Ecological Class Architecture

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Introduction

I see the thesis project as a chance to make a difference, to contribute to the discourse of social and ecologically sensitive architecture. It is crucial not only to change the mindset of architects and decision makers, but of everyone else's; as we are no longer allowed to bury our heads in the sand or take for granted the current conditions of habitability. It is up to each and everyone of us to change our practices and to adapt the way we live, consume, and participate in the public and economic realms. This process needs to happen at individual and collective levels simultaneously. As Bruno Latour and Nikolaj Schultz point, "Ecology is neither local nor global – it exists at all scales, and its metrics vary according to each object of study and each subject of dispute [...] It has to develop its own ways of putting together collectives and forming 'totalities'."

I was deeply inspired by Latour and Shultz's text; in my opinion, more of a manifesto than a 'memorandum' as they suggest. It can be used for congregating the assemblage of the Ecological Class. Not able yet to challenge the hegemony, but nevertheless, existing and slowly growing. Too slowly. In the following pages I will clarify the project's theoretical background and my approach, disclose historic processes and their repercussions, illustrate the current situation

of the living conditions at my site, and finally propose architectural, social, economic, and spatial methods that can lead us toward prosperity.

The uprising of a new class has to be grounded and rooted within both a community and a place. Social benefits one might elicit from re-classification, are only part of the new class' success. A new economic structure is needed to drive forward the reformation of society, as well as maintaining it and securing better options for current and future generations. To meet the requirements of the Ecological Class there is a need to simultaneously think globally and locally. Ecological and sustainable practices proved themselves successful in small community organisations, yet it is crucial to spread and involve more and more people in those manners, routines, and standards—to make it the 'common sense'. In this project I aspire to combine architectural proposals along with social and economic methodologies that can lead to the anticipated ecological revolution through ecological practices.

¹ Latour, Schultz, and Rose, *On the Emergence of an Ecological Class - a Memo*, 70. Note no. 64.

In this year's PA:CS hand-out (a brief of the yearly theme, published and discussed among the tutors and students) a few questions arose; "how to work, how to organise, what, how and if to build."; I found myself continuously asking these questions during the past few months. The chosen theme "Ruinous Landscapes — Landscapes of Degrowth" relates to the destruction that follows capitalist extraction of resources, such as labour and materials [fig. 1]. After abundance assets are drained from their environment, the entrepreneurs proceed toward the next cache of future wealth leaving the depleted human, non-human, and substances to wither.

This year's subject matter aims to focus not on the demise of these places, or in other words, the ruins left behind. Instead, looking for local possibilities that can still be found regardless of the wreckage or the economic wasteland. Anna Storm explains in her book "Post-industrial landscape scars are marks of sorrow and betrayal, of the abuse of power and latent hazards. At the same time, they bear tales of communities and dreams, of achievements and resistance."4 She argues that scars are a living matter as someone or something causes them, tissues need to slowly heal, and eventually their permanent form holds a symbolic matter to others. Not only are scars active, they are also non-linear; the act of scarring (both physically and mentally) could take a long time, and the healing process could take even longer. Scabs can reopen and become a wound once again, while some wounds can't heal on their own [fig. 2]. Moreover, scars signify "[...] the new and the old [...] a mark of pride and of honour, both for what has been lost and what has been gained. It cannot be erased [...] To accept a scar is to accept existence."5

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fig. 1 Ruinous Landscape. Active open-pit coal mine. Biedrzychowice Górne, Poland, 2023, by author.



fig. 2 Urban scar. The deserted Siemens railway which will be renovated by 2030 for €500 million and the Siemens headquarters in the background. Berlin, 2023, by autour.

² PA:CS tutors, "Ruinous Landscapes — Landscapes of Degrowth."

³ ibid.

⁴ Storm, Post-Industrial Landscape Scars, 1.

⁵ Woods, Radical Reconstruction.

In addition to scars being a living tissue, landscapes are also active and ever-changing. The word landscape was first recorded in the 13th century by the Dutch. It is a blend of 'land' which means bordered territory, and 'scape' (originally 'scap'/'scep') which indicates the process of creation. The Dutch used the term 'landscape' when referring to land reclamation—men-made artificial land. Hence, even when capitalist projects have already evaporated from a place; the post-industrial landscape scars that were left as the result of the destruction are still a thing in need of our attention [fig. 3].

Storm suggests three types of post-industrial landscape scars: 'reused', 'ruined', and 'undefined'.⁷ Reused landscapes are ones that are repurposed or reformulated, they might allow a glance to the history of the place, but not necessarily. Ruined landscapes are usually abandoned and neglected sites, they are sometimes glorified as in the German Romanticism during the 18th and 19th centuries, or looked upon in abasing light and contempt. Undefined landscapes are places that were not important enough to represent the heritage of a place or the course of events that accrue in it, they are left out from the collective memory. Undefined scars rarely stay in that state, as renewed capitalist forces will return to extrapolate and extract whatever is left from the carcass.

In this project all three types of scars are present; for example the Turbinenhalle power plant (Franz Schwechten, 1901) was partially deconstructed in the 1980s to allow modernisation. Part of the old building was renovated and nowadays functions as an event venue. The AEG turbine factory (Peter Behrens, 1909) has been preserved and renovated under

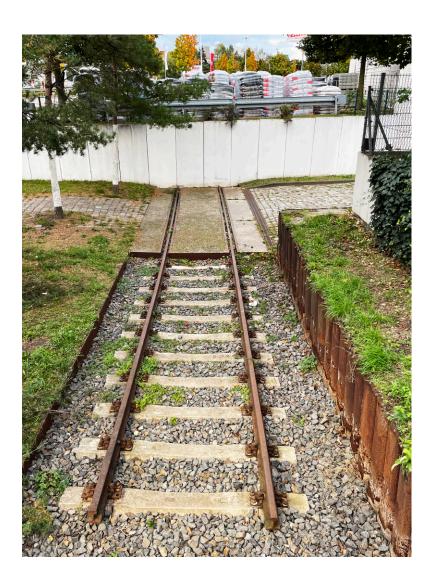


fig. 3 'Undefined landscape'. The remains of the old freight rail and docks of Moabit, used for transporting goods, as well as 'enemies of the regime'—political opponents, homosexuals, jews, and others. Moabit, 2023, by author.

⁶ Howard et al., The Routledge Companion to Landscape Studies, 12. In Antrop, Marc, "A brief history of landscape research".

⁷ Storm, Post-Industrial Landscape Scars, 7.

historical monument laws, nevertheless it is not open to the public and is owned by Siemens [fig. 4]. It is the latter type of scars—the undefined landscapes, that interest me the most. However, I don't see them as a problem but as an opportunity [fig. 5]. I will propose ways to work with the landscape of Moabit, Berlin. Through 'research by design' I will suggest catalysts that deal with the neighbourhood's spatial bruises. Perhaps in the same manner that collagen fibres bridge cuts in the skin, architecture can take part in the healing processes of the built environment, as well preventing social segregation and ecological deprivation.



fig. 4 'Ruined landscape'. The AEG turbine factory as observed from the street. Moabit, 2023, by author.



fig. 5 'Undefined landscape'. Dilapidated old workshop. Moabit, 2023, by author.

Ecological Class Struggle

In their 2020 memorandum, Bruno Latour and Nikolaj Schultz called for re-classification based on the dire conditions of habitability. They defined what is the 'Ecological Class' through the junction of "the world we live in and the world we live off".8 They proposed joining forces in order to make a change and challenge the capitalist neo-liberal hegemony. Instead of capitalist development and growth, they suggested envelopment and prosperity by the agency of 'engendering practices'. By engendering, Latour and Shultz meant reproduction that is essential for the living conditions of both human and non-human. They argued that a 'cultural inventory' needs to be established. I see resemblance between their term and Pierre Bourdieu's 'Cultural reproduction' and 'Habitus'9— the former means the process of formulating and delegating collective common sense and social values by communication between individuals and groups. The latter means an assortment of social norms and unspoken rules which structure human behaviour and self disposition within a society. Bourdieu used these terms to explain how power is distributed among a group of people so it builds and maintains social structures. These structures solidify into the social stratifications that are passed from one generation to another.

Latour and Shultz's 'cultural inventory' or Bourdieu's 'cultural capital' are both means to accumulate knowledge and as importantly to share it with one's network.

The inventory they seek is hard to accumulate and could take decades or even centuries to gather, as seen before in the slow progression that prior classes have gone through. With the ecological and sociological calamities that we are already experiencing; there is no time for this sluggish process. Latour and Shoultz suggested assembling an opposition combined of multiple minorities, backgrounds, and political views, in such a way that collectively it becomes the majority. This will help form the ideological, artistic, and cultural backbone quicker and in a more determined way so the cultural inventory will be sufficient for challenging the hegemony.

The Ecological Class suggests a different classification method which reacts to the "disintegration of the old parties" in conjunction with the fragmentation of present 'politics'. When reviewing historical classes' typologies we can see how society was divided by hereditary traits of lineage; you are born into your class, and class-transition is almost impossible. Monarchy thrived on account of this separation between social groups, it allowed the elite to keep its sovereignty.

⁸ Latour, Schultz, and Rose, On the Emergence of an Ecological Class - a Memo, 22. Note no. 20.

⁹ Bourdieu, *Distinction*.

 $^{10\,}$ Latour, Schultz, and Rose, On the Emergence of an Ecological Class - a Memo, 74.

It was only during the feudal regime, when early stages of capitalism started spreading in Europe, that the collapse of the monarch hegemony started to gain momentum. The downfall happened mainly due to mercenaries being paid with land for their service protecting the feudal lords. Another class typology was identified by Karl Marx through the affiliation of labour. Friedrich Engels and Marx discussed the separation between the 'means of production'—what is necessary for manufacturing goods, the proletariat, tools, worker, materials, and so on, and the 'relations of production'— the bourgeoisie, who own the means of production. Additionally, Slavoj Žižek points out the dissolution of classes in late capitalism as we are all becoming entrepreneurs. He maintains that nowadays what divides us is our quantitative financial abilities.

In the case of the Ecological Class, classification is based on the choices we make. Categorisation comes from the 'ecological' practices we exercise and our lifestyle. To be included in the Ecological Class, all one needs to do is to strive for an equilibrium of the 'world we live in' and the 'world we live off', and to take measures towards it. As it was true with older classes, class consciousness is not mandatory. The Ecological Class is not fully aware of itself, that is to say,

people might not know they are part of it but act accordingly. Louis Althusser argued that ideology exists in the practices and rituals we hold. Moreover, through the process of 'interpellation' an individual becomes an agent of ideology, knowingly or not. Ideas exist in the practices and rituals we hold. Therefore, class transition into the Ecological Class should be rather simple, action is necessary.

Although Latour and Shultz talk extensively about class struggle and the Ecological Class, they never put those three words together. As everyone and everything on Earth is affected by centuries of the demolition of our planet, the Ecological Class Struggle is paramount for enabling life in the near and far future. The urgent questions should be how can we mobilise people into taking action against ecological, social, and economical injustice? As well as, what practices stimulate the struggle?

In the past few months I have explored alternative economical structures, dove deep into the history of industrialisation and social changes, emersed myself with the daily life in the Moabit neighbourhood of Berlin, searched for partners and stakeholders in a 'Ruinous Landscapes', and proposed a way to spark an ecological struggle in a local context and scale.

¹¹ Henri, Modern Capitalism: Its Origin and Evolution, 14.

¹² Marx and Engels, Manifesto of the Communist Party.

¹³ Žižek, The Relevance of the Communist Manifesto, 28.

¹⁴ Althusser, On the Reproduction of Capitalism.

In the coming months I will dive even further into the intricacies of Moabit urban fabric. This semester I plan on better defining what can be done in order to increase Ecological Class Struggle.

In my previous work¹⁵ I found that the practices that are needed to provoke the Ecological Class Struggle are also its manifestation. There is a dire need for mending the wrongdoing of capitalist growth—urban landscape scars, in the case of this project, not only do they possess our past, but also consume our future. Instead of glorifying 'growth' and 'development' we need to think in terms of 'prosperity' and 'envelopment'. This attitude calls for focusing on 'engendering practices'-instead of producing, that of "assemble and combine resources". 16 Bruno Latour is suggesting to harness the fear of dying and to rebel against extinction.¹⁷ To give birth to something instead of exploitation. Moreover, it is about what can also give birth later on, in other words "what is it that allows these resources, and these people who live off them, and these worlds in which they are born, to continue to exist?"18

There is a need for fusing social sensitivity together with financial sense; a just economy not only for the working class, but also for Earth and its finite resources. This combination calls for an assemblage of catalysts, ideas, solutions, and frameworks. Such a meshwork will redefine sustainable 'means of production', enhance inclusiveness, redesign our public and private spaces, and fuel the resistance against capitalist destructive hegemony—the Ecological Class Struggle.

I aim to raise awareness of the disastrous byproducts of capitalism, inspire initiatives, and advocate for a new ecological lifestyle. These are the first steps in the struggle.

¹⁵ Silbiger, "Emerging Possibilities of Social-Economic Landscapes."

¹⁶ Latour, Schultz, and Rose, On the Emergence of an Ecological Class - a Memo. 19.

¹⁷ Miranda and Latour, Issues with Engendring ('Troubles dans l'engendrement').

¹⁸ Ibid. 8.

Site

In September 2023, PA:CS students and tutors had fieldwork in Germany. Although the focus was on open-pit coal mines in Saxony, I found interest in the city of Berlin and in particular the neighbourhood of Moabit. For more then three weeks I stayed in an apartment boarded to wholesale market and freight infrastructure, and a hostel two blocks away from the Rathaus (municipal offices building) on the main street and food market behind it. During my fieldwork I walked through rusty industrial areas, soot-covered harbours, along deserted not-so-old railways overgrown with bushes, bustling colourful streets [fig. 6], monuments that survived WWII, blossoming allotment gardens, gloomy spaces that are the consequences of bad decision making paired with great creative initiatives by residents and artists [fig. 7]. I learnt about the city's spatial history from these walks, as well as, conversations with residents such as Dr. Lidia Gasperoni who invited me to spend the afternoon with her family and friends. In the upcoming chapter I will uncover bits of history of both Berlin and Moabit in order to show why this is a great breeding ground for a struggle.



 ${f fig.~6}$ One of many vendors colouring the streets. Turmstraße, Moabit, 2023, by author.



fig. 7 Exhibition at a former freight station. Zentrum für Kunst und Urbanistik, Moabit, 2023, by author.

Berlin

Archeological findings in Berlin dated human activity as far back as 55,000 BC and signs of settlements as early as the 4th century BC. Yet, the city of Berlin as we know it appeared in the late 12th century. It was first documented in its own declaration as a city in 1251. The name Berlin has two possible meanings, the first comes from Albrecht I ("Albrecht the Bear") who founded the Margraviate of Brandenburg state in 1157. The other explanation is from the Slavic term 'brlo' which means a swamp or a dry land within the marshes. This kind of nomenclature will happen again in the 17th century. Berlin had a twin city—Cölln, which was more important in their early years. Nevertheless, when they were united in 1307 Berlin had more political power in the region.¹⁹ The two cities were built and governed by merchants. The rapid growth of the twin cities came from the trading routes that crossed them [fig. 8] as they channelled merchants between other important cities in the north, south (e.g. Leipzig), east (e.i. Wrocław, then Breslau), and west (e.g. Hamburg). In the late 14th century the population of Berlin-Cölln stood at 8,000. By the time Berlin became the capital of Prussia, in the beginning of the 18th century, around 60,000 resided in the city.

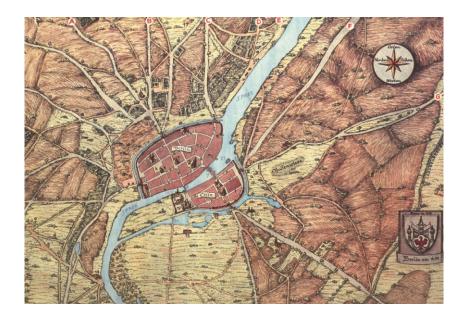


fig. 8 The 14 main commercial routes that passed through Berlin and Cölln. 1600, public domain.

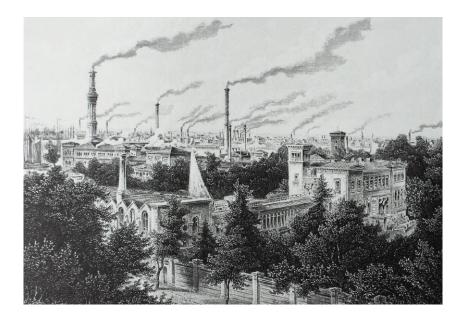
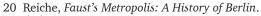


fig. 9 Industrial area in Berlin, around 1837, public domain.

19 Stöver, Stonecipher, and Stöver, Berlin.

Berlin slowly gained political and economical power, along with its importance to the German people. Albeit, the city was lagging behind in academics, culture, and riches compared to Paris, Prague, and other cities. It was only in 1696 that the Academy of Arts was founded, followed by the Academy of Science by Gottfried Wilhelm Leibniz in 1700. Only then did the city start to play a bigger role in the European political context.²⁰ King Frederick William I who initiated these improvements also made many adaptations to the military and local economy. Building the strongest army in Europe and advancing manufacturing processes, as well as centralising workers in Berlin's region. These strengthened the economy and ensured its independence and ability to produce goods in higher quality [fig. 9]. Such improvements continued with his son Frederick II, out of Berlin's 150,000 residents in 1786, one fifth worked in industrial and trade professions and one sixth served in the military.²¹

Berlin's industry and population grew rapidly; by the eve of World War I there were 4 million residents,²² which meant that it was the biggest city in Europe at the time [fig. 10], 55-60% of them held an industry related job. The increase in population came mainly from immigration of Prussians into the capital and permissive foreign policies that began a few centuries ago, the latter brought many professionals from all over Europe and the East (especially Turkey) [fig. 11]. Paradoxically Berlin's society was composed of many nationalities on the one hand, while being a centre for radical German nationalists and conservatives on the other.



²¹ Ibid. 140.

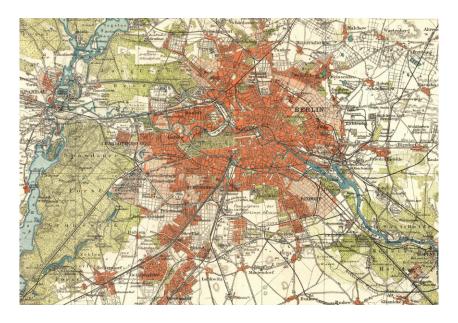


fig. 10 Aerial map of Berlin, 1905, Meyers Konv.-Lexikon, 6, Bibliographisches Institut in Leipzig.

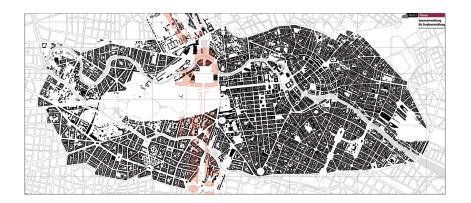


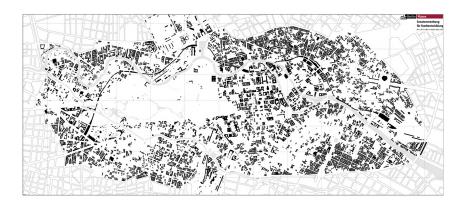
fig. 11 Turkish guest workers (Gastarbeiter) in a typical overcrowded working class apartment. 20th century, Diaspora Türks, ALART.

²² ibid, 227

Berlin peaked in the second half of the 19th century, specifically after Prussia defeated France and the German Unification, this marked the golden age of Berlin. The success of Otto Von Bismarck in managing the empire with Berlin as its capital meant the city was in "the process of re-inventing itself yet again, this time transforming itself into a powerful world capital."²³ Berlin's golden age was short lived; World War I and the Weimar Republic followed by World War II and the divisions of the Cold War left Berlin segregated, ruined to gravel, and scarred for centuries [fig. 12].

Nowadays, out of its 3.87 million residents, 23.9% are foreign. 39% of the residents (1.51 million) have a migration background.²⁴





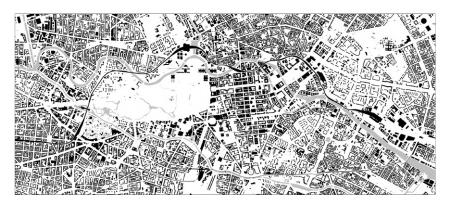


fig. 12 Berlin before and after WWII. Berlin Plannen; Senatsverwaltung für Stadtentwicklung

From top to bottom: Berlin's centre at 1940, with Albert Speer's plan for Germania (in red). Buildings that survived the allied bombings during WWII, 1953. Current state, 2022.

²³ Reiche, Faust's Metropolis: A History of Berlin, 269.

^{24 &}quot;Population Register Statistics June 30, 2023, Berlin."

Moabit

In 1685 Louis XIV, king of France, banished the protestant Huguenots. About 6,000 of them came to Berlin due to Frederick William's Edict of Potsdam which allowed people to seek refuge in Prussia. By 1867 they counted as 20% of Berlin's population. The Huguenots were granted permission to settle in the area now known as Moabit, a neighbourhood which is part of the Mitte district nowadays. It was mainly used as a hunting ground and for grazing due to its swamp and marshland terrain. There are a few suggested origins for the name Moabit; some attribute it to the land of Moab from the Old Testament, this makes sense with the Huguenots finding refuge just outside the city. Moab used as a camping ground for the Israelites before re-entering the promised land from exile. However, there are options that refer to this region as having harsh and unpleasant geographical attributes; one is a derivative of the term 'la terre maudite'25 which means the 'cursed land'. Another is the Slavic word 'moch' which is 'moss'. A third option comes from an old German-Berlin dialect 'Moorjebiet' which is 'swamp area'. As I already mentioned before, Berlin's name also comes from an older slavic word for swamp. There is one more option that should be mentioned although it might just be an urban legend; the french refugees called their new home 'mon

habitation' which literally translates to 'my dwelling place', it got shortened through the years to 'mon habit' and then finally—Moabit.

The Huguenots made a huge impact upon arrival, not only did they bring a small fortune with them, they also contributed to the city's industry and especially to production of textiles, through weaving.²⁶ At first the new residents planted White Mulberry trees and tried growing Silkworms to produce silk. Yet, by the middle of the 18th century they shifted toward other professions, such as winemaking and restaurants, Moabit was considered a recreational area with rural aesthetics. A large military powder mill was erected on the eastern part of Moabit; this further divided the settlement located along Alt-Moabit street from the rest of Berlin. When the neighbourhood was incorporated into the city in 1861 it had only 6,534 residents, from this point forward the population grew rapidly; a decade later Moabit already doubled and by 1880 it doubled once again.²⁷ Moabit's population continued to rise until WWII reaching more than 190,000, this is the result of very high density; consisting of the mostly poor blue collar workers, with many people crammed in small apartments. It is mentioned that beds in apartments were rented by the hour, allowing workers to rest between shifts instead of having a stable home.²⁸ It is estimated that two thirds of the buildings in Moabit got destroyed during the allied bomings in the 1940s. Today in Moabit there are approximately only 85,000 residents [fig. 13+14].

²⁵ Nicolai, Friedrich, "Beschreibung der Königlichen Residenzstädte Berlin und Potsdam, aller daselbst befindlicher Merkwürdigkeiten, und der umliegenden Gegend."

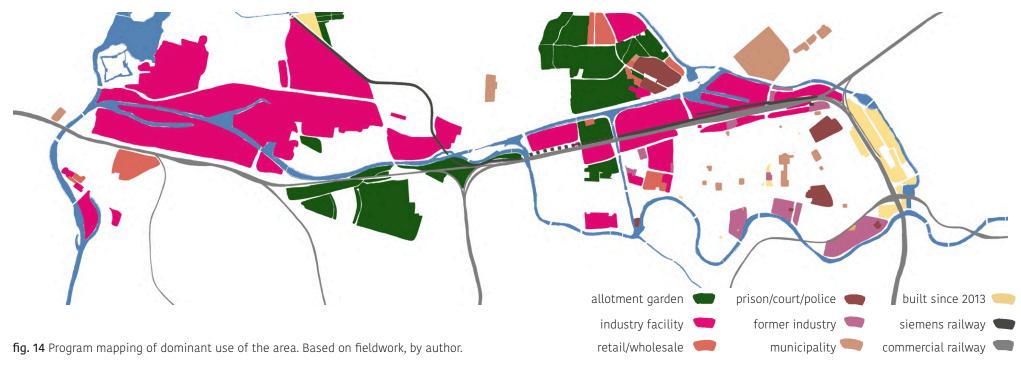
²⁶ Reiche, Faust's Metropolis: A History of Berlin, 122.

²⁷ District Office Mitte of Berlin, "Moabit."

²⁸ Kuhrt, Moabit-Buch: Geschichte, Geschichten, Besondere Orte.



fig. 13 The island of Moabit. Aerial map, by author.



Moabit is an island surrounded by the river Spree from the south and smaller canals from all other directions. Prior to the 19th century the majority of Berlin's factories were situated in the city centre—the Mitte neighbourhood. Most of them moved in order to keep the city's centre clean and healthy for the newly built residential buildings. Many foundries, factories and other metal workshops relocated to the Spree bank on the Moabit side, south to Alt-Moabit street and the residential area. In 1837 Johann Friedrich August Borsig cast his first iron mold in the Borsig factories, an event that unofficially marked the beginning of the first industrial boom of Moabit; by 1858 more than 1,000 locomotives were made in the Borsig Factory [fig. 15].29 Companies such as AGFA, AEG, and Siemens constructed their own factories, laboratories, offices, and housing for their employees at this point as well.

The dense population, extremely poor conditions of dwelling, and powerful industries devised a new typology of residential buildings. The 'Mietskaserne' are rental barracks first designed by Adolf Erich Witting and commissioned by Jacques Meyer, a textile industrialist, in 1872 Wedding (a neighbourhood bordering Moabit from the North-West).³¹ Versions of the original design had the same characteristics. The plot was fully surrounded with apartments, leaving a small courtyard in the middle or to the side; bordering with the adjacent building and plot. The floor plan allowed modifications; the layout of two spacious apartments can be split into several different single-room units [fig. 16].³²

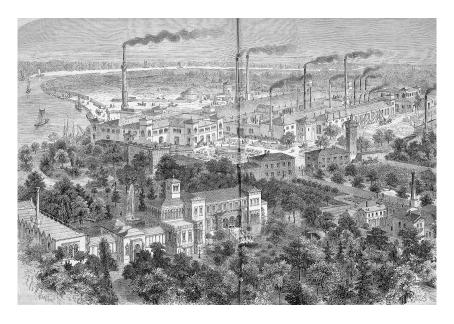


fig. 15 "every chimney spewing out great showers of sparks and thick billows of smoke, as if it were the fire city of Vulcan". Borsig's establishment and factories in Moabit, 1867, public domain



fig. 16 Working class life. Geburtstag (Festtag im Hause Stübbecke, Die Schwestern), 1905, Berlin, Heinrich Zille.

²⁹ unknown, "With the locomotive king."

³⁰ Reiche, Faust's Metropolis: A History of Berlin, 122.

³¹ Aaron, "Mietskasernes: Working Class Berlin, 1871-1922."

³² Whyte and Frisby, Metropolis Berlin, 130.

The ground floor was left for commercial usage as stores faced the street, workshops usually faced toward the courtyard if not completely situated within them [fig. 17]. The positioning of the toilets changed from one project to another; in some cases, each apartment had its own bathrooms, some had a communal facility on each floor, in others the toilets were placed in the courtyard. Another distinctive feature was the height of the buildings that reached 5-6 stories while most buildings in Berlin were only 4 floors or lower.

In 1861 king Wilhelm I ordered the demolition of the old Berlin Customs Walls in order to expand and improve the city's infrastructure. Additionally, in 1862 he commissioned a massive urban plan from James Friedrich Ludolf Hobrecht; the plan took inspiration from Haussmann's urban planning of Paris (1853-1870). Although its official name was 'Elaboration of Development Plans for Berlin and its Environs' it was shortly nicknamed 'Hobrecht-plan' and 'Wilhelminering' [fig. 18]. Due to the lack of resources to build the much needed housing, the king allowed private investors to construct dwellings. This resulted with very permissive regulation, such as no height restriction which led to very dark courtyards and minimal sunlight in the lower apartments, if any. The plan accelerated the spread of 'Mietskaserne', spreading it like wildfire. It was only toward the end of the 19th century that architects and housing associations made modifications to improve the living conditions, and for the municipality to erect building restrictions, e.g. courtyard entrances have to fit the fire brigade vehicles.

The Beginning of the 20th century shifted the industry from South Moabit to the North. The old factories made room for residential apartment buildings and offices that were 33 Whyte and Frisby, 129.

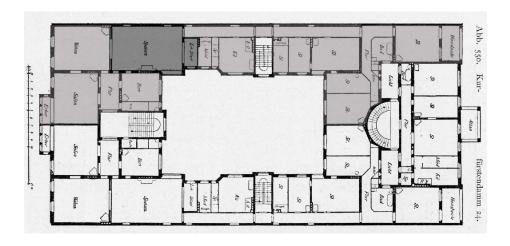


fig. 17 "a house type that in courtyard apartments, side wings, and rear blocks encloses an undifferentiated mass of living quarters."³³ Alfred Messel, 24th Kurfuerstendamm, Berlin, 1893, shading by Douglas Mark Klahr.

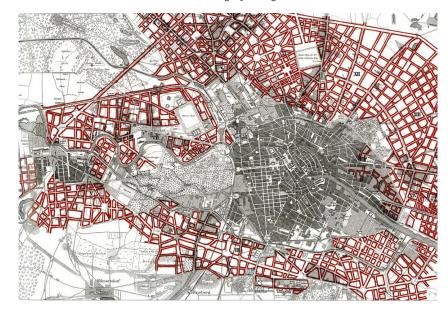


fig. 18 Reinventing the city of the modern time. Hobrecht-plan, 1862.

more lucrative. In 1923 the Westhafen (West Harbour) was constructed. Its inauguration was joined with the launch of BEHALA, Die Berliner Hafen- und Lagerhausgesellschaft (The Berlin port and warehouse company). It also meant new and improved infrastructure for freight goods, coal, and waste via water, railway, and trucks. Slowly the industry moved even further away (or vanquished), allowing wholesale markets and businesses to partially take over. Nowadays, Moabit is still ruled by the industry's infrastructure and neglected facilities— scars that were left behind, mostly unused. Over 35% of Moabit's residents are non-German and over 55% have immigration background, this makes it one of the most international neighbourhoods in Berlin. Strolling through its streets, one can't shake the feeling that Moabit is not only a geographical island, but also a conscious one; left out of the awareness of scholars, artists, politicians, entrepreneurs, and many others.

I see Berlin and Moabit's mixed international demography as an opportunity for assimilating multiculturalism; this is how Latour and Shultz's call to bare arms by different groups can become reality. There is strength within the local community, and empowering them is a step in empowering the wheels of change towards an ecological era.

The abundance of blue collar workers and labour unions in Moabit, who took a crucial part in the industry work environment, led to the prevalence of left-wing groups and activists. In the 20th century that also meant many protests, resistance, and riots. On September 19th, 1910, the workers of Ernst Kupfer & Co., a coal trade company on Sickingenstraße (North West Moabit), began protesting due to low salaries and poor working conditions. 30,000 workers from the



fig. 19 Sewage pump station and 'Mietskaserne' style buildings in Alt-Moabit, approx. 1890.



fig. 20 Deserted pump station and slightly renovated 'Mietskaserne' style buildings in Alt-Moabit, 2023, by author.

north industrial area of Moabit joined; they were 15-20% of the total residents of the neighbourhood at the time. The first day of the protests ended after the intervention of the biggest police force seen by that time, which led to the death of two workers and more than a hundred seriously injured.³⁴ The 'Moabit Riots' sparked protests in other parts of Berlin and Germany for months to come, mainly in the coal related factories.

Moabit is no stranger to protests, another example is the 'Ruhr uprising' which started as a strike by left-wing workers in the region. More than 12 million German workers took part in the strike.³⁵ Depicted in the picture [fig. 21] is the Weimar army forces (Reichswehr) camping outside Moabit municipal office (Bürgeramt Rathaus Tiergarten) on February 26th, 1919. They were sent to deal with the Ruhr uprising forces—Social Democrat workers led by left-wing parties and workers unions. The 'Red Ruhr Army' of 50,000 members, fought across Germany against the Government and right-wing troops (Freikorps—free regiments). Riots, demonstrations, and unrest are no strangers to Moabit; in the 1953 the 'popular uprising' (Volksaufstand) started by workers in GDR's east part of the city, it spreaded quickly with more than a million participants across Germany. ³⁶Between 1979 to 1982 Berlin's squatting movement became prominent as an act against the 'Clear-cutting Renovation' and 'Careful Urban Renewal' programs (Kahlschlagsanierung, Behutsame Stadterneuerung). Lately it seems that protests in Moabit are quite smaller, less violent, and tackle issues of immigration, racism, refugee policies, ecology, and minor

urban planning.³⁷ I believe it is time to wake up again, but how can a disadvantaged community rise and change their reality when they are facing dispossession?



fig. 21 Using the town square as the army regrouping camp, February 1919, public domain.

^{37 &}quot;Moabit.net local news website."

³⁴ Sieje Bleiber, Die Moabiter Unruhen 1910.

³⁵ Scriba, "The General Strike of 1920."

³⁶ Knabe, 17. Juni 1953.

Gentrification

When compared with other major cities in Europe and North America, gentrification in Berlin started relatively late. The segregation of the city and the cold war, paired with the massive and long reconstruction phase after WWII, delayed the process of replacing residents from a low socialeconomic background with residents from a higher one until the late 1980s. The majority of housing units in East Berlin were owned by the German Democratic Republic (GDR); already in the 1940s the Soviet government seized the homes of many families who fled to the West. In addition, many social housing complexes were built during the time of the GDR. Therefore, housing prices and rent were kept stable and regulated by a socialist paradigm [fig. 22].38 Moreover, there was no reason for prices to rise due to the policy not to renovate the inner city neighbourhoods such as Friedrichshain, Mitte, and Prenzlauer Berg; instead, their devaluation occurred simultaneously with prioritising highrise buildings further away which led to the overall neglect of the eastern city centre. In the West, the urban-modernist methodology relocated residents from the dense centre to the airy outskirts, also prioritising high-rise buildings. Major urban renewal projects weren't afraid to demolish parts of the urban fabric and change it completely, e.g. the 1957 IBA in Hansaviertel.

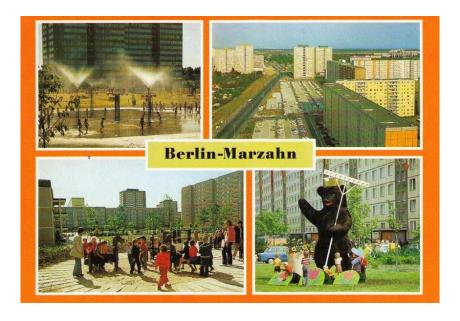


fig. 22 Massive high-rise social housing made with prefabricated concrete units during GDR time. Postcard of Marzahn, Bild und Heimat, 1989.

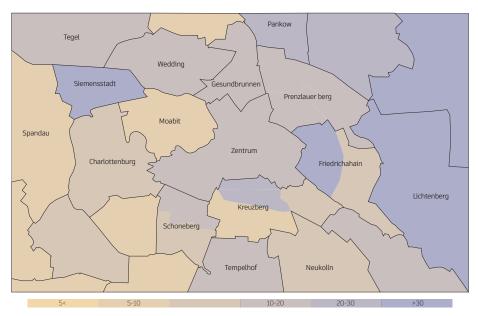


fig. 23 Unattended: percentage of housing associations from total housing stock, December 2020, Based on data from the Senate Department for Urban development, building and living, by author.

 $^{38\,}$ Siemer and Matthews-Hunter, "The Spatial Pattern of Gentrification in Berlin," 50.

After the German reunification, policies changed in such a way that companies would find it lucrative to buy whole buildings and complexes in order to avoid taxes or to get benefits [fig. 23]. The majority of households transitioning from public hands to corporate ones intensified gentrification in Berlin. In the 1990s Berlin reinvented itself as 'Service Metropolis' and manipulated the market to build a multitude of office buildings that by 1998 were mostly abandoned. The city reinvented itself once more after the financial crisis of the late 1990s; The 'Media Metropolis' magnified the gentrification process in the city centre even further. The media sector attracted the 'creative class'39 by forming a hub for sectors such as film and television, music, publishing, advertising, design, software, biotechnology and pharmaceutical, engineering, and more. Focusing on services and the rise of Berlin as a media powerhouse meant that the manufacturing industry took a big hit; in just a decade, between 1991 to 2001, Berlin lost 150,000 industryrelated jobs which were 58% of positions held before the reunification.40

Richard Florida coined the term 'creative class' to categorise a group not only by their human capital—higher education, nor their profession—"producing new forms or designs that are readily transferable and widely useful [...] "creative professionals" who work in a wide range of knowledge-intensive industries [...]". Instead, Florida emphasises their desire to live in the vicinity of each other. As he explains, the creative people are drawn to other creative people; more than the importance of being among people with the same profession or salary level, they are looking for relations with people

 $39\,$ Florida, The Rise of the Creative Class.

with the same lifestyle. The growth of Berlin's creative class is a combination of the policies mentioned before of making it a service and media centre, as well as, its artistic openness and low prices compared with other European capitals. It is mainly the wealthier people in the creative class who move into already gentrified areas, whereas the less able artists, or avant-garde, are the early-birds whose move to an area affect the local residents and attract the more established creative class to follow.

With the reunification of Germany, another class gained power in the city— the political class. This was the outcome of the concentration of political bureaus and ministries in municipal, metropolitan, state (bundesland), and national levels, as well as national banks and other economic and political institutions. The political class was responsible for over 1.5 million square metres of unoccupied offices by 1998; the city's financial corporation invested in the construction of offices and approved multiple unnecessary projects instead of focusing on housing. They are also guilty of increasing the city's debt to €42.5 billion, de-subsidising the industrial sector, and privatisation of the housing market. By 1999 the political class in Berlin grew even stronger when the seat of the government (Regierungssitz) moved from Bonn back to Berlin.

A shift in Berlin's political class started in 2005 with the CDU party and the new chancellor Angela Merkel taking charge. However, it didn't change the trend in the local housing market policies; building and renovation subsidies discontinued, new construction projects decreased, half of the public housing units and more than half of the social housing were privatised, as a matter of fact, many regulations on rent

⁴⁰ Holm, Bernt, and Grell, The Berlin Reader, 133.

⁴¹ Florida, The Rise of the Creative Class, 38.

⁴² Holm, Bernt, and Grell, The Berlin Reader.

prices and building were terminated.⁴³ As a consequence, rent prices started to rise; in some neighbourhoods incredibly rapidly, resulting in gentrification. Andrej Holm suggests that to understand Berlin's gentrification patterns, one must focus on the scale of the neighbourhood and its politics rather than national or global dynamics.⁴⁴ In the Mitte and Prenzlauer districts, gentrification started from political initiatives; the declaration of these areas for 'urban renewal' and supporting 'modernisation' of houses by private hands, made many residents move away due to the fact that rent prices doubled in less than a decade.

The progression of gentrification in the city [fig. 26] left the industrious neighbourhoods of West Berlin in the worst socioeconomic conditions and unemployment. While the east is already gentrified or in advanced stages of gentrification, the unwanted community moves to neighbourhoods such as Moabit and Wedding which are still central, or others which are still further away.⁴⁵

During my fieldwork in Moabit I noticed the beckoning signs of gentrification crossing over the water from Mitte, Charlottenburg, and Wedding. The most evident is 'super gentrification'—construction of new luxury buildings, both residential and offices, that the current residents cannot afford [fig. 24+25]. Although not abundant in the neighbourhood, these buildings are easy to spot; while most of the houses in Moabit look like the 'Wilhelmine-ring' typology, the super gentrification buildings shine and reflect light from the generous use of steel and glass.



fig. 24 'Super gentrification', Europacity beyond the railway's massive infrastructure. Moabit, 2023, by author.



fig. 25 Side effect of Europacity, newly built luxury residential area in Stephenkiez, Moabit, 2023, by author.

⁴³ Holm, Bernt, and Grell, The Berlin Reader, 172.

⁴⁴ ibid. 185.

⁴⁵ ibid. 143.

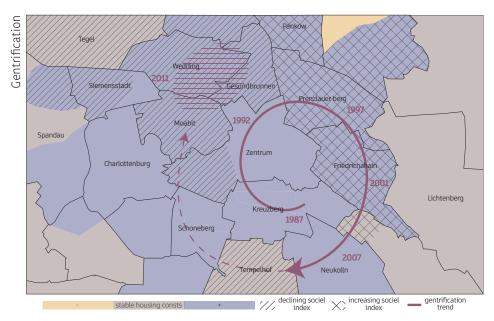


fig. 26 Dynamic changes: gentrification as the derivative of housing cost and social demographic trends, 2017, based on 'GentriMap' and Berlin-Brandenburg Statistics Office, Senate Department for Urban Development and Environment.

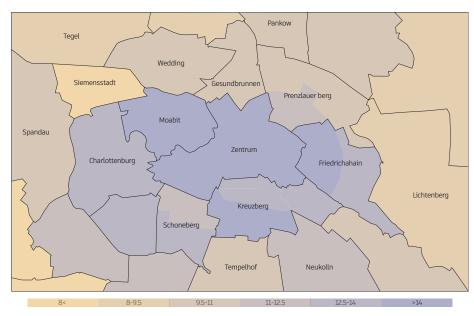


fig. 27 Unaffordable: rent prices/m², statistical areas, December 2020, based on data from the Senate Department for Urban development, building and living.

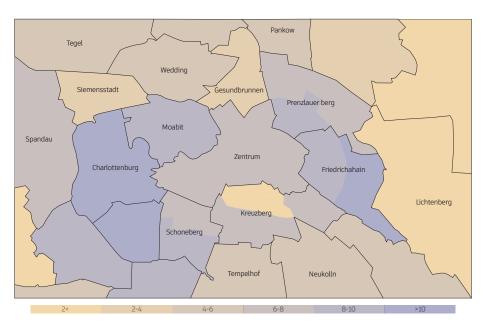


fig. 28 High demand: apartment sales per 1000 apartments, 2020, based on data from the Senate Department for Urban development, building and living.

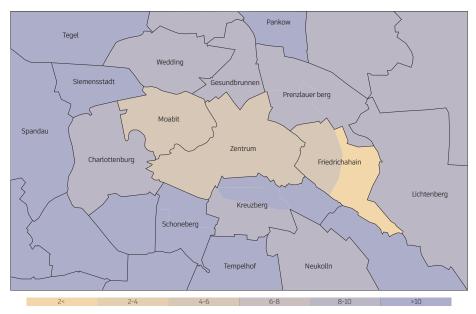


fig. 29 Quick turnover: percentage of residents living more than 5 years in the neighbourhood, December 2020, based on data from the Senate Department for Urban development, building and living.

Their positioning in the street, their density, the commercial spaces on the ground floor, and even the arrangement of rubbish bins are foreign to the aesthetics of the post-industrial landscape scar that Moabit is.

The other two types of gentrification in Moabit are more elusive. 'Modernisation' occurs when a private landlord (or a holding company) decides to renovate a property in order to raise rent for current residents [fig.27]. This is the outcome of the city's legislation that limits the ability to raise prices without a structural change in the building. If maintenance work needs to be done it should be covered by the landlord; however, if it falls into the vague definition of 'modernising' the building then the tenants are forced to contribute to the cost.⁴⁶ The sudden expenditure drives many destitute residents out of their homes allowing the landlord to raise the rent for the new tenants which the legislation does not cover. 'Pioneer gentrification' is usually the first stage and the precursor of gentrification. In this phase, artistic individuals move into a low rent area which allows them to have a studio or a gallery to present their work. A creative community slowly forms around the hip environment and the cheap way of living. Starting usually with young, inexperienced, and unknown artists with music, design, or performance background, the community attracts others from the 'creative class'; once it has been established as a chic place to live, more financially-established members of this class will follow.

While doing fieldwork in Moabit I spotted only a few buildings under renovation that can count as being 'modernised', and they are few and far between. There are less than a handful of residential buildings under construction. I noticed several

artistic groups and initiatives working in Moabit. The Zentrum für Kunst und Urbanistik (ZU/K) offers residency for artists in a former freight station, the Kulturfabric organisation operates a theatre, youth club, bar, public workshops, and different other programs from a former slaughterhouse [fig. 30]. It seems that the Moabit art scene is slowly rising and more 'hip' places are opening. Having said that, from conversations with residents I understood that they prefer spending leisure time in other areas rather than staying close to home. Compared to the bordering neighbourhoods' art scene, Moabit's initiatives have a rather small scope and influence on its society. Collaborating with the local art scene can enhance the assimilation of this project architectural suggestions.

In conclusion, my observations on current gentrification in Moabit point to the established creative class members having just started recognising its potential. Entrepreneurs have only lately begun noticing the opportunities that await them, construction records between 2012-2014 shows that only 187 new apartments were built in the whole neighbourhood, whereas between 2020-2022 records indicate 1202 newly built apartments.47 Dynamic social changes in the city skipped Moabit (on the way to Wedding) and started a new cycle in the already gentrified areas in the east and south. However, Moabit shows early signs of gentrification— rent prices are becoming as high as in Mitte and the inner city, housing units sales are peaking [fig. 28], property ownership changes hands rapidly, thus many of the neighbourhood residents are relatively new [fig. 29], the Europacity complex (luxury residential, commercial, and office buildings that were built as one huge project) in

⁴⁶ Zerofsky, "The Causes and Consequences of Berlin's Rapid Gentrification."

^{47 &}quot;Berlin Properties: Moabit 2024."

the east affects rent prices and influenced other newly-built projects in its vicinity. Additionally, due to high demand in Mitte and Charlottenburg, wealthier residents are slowly crossing the borders from both sides. New TU (Technische Universität Berlin) facilities just south of the Spree make it more appealing for students and university personnel to move to Moabit. By 2030 with the completion of Siemensstadt Square and the restored Siemens Railway that will better connect it to Moabit and the rest of Berlin, I foresee that the gentrification processes will engulf the island of Moabit from all directions [fig. 31].

My strategy with this project is to empower the current residents and local community. Fighting gentrification, displacement, and alienation through engendering practices and reproduction. Alteration of the capitalistic mindset of growth and development into prosperity and envelopment.



fig. 30 Moabit's rising art scene. ZK/U cultural centre, Moabit, 2023, by author.



fig. 31 Signs of gentrification in Moabit, based on observation and fieldwork in September and October, 2023, by author.

pioneer gentrification super gentrufucation



Help the residents to keep their homes, legitimising their common sense and cultural capital. The knowledge accumulated from learning about the process of gentrification in general and especially from Berlin's unique patterns will be applied on the architectural decision making and urban planning in the project. Collaborating with the already active artistic movements in the struggle, battling 'modernisation' with self maintenance, and blocking intruding investors from purchasing more properties. These are all parts of the methodology I intend to use in order to prevent gentrification in Moabit. These practices will go hand in hand with my attempt to spark the Ecological Class Struggle.

I wish for my project not to be part of the populist sustainable discourse, moreover I want the project to enable others to contribute to a healthier discussion and practice. The academy asks us thesis students to choose the United Nations' Sustainable Development Goals (SDG's) which suit our projects. The State of Berlin also uses these goals and claims that processes are being implemented in order to reach the global sustainable targets. On one hand the state is bragging about the broad spectrum of offices committed to and aware of the cause, 48 on the other hand it is stated in the city's 2030 Agenda that "targeted allocation to the SDGs or the local implementation of the 2030 Agenda is usually not made."49 This contradiction can be observed as the rent cap (Mietendeckel) was lifted in 2023, allowing landlords to raise rent in over 1.5 million apartments (as of 2019),⁵⁰ although the city is working to "ensure access for all to adequate, safe and affordable housing" as written in

the 11th SDG.⁵¹ While Berlin's political class socialwash and greenwash its residents about affordability, housing prices more than doubled [*fig. 32*]. If we take a closer look at Moabit, the median property ask rose from 1,120 €/M2 in February 2010 to 5,210 €/M2 in January 2024.⁵² Due to the effect the SDG's have on institutes and the general lack of implementations, changes, or regulations of the wrongdoing done by the same institutions, I will not work with the UN goals list.



fig. 32 Rent prices in east Moabit starting at €30/m2 while the median ask in the whole neighbourhood stands at €14/m2 as of January 2024. Moabit, by author.

^{48 &}quot;Sustainable Development Goals in Berlin."

⁴⁹ Bestandsaufnahme zum Engagement der Berliner Bezirke zur Umsetzung der Agenda 2030.

⁵⁰ Connolly, "Berlin's Rent Cap Is Illegal, Germany's Highest Court Rules."

^{51 &}quot;Sustainable Development Goals—11: Make Cities and Human Settlements Inclusive, Safe, Resilient, and Sustainable."

^{52 &}quot;Berlin Properties: Moabit 2024."

Thesis

These historical and current events are elaborated on in order to indicate the unique social and cultural inventory of the city and the neighbourhood. The people of Berlin made a name for themselves; it is the Mecca for alternative culture, artists, free-spirits, thinkers, workers, and many others. It has been that way for centuries! This is probably what Bourdieu saw as the 'common sense' that is passed down by inheritance. Not as a hereditary trait one received passively, but rather by actively choosing the lifestyle that Berlin has to offer. The city and its residents want each and everyone to participate and take part in public life. This unique setting is part of why the Ecological Class Struggle can gain momentum here; in a place that has known many changes, which links different classes, that witnesses wrongdoing as well as kindness and kinship, where post-industrial landscape scars are still visible on almost every corner.

In the past few decades, Berlin favoured the 'creative class' over others; grooming this class through legislations, urban planning, and gentrification. International expats are welcome as long as they are not part of the city's "underclass"—immigrants from Turkey, the Middle East, and Eastern Europe. ⁵³ At the same time, the 'political class' was empowered by centralising public institutions, Germany's central role in the European Union, and some bad financial

⁵⁴ Holm, Bernt, and Grell, The Berlin Reader, 148.

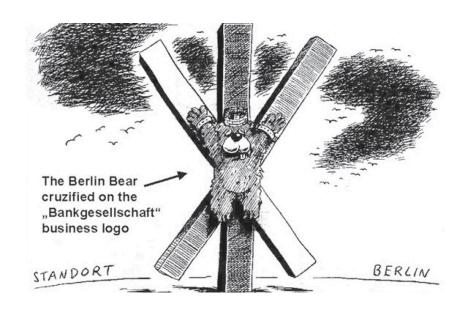


fig. 33 The political class taking advantage of the city's residents. The Berlin Reader, p.150.

decision making. Bad for the tax paying residents, but good for the politicians that profit on their behalf as in the case of the Bankgesellschaft [fig. 33].⁵⁴ In my project I will pursue a way to bring forward the 'Ecological Class' and to make Moabit an exemplar of how the city of Berlin can become an Ecological Metropolis. While the political and creative classes are still hesitant regarding the potential of Moabit, individuals and groups that Latour and Schultz consider the foundation of the Ecological Class are already there. Minorities, blue collar workers, immigrants, people who witness the destruction forces of capitalism through the post-industrial scars and the decision making that are driven by current capitalist paradigms, are all residing in the neighbourhood [fig. 34].

While big cities "stood for a unified culture and social equality", in a metropolis, "social antagonisms are naturalised through the plurality of lifestyle."⁵⁵ Through my project I would like to reinvent Berlin once again as an Ecological Metropolis. Unlike the top-bottom approach of the political class since the 1990s [fig. 35], the formation of the metropolis will be based on reproduction, engendering practices, and includes the participation of its residents.

Instead of focusing on professional sectors that can be facilitated in shiny new office buildings, the current residents of Moabit will get the benefits, attention, and stimulation they deserve [fig. 36]. Working with the community instead of luring in outsiders opens opportunities to uncover local knowledge [fig. 37], learn from the residents' common sense as it has been forged through the unique history and circumstances of this industrious area. The Ecological Metropolis will allow an equilibrium of society despite differences within it. Basing my approach on increasing multiculturalism also means that the project will deal with various scales and apparatuses. In some cases small interventions will be sufficient, whereas in others, major changes to the urban landscape of Moabit will be applied.

Facing the destruction of capitalism and manifesting the Ecological Class (and its struggle) requires an assemblage of changes, improvements, adaptations, and repairs. Enabling the assemblage to stretch to other parts of the city, not by growing rather by prospering, unfolding new possibilities for people to actively choose the ecological lifestyle. I intend to learn through experimentation with both theoretical and design research what would spark the Ecological Class Struggle. Through the examination of spatial and social

structures I will propose a series of architectural catalysts as part of my process to figure out the role architecture plays in this struggle. Realising this new era and what type of intervention and construction practices can be both predictive of the upcoming era and common sense of the ecological lifestyle.

My investigation combining architectural, economic, and social systems will try to answer the question: how can architecture participate in challenging capitalist hegemony? My process is the amalgamation of theoretical thinking and research by design which are based on history and local knowledge which I will gather from desk research, fieldwork, and critical reading of theory. My ambition is to suggest an applicable meshwork of adaptations and interventions in Moabit that will mobilise people into action, and can be used as prototype catalysts for the Ecological Class Architecture.

⁵⁵ Holm, Bernt, and Grell, The Berlin Reader, 214.

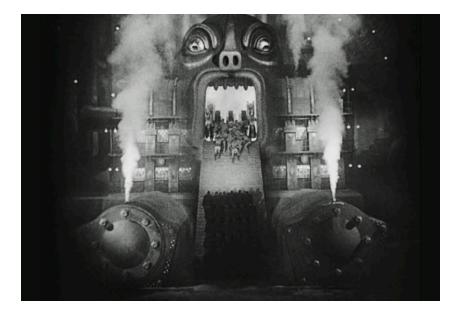


fig. 34 The Worker's Metropolis. Metropolis, 1927, Lang, Fritz.



fig. 35 The Media Metropolis. Aerial plan of Mercedes Platz, 2014, UniCredit Global Business Services.



fig. 36 Breeding ground for the Ecological Metropolis. Turmstraße and Gotzkowskystraße, Moabit, 2023, by author.



fig. 37 Partners for the Ecological Metropolis. BEHALA HQ as it viewed from ZK/U garden, Moabit, 2023, by author.

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The Ecological Class Architecture

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