# BORDER CONDITIONS
# ALONG THE NEW SILK ROAD
# GRADUATION STUDIO

2020 — 2021

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## PREFACE
This collaborative studio work has been produced since the start of the academic year 2020-2021. This has been up to today a year that is marked and influenced by the Covid-19 pandemic. However, we have found the opportunity to make time for our collaborative maps and research and have always tried to get the best results possible, no matter the limitations. We hope that this effort is visible in our results and are pleased to show you this in this booklet.

We would like to thank all of our teachers that all have been of great help with their guiding words and their structural critiques that made us push through that extra mile to get the best results possible. In special we would like to thank Oscar Rommens who has been our mentor the last months and has always approached us in an open minded fashion and a looked at our results with a good eye for quality in mind.

INTRODUCTION

## INTRODUCTION

The Borders & Territories Graduation Studio has as main theme "New border conditions along the new silk road". From the many cities along this new silk road the graduation studio focusses on six of them; Almaty, Beirut, Gwadar, Gashgar, Mashad and Yekaterinburg. the latter has become the city our group has been working on since september of 2020 and this booklet will show the results of our collaborative work and personal work. But before we give a short introduction of this work, a sidenote has to be made.This year the studio started somewhat different due to the Covid-19 pandemic where physical education made place for a shared amount of digital and physical education. Also due to regulations by the government finding a place to work together has sometimes been a struggle. Eventually, the government introduced a full lockdown that forced us to work from home since halfway of december. Nonetheless, despite all of these consequences, we were able to work to a common product that enbodies the main topic of the studio, Borders & Territories. We therefore can be and are very pleased with the results we have produced and are more than willing to show you our results.

## YEKATERINBURG

The city we have chosen at the beginning of the semester is Yekaterinburg. This city is situated in Russia against the Ural Mountains directly on the continental border between Europe and Asia. Its geographical placement is also in line with the natural valley of the Urals that has always been a vital transport route between Europe and Asia which made the place an important stop in the big tea trade route where Chinese tea was transport-

ed to Moscow and other cities in Europe. The city of Yekaterinburg started as a mining village in the days of the Eastward expension, or, Siberian expedition and has always remained the economic center in the region. The high amounts of natural reserves made it a vital place for the Russian government for the creation of infrastructural, engineering and (war)machinery. Especially in Soviet times, the big industrialization of the cities around the Urals made Yekaterinburg even more important as economic center in the region. This resulted in Yekaterinburg being the fourth biggest city of Russia. After the collapse of the Soviet Union Yekaterinburgs function as industrial powerhouse became unsure. With a economy focussed less on industries but more on trade, a political unrest was the result. However, the industrial past is very present today and the numbers of pollution within the Sverdlovsk Oblast (the federal subject) are higher than average. The presence of factories and mines polluting the water and nature gives the city a somewhat eerie character, or, as Freud called it, UNCANNY.

## GROUP WORK

When we began with the analysis of the city of Yekaterinburg, our group started off by individually analyzing as many aspects as possible, all focussed on a personal interest. By doing this, we tried to achieve five different themes that were well documented in the early stage of investigation. A consequence of this was that in the early stages, it looked like we didn't know where we wanted to go to as a group. But after some brainstorm sessions we found out that our collaborative research was connected by a general notion of the city, the uncanny. This definition 'uncanny' finds its origin in the writings of Sigmund Freud and talks about the ever present feeling of a

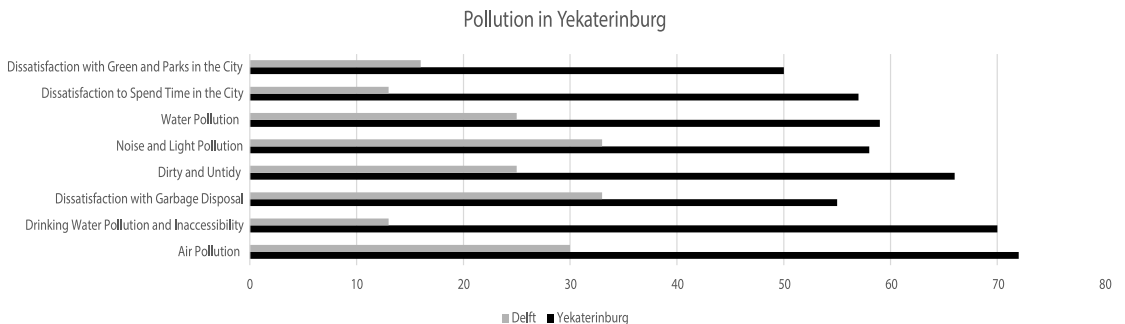'wrongness' and 'ugliness'. While this could be interpreted as a solely negative definition of the city, uncanny does not always have to be seen as negative but rather as an aesthetic quality. This aesthetic uncanny quality could be found in almost any place in and around Yekaterinburg. In and around Yekaterinburg we found many lakes with a broad variety of colors, indicating a form of pollution. Next to these lakes there are factories, mines and cities that are using the natural waterflow as waste water which not only affects the water quality, but also the nature surrounding these bodies of water. Also, if a factory, mine or town becomes deserted, it is left in its latets condition without being dismantled. This leaves many places in a transgressive state. By trying to map the uncanny, we stumbled on the fact that there is no clear border or claimed territory of the pollution. Because of this, we had to work in a unconvential way. Instead of digital mapping, we also started to experiment with fluids and chemicals to replicate the way the pollution spreads through the region of Yekaterinburg. This imprecision is however controlled by the data we could find. The location of the factories and mines, infrastructural routes, wind directions and flight schedules were indicators of sensorical but also invisible pollution that we could track from this data. This eventually resulted in a borders and territories map that were focussed on the more tangible data of the uncanny and one overarching background that is more like a fluid simulation of the sensorical and invisible spread of the uncanny throughout Yekaterinburg.

## THE ARCHIVE

During our collaborative research, we stumbles upon a variety of references and epiphanic moments that helped us move forward within our research. By keeping track of these elements, we were able to create an archive that consists of these elements. For example the aesthetic in the movie Stalker by Andrei Tarkovsky worked as a big inspiration of the more tangible fashion of the uncanny. And the experimentation with fluids and chemicals brought us to artists like Richter, Brakhage and Pollock. This archive also functioned the other way around where we found inspiration for new steps by combining some elements of aesthetics found within the archive. Therefore this archive became a helpfull tool within our design process.

## INDIVIDUAL WORKS

From our collaborative approach of the city of Yekaterinburg, which is the uncanny, we all created our own subthemes. In this booklet we have placed our research with the drawings that were created out of this research and it ends with the theory thesis

we wrote about our personal interest. The themes are weathering by Gongbu Han, the terrain-vague by Bas van Lenteren, transgression by Pedro Daniel Pantaleone, Liminal place by Sander van Rijn and the thickness of borders by YiChen Shih. All of these themes are, as mentioned before, subthemes of the uncanny. This personal research was therefore always an extra drive for us to let it come together in our collaborative works. A lot of influences can therefore be found within the group work.

In the end, all our work combined creates a coherent story that contributes to the general theme of the uncanny within Yekaterinburg, a city on the new silk road that with its industrial past, present and future will always find sensorical and invisible border conditions within the urban and natural setting.
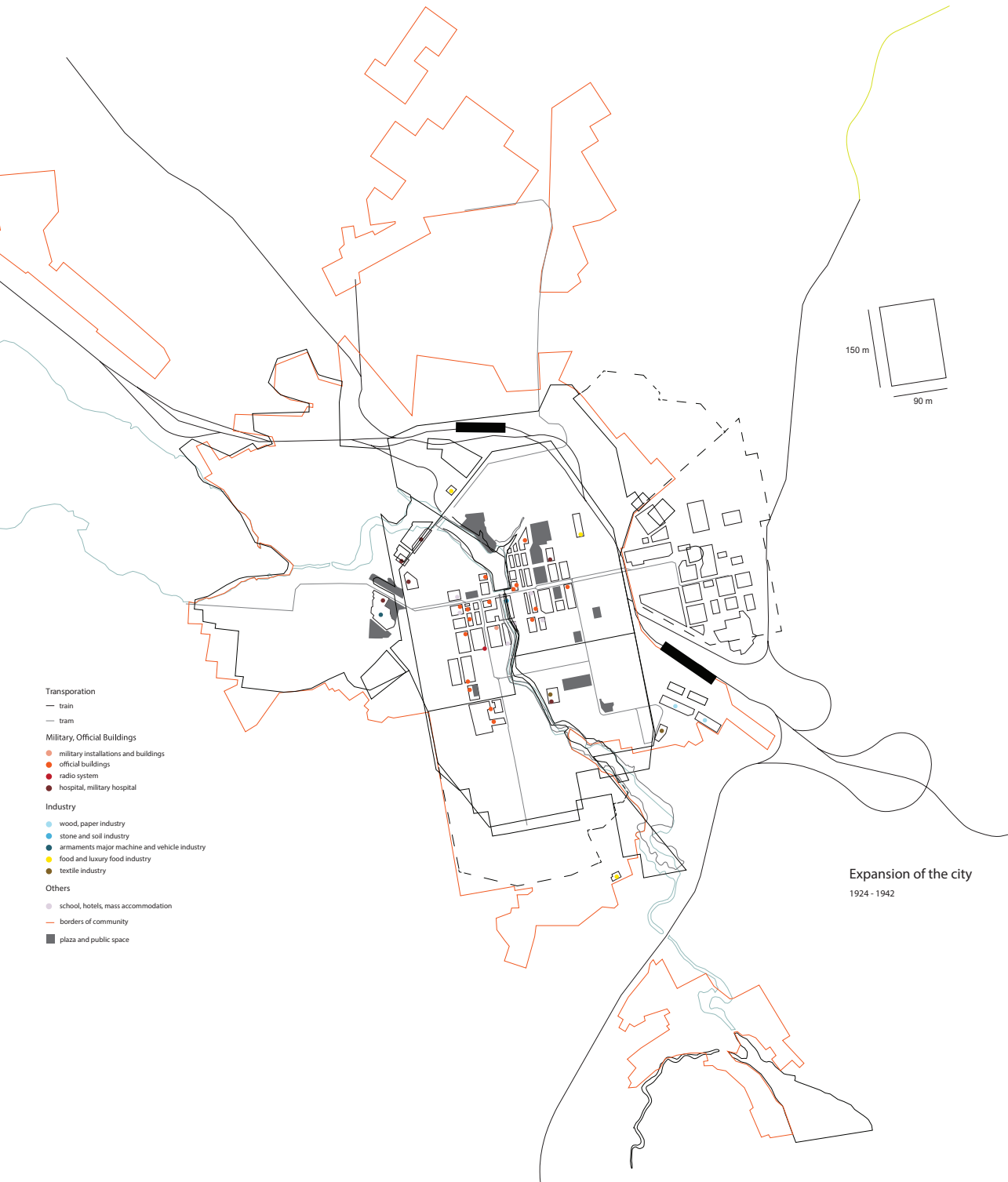
Pollution in Yekaterinburg

