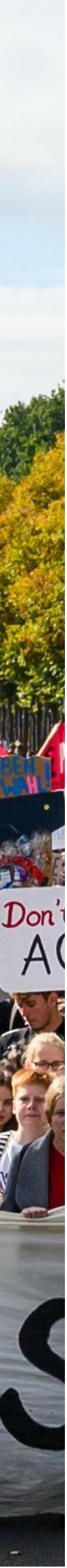
DESIGNING WITH THE CLIMATE MOVEMENT

Explore Lab | Research Plan

Frieder Vogler

Fig1. Climate Demonstration in Berlin, Germany (Photographed by Christophe Gateau /dpa,September 23, 2019)



I. PROBLEM STATEMENT

I.1 ENVIROMENTAL CRISIS AND THE SIXTH EXTINCTION EVENT

Scientists concerned with the strata of the earth are registering a change of trajectory in the deep history of our earth. Geologists start to observe layers of our earth that show sediments of 'non-earth-bound' materials like plastics, radioactive material, and concrete never seen before. Stratigraphers observe a trajectory of rising Co^2 levels in the atmospheres and higher methane concentrations. Oceanographer's, register a higher ph-value in the oceans, an increase in micro-plastics and a change in the network of currency flows. [1]All these changes are unfolding slowly if we perceive from a human perception, but they are unfolding rapidly if we put them in the context of the history of the planet. If we would consider them individually, they might not be causing any big impact, but collectively these changes indicate that we are on a path of epochal change. The registering of these rapid changes has caused the consideration in the scientific community that we are on the trajectory of leaving the current era of the Holocene, that started 11.000 years ago after the last ice age – and that we are about to enter what is called the Anthropocene.[2] The etymology of Anthropocene consisting of the Greek *Anthropos*, 'man' and *Cene* for 'new'[3] makes evident that the scientist see the human impact on the earth's strata as the root for this epochal change. This human made change itself would not be a problem for the earth, epochs have changed continuously since the genesis of the planet. The earth is not in crisis – but what they cause are environmental phenomenon, which we started to perceive more frequently in the last decades. These phenomenon like exceptionally strong storms, extreme hot summers and floodings of unseen extent destroy interwoven networks of life. Hundreds of species a day fall victim to the proliferation of environmental changes and are driven into extinction. With these extinctions all modes of existence are lost, languages, ways of thought, stories and interrelations are gone. Therefore, life and

[1] IPCC, *Climate Change 2021: The Physical Science Basis*, 2021 (New York, Cambridge University Press).
[2] Paul J. Crutzen and Eugen Stromer, "The 'Anthropocene'" *Global Change Newsletter*, no. 41 (May 2000).
[3] „Anthropocene," National Geographic Society, June 7, 2019, https://www.nationalgeographic.org/encyclopedia/anthropocene/.

the interwoven environments are at crisis.

By being part of this interwoven network's humans are hit equally hard. Especially in a global south, where the protection against the environmental disasters is not as developed as in the north, the increase in human fatalities can be observed. Hot summers are causing a rise in heat deaths, dry seasons causing crop failure leading to starvation and a proliferation of hurricanes is taking a bigger amount of lives every year.[4] Guattari warns us that the continuation of that trajectory "*will ultimately threaten the continuation of life on the planet's surface*".[5] – If the human species does not make the necessary decisions in this crisis of environments, we are ultimately at risk driving not only non-humans towards extinction but the human species itself. This trajectory towards a massive extinction of life is what climate scholars talk about when they warn us that we are entering a 'sixth extinction event'[6]

If the human set the trajectory for this crisis, we need to identify and challenge the paradigms and the related process which have led us to this point, so we might be able to divert the direction we are currently on. If we observe the changes in the strata of the earth on a chronological axis, we can see that the impact of the human seems to be rising with the industrial revolution, picking up speed in the great acceleration in the decades after the second world war and has broken all records in the last three decades.[7] This gives us an indicator that the industrial revolution, and the changes in the modes of production that are related to it might be at the core for the crisis at hand. Therefore, I want to look at how the paradigms of our economy as one of the drivers of the extinction event.

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[4] "Climate Change and Health" World Health Organization, October 30, 2021, https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health.

[5] Felix Guattari, *The Three Ecologies* (London: The Athlone Press, 2000) 27.

[6] Andreas Malm, *How to Blow up a Pipeline* (London: Verso, 2021)2.

[7] Will Steffen, "The trajectory of the Anthropocene: The Great Acceleration," *The Anthropocene Review*, no. 2 (April 2015): 81-95.

