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The Royal Danish Academy of Fine Arts
School of Architecture
Political Architecture: Critical
Sustainability

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WATER

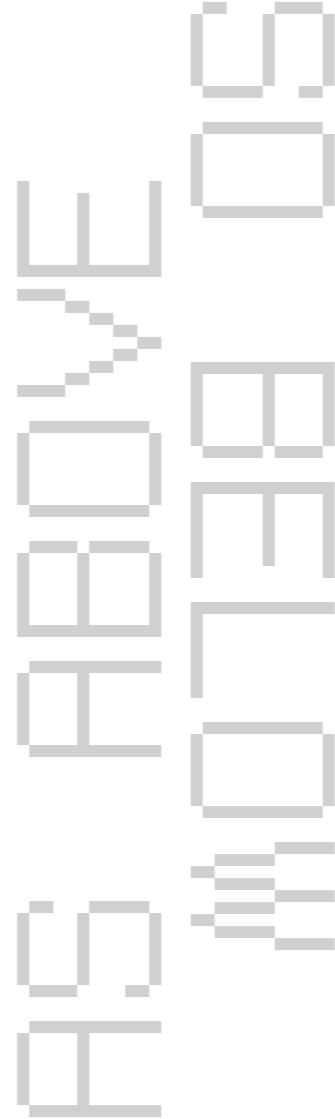
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Phoebe Cowen

PROGRAM
THESIS PROJECT
Spring semester

Tutor: Niels Grønbæk



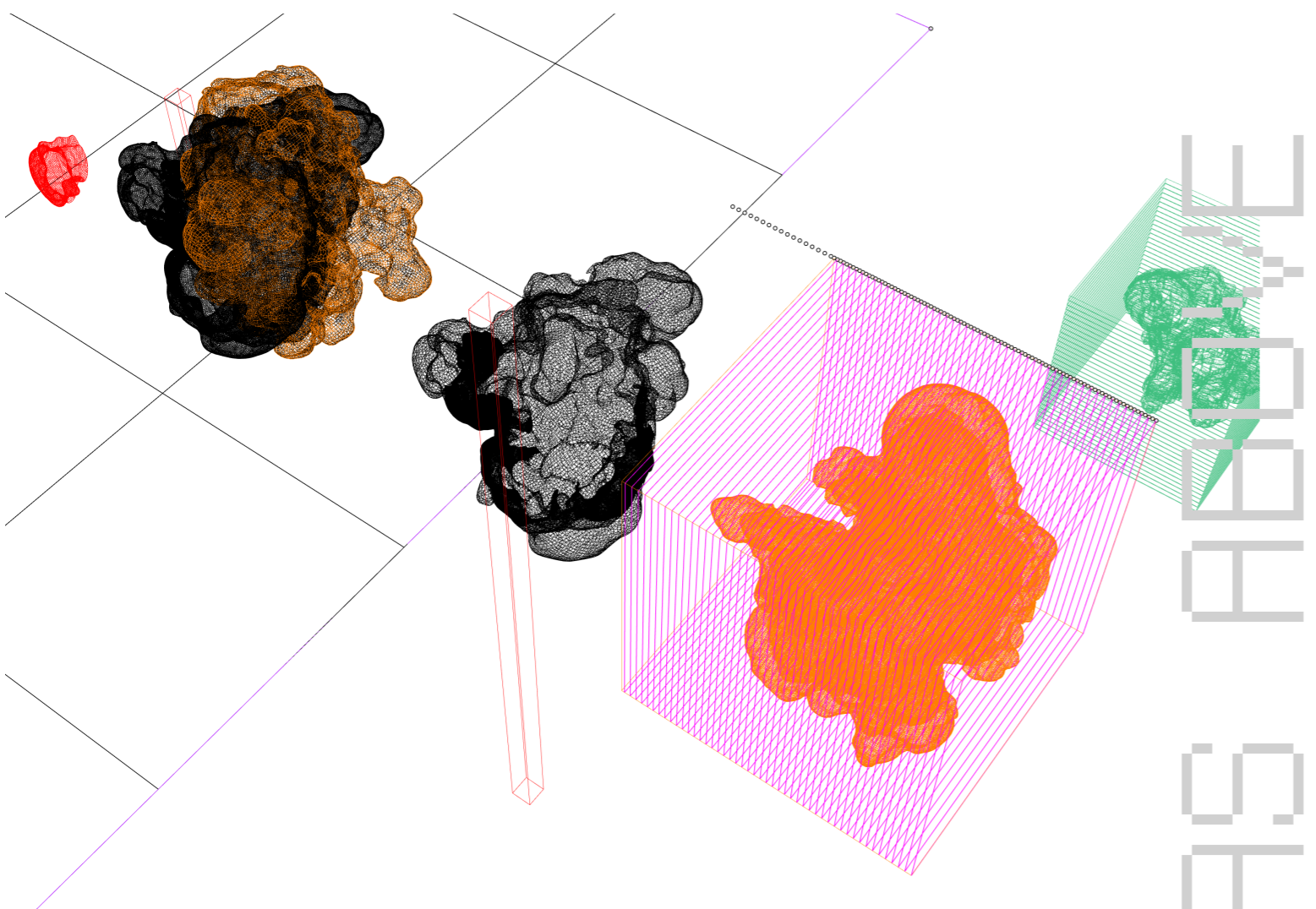
"As above, so below" is a popular paraphrasing of the second verse from an inscription in the *Emerald Tablet* from the eighth or ninth century. Due to time and irregularities between the Arabic and Latin transcriptions of the original Hermetic text, the meaning can be interpreted as either of the following:

*what is above is like to that which is below,
and what is below is like to that which is above*

or, more beguilingly:

*what is above comes from what is below,
and what is below comes from what is above*

This program takes its definition from the latter.



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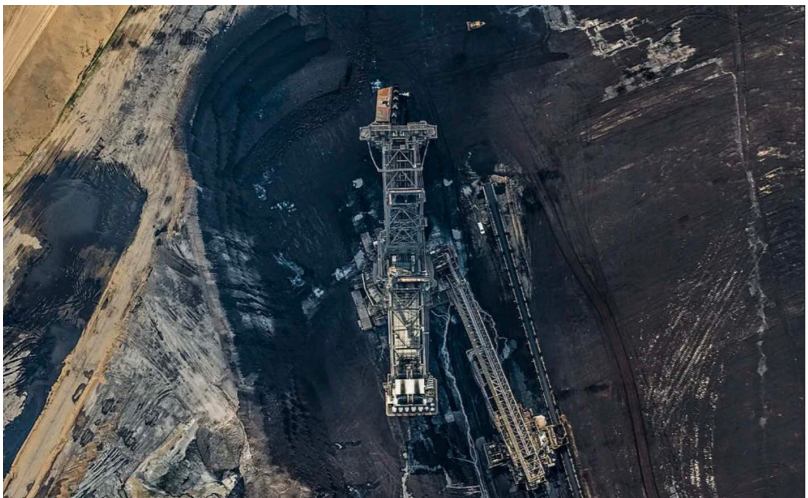
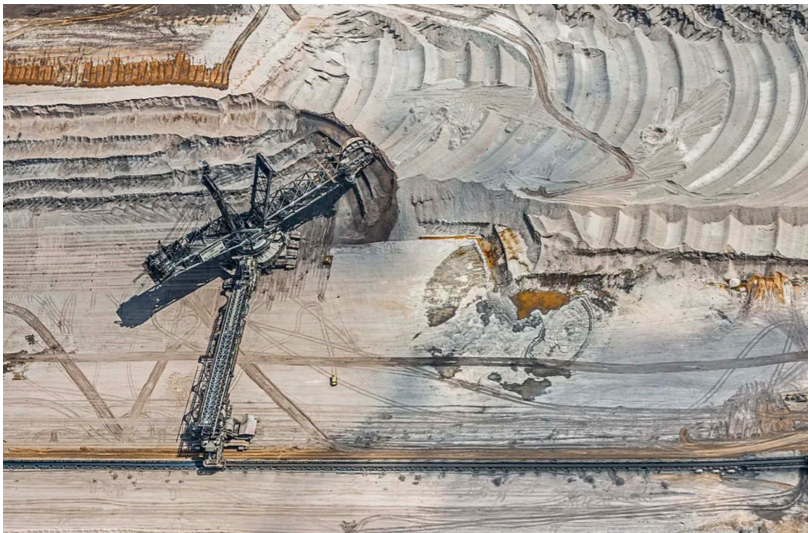
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CONTEXT:

The project is based in the Lower Lusatia region of eastern Germany, that covers an area between Brandenburg, Saxony and Western Poland and Northern Czech Republic. Specifically I would like to narrow my focus in on the village of Mühlrose, where a remaining 200 inhabitants have been forced to relocate in 2022–2023 because of mining expansion in the area.

The story goes as follows:

After the second World War, the mainly Jewish-owned and cooperative-run mining sector in Lusatia was nationalised and consolidated by the GDR. Subsequently, with the collapse of the USSR, East Germany joined the German Federation in 1991, and the remainder of the mines were sold off to private companies. The estimated number of jobs in the region plummeted 90% from 80 000 to 8000, around which the figure still hovers today.

Today, LEAG (Lausitz Energie Bauberg AG) controls both the coal mines in the region and the power pumps they support. In 2019 LEAG stated they employ 8049 people, and extracted around 52 million tonnes of lignite coal – it is estimated that the four mines of Nochten,

01. A thorough account of steps taken by LEAG to curb noise pollution can be found here:

www.leag.de/de/seitenblickblog/artikel/laermschutz-in-den-leag-tagebauen/

02. Paragraph extract from Phoebe Cowen, *Episodes in Cars with Strangers*, Writing Architecture assignment, November 2023, 14

Jänschwalde, Welzow-Süd, and Reichwalde collectively contain 852 million tonnes. The collected power stations produce 50 million TWh (Terawatt hours) of electricity annually, and around 55 million tonnes of CO₂.

So, LEAG is responsible for every tenth kilowatt hour in Germany, extracted from the crust of the soil at the expense of great labourings of both human and machine. They are also solely responsible for the dust, noise, heat, restructured water, and reformed air leaking, leaching, lurching off their mining sites. They keep their noise pollution in nearby villages to a federally agreed maximum of 45db, the “noise level of an average rainfall”⁰¹ and yet, when I camped some 5km away, the mineral agitations of the machines kept me awake in the night, and the dust settled on my tent in the morning dew.⁰²

German Federal climate action, called the Energy Transition Plan, mandates a reduction in CO₂ emissions, thereby mandating for heavily regulating, improving efficiency of, and eventually phasing out lignite energy production entirely by 2045. There is considerable pushback in the region, since the coal reserves could last for several generations, and lignite coal is unrivalled in its “long-lastingness, reliability, security... cost-efficiency, independence, and societal acceptance,” according to Saxony’s energy and



climate programme from 2012.⁰³ The mines today cover around 340km² and reach depths of 100 to 120 metres. Due to extensive regulation efforts, the experience of travelling through these landscapes is clean, almost fresh. Modern Germany hides its scars. The power stations quietly expel white clouds from within replanted forests, hidden mostly from the autobahns and scattered towns. The mines are almost unnoticeable if you haven't seen the huge blank spots on the map; fields of white dust sitting behind carefully planted banks of trees. But this churned earth that marks the passage of these mines is of a different colour, aeration and structural composition than the natural profile of the soil around it, and is considered biologically 'dead'. The region on the whole has seen a drastic reduction in populations of wildlife and vegetation. When the water pumps are eventually switched off, the ground will become waterlogged. Erosion progresses at a ruinous rate without natural structures holding the soil to itself, without layers of sedimented and compacted soil to sift and dispel and redirect.

LEAG is also responsible for rehabilitating and revegetating these devastated landscapes. Their current proposal aims to cover around 53% in forest, 25% in lakes, 10% agricultural

⁰³. www.umwelt.sachsen.de

⁰⁴. Gavin Haines, "Germany: lifting the black clouds in Lusatia" in *National Geographic*, April 9 2019. <https://www.nationalgeographic.co.uk/travel/2019/03/germany-lifting-black-clouds-lusatia>

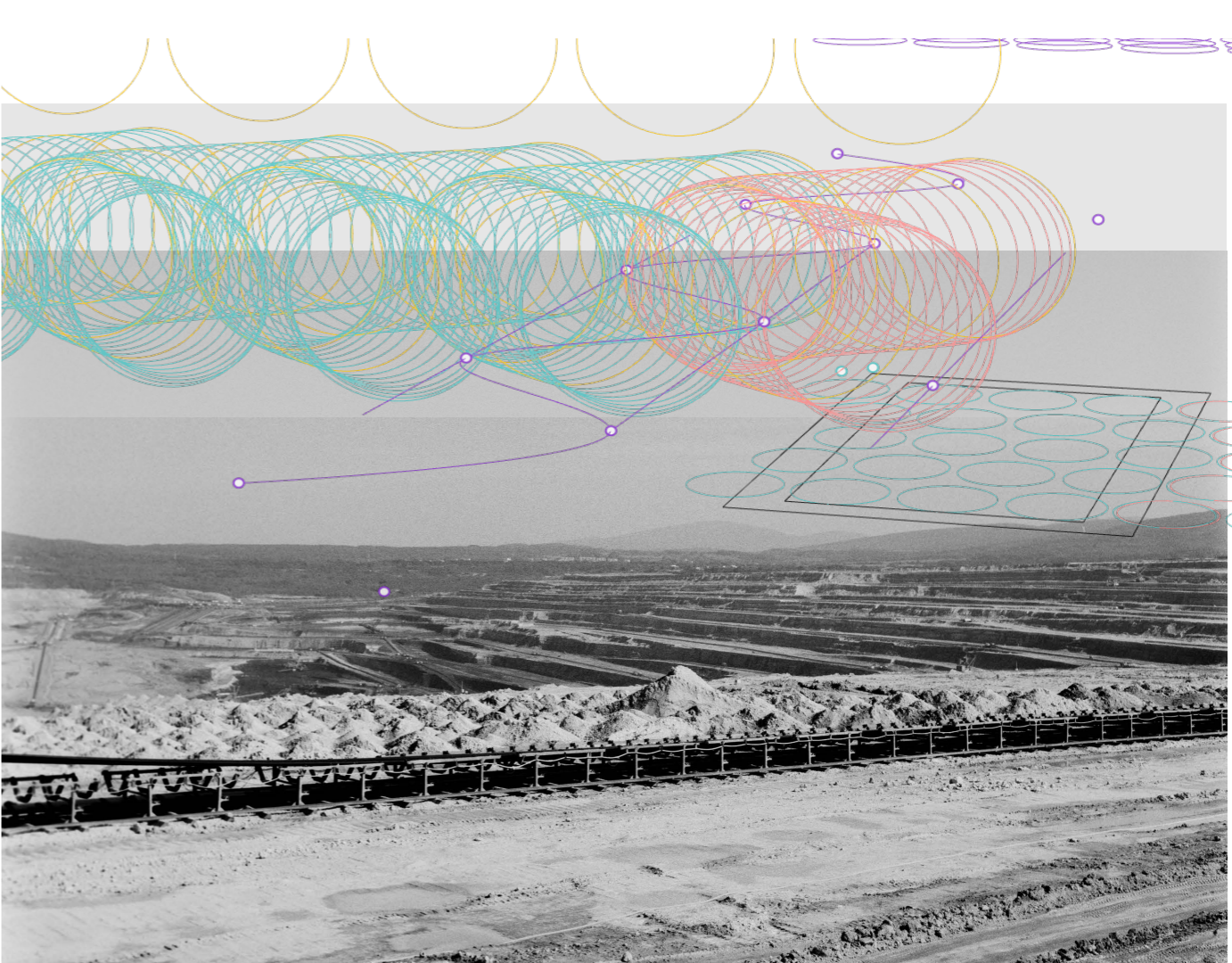
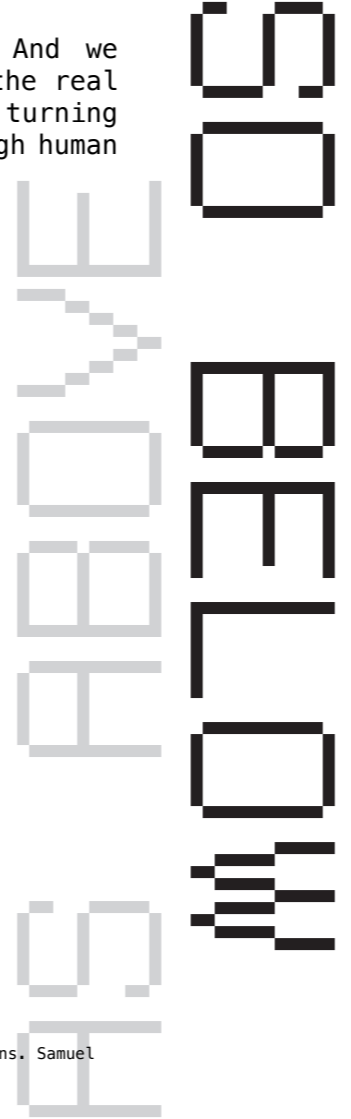
fields, and the remaining 12% roads and tourism infrastructure. But who will maintain these fragile and newly implemented ecosystems when the money runs out and the mining companies are no longer legally required to? And is tourism –once again turning to profit– the answer to a ravaged post-capitalist landscape?

LEAG itself is fairly tight-lipped about its resettlement policies in particular. There are many ethical questions around forcing 200 people to move out of their inherited generational homes in the service of a dying industry. Mühlrose has now been 80% resettled to a farming field, north of the nearby town of Schliefe. A few residents continue to refuse to move out, even as the village is taken apart around them. Most of these people were once employed by the coal company. At the same time, the noise and dust from the nearby Nochten mine is reaching untenable levels. Living here has meant living with pollution, even under the increasingly stringent standards of operation mandated by the federal government in the last decades. "Sören recalls what the area was like when he was growing up. "Everything was dusty and everything smelled of coal and sulphur," he says. "Sometimes when you swam in Lake Senftenberg you came out dirtier than when you went in."⁰⁴ People complain of lung cancer, respiratory problems, layers of dust caked to laundry. An airborne anxiety, extracted piece by piece from the ground.

CRITICAL ZONE THEORY:

The heterogeneous, near surface environment in which complex interactions involving rock, soil, water, air and living organisms regulate the natural habitat and determine availability of life sustaining resources. Science defines this zone as the top of the tree canopy to the base of the aquifer. A very narrow band at the surface of the earth. Most of human kind lives within this zone. Most of human kind has changed this zone irrevocably. There has been much research into how the zones interact - the vegetation affects the soil affects the bedrocks affects the water reservoirs. There is constant, shifting exchange across these zones. And all that is solid melts into air. (...all that is holy is profaned, and man is at last compelled to face with sober senses his real conditions of life, and his relations with his kind.)⁰⁵ if taken away from its socio-political Marxist context of societal change, and all of the human conditions that are of weighty profound import - art, love, food, family, religion - will be catabolised before the grinding mill of capitalism and profit, and insert it into the Anthropocene, we can read an interpretation where all that was good, and useful, and chaotic, and existential, and rich and lush and profound has been used by mankind in the pursuit of its own ends, and it is sublimating before our own eyes, before our

axes, before our mining machines. And we are left to face with sober senses the real condition of our lives. There is no turning back. It has melted. Sublimated through human effort. Drainage and dust.



⁰⁵. Karl Marx. *Manifesto of the Communist Party*. Vol. One, Trans. Samuel Moore (Progress Publishers, Moscow, 1969). 17

REF:

In 1969, escalating Cold War tensions and growing threats of nuclear annihilation prompted Oscar Newman to make a proposal to move New York City below ground using, naïvely, a series of nuclear explosions to hollow out the space. The city would be rearranged into to several layers organised along a gridded system of streets, and a series of giant filters that allow air from the surface to feed into the giant dome. Coca Cola projects a huge advertisement onto the inner wall; even retreating civilisations are not exempt from the sticky hands of capitalism.

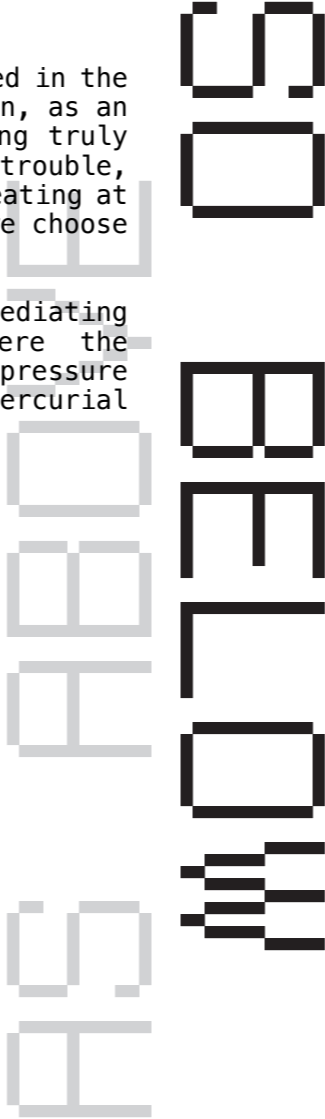
It has been widely disparaged as an untenable and frankly impossible plan, but where do we take shelter when the extractivist and devastating forces of production and emission have made the surface of our planet no longer supportive to human life? Bunkers, silos, deep underground or out in space, these ruinous landscapes are stripped of all worth and then abandoned. The advancing forces of profit and production driving us further from our own inhabited landscapes and into the metaphorical hills, into the dark.

True subterraneity, with its complete retreat from the elements of human life – air, sunlight, rain, growth, the changing of the seasons, agriculture – seems to symbolise a turn towards numbness, boredom, death.

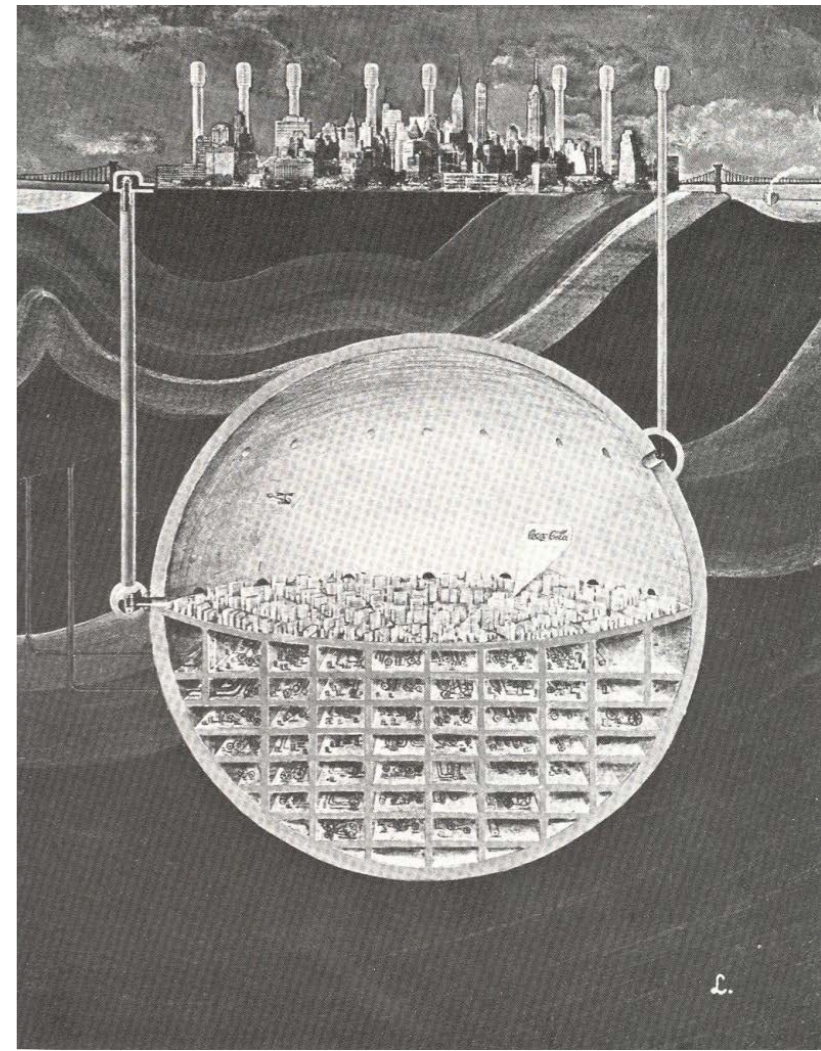
It represents preparations against some deadly future, but loss of any mediation with the present.

However, this project is more interested in the space between, and in mediating between, as an attempt to mitigate landscapes becoming truly ruinous. An attempt to live within the trouble, to occupy devastation. Instead of retreating at the will of external powers, how do we choose to “stay with the trouble”?

This project will investigate the mediating moments where soil meets air, where the incredibly slow movements of stone and pressure and clay and heat dissolve into the mercurial eddying of the atmosphere.



Oscar Newman – Atomic City
From Alison Sky and Michelle Stone's *Unbuilt America*, McGraw Hill, 1976, 192





Rachel Whiteread
With assorted works *House* (1993) and *Detached* (2013)

REF:

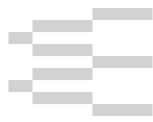
Rachel Whiteread's transferral of negative to positive space. Translation from perceived emptiness to solid tangible material form.

The process is a chemical one, a complex one, a form of sedimentation to fill the spaces the house does not. Concrete is a mixture of sedimentary aggregates, rocks that have been deposited over millenia, then dug up and broken down and resold as strengtheners for the mixture. The concrete powder itself is fine as silt.

Once the house has been cast in concrete, so all the unnoticed imperfections in the surfaces of the rooms become apparent - scratches around the electricity outlets, a dent in the plasterboard, corners scuffed off the skirting boards.

Her casts call in to view the space the house left behind. Not just the materiality and inhabitability that is stripped away with the physical attributes of the house, but the quantity and weight of the space that it enclosed. The breaths within the walls.

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AS ABOVE

SO BELOW

Residues defy scalar expectations. Residue accretion is the principal physical driver of our planetary crisis. And monitoring this accretion constitutes the key method of Anthropocene epistemology: it's how we know the geological, atmospheric, and biophysical impact of human activity. In the Anthropocene, residues are the main event. ⁰⁶

06. Hecht, Gabrielle. "You can see Apartheid from Space." In *Residual Governance: How South Africa Foretells Planetary Futures*, 19–45. Duke University Press, 2023. 34

REF:

There are many vernacular archetypes of underground buildings from the very beginnings of human history —where the first rudimentary shelters are thought to have been caves— to the present day, where extremes of heat or cold and exposure to the elements drive whole communities underground.

In Coober Pedy, Australia, the immense heat of the region and lack of variation in the landscapes forces the local residents to seek shelter by digging into the rock, inhabiting 'dug-outs'. Coober Pedy translates from the Aboriginal word for 'white man in a hole', referring to the existential reason for the settlement in such an inhospitable place: the opal mines. As the opal trade diminished, and temperatures regularly reach over 45°C in the summer months, people retreated into the cooler underground spaces left by the mines, carving out homes, bars and churches.

The Turkish region of Cappadocia has many example of underground cities, that either are dug into the rock or down into the ground. Peppered by volcanic activity, the ground is made from soft sedimentary rock that was deposited in heaped up piles like cakes, the christians retreated into these hollows to escape persecution. The city of Dinakulu sheltered over 20,000 people at its most populated.

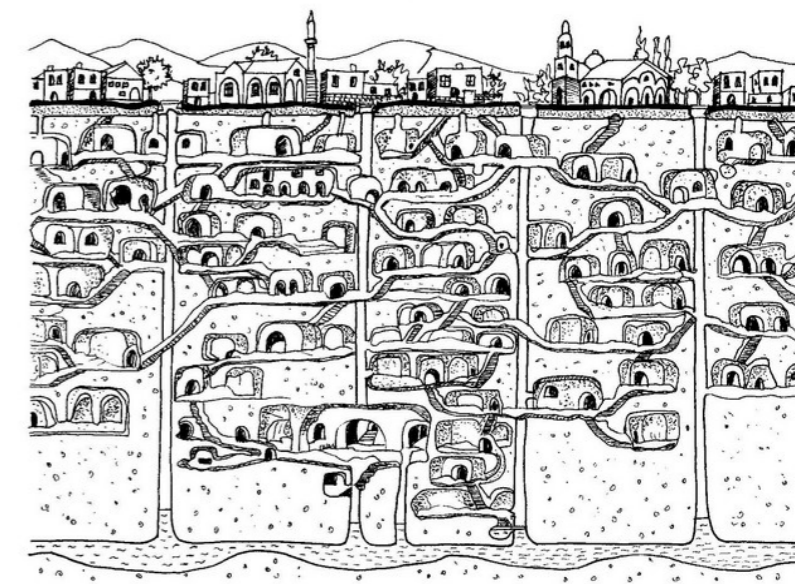
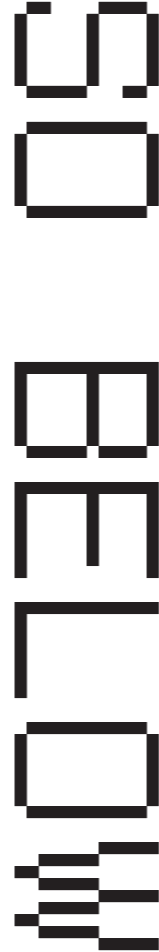
Montréal, Canada, exists over the RÉSO, an underground network connecting pedestrians to transport, malls, residential and commercial complexes, universities and concert halls, through climate controlled tunnels, all without having to come up to the bitter cold surface of Montréal's winter.

Loess is silt, transported and deposited by the wind. It is fine, and loamy, easy to dig into and cut into terraces, but requires maintenancé against erosion by the elements.

"Dwellings below, and fields upstairs"⁰⁷

The aerated yet dense nature of the sediment traps air in higher quantities than wetter, more compact forms of earth like clay, and increases the insulating properties of the material. The houses are warm in winter and cool in summer.

07. George B Cressey, quoted in Rudofsky, Bernard, *Architecture without Architects* (University of New Mexico Press, Albuquerque, 1987)



TRANSLATION:

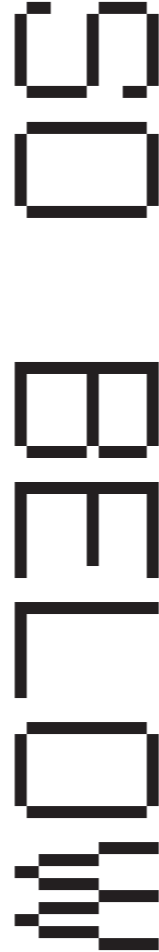
Spatial: Since 1924, 313 towns have been displaced by open cast lignite mining in Germany, 136 of them in Lusatia. The town of Neu Mühlrose represents a spatial translation, but one that lacks all of the qualities of the old town. What is needed, and what will probably reinstate those qualities, is time. A temporal translation needs to also take place. A town that has been planned, built, and displaced over the course of 5 years is missing much of what in the vernacular we refer to as 'soul'. Unfortunately for the inhabitants of Neu Mühlrose we can only travel through time at a rate of 60 seconds a minute. Perhaps this town in 20 years will look well lived-in. Perhaps there will be older trees, well maintained hedgerows and forestry on the outskirts, land that has been tilled and used for vegetable growing, barns overflowing with ivy and tumbling birds... But Neu Mühlrose has been so hastily concocted that it sits on a narrow triangular plot with no discernible opportunity for growth, or sprawl. It is hedged in by two roads that clearly delineate the boundary, and to the north, farmers' fields which in the spring are sure to be heavy with manure and insecticide. Where does this town go? How does it make space for itself?

Plot for plot, the translation has been sincere, but the common space that separates the houses

in the old town has been consolidated into a central green across which most of the houses look at each other. Where the old town has grazing goats, and the inconvenience of old oak trees, orchards, and a certain amount of wilderness, the new town has flat, ploughed farmland sewn with new monocultural lawn grass, and metal fencing that clearly delineates cadastral ownership. Organic, old growth by definition cannot be forced or artificially constructed. How then do we offer the citizens of Mühlrose a translation with fidelity?

Tsing writes of "the malevolent hegemony of precision".⁰⁸ This project attempts to move away from the generic solution evident in LEAG's resettlement policies, and towards a situated, sensitive strategy for design, that allows all the complexities to encroach, that inhabits a sedimentary logic,

08. Anna Lowenhaupt Tsing, "On Nonscalability: The Living World Is Not Amenable to Precision-Nested Scales." *Common Knowledge* 18, no. 3, 2012. 524.



TRANSLATION:

Temporal: Anthropocene stories concern geological deep time and present-day politics simultaneously... They trace changes in the composition of matter itself, observing molecular transformations and navigating among subatomic particles, urban spaces, and continents.⁰⁸ Below the soil of Lusatia sits a geological record of forests, sedimentation, glaciation, freezing and thawing, all of which dictates the movements and yield of LEAG's operations in the present day. Who really holds the power in this region? The government? The people? The mining company? Pleistocene glaciation? Historians sometimes describe their work as a dialogue in the present with the past about the future. The Anthropocene demands that we dramatically extend the temporal and spatial coordinates of those dialogues.⁰⁹

These narratives around air, land, and pollution also affect how we feel about ourselves and our place in the world. "It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties." All communities need stories that weave a common history and understanding. The difficulty, of course, is that stories don't end. They



accrete.¹⁰ Once the first excavation was made in Lusatia, the responsibility for replacing and restoring that land was already embedded. Once the machines and the crews of Polish workers were brought in, and the Sorbs were displaced from their ancestral lands in the name of production, the responsibility became a matter of state governance. The story itself is rather simple: one of a capitalist neo-extractivist industry reaching its foregone conclusion. But the stories heap upon one another and dissolve and knot and confound in complexity.

08. Gabrielle Hecht, "You can see Apartheid from Space." In *Residual Governance: How South Africa Foretells Planetary Futures*, 19-45. Duke University Press, 2023. 34

09. *Ibid.*, 38

10. *Ibid.*, 41



TRANSLATION:

Energetic: Mining occupies a catabolic membrane between solid and gas, between slow and fast, between potential and action.

It is here in this thin layer of transistence and translation that large-scale processes sublimate sedimentation into energy and back again. The critical zone morphs in and out. The soil melts into the air.

This mirrors the molecular breakdown of chemical compounds into smaller units and energy..as above so below.

AS ABOVE
SO BELOW

AS ABOVE
SO BELOW

DUST AS WITNESS:

Carried along on these eddying Brownian currents are the sediments, lighter than air, retributed and shaped by winds and flows: soil particles and pollen and soot and fragments of bacteria and fungus, anthropogenic particles like rubber, plastic, and heavy metals, and other so-called pollutants.¹¹ Generally these things are lumped in the unglamorous category of dust. But dust is a witness.¹² Dust tells a story of where it came from and what disintegrated. Similar to 'dirt is disorder', dust has famously been referred to as 'matter out of place'¹³: it comes from somewhere solid, with form, but is now different, smaller, infinitesimal. It travels, up and away, and then settles imperceptibly, evenly, coating surfaces like fluid fills out a container. Susan Schuppli discusses matter as a witness, describing dust as possessing a language, a signature, and a record of its past.¹⁴ This notion is unsettling, particularly when we reflect on how we routinely, often unwittingly, inhale and exhale air, having no say in its composition.

11. Phoebe Cowen, *Episodes in Cars with Strangers*, Writing Architecture assignment, November 2023, 13

12. Susan Schuppli, "Impure Matter: A Forensics of WTC Dust." In: *Savage Objects*. Portugal: Imprensa Nacional Casa da Moeda, 2012. 128

13. Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London: Routledge, 2002). 2 –although the phrase itself has complicated origins, attributed to Lord Palmerston, William James, and Lord Chesterfield, variously.

14. Susan Schuppli, *Impure Matter*. 128

"It is a basic principle of forensics that, between solid objects, "every contact leaves a trace". By contrast, clouds are the epitome of transformation, their dynamics are governed by nonlinear, multi-causal logics...Clouds are always double. Seen from the outside they are measurable objects, seen from within they are experiential conditions of optical blur and atmospheric obscurity."¹⁵

15. Forensic Architecture, "Cloud Studies" <https://forensic-architecture.org/investigation/cloudstudies>

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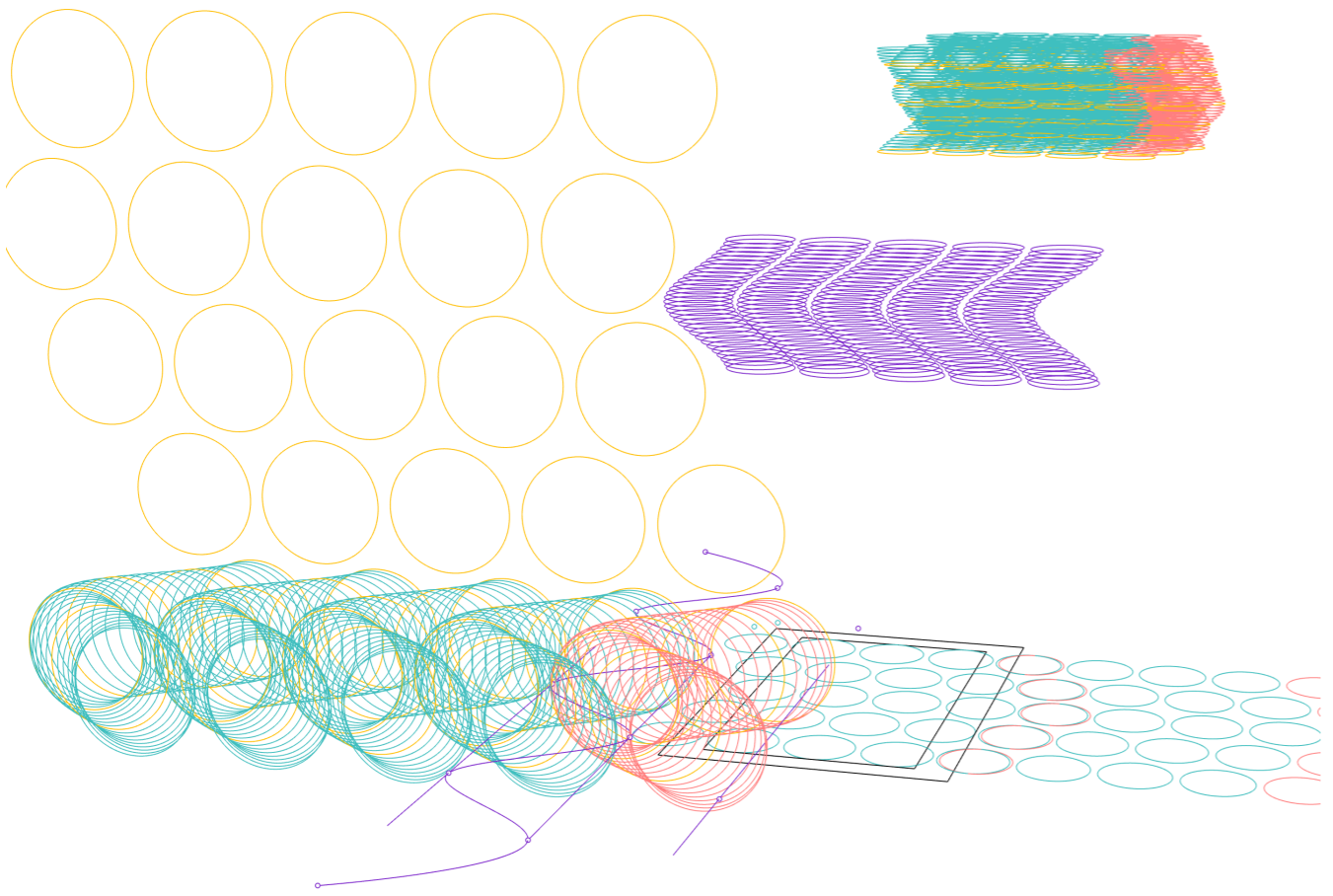
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1.65 THE BEIRUT PORT EXPLOSION



DATE OF INCIDENT 04.08.2020	LOCATION Beirut, Lebanon	FORUMS Media
IN PARTNERSHIP WITH Mada Masr	The explosions that ripped through the port of Beirut in 2020 devastated the city, leaving as many as 300,000 homeless. Following calls for an independent investigation, we mapped the contents of the warehouse where the blast originated and the spread of fire that instigated it, and have released our 3D models of the incident as a free resource for investigators and civil society.	

An investigation into the circumstances of the devastating port explosion in 2020 in Beirut using, among other evidence, smoke colour to identify what was burning and when. [Forensic Architecture]



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AIR AS COMMONS

In 1992, the UN designated the atmosphere as a “global commons,” alongside the open sea, Antarctica, and outer space. This classification placed the troposphere, that thin layer of habitable, breathable air nestled between land, ocean, and the ozone layer, beyond the jurisdiction of any single nation-state. This acknowledgment arose from the realization that these shared resources – the air we breathe is both necessary for life, and a wasteground for industrial and energy-related emissions – were being overused by some and thus required collective governance to achieve equilibrium. This highlights the difficulties of the generalised, decentralised nature of air as matter.

Yet, despite well-intentioned policies, custodianship over a commons can easily transform silently into a form of violence. The disparities inherent in air quality make it susceptible to exploitation by those tasked with its oversight. Many approaches to governing airspace as a commons result in neglect or governmental blindness to the communities impacted by polluted air. There is no obvious intentional malevolence, only a bureaucratic unwillingness to see that the waste products of

industrial processes disproportionately affect minorities, the poor, and the disenfranchised: “the subtle distinction between ‘make die’ and ‘let die’ violence goes some way to explain the experience of slow violence at the hands of an unlocatable, dispersed, and contested polluter.”¹⁶

However, Mario Blaser and Marisol de la Cadena argue that it is increasingly unhelpful to see the commons as shared pool of resources, in much the same way that sensitive design and research does not scale into generic solutions to diverse problems. Situatedness and smaller scale detailed understandings are the key. “To speak of the commons as if it were a natural resource is misleading at best and dangerous at worst – the commons is an activity and, if anything, it expresses relationships in society that are inseparable from relations to nature. It might be better to keep the word as a verb, an activity, rather than as a noun, a substantive.”¹⁷

16. Thom Davies, *Toxic space and time: slow violence, necropolitics, and petrochemical pollution*. *Annals of the American Association of Geographers*, 108:6, (Routledge, 2018). 1540

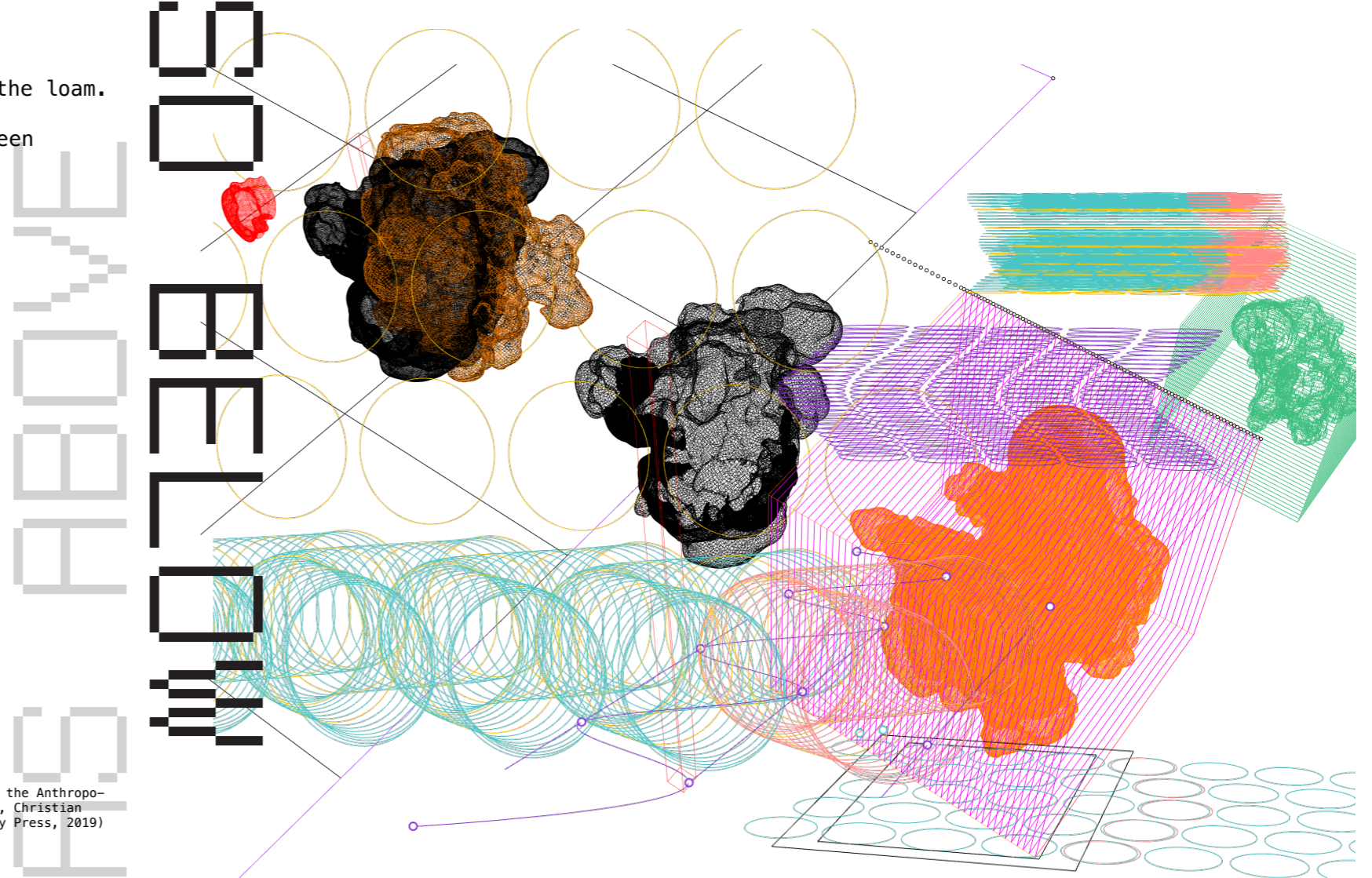
17. Linebaugh, quoted in Mario Blaser and Marisol de la Cadena “The Uncommons: An Introduction”, *Anthropologica*, 59. No 2. 186

UNCOMMONING NATURE:

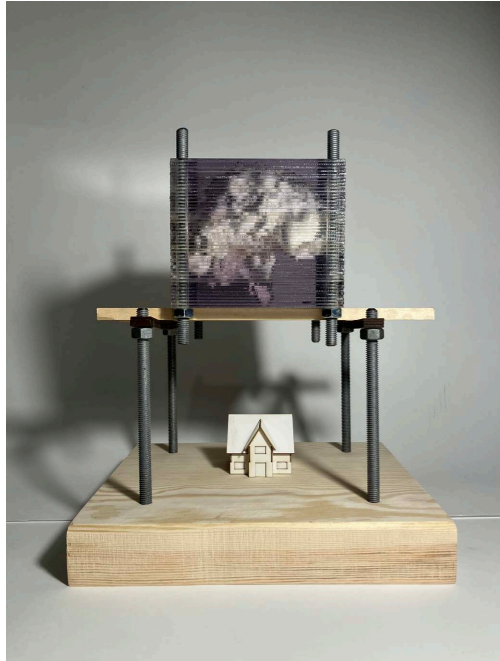
In Marisol de la Cadena's *Uncommoning Nature* she discusses how the capitalist proposal of swapping out nature for resources is a false exchange, even if the nature is to be 'restored' afterwards. Particularly, she refers to the indigenous struggle in the Northern Andes to maintain their lagoons against advancing, encroaching mining prospect – not to maintain the water itself, but the life within the water that cannot be replaced, even if the mining companies reinstate the body of water as a reservoir.¹⁸ This has uneasy echoes in Eastern Germany and the great hubris of the land reclamation projects there.

Herein lies the problem. Rehabilitating a landscape is a tautology, a moot point. The landscape that once was has fled, any landscape that replaces it will be entirely, unavoidably different. Every tablespoon of fertile topsoil contains ten times more organisms than there are people on the planet. Every hour the f60 machine in a Lusatian mine is capable of digging out 29000m³ of earth, (or around 2 billion tablespoons). If we embrace, acknowledge, and fully take responsibility for the Anthropocene, then we would not attempt reimposition of previous paradigms, we must look for new ways of inhabiting and coexisting with this *terra firma* that we have shaped with our own hands.

_Toes wriggling in the molecules, in the loam.
_The soil loves the green, and the green loves the wind.



18. Marisol de la Cadena, "1. Uncommoning Nature: Stories from the Anthropo-Not-Seen" In *Anthropos and the Material* edited by Penny Harvey, Christian Krohn-Hansen and Knut G. Mustad (New York, USA: Duke University Press, 2019) 35-58



AIRBORNE TOXIC EVENT

The beginnings of an experimental representation to harness dust sediment carried across Lusatia. These models that explore the nature of air, air pollution and our understanding of it in everyday life. Near Mühlrose, the air that permeates the soil contains byproducts from mining and power plants: unusually high amounts of NO₂ and CO₂, iron, magnesium, lead... Nothing here is untouched by the sticky hands of capitalism.

What does it mean to live both on and under these artificial landscapes? Does it permeate our understanding at all? The models attempt to look at air as an extension of the Anthropocene. "We live with/in air"¹⁹ so we cannot ignore it. How artificial and human shaped landscapes affect the air we breathe, and how this is a recursive loop, blurring bodies and environments.

I am interested in spaces where something is intended to be experienced or communicated. What kind of space would allow us to become aware of the air we breathe, to almost see it? I used models as a form of exploration and analysis, allowing them to inform each other in repeatedly enmeshed iterations, a dance of knowing and acting.²⁰ This is partly an attempt

19. Nerea Calvillo, *Aeropolis: Queering Air in Toxicpolluted Worlds*. (New York: Columbia Books, 2023). 25

20. Anna Tsing. "On Nonscalability: The Living World Is Not Amenable to Precision-Nested Scales." *Common Knowledge* 18, no. 3, 2012. 506

to make airs more visible, and partly to grasp at the moving, flowing complexities of the medium.

And what of the dust? It contains, it spreads, it settles like a skin. It is ubiquitous. It talks. How do we listen?

_fluid fills out a container, and dust settles evenly like a skin

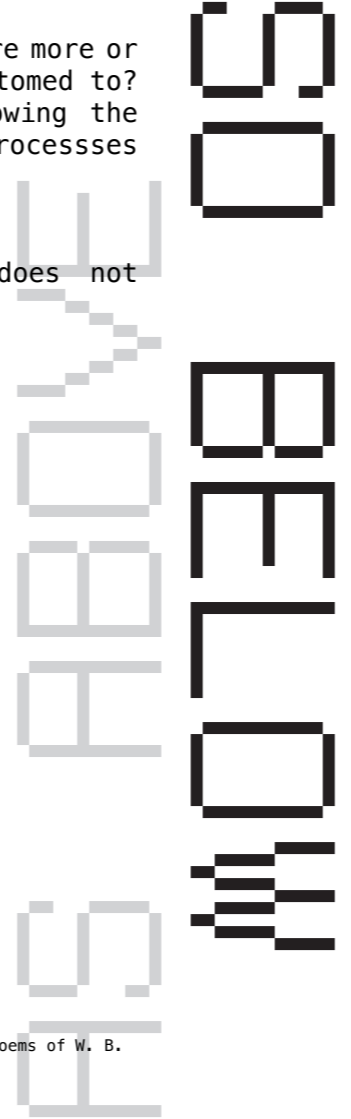
SELF ORGANISING CRITICALITY::

A property of dynamic non-equilibrium systems, that develop slowly and have a critical point that self-regulates the outcomes. Like a pile of sand, poured at a constant rate upon a flat surface, will form its own structural pattern that heaps upon itself continuously. A growing cone of a fixed shape and proportion is formed, building upon itself steadily, until a critical point is reached, the weight of the grains become too much for the gradient of the slope, and the top collapses. The process starts again from there. It 'self-regulates' endlessly in this way, adjusting its own structure at advancing intervals of time. The collapse, although a form of destruction, a scattering of energy, cascading failure, allows for a stronger structure to be built. The energy in the system temporarily dissipates and greater potential energy is inherent in the next formation. This is one of the ways in which complexity arises in nature. A self regulatory thing, a withholding thing, an unfolding thing. Purveyor of randomness and quiet chaos. The avalanche in the hills.

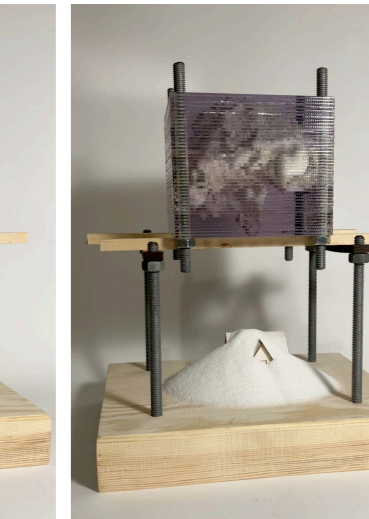
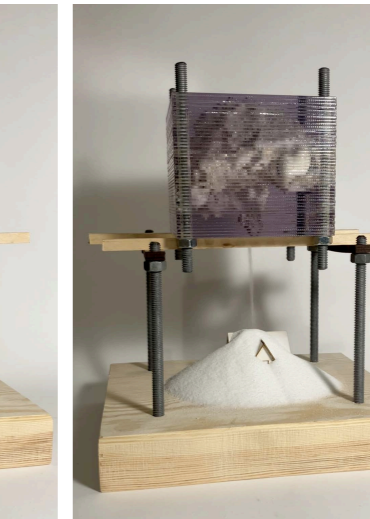
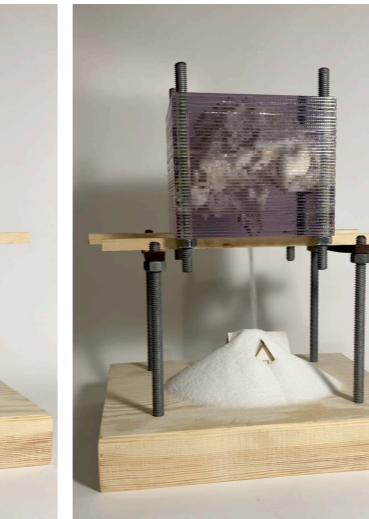
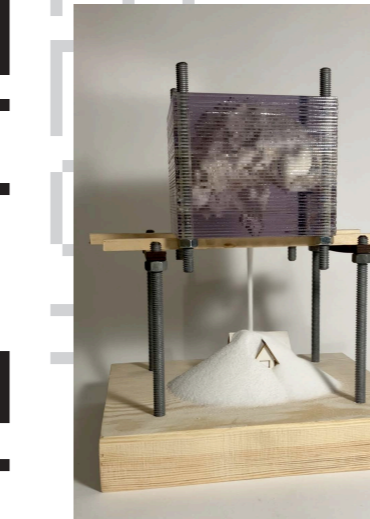
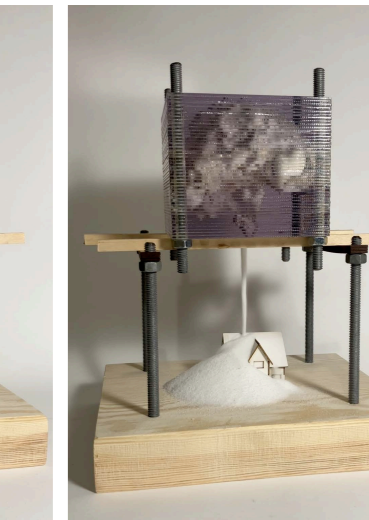
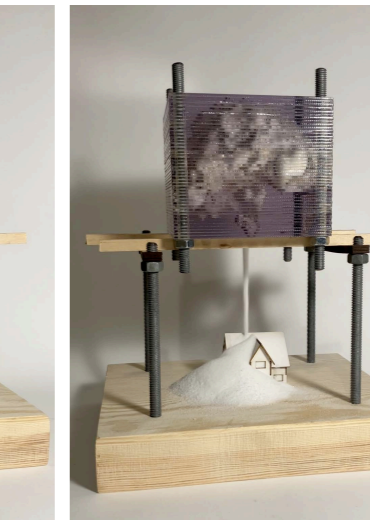
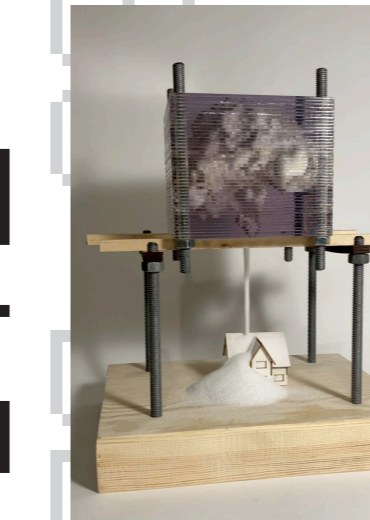
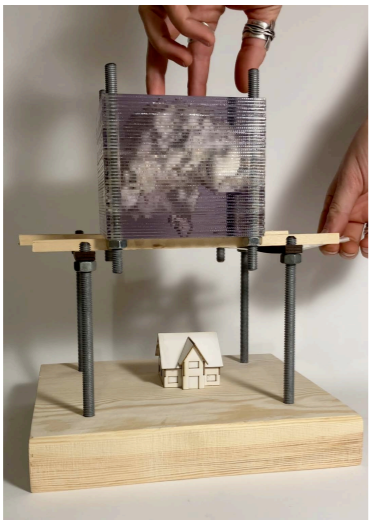
Can this form of dynamic system be harnessed in design, forcing the situated and the representational together into a real-world application? If you pour dust upon a house how

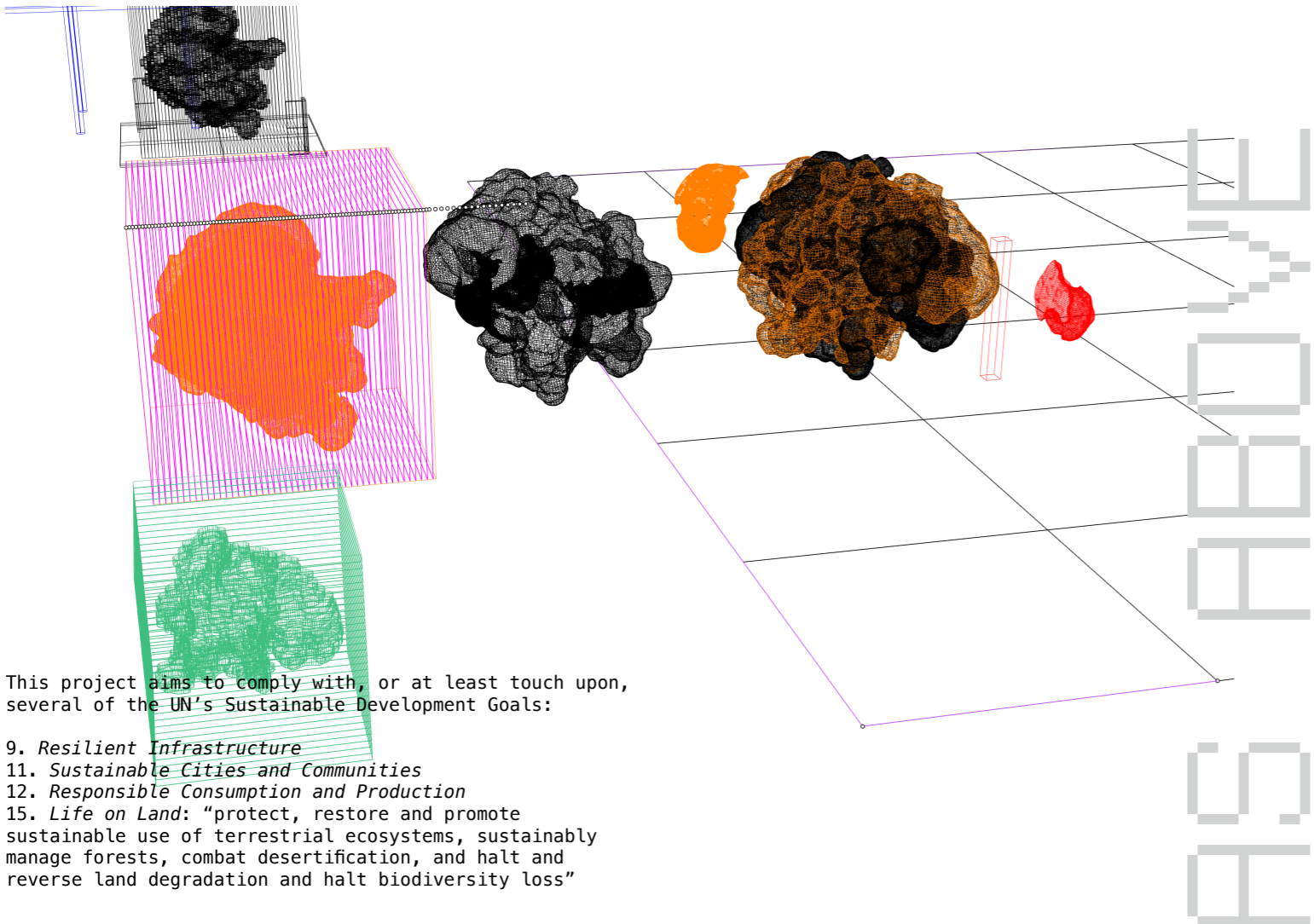
will it self-organise? Is this structure more or less efficient than those we are accustomed to? Inhabiting a sedimentary logic, allowing the material to form itself, in cyclical processes of creation and chaos.

“Things falls apart; the centre does not hold.”²¹



21. William Butler Yeats, "The Second Coming", The Collected Poems of W. B. Yeats (1989)





This project aims to comply with, or at least touch upon, several of the UN's Sustainable Development Goals:

- 9. *Resilient Infrastructure*
- 11. *Sustainable Cities and Communities*
- 12. *Responsible Consumption and Production*
- 15. *Life on Land: "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss"*

METHOD:

- _Model making
- _Constructing context layer by layer
- _Fieldwork in the form of photography, note-taking, interviews, hitchhiking, sketching, and observations.
- _To experiment with the surreal, blurring the lines of representation and detailed contextual research. To attempt to extract meaning from the surreal, the representative, and place emphasis on the general narrative in order to construct the situated. To slowly stalk the contested territory, distorting mining cartographies to generate a new form of landscape representation.

SUBMISSION:

- _Model series
- _Series of machine drawings
- _Photographic series
- _Map//section of the context
- _Strategies for building

NB.
The list of deliverables is preliminary, and will be continually negotiated as the project develops.



ENDNOTE:

I have grappled with the idea that interfering in this context is by its nature condescending to the people that live here. As an outsider, it seems academic, and almost meddling to conclude that Lusatia is a toxicpolluted site, and that the inhabitants are oblivious and ignorant of their own fates. They are simply going to work, doing their jobs, buying their food, feeding their families – who is the foreign architect to interfere?

With the stepping down of coal and energy production in Lusatia, a major political incentive for investment in the region has been the haemorrhaging of blue-collar jobs. An increase in votes for the far right AfD party and local vitriol against the Greens in local elections can be traced back to this decision; a feeling of disenfranchisement and “being left behind” hovers in the air. What do the political left in Berlin know of these dying towns, this emptying landscape?

Development discourse globally often sets employment in opposition to ecosystems, and framing this dichotomy has allowed affluent white environmentalists to assume that affected communities are indifferent to pollution. Even well-intentioned individuals might believe that those facing economic hardships have “more immediate concerns” than safeguarding

the environment on a large scale. While this perspective may seem reasonable, it raises questions about what qualifies as large scale and which aspects are deemed environmental. Whose needs are considered urgent? Residents with well-paid, and well-documented employment in ‘well-regulated’, downsized mining operations such as those in East Germany require safeguards against toxicity, injustice, and social degradation just as much as those living near and working with uranium-contaminated tailing piles in South Africa. The fight is the same.

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The Royal Danish Academy of Fine Arts
School of Architecture
Political Architecture: Critical
Sustainability

SOBER
WATER

QUOD EST SUPERIUS EST SICUT QUOD INFERIUS,
ET QUOD INFERIUS EST SICUT QUOD EST SUPERIUS.



Phoebe Cowen

PROGRAM
THESIS PROJECT
Spring semester

Tutor: Niels Grønbæk