	promotes the use of bicycles for everyday and leisure mobility	
>GLAMourga Macao	Artistic collective	
> Il Cinema e i Diritti - Eventi & Analisi	Cineforum	
> Il Fatto Alimentare	Journalistic site on the food issue	
> Isola Solidale	facility for homeless ex-prisoners	
<u>> Collettivo Zam</u>	Activist collective	
> La locomotiva di Momo nido scuola d'infanzia	nursery school	
>L'asilo nel bosco	Nursery school	
>Leal Lega Antivivisezionista	Animal rights	
<u>> Massa marmocchi • Milano</u>	Milanese citizens organising to take their children to school by bike	
> Milano Climate Save	Milano Climate Save is committed to fighting climate change by combating the environmental impact of livestock and	

	fisheries, promoting reforestation and phasing out fossil fuels.
> Parco Piazza d'armi Le Giardiniere, Milano	Food, mobility and soil consumption
> Razzismo Brutta Storia	Anti-racist association
> Rete Clima	Circular economy
>Women's March - Milan	Feminist collective
<u>> Està</u>	Research and education centre
<u>> Deafal</u>	Sustainable agriculture
> Naturiamo	Nursery school, children and nature rights
> Cittadini Consapevoli	Environmental education
> Piste Ciclabili Fantastiche e Dove Trovarle	Pro-bike collective
> WWF Lombardia	Environmental ONG
<u>>Italian Climate Network</u>	Research and advocacy centre about climate change

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