I. PROBLEM STATEMENT

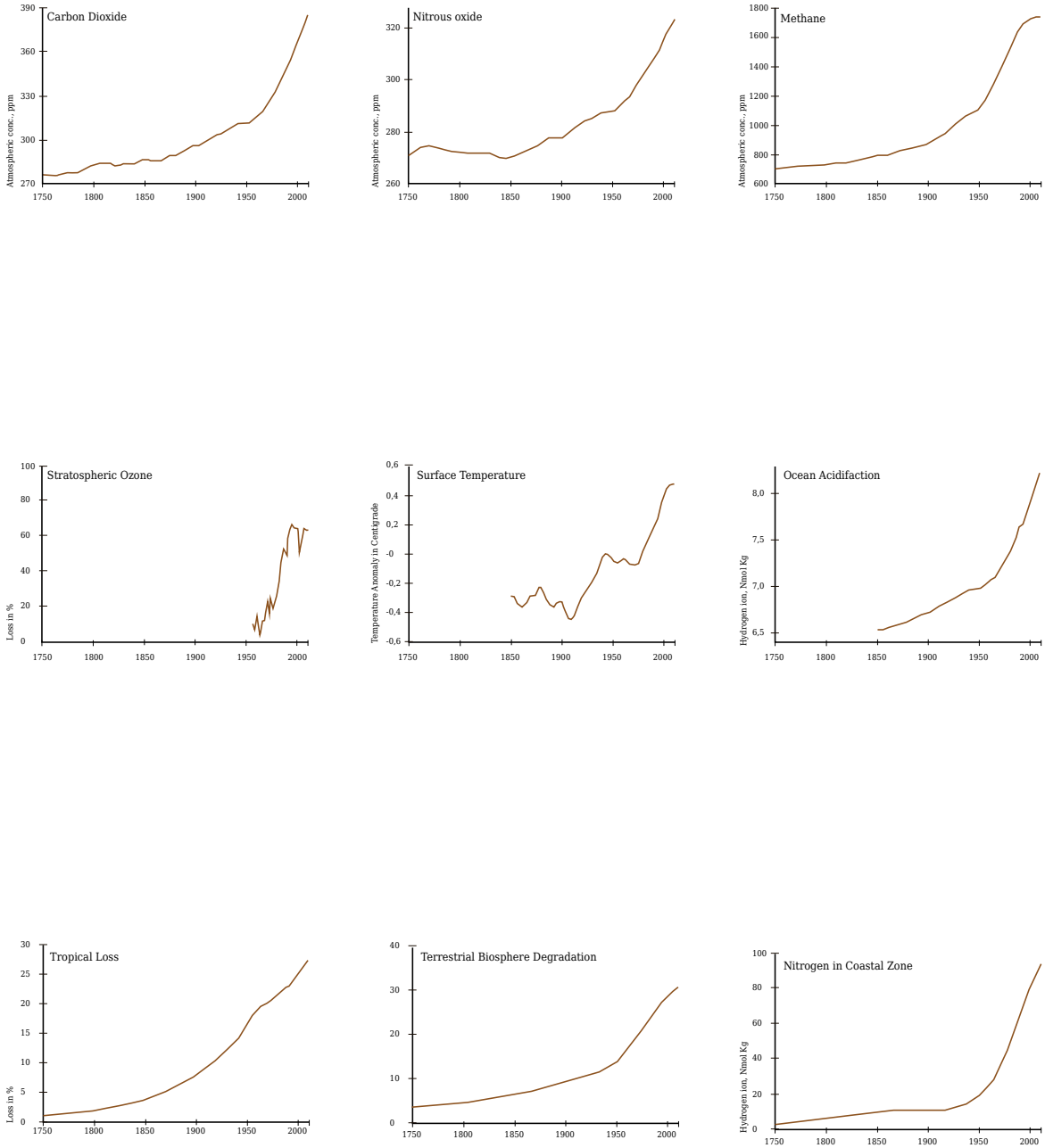


Fig.2 Earth System Trends
Will Steffen,"The trajectory of the Anthropocene: The Great Acceleration," *The Anthropocene Review*, no. 2 (April 2015): 81-95.

Fig.3 Famine in Somalia due to extreme droughts (Photographed by Anna Mayumi Kerber/dpa. February 22, 2017)

I.2 ECONOMIC PARADIGM AS DRIVER FOR EXTINCTION

"It is the same dominant modes of valorising human actives that are implicated. That so say: Those of the imperium [Latin: 'authority] of a global market that destroys specific value systems and puts on the same plan of equivalence: material assets, cultural assets, wildlife areas, etc."

Felix Guattari, The Three Ecologies

The paradigm of our current mode of production, is based on the reduction of complex networks of value to the universal exchange-value of money. This 'homogenization' of values is taking embedded values of life and puts them on *"the same plane of equivalence"*[8] – relating them only to the one value of money, disregarding other modes of valorisation. This reduction can be observed throughout all scales and ecologies. It is visible in the industrial and extraction landscapes – where highly complex ecologies consisting of meadows, forests villages and their interrelations, are reduced to the extraction of coal as a resource. We can observe farming landscapes where the soil is evaluated solely by the number of crops it can produce disregarding the web-of-life that is interwoven with it. But we can see it also in the urban fabric where the inhabitants of whole districts are driven out to make room for new financially driven developments. In the ecologies that fall victim to this homogenization, the existing complexities are disregarded and consequently destroyed. Through these destructions the earth-human systems are becoming increasingly unstable. In the extraction landscapes, forest and meadows that are necessary for the balancing of the atmosphere are destroyed, the farming industry the use of glyphosate to boost the profits is killing the insects that are necessary for a balance web-of-life and the reduction of a city to a speculation object is reducing the human bonds that might form a resistance against this homogenization. If you add up these processes, it is a logical conclusion that the current economic paradigm is a driver for the changes in the earth-system, and with it a driver for extinction.

[8] Felix Guattari, *The Three Ecologies* (London: The Athlone Press, 2000) 29.

Fig.4 Palm Oil Farm
(Photographed by Rich Carey/Shutterstock)

Fig.5 Hambach Open-Cast Mine
(Photographed by : Federico Gambarini/dpa, September 11, 2018)

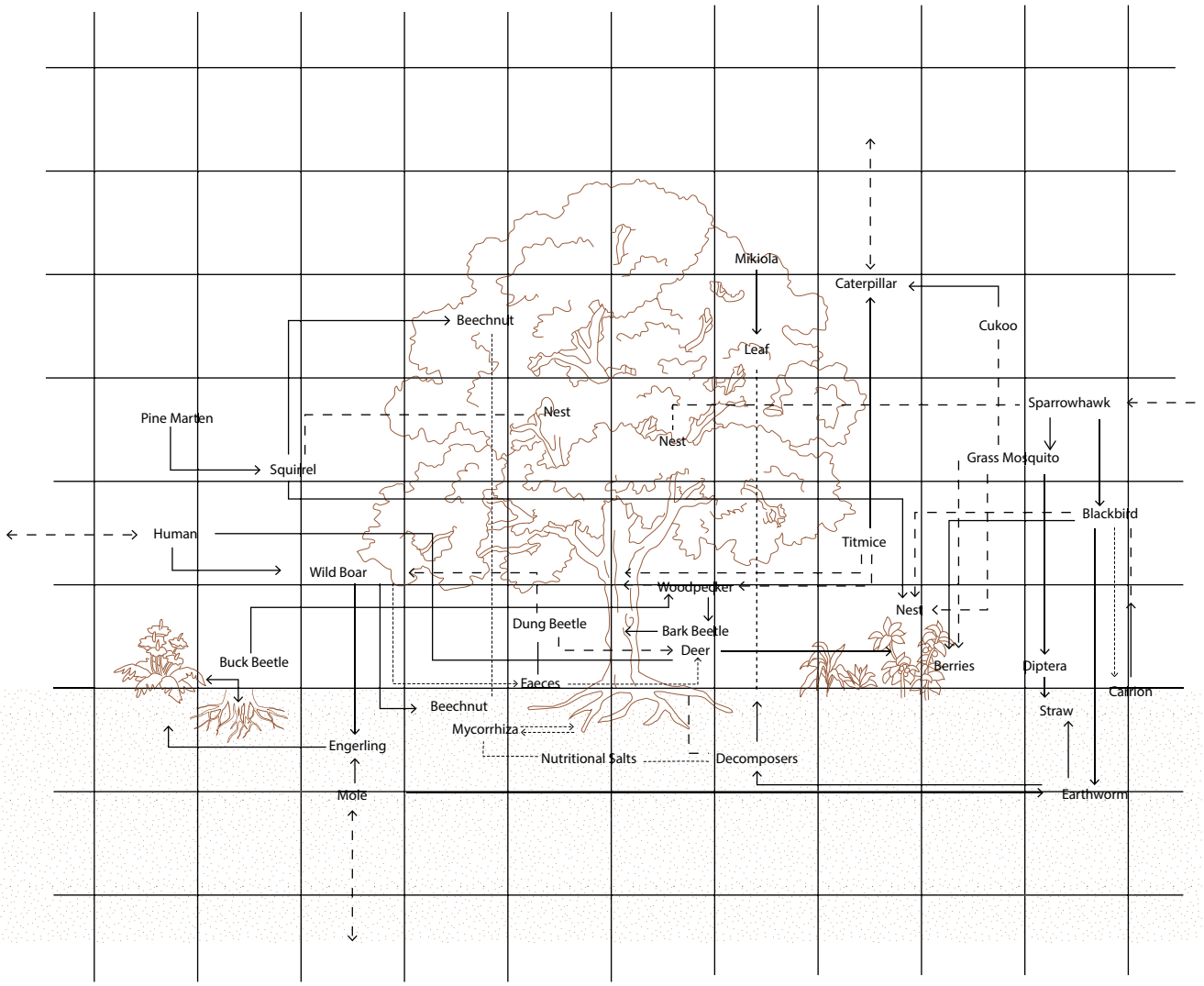


Fig.6 Gridding of Complex Networks

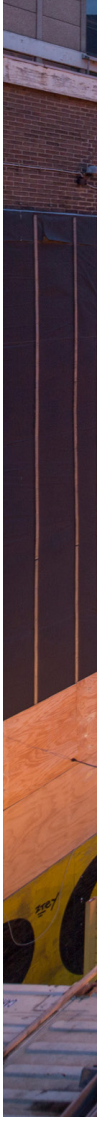
I.3 THE ARCHITECT, AN INSTRUMENT OF THE ECONOMIC PARADIGM

"I quickly discovered that economic needs render the architect a largely powerless figure. Saying no or questioning a client's directiveness is at best a matter of gentle persuasiveness"

Reinier de Graaf, Four Walls and a Roof

We are taught in our education that the Architect, works at the intersection of the complex networks of the environment, social and the psyche. We learn to analyse how the change of material conditions affects social networks, we learn about historical context of a site, the relations between material and the senses. We learn to see values in all these things and try to weight them in their relevance, debating on how a building could materialize in these networks. I don't want to claim that the architecture education is flawless, but I am convinced that cliché of the reductionist modernist designing utopias is indeed become less prominent and the image of the architect is the shifting towards the recognition of a multiplicity of values in the realm of the three ecologies.[9]