| | |
|---|---|
| Dissatisfaction with Green and Parks in the City | |
| Dissatisfaction to Spend Time in the City | |
| Water Pollution | |
| Noise and Light Pollution | |
| Dirty and Untidy | |
| Dissatisfaction with Garbage Disposal | |
| Drinking Water Pollution and Inaccessibility | |
| Air Pollution | |

0    10    20    30    40    50    60    70    80

■ Delft   ■ Yekaterinburg

# COLLECTIVE RESEARCH

Transporation
— train
— tram

Military, Official Buildings
● military installations and buildings
● official buildings
● radio system
● hospital, military hospital

Industry
● wood, paper industry
● stone and soil industry
● armaments major machine and vehicle industry
● food and luxury food industry
● textile industry

Others
● school, hotels, mass accommodation
— borders of community
■ plaza and public space

150 m

90 m
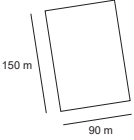
Expansion of the city
1924 - 1942

GENERAL MAP:

INVESTIGATING THE
CITY

In the first week we were look-
ing at the city in a very broad
way, trying to find as much
information as possible. This
map shows a literal representa-
tion of the city with empahsis
on found elements in the city
that might contribute to the
overall notion of Borders and
Territories. This came out the
study of historical expension,
monuments and infrastructure.

URAL MOUNTAINS

1:60'000

110 km

350m
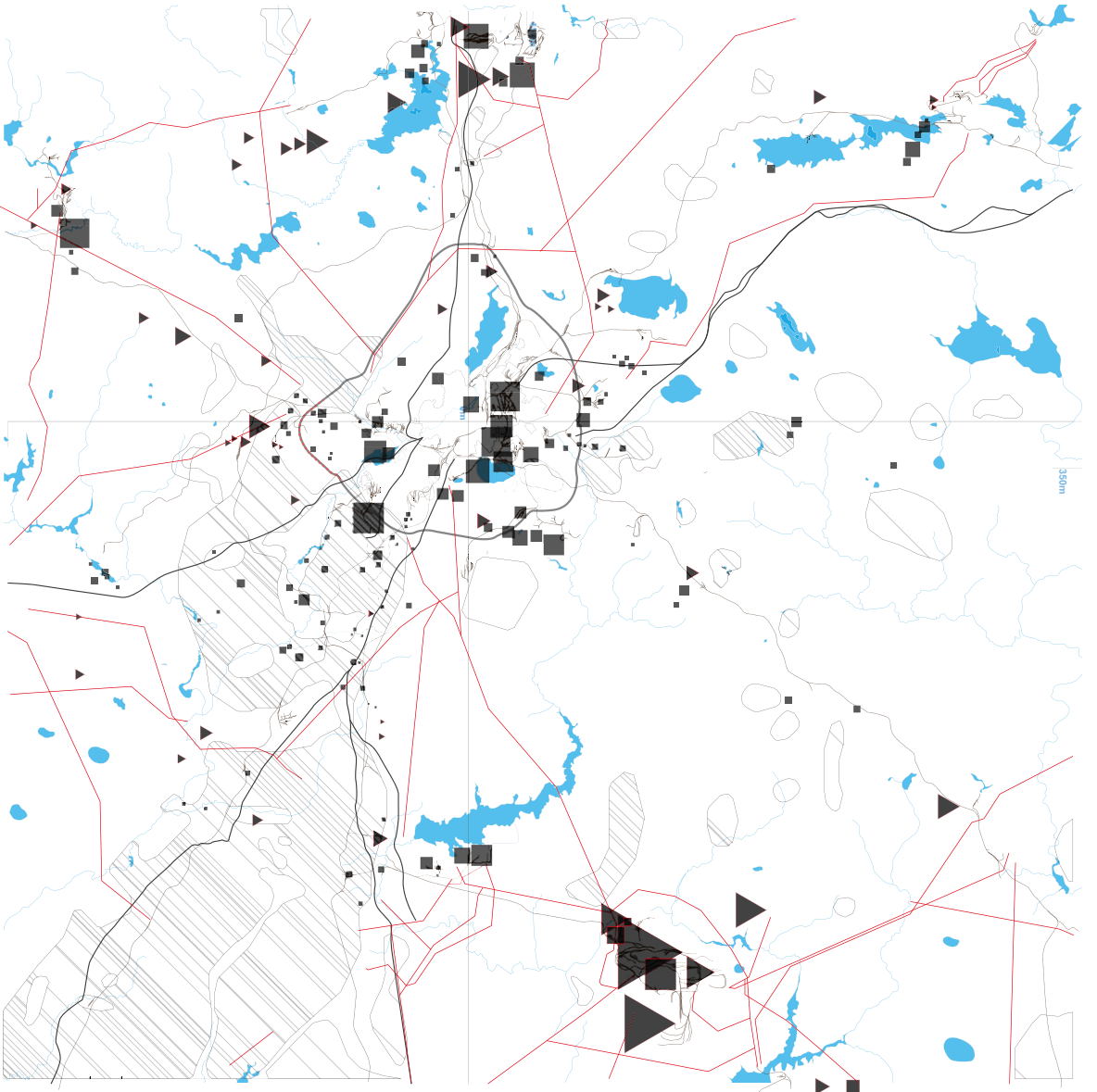
LEGEND:

High speed roads
Railways
Power lines
Industrial enterprises
Mining facilities
Natural lakes
Croplands

TERRITORIES MAP:

INDUSTRY VS
AGRICULTURE

In this map. the spread of mines and industries in contrast of croplands are shown. This shows how there is a concentrated area where croplands are situated, but that industries are spread all over the land. This can be explained from the fact that Yekaterinburg lies against the Ural mountains, a mountain range that is known for being rich of materials. Therefore in history, there were people found valuable elements (copper, gold or iron) they would settle down and live from that. Agriculture was, because of the landscape, harder to develop on a bigger scale.  Only soils that were of little value for mining are fit to have agriculture on.

URAL MOUNTAINS

110 km

350m

1:60'000

LEGEND:

- High density urban texture
- Low density urban texture
- Fukushima radius (20km)
- Chernobyl radius (30km)
- Linear low density settlements (dachas)
- High speed roads
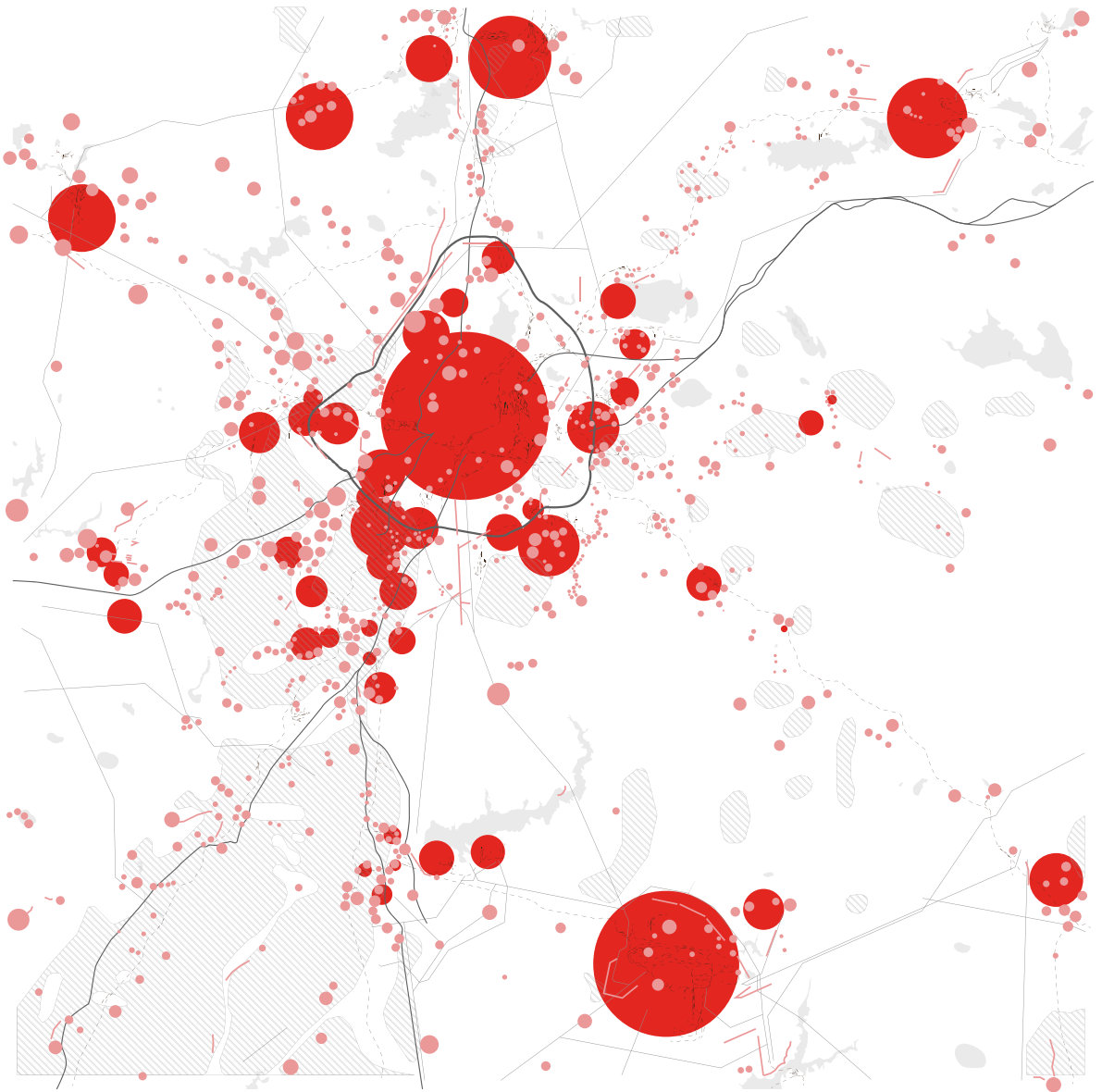- Railways
- Power lines
- Natural lakes
- Croplands