Even though the architect is trained to recognize and balance these intricate conditions, upon entering the work field, the profession is subjected to the forces of the dominant modes of production. *"I quickly discovered that economic needs render the architect a largely powerless figure. Saying no or questioning a client's directiveness is at best a matter of gentle persuasiveness"*[10] This is how Reiner de Graaf describes his first impression upon entering the working world of architecture. The asymmetrical power relation that de Graaf describes, is reflecting the position of the architect in the current economy. We are able analyse complex networks of life, but we are instrumentalized to subjugate all the values we can observe to the one of the exchange-value of money. Different Architects deal with this frustrating premise, many work in a schizophrenic way, participating in projects to 'gain money' e.g., big housing complexes for investment companies, to finance 'good



[9] Helene Frichot, *Creative Ecologies: Theorizing the Practice of Architecture* (New York: Bloomsbury Visual Arts, 2018).

[10] Reinier De Graaf, *Four Walls and a Roof: The Complex Nature of a Simple Profession,* (Cambridge, Massachusetts: Harvard University Press, 2017) 4.

Fig.7 The Network of the Schieblock
(Photographed by Ossip van Duivenbode)

Fig.8 New Developmenet in the Schieblock
(Visualization by KCAP, January 18, 2022)

architecture' free from the force of the modes of production, in which they can appreciate and evaluated a condition to their full potential. Others 'make the best out of the situation' by finding justification in their work through incorporating as much 'valuable' architecture in forms of minor decisions, like brick placement, orientation of bathrooms or plant growing wires on the façade, while submitting the main decisions to the demand of wealth accumulation. Lastly there is a selection of architecture practices deliberately obfuscating the processes of homogenization by pretending to put other values in the foreground to disguise the underlying destruction of networks. A perfect example of this being greenwashing which gives the impression of sustainability as a value but in the last consequence is destructive for the complexity of life. This last example of the architecture practice is not only instrumentalized but is becoming an accomplice to this reduction of values and accomplice to extinction.

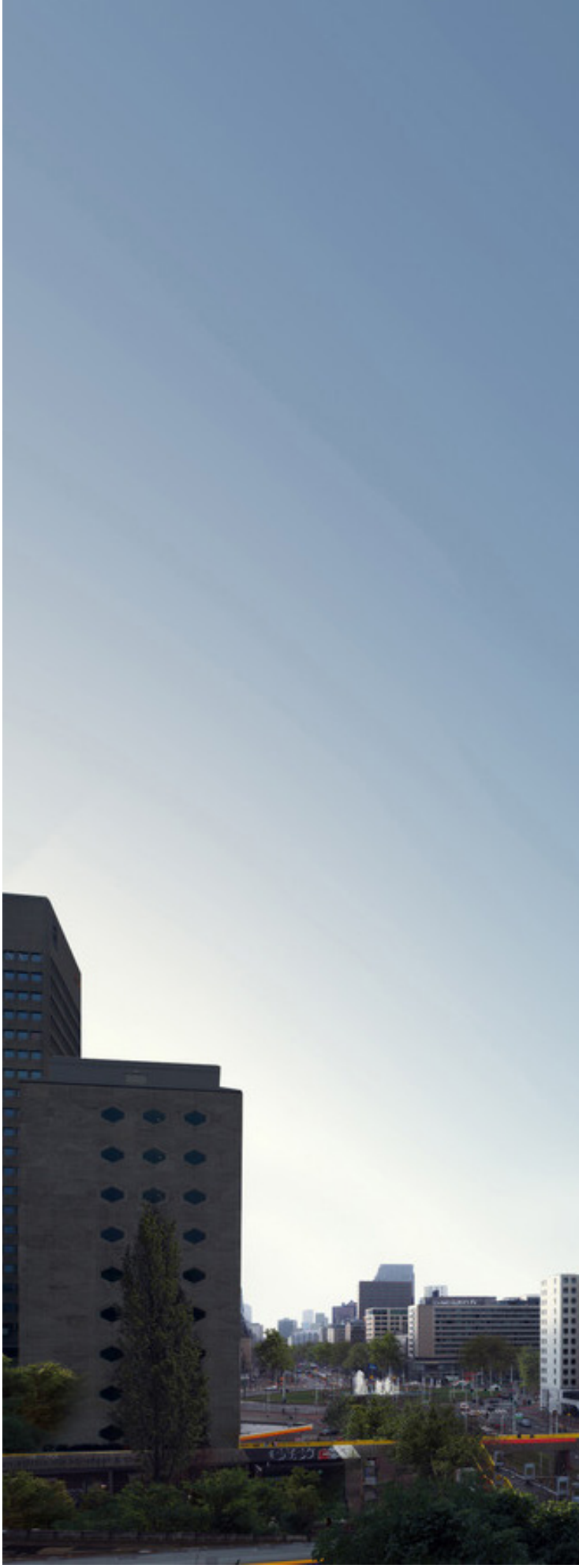


Fig.9 New Developmenet in the Schieblock 2
(Visualization by Proloog.tv/UN Studio)

1.4 PROBLEM STATMENT

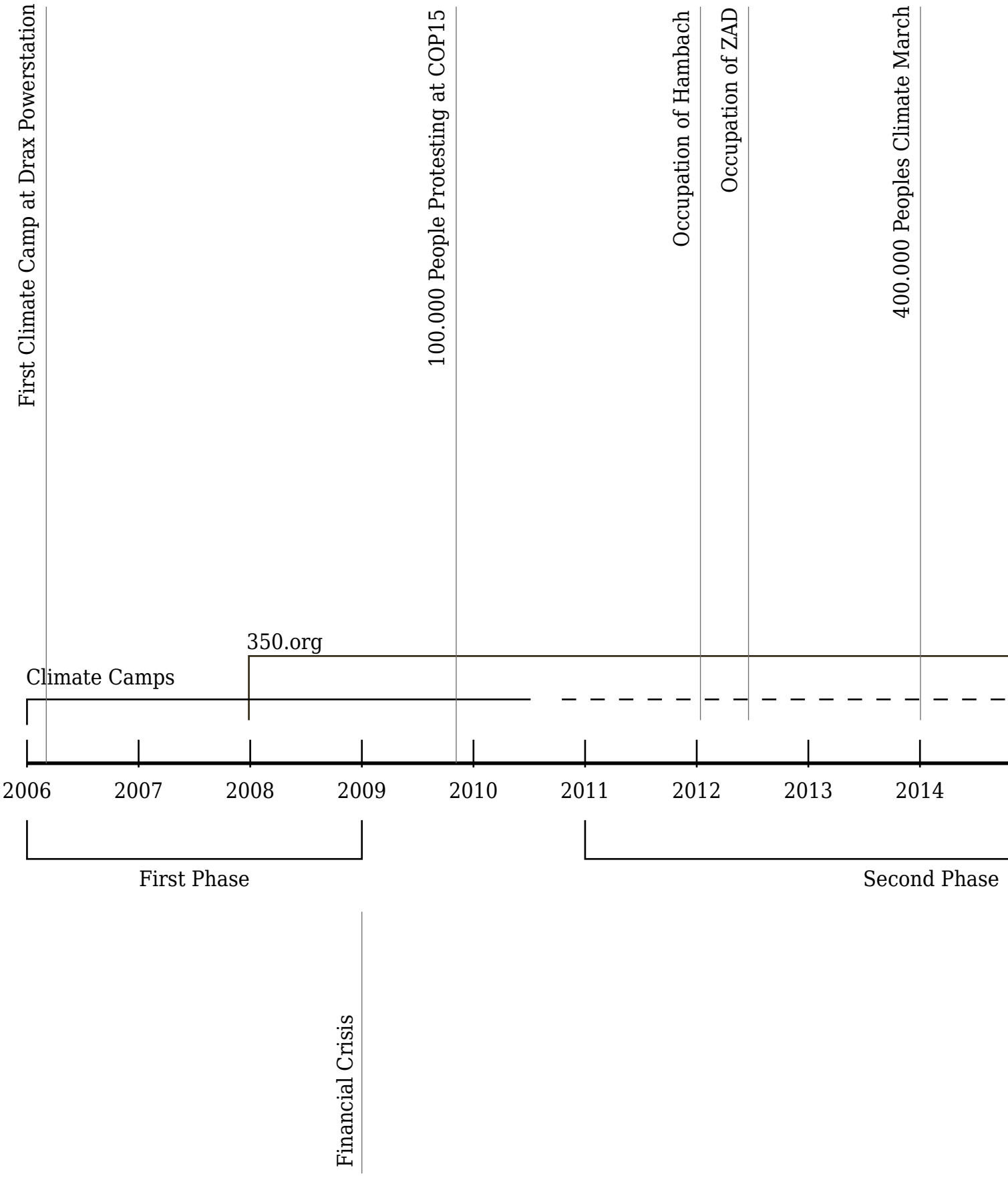
The Architect is a specialist in analysing complex networks of value, but is instrumentalized by the economic paradigm of homogenization. The architecture practice therefore has to break free from this instrumentalization (Potestas) and find new ways to gain power (Potentia) to fight for a re-heterogenization of values.

II.2 THE CLIMATE MOVEMENT A MOVEMENT FOR HETEROGENEITY

Becoming aware that the practice of architecture is part of a network that drives the sixth extinction event, is deeply unsettling and makes it clear that we must break with this instrumentalization, re-positioning the practice of architecture in a productive way. We must take our eyes elsewhere to other social assemblages that struggle against this uni-dimensionalization of the interwoven worlds we live in. Luckily, we are not the only one with that need. A collection of social movements has been emerging under the overarching term of climate movements. These climate movements, with its many facets, has been denouncing the process of homogenization and the related human impact on the earth-human networks. While a part is only treating the symptoms of a derangement of these networks, a significant part of the movement actively makes the dominant modes of production responsible for these destructions. Especially specific agents in this economy, that disregard their impact, like the fossil fuel industries are targeted massively and the slogan "system change not climate change" is resonating in the cities when climate movements take their demands to the streets. The struggle against the destruction of networks has been gaining power in the last decades. Andreas Malm states that *"The climate movement the global north has several cycles of intense activity, each on a larger scale then before".*[11] In 2009 at COP15 100.000 people marched through the streets. In New York after the disaster of hurricane sandy in 2014, it was 400.000 people protesting and in September 2019 more then four million people marched with the Friday for Future movement at more than 4.500 locations on all continents of the world. This increasing velocity of the movement is used to safeguard modes of valorisation from the gridding of the dominant modes of production and demands governmental and industrial actors, to do so as well. In the last newsletter published by extinction rebellion Rotterdam, they state, *"The consequences of the climate crisis are clear: to protect life on Earth, governments and companies must act now."* [12] The statement is clear. Protect what is living on this earth – acknowledge the webs of life and act accordingly. This is where the architect and the climate movements can form an alliance. Being the expert in acknowledging complex networks we can be a part of safeguarding them through our practice, through design.

[11] Andreas Malm, *How to Blow up a Pipeline* (London: Verso, 2018).
[12] Extinction Rebellion, email newsletter to author, April 7, 2022.

Fig.10 Blockade of a Oil Refinery through Extinction Rebellion (Photography by Extinction Rebellion, August 25, 2021)


First Climate Camp at Drax Powerstation
100.000 People Protesting at COP15
Occupation of Hambach
Occupation of ZAD
400.000 Peoples Climate March
350.org
Climate Camps
2006
2007
2008
2009
2010
2011
2012
2013
2014
First Phase
Second Phase
Financial Crisis

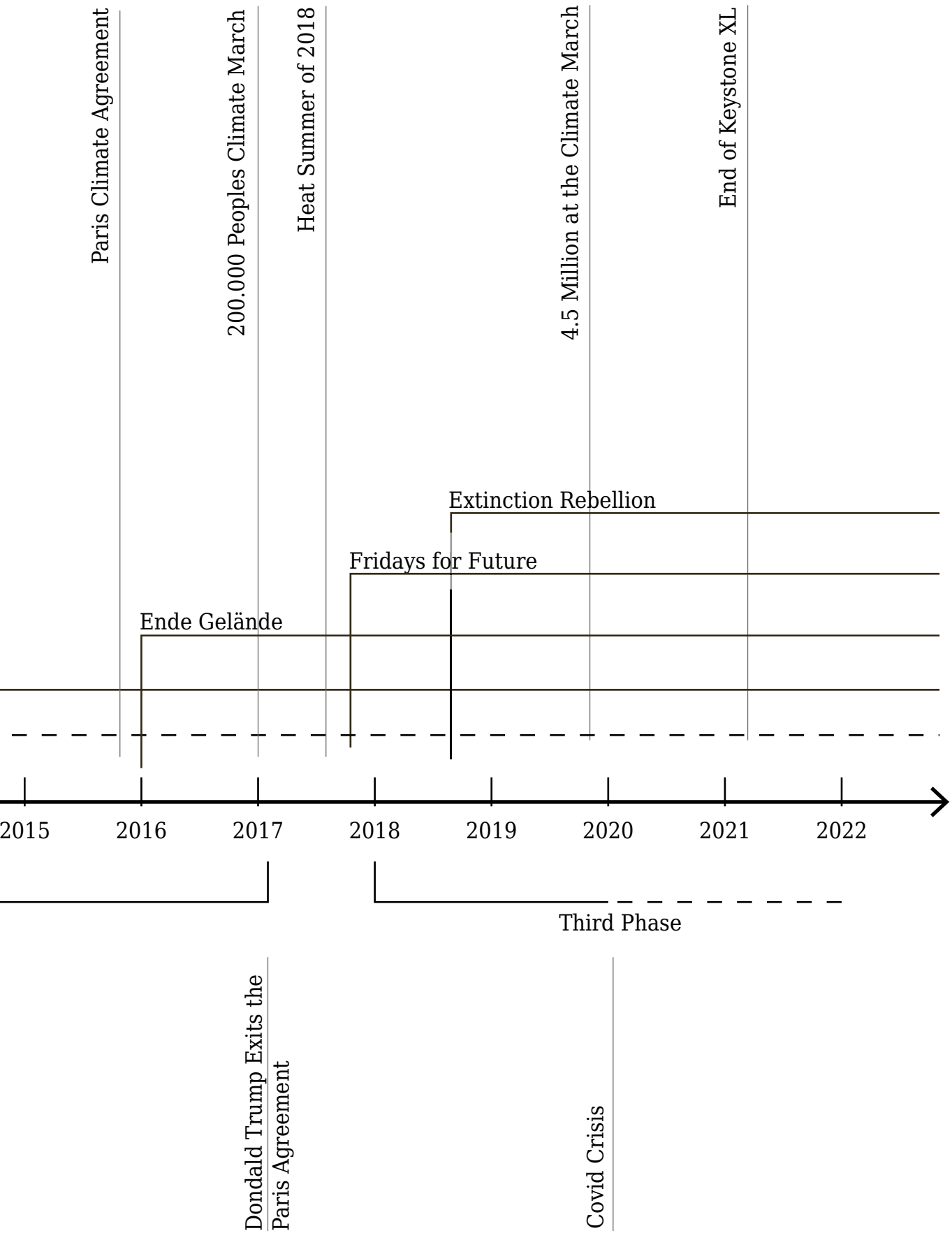


Fig.11 Development of Climate Movements since 2006

II.2 HYPOTHESIS

I want to claim that together with the gained power of the climate movement and the knowledge the trained architect has about the embedded values of complex networks. An alliance between this knowledge and power, can be a valid contribution in the re-heterogenization of values to counter the destructive homogenization of values.

III.1 ASSEMBLAGE THEORY, ANALYSIS OF COMPLEX NETWORKS

"It is this type of irreducible social whole produced by relations of exteriority, a whole that does not totalise its parts, [. . .].We can refer to these social wholes as assemblages."
Manuel De Landa, Assemblage Theory

To understand how the architect can form an alliance with the climate movement, I want to build a theoretical framework, a backbone of my project to analyse the network of the climate movement and its relation to other networks.

A theory which lends itself to this, is the assemblage theory originating in the work of Deleuze and Guattari[13] and developed further in the writings of Manuel DeLanda.[14] The theory can be used to analyse a part to whole relationship. It allows us to look at components of a movement and bring them in a relation to each other. These components can be social components like persons, but also, they can include material components like architectural structures. [15] The relation between the different parts which form new properties, makes the assemblage. What is interesting about the theory is that you can look at the components themselves and observe them as an assemblage of another scale. As an example, we can look at the climate coalition in Netherlands[16] as an assemblage consisting of different movements that form that coalition, like Code Rood and Fossielvrij NL, but each of these parts can be then observed as an individually assemblage. Additionally, to this nesting of assemblages on different levels of scale the individual parts can be analysed on different parameters. The two most relevant that together define the identity of an assemblage being de/territorialization where *"Territorialisation refers not only to the determination of the spatial boundaries of a whole – as in the territory of a community, city, or nation-state – but also to the degree to which an assemblage's component parts are drawn from a homo-*

[13] Gilles Deleuze, and Felix Guattari, *A thousand Plateaus: Capitalism and Schizophrenia* (London: Athlone Press, 1988)
[14] Manuel DeLanda, *Assemblage Theory* (Edinburgh: University Press, 2016).
[15] Manuel DeLanda, Assemblage Theory, 31.
[16] "Wie zijn we", De Klimat Coalitie, https://klimaatcoalitie.org/index.html

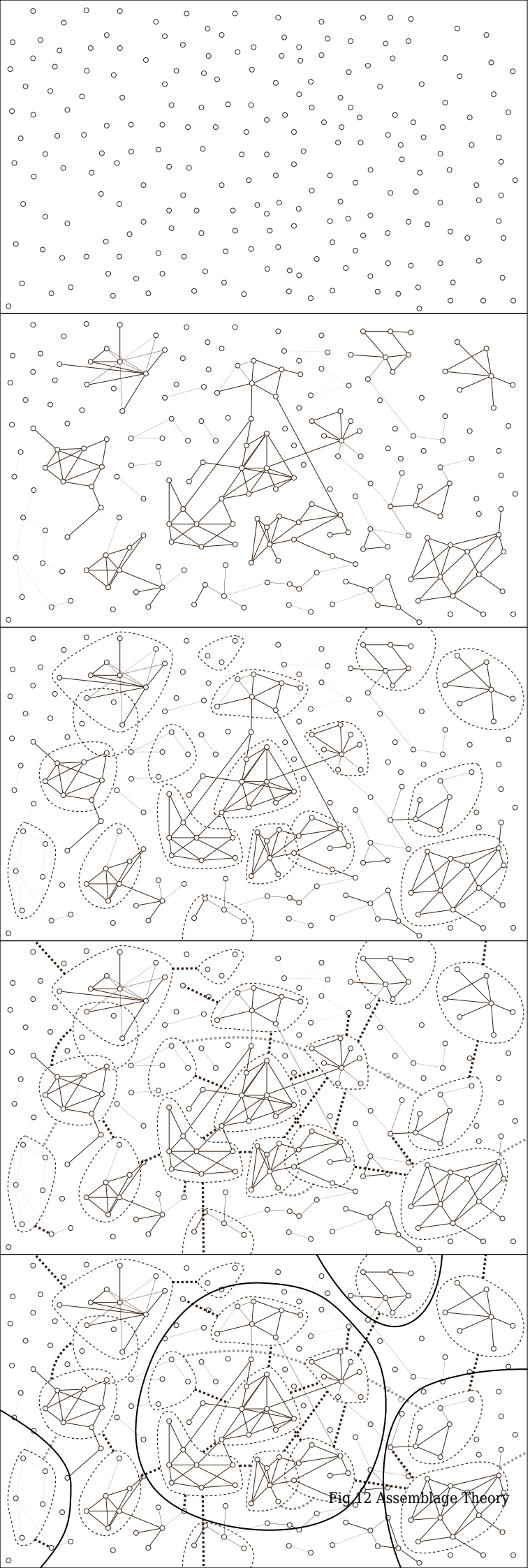


Fig 12 Assemblage Theory

geneous repertoire, or the degree to which an assemblage homogenises its own components."[17] and de/coding where *"Coding refers to the role played by special expressive components in an assemblage in fixing the identity of a whole. The two best-known expressive components with a specialised function are chromosomes and languages."*[18] By understanding assemblage theory and with it the different parameters that make this complex heterogenous networks I will be able to use these understandings to create a representation of the climate movement in the Netherlands.

[17] DeLanda Manuel, *Assemblage Theory*, 22.
[18] Idib

III.2 SITUATING A DESIGN IN THE ASSEMBLAGE OF THE CLIMATE MOVEMENT

Active participation in the climate movement of Rotterdam, will allow me to understand and analyse the existing nested assemblages of the climate movement. Starting from this immanent perspective I will start to look at the movement first from a direct scale of my body and its environment – and relate this then to assemblages on other levels of scale/organization.

This immanent observation of the movement, paired with the theoretical framework will be then, in a second step, translated into an installation that represents these assemblages. The different parts of the assemblage will be located along three spatial axis of the installation– each representing a different parameter of the assemblage. One being the level of scale in which the assemblage is located – the second being a line between the material and expressive components of the assemblage and the last being the identity of the assemblage defined by their degree of de/territorialization and de/coding. The parts themselves will be analysed through the tools of architectural analysis including sections, floorplan, maps and diagrams and models.

Like the other parts of the representation, a design can be observed as an assemblage, consisting of the material and expressive parts that make a design, but also as a component part of an assemblage on a higher level of organization. In both cases – the design will be positioned in the installation – to show the relations it creates with other parts of the climate movement assemblage. Through that positioning I will be able to identify at which scale of the assemblage a design can situate itself – what properties it has and what capacities it can have to affected and be affected by other parts of the assemblage. Through this positioning I will be able to create an alliance with the climate movement through architectural design.

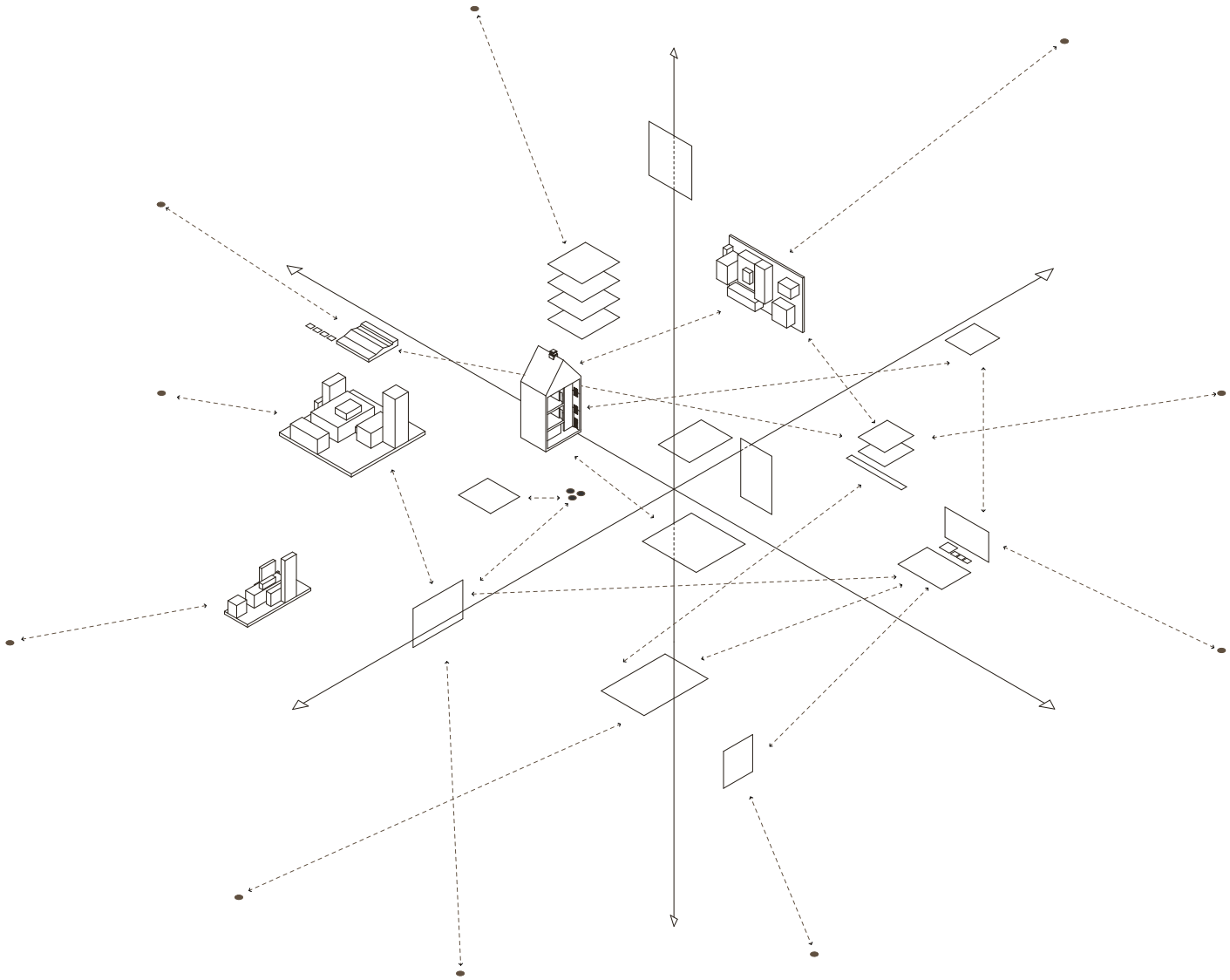


Fig.13 Assemblage of the Climate
Movement as a Installation

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