## TERRITORIES MAP:

## URBAN SPRAWL

This map portrays the urban sprawl with high and low urban densities in and around Yekaterinburg. Some key features we learned from this map was that there are two nuclear power plants in the area, where the fallout perimeter has had an impact on the urban sprawl. Especially Yekaterinburg is built more to the westside while that would be non-sensical if you would look at the geographic qualities. But taking the radiation zone in mind, it shows that for safety, people refused to build here extensively. Other features is that urbanization is centered around industry instead of industry being a part of urban sprawl, which dates back to the history of the development of the city and its surroundings.

1:60'000

110 km

LEGEND:

Croplands

Natural lakes

Power lines

Railways

High speed roads

Linear low density
settlements (dachas)

Territory of planned regions
(infrastructures and hi-densi-
ty residences)

Unplanned territory (dachas)

BORDERS MAP:

PLANNED vs.
UNPLANNED

This map goes deeper into the urbanized area of Yekaterinburg as contrast between areas that were planned according to industrial and soviet communist standards and areas that emerged from the need for cheap housing and the installation of the free market economy. While the bigger cities are more commonly formalized, the informal towns and villages are more spread throughout the landscape. These 'unplanned' houses might consist of dacha's (landhouses) and other structures. Some special urban structures we found were dacha villages that are built directly under powerlines, while the forest was cut for these lines, creating space to built upon.

110 km

1 : 60'000
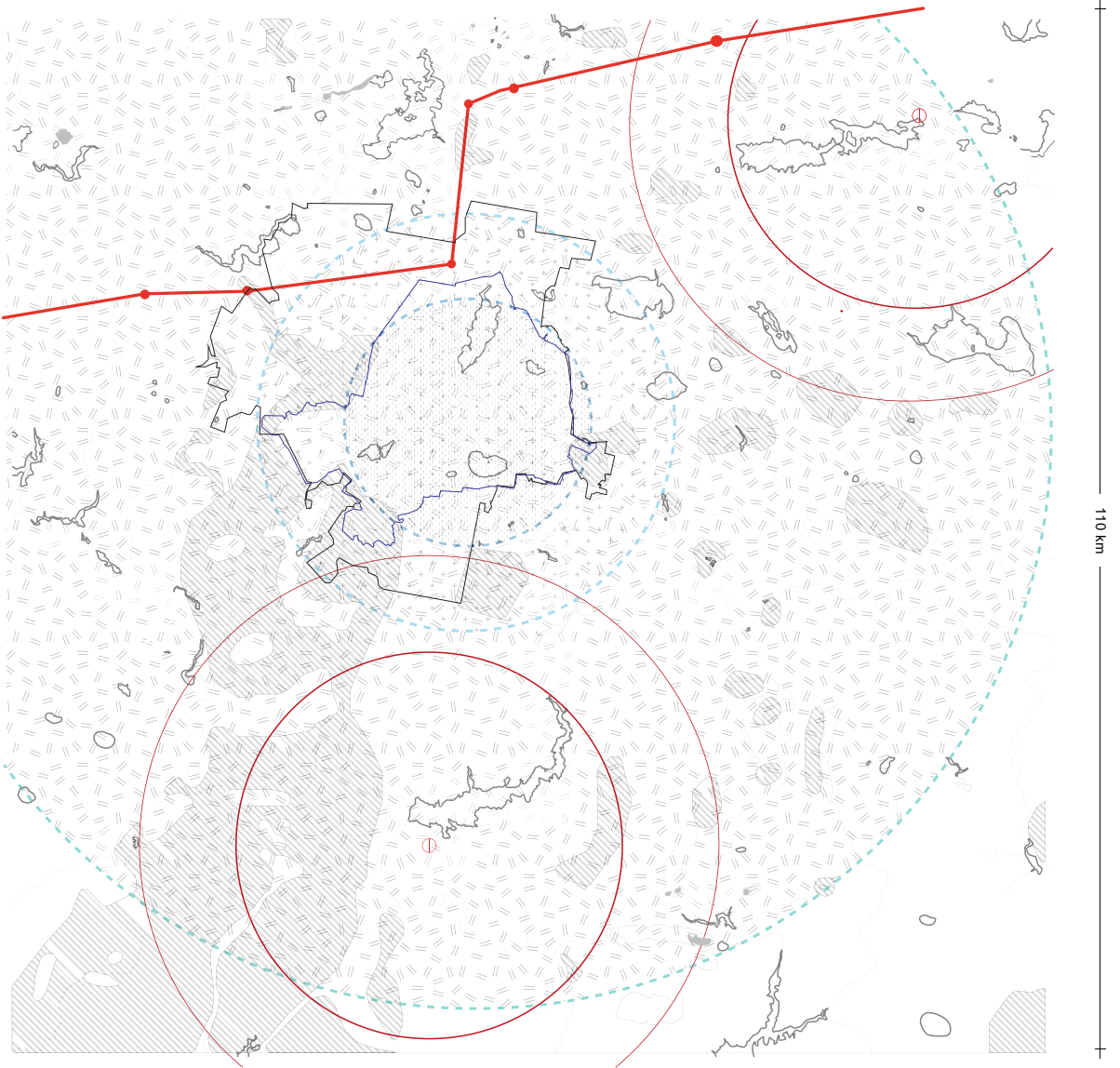
LEGEND:

Croplands

Natural lakes

Lakes

Border between
Europe and Asia

Landmark along the
border

Chernobyl radius (30km)

Fukushima radius (20km)

Yekaterinburg inner circle

Yekaterinburg suburban area

Yekaterinburg metropolitan
area

BORDERS MAP:

INVISIBLE/EPHEMERIC

This map portrays the invisible. While we as humans are used to cross a line by going through a fencing element, we often are not able to sense invisible borders.This map shows borders like nuclear radiation zones, the eurasian border, the ouline of the city and agglomeration zones that can't be sensed but are there.  There is also the ephemeric border that is only temporal, like lakes that are frozen in winter and can therefore be crossed, but are seperating places in summer.
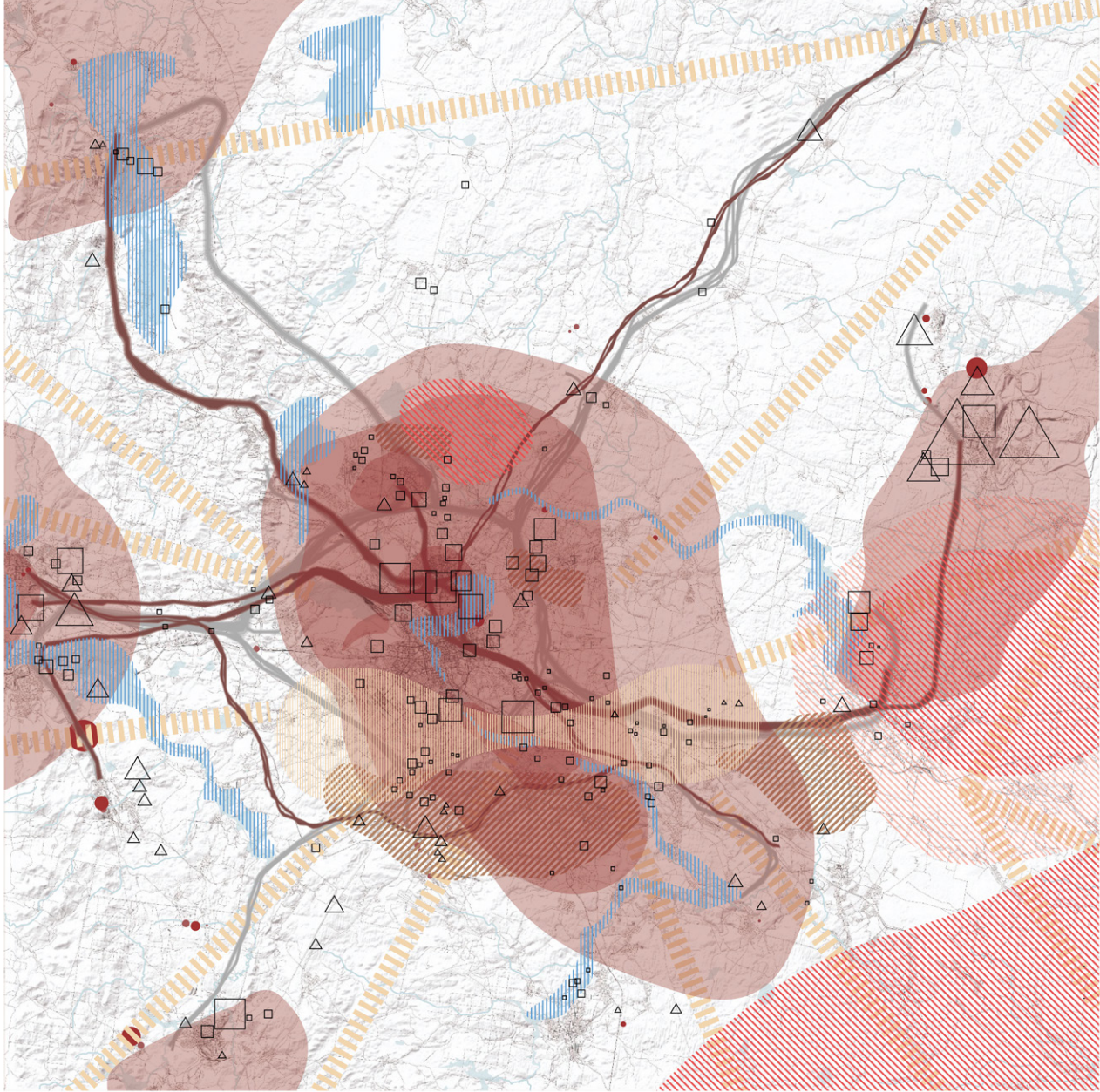
1:130000

□ Industrial Infrastructures

△ Open Pit Mines

● Heavily Polluted Pit Lakes

● Pit Lakes

▨ Radioactive Pollution Zones

▨ Soil Pollution Zones

▥ Water Pollution Zones

▥ Airport Pollution Zones

▥ Airway Noise Pollution Zones

▬ Industrial Pollution Zones

▬ Noise Pollution from Train Tracks

▬ Noise Pollution from Highways

TERRITORIES MAP:

SENSUAL POLLUTION

This map shows the pollution that can be sensed by our visual (eyes), auditorial (ears), vestibularial (inner ear), olfactorial (nose), gustatorial (mouth) and somatosensorial (skin) senses. Yekaterinburg has a high amount of pollution and with this map we tried to give this pollution its own territory while it tries to claim a perimeter by having effects on humans. These effects can be minimal like a little feeling of unease, but can also have serious health issues like higher chances of cancer in and around the city of Asbest (Schüz et. al., 2013).

34km

B2 ━┼━

202'818 :
population in the quadrant

G13
G11 ━┼━
R12 ━┼━ G11 ━┼━
G9

B10
B1 ━┼━
━ B10 ━┼━

10km

5km

B10 ━┼━

R10 ━┼━
R5 ━┼━

R14 ━┼━

LEGEND:

| | | |━▷| | | |    NOISE DROM
AIRCRAFTS

━ ━ ━    YEKATERINBURG THIRD
RING

≡≡≡    NOISE FROM INDUSTRIAL MATERIALS
BEING TRANSPORTED

ODORS FROM INDUSTRIAL PLANTS

COLOUR OF THE
LAKE
B1 ━━━ COLUMN
━┼━    LOCATION

0

23km

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|--|

Ca 20
W 74
S 16

Cr 24
P 15

Cu 29   Zn 30
Pb 82   Cd 29
Fe 26

26
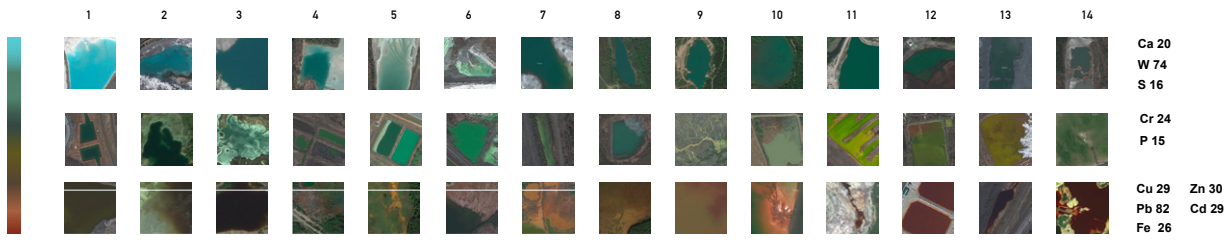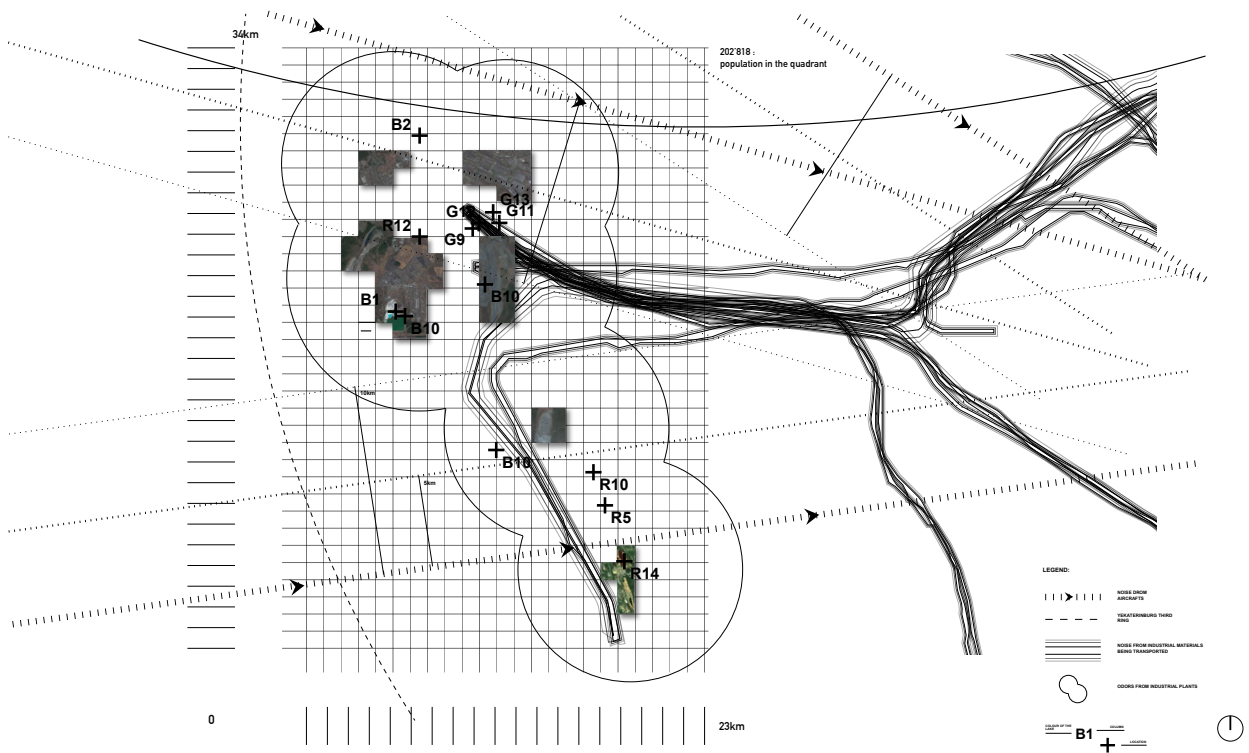
TERRITORY MAP:

EXPERIMENT
SHOWING
POLLUTION

This map was an experiment to classify the polluted lakes in the urban perimeter in and around Yekaterinburg. This highly graphic element of classification in relation to the elements causing the colors to the color makes for a better understanding of the effects of the mines on their surroundings. This in its place converted into a smaller part of the map. By locating the polluted lakes and industries in a grid, it creates a balance between order and disorder, the canny and uncanny.
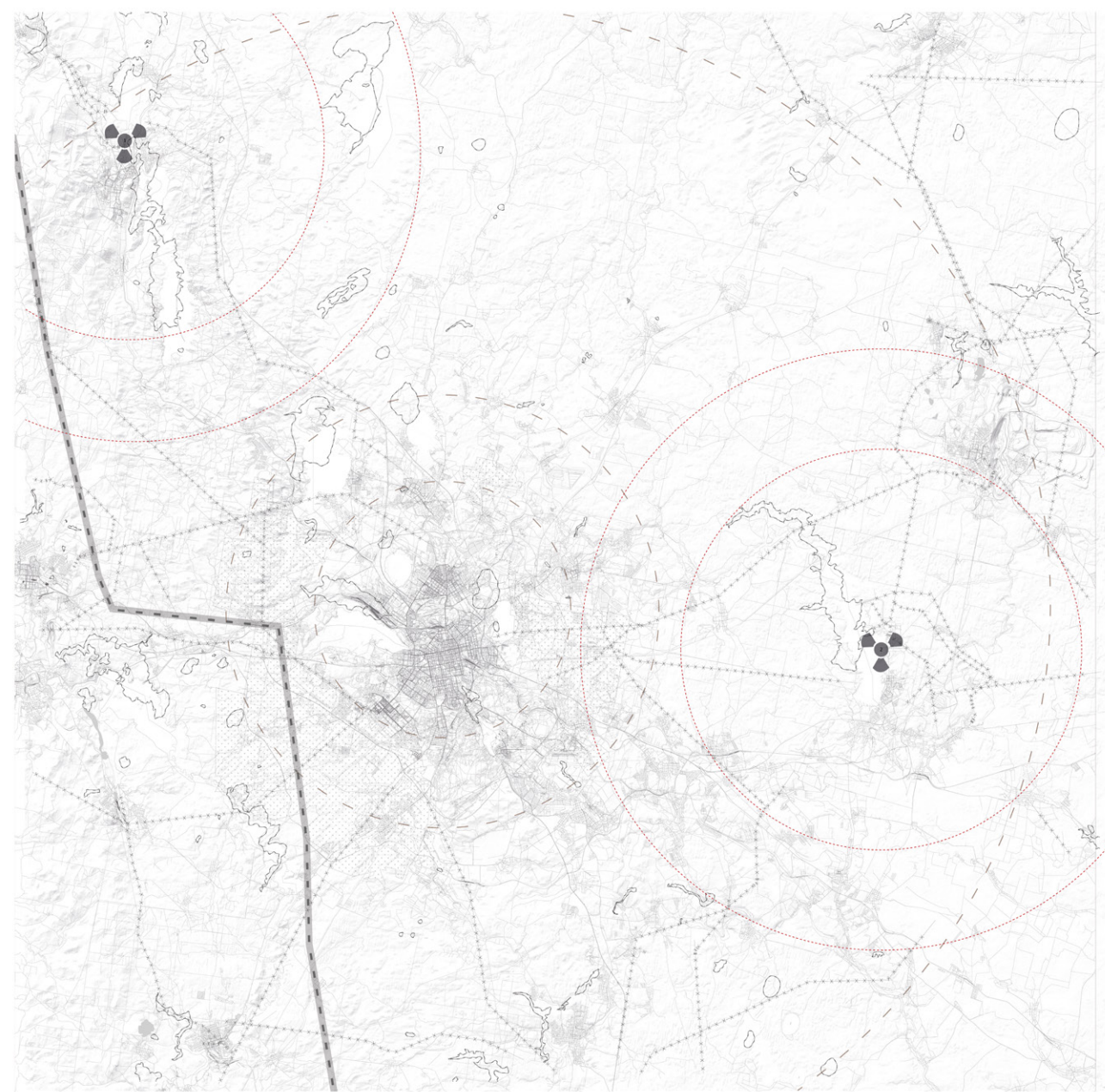
1:130000

- - - - - Nuclear disaster diameters
- ·-·-·-· Lakes
——— The area of Yekaterinburg (Yandex)
——— The area of Yekaterinburg (Google)
▓▓▓ The border of Europe-Asia
- - - Agglomeration: Industrial belt
- - - Agglomeration: "Greater Yekaterinburg"
- - - Agglomeration: Second belt
x x x x Power lines

Belojarsk nuclear plant

Novo-Oeralsk nuclear city

Border between territories

BORDERS MAP:

EXPERIMENT
SHOWING
POLLUTION

This map again portrays the invisible behaviour of the borders in and around Yekaterinburg in a different graphic style. By implementing the geography, we tried to convey the disputable way Yekaterinburg expands into the mountains as a consequence of the threath of a potential nuclear disaster. Furthermore, by smoothing out the graphic style, we tried to convey the invisibility of the borders.
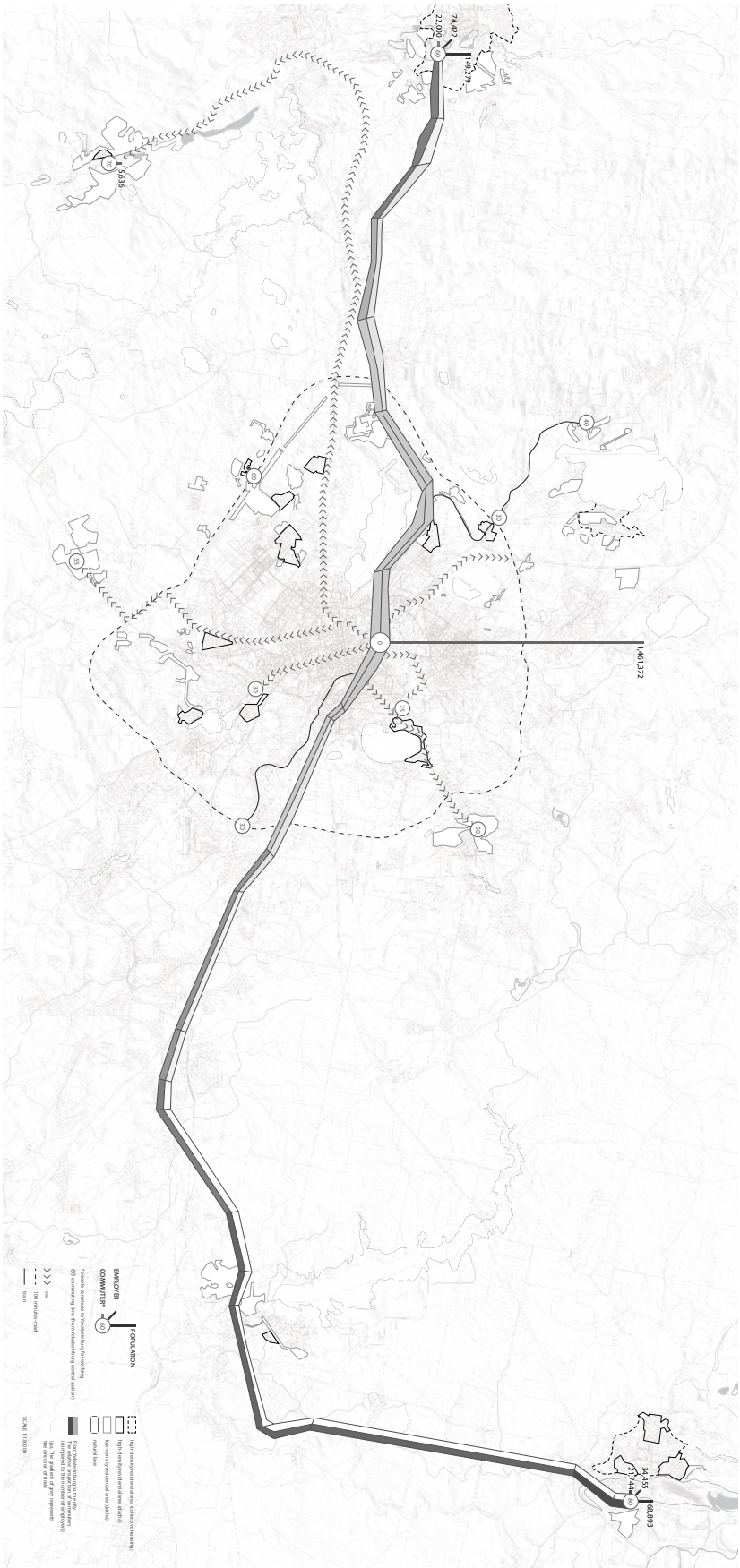
BORDERS MAP:

PEOPLE FLOW
EXERCISE

This map is an exercise of ephemeral borders. It depicts the amount of commuters from satellite cities to the city center to visualize the sense of belonging. Our assumption is that most of the employers that work in the city of Yekaterin-burg live in a satellite city and commute every day and might thereforepossibly think they are a citizen of Yekaterinburg. The vertical bar shows the popu-lation of the city, the gradient grey displays the amount of people flows. Thus, most of the workers from Asbest go to the city center while less than one-third of that from Pervo-Uralsk. To sum up, the border of city would be formed by a sense of belonging to their home city or working city. During the commuting journey, the personal border is dynamic and uncertain in-between of these two cities.

- TERRITORIES MAP -

The territory of the UNCANNY, a synesthetic perception of infrastructure and technological plants

Borders&Territories, Yekaterinburg, Russia

LEGEND:

| BASE | VISUAL | AUDITORY | BIO-CHEMICAL |
|------|--------|----------|--------------|
| Built environment | Industrial plants | Intense airplane noise | Polluted lakes |
| Natural lakes | Power lines | Highway and railway (1) | Polluted rivers |
| Rivers | | Highway and railway (2) | High vegetation zones |
| Extraction/Processing | | | Soil pollution |
| Materials | | | |

TERRITORIES MAP:

THE UNCANNY

This map visualizes a synes-
thetic perception of infra-
structure and technological
plants. This map came to shape
by combining the previous
territory map combined with
the experiments to become a
clearer notion of the uncanny.
The map shows the location
of the industries, mines and
infrastructure which impacts
the environment in way that
it can be sensed wherever you
are, or, you can never escape it.
The neon yellow color portrays
the synthetic nature of the
industries creating landscapes
that are altered to a level it
is unreminiscent of anything
natural.

Ленинский район ~ District Leninski

Кировский район~ District Kirovski

| Auditor | Visual | Odor | Prevailed wind |
|---|---|---|---|
| Industrial Noise pollution | Polluting industries | Smell pollution | North |
| | | | West |

34
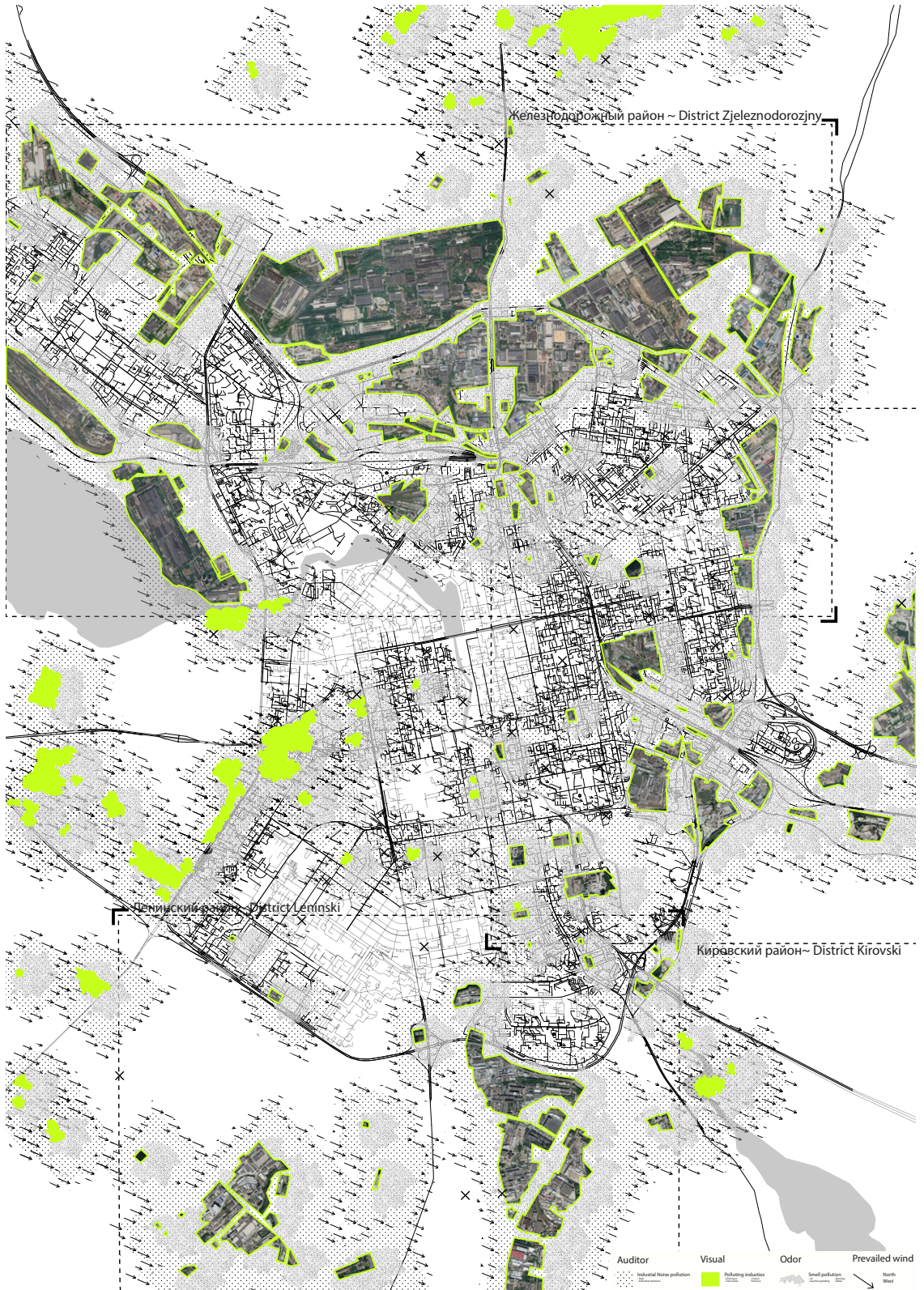
TERRITORIES MAP:

THE UNCANNY ZOOM
IN

This experimental map tried to emphasize the smaller details of the uncanny by zooming in on the city again. This gave room for showing some more in-depth relation between the city and the industry as two separate entities.

– BORDERS MAP –

THE BORDERS OF THE **UNCANNY**, AN EPHEMERIC AND PIXELATED REPRESENTATION OF
THE INVISIBLE BORDER BETWEEN THE ORDERED AND ENTROPIC LANDSCAPE

BORDERS&TERRITORIES, YEKATERINBURG, RUSSIA

Hard Borders
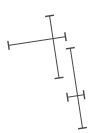
Ephemeral Borders

Soft Borders

Invisible Borders

Legend

BORDERS MAP:

THE UNCANNY

The borders map shows an ephemeric and pixelated representation of the invisible borders between the ordered and entropic landscape in and around Yekaterinburg. The dots are gradiently going from distorted to invisible, portraying the impact perimeter of the industries and the soft border from these industries. The map also portrays the ephemeral borders like the worked out version of the commuters experiment. The same neon yellow color is used to convey the notion of a synthetical environment.
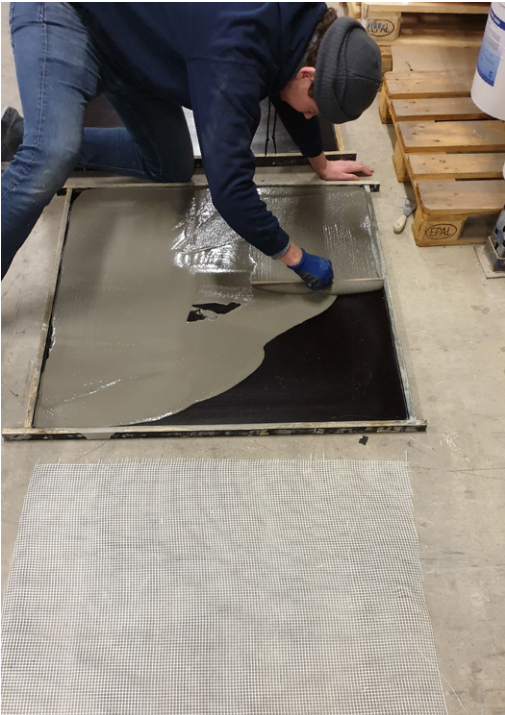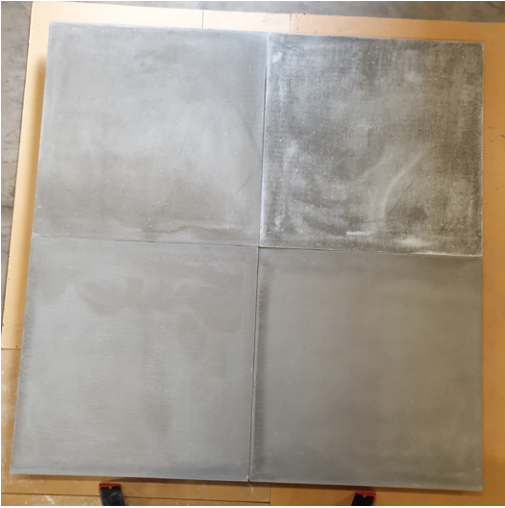
## MEGAMAPS:
## P2

The two maps try to represent the complexity of a territory that, because of its geographical location, history, aspirations, crisis strengths and weakness, required a further level of inquiry and reflection on the process of making a map and representing the territories at such a scale.

As a result of the radical and intense implementation of its industrial purpose, now the territory of Yekaterinburg constitutes a system of satellite cities, each with their specific 'technical' purpose, revolving around its core. As an outcome of this infrastructural sprawl, a new, synthetic, territorial condition arises.

The fact of having 'surrounded' and instrumentalized the territory in such a way gives rise to the necessity to question the very lines between what can be considered as artificial and what is natural. It poses new questions on a relational condition in which the very notion of delimiting becomes critical and vague.

A limestone extraction site in the middle of the taiga, powerlines engraving the forest and powering this territorial mechanism, acid hues in lakes and rivers as a result of water pollution.

The deception of sensorial experience in establishing clear borders between spatial entities, focused our attention on the concept of in-between itself. If one is not able to circumscribe and recognize an object, it will experience an aesthetic ambiguity, a feeling of suspension of meaning halfway a polarization in either one or the other categorization. This feeling is referred to as 'uncanny'. As Freud first described it, uncanny is the 'ugly' nature of artificiality when it starts to overwhelm us, to pull itself out from a clear definition. By insisting on the aesthetic connotation of industrial pollution therefore, the three maps try to represent, in their process of production as well as in their content, the flow between borders and territories in the unstable gaze of the uncanny.

## BACKGROUND

Three layers constitute an overlapping of meaning to describe this condition. A background, a territories layer and a borders one. The background is the result of the mapping of polluting sources and industrial complexes around the territories burned out with acetone on a color base. A heavy and diluted presence constitutes the background noise of industrialization in which clear borders cannot be distinguished between that and its surroundings. This layer was produced by sampling colours of pollution around the territory during our investigation. Then, the act of mapping translates in 'blurring' and distorting the spatial impact of the single element, and blending it with the others.

The territory of the **UNCANNY**, A SYNESTHETIC PERCEPTION OF INFRASTRUCTURE AND TECHNOLOGICAL PLANTS

BORDERS&TERRITORIES, YEKATERINBURG, RUSSIA

0    5KM

0

5KM

105KM

B6

B11

Новоуральск - Novouralsk

R1

NI SMELTER

Реж - Rezh

CR 24 - NI 28

GEMSTONE

G12

GRUSCHED STONE

CR 24 - NI 28
CU 29

GRUSCHED STONE

VICTORY

R2

D

CR SMELTER

B11 G13
R9

B13

Первоуральск - Pervouralsk

GRUSCHED STONE

Екатеринбург - Yekaterinburg

B3
B1

R15

CR 24 - NI 28 - CU 29 - CU SMELTER

CR 24 - NI 28

CR 24 - NI 28

Полевской - Polevskoy

CR 24 - NI 28

Сысерть - Sysert

5      20

0 1km          10          40
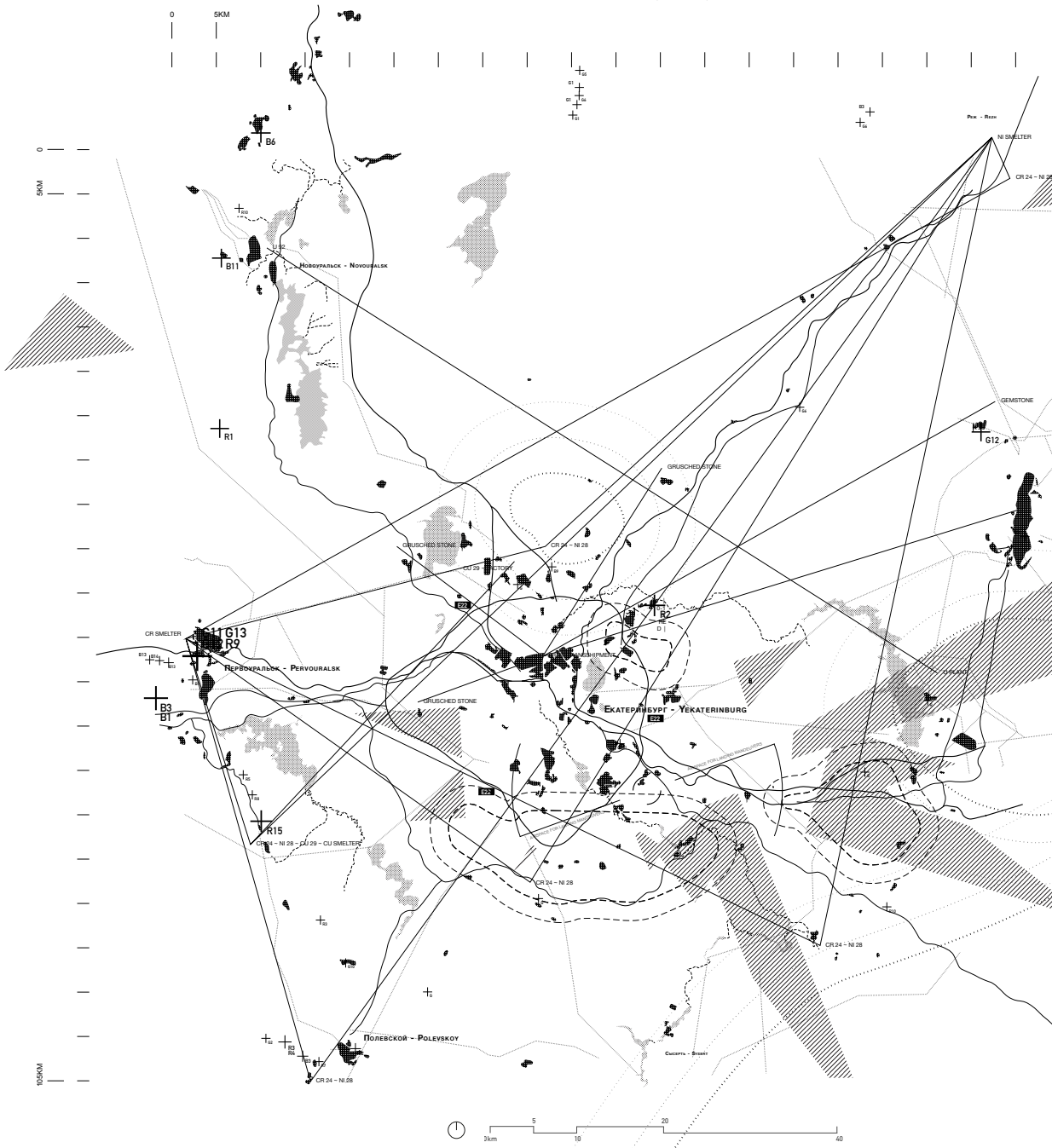
LEGEND:

| VISUAL: | AUDITORY: | BIO-CHEMICAL: | EXCAVATION: | MINERAL POLLUTION: |
|---|---|---|---|---|

INDUSTRIAL PLANTS      INTENSE AIRPLANE NOISE      POLLUTED LAKES      RESOURCE TRAVEL ROUTE      LOCATION

POWER LINES      HIGHWAY NOISE POLLUTION (200 M)      POLLUTED RIVERS      RESOURCE   CR 24 = CR ( chromium), 24 ( Atomic number )      R15

RAILWAY NOISE POLLUTION (200 M)      SOIL POLLUTION      CR 24   Chromium      COLOR CODE      LAKE NUMBER

RADIATION ZONE      NI 28   Nickel
CU 29   Copper
U 92   Uranium

SATURATION

NI 28      CU 29

0-15 RED      0-15 G

105KM

B5

Асбест - Asbest
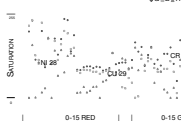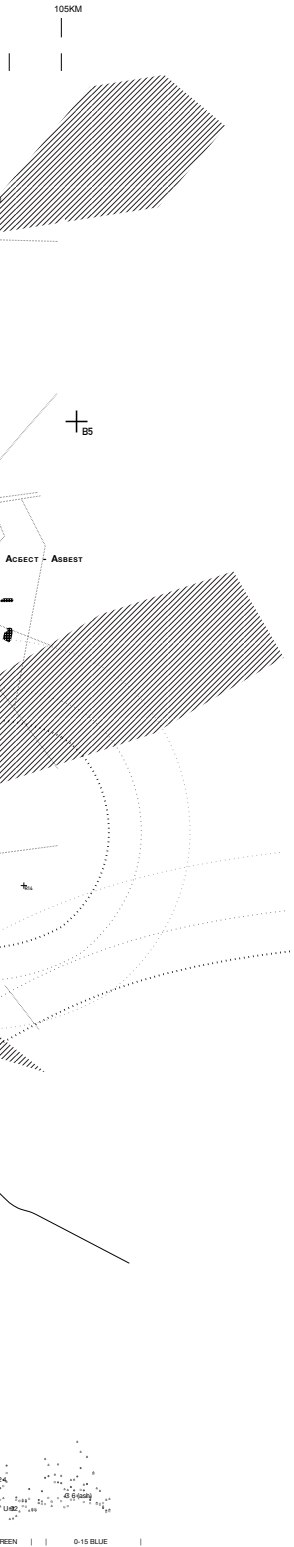
## TERRITORIES MAP

The territories map, on the other hand is the mapping of the gaze that produced such condition and its artefacts. Crystal clear  information printed on a transparent layer is overlapped to this background. Precise perimeters draw the population of  infrastructure present on the territory. The exactitude with which countless plans were laid down to control the territory then,  contradicts the dirtiness of the background, the product of their operation.

45.6 Gashly

LH92

REEN       |    |        0-15 BLUE          |

THE BORDERS OF THE UNCANNY, AN EPHEMERAL AND PIXELATED REPRESENTATION OF
THE INVISIBLE BORDER BETWEEN THE ORDERED AND ENTROPIC LANDSCAPE

BORDERS&TERRITORIES, YEKATERINBURG, RUSSIA

0    5KM



Рек - Rезн

FACTORY WITH CHIMNEYS

Новоуральск - Novouralsk

Первоуральск - Pervouralsk

Ревда - Revda

ЕКАТЕРИНБУРГ - Yekaterinburg

POWERLINE
HIGHWAY
DISTRIBUTION CENTER
WIDE LAND

EUROPE-ASIA BORDER

POWERLINE
HIGHWAY
WIDE LAND

SCULPTURE A
STRAIGHT ROAD
SINGLE FOCUS

Полевской - Polevskoy

Сысерть - Sysert

5    20

0km        10        40
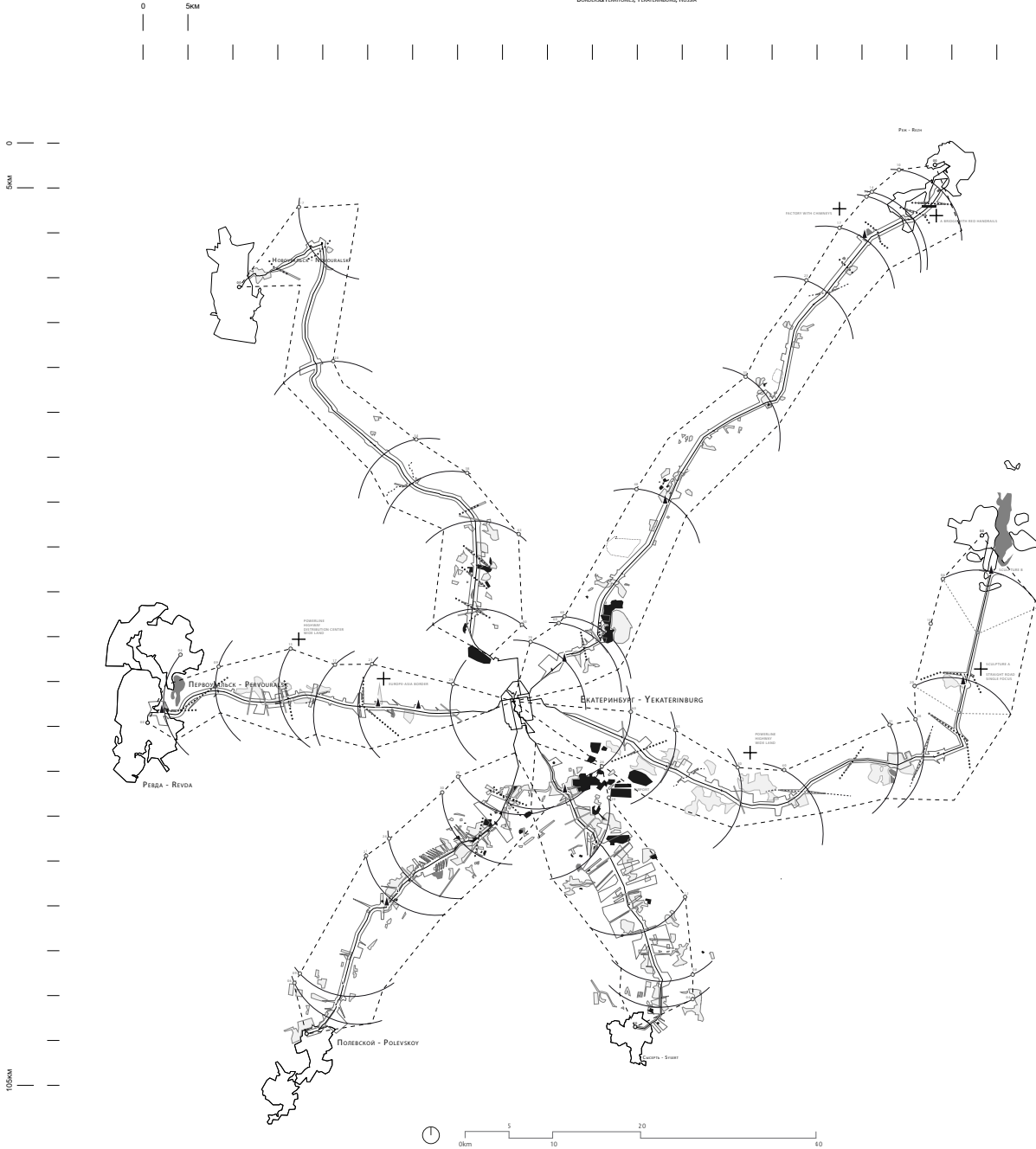
EPHEMERAL BORDERS

The arc shows the orientation of
ephemeral city-border and time. It
indicates the horizon of elements
that locate a relative position in the
territory

The ephemeral border is
represented as a series of sights
from inside a car at a given
moment.

LEGEND

20    REMAINING TIME

⊙    FRONT SIGHT

LANDSCAPE ELEMENTS

———    HIGHWAY ABOVE ROUTES

........    RAILWAY

----    RIVER

+++    POWERLINE

MAIN ROUTE  S FROM CITY
CENTER TO SATELLITE CITIES

EUROPE-ASIA BORDER

▲    TOWER, SCULPTURE, CHIMNEY

A    B

+    EMERGENT ELEMENTS

▬    BUILDING, SERVICE STATION

◆    OVERPASS

●    LAKE, POND

▬    BRIDGE

MINE

DACHA / SUBURBAN DEVELOPMENT

MILITARY BASE

INDUSTRIES

AMOUNT OF ENTROPY  OF THE
ELEMENTS  IN THE LANDSCAPE

105км

Acbect– Asbest

## BORDERS MAP

Measure and delimitation (bordering) of this continuous entity can only happen therefore in an ephemeral and phenomenological way. The borders layer therefore is the exploration of the sequence of objects that, without pretension of indicating and delimiting themselves singularly, overlap themselves when the territory is traversed. The relational side of space, the changing of its components, therefore, becomes the way through which one can establish a difference between one location and the other. By crossing them, we constitute the borders.

THE BORDERS OF THE UNCANNY, AN EPHEMERAL AND PIXELATED REPRESENTATION OF
THE INVISIBLE BORDER BETWEEN THE ORDERED AND ENTROPIC LANDSCAPE
THE TERRITORY OF THE UNCANNY, A SYNESTHETIC PERCEPTION OF INFRASTRUCTURE AND TECHNOLOGICAL PLANTS

BORDERS & TERRITORIES, YEKATERINBURG, RUSSIA

0       5KM

5KM

10KM

B6

B11
Мовоураьск - Novo

B1

R1

GRUSCHED STONE

CR 24 - NI 28

GRUSCHED STONE

CR SMELTER

G13
R9
Первоуральск - Pervouralsk

B3
B1

GRUSCHED STONE

Екатеринбург
Екатеринбург
Yekaterinburg

E22

Ревда - Revda

R15
CR - NI 28 - CU 29 - CU SMELTER

R3
R4

CR 24 - NI 28

CR 24 - NI 28

Полевской - Polevskoy

Сысерть - Sysert

5        20

0km      10              40

LEGEND:

EPHEMERAL BORDERS

LEGEND

VISUAL:                 AUDITORY:              REMAINING BIO-CHEMICAL:           EXCAVATION:                    EMERGENT MINERAL POLLUTION:
                                                                                 MAIN ROUTES FROM CITY
INDUSTRIAL PLANTS                                FRONT SIGHT                      CENTER TO SATELLITE CITIES      EUROPE
                                                                                 RESOURCE  TRAVEL ROUTES

POWER LINES                  HIGHWAY NOISE POLLUTION   LANDSCAPE ELEMENTS         RESOURCE CR 24 - CR ( chromium), 24 (Atomic number)
                             (200 M)                   POLLUTED RIVERS                                          R15
                             RAILWAY NOISE POLLUTION   HIGHWAY ABOVE ROUTES       CR 24                          LAKE  NUMBER        MINE
                             (200 M)                   S OIL POLLUTION            NI 28                          LAKE, POND          DACHA / SUBURBAN DEVELOPMENT
                                                       RAILWAY                    CU 29  Copper                                      MILITARY BASE
                                                       RADIATION ZONE             U 92   Uranium                BUILDING, SERVICE STATION
                                                       RIVER                      TOWER, SCULPTURE CHIMNEY      OVERPASS            0-15 RED
                                                                                  COLOR CODE                    LAKE, POND          INDUSTRIES
                                                       POWERLINE                  A        B                    BRIDGE

The ephemeral border is
represented as a series of sights
from inside a car at a given
moment.

## COMBINED MAPS

The three layers juxtaposed trying to express and locate this ambiguity. Different materials and substances (concrete, linen, paper, acrylic colour, acetone) and levels of transparency interact to insist on the aesthetical relevancy of industrial pollution, trying, therefore, to explore different conceptualizations of this issue. Finally, the action of looking through the maps, and the constitution of the map as meaningful in respect to the relation of its multiple components is as well the attempt to interact with the notion of mapping as a systematic representation of a territorial condition.
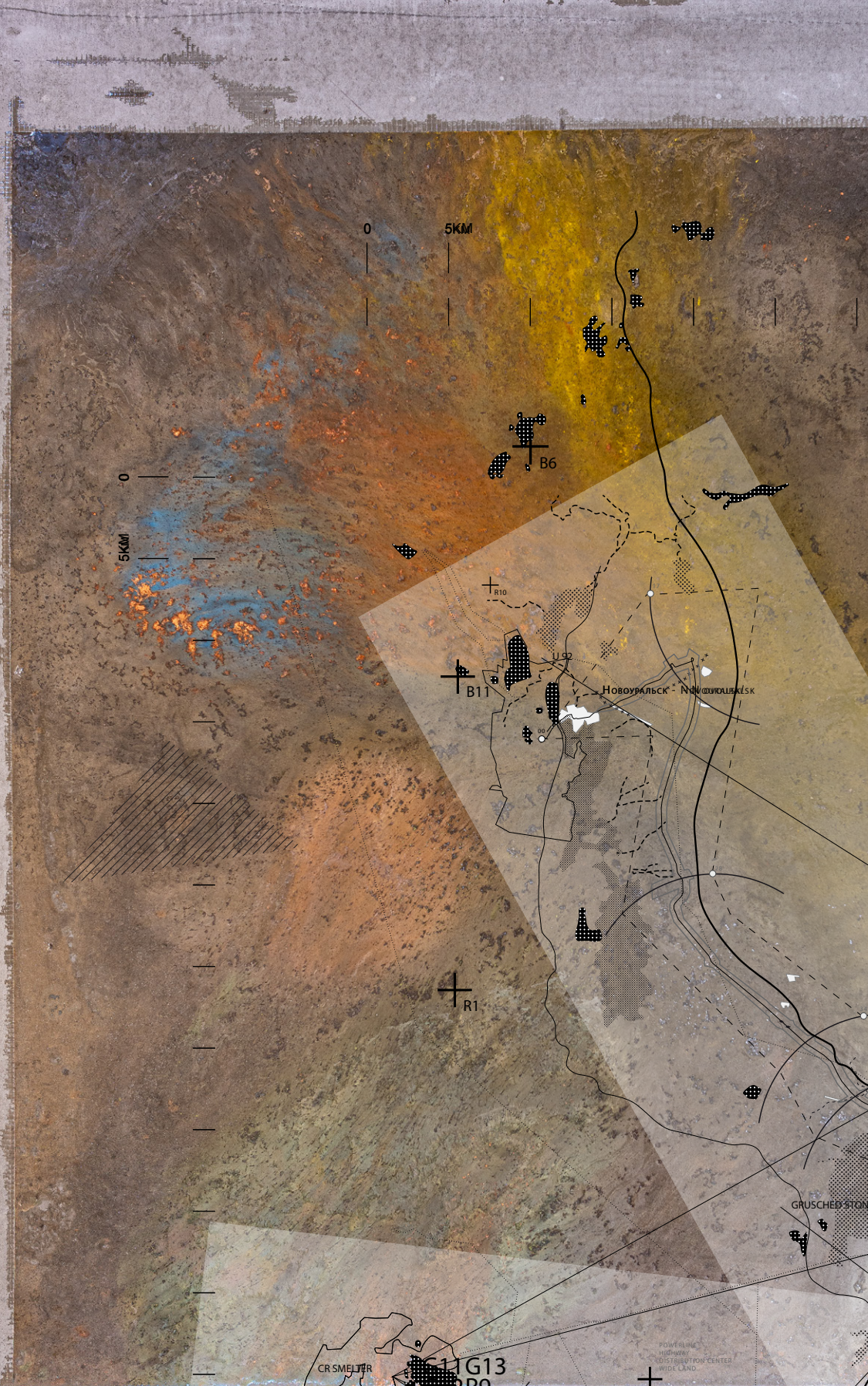
0        5KM

B6

0

5KM

R10

B11

U 92

Новоуральск - Novouralsk

00

R1

GRUSCHED STON

POWERLINE
HIGHWAY
DISTRIBUTION CENTER
WIDE LAND

CR SMELTER        C11G13

- BORDER
- TERRITOR
THE BORDERS OF THE UNCANNY, AN EPHEM
THE INVISIBLE BORDER BETWEEN THE C
THE TERRITORY OF THE UNCANNY, A SYNESTHETIC PERCEPT

BORDERS&TERRITORIES, YEKAT

## DETAIL COMBINED MAP

Aesthetic (n.)
From Greek aisthetikos "of or for perception by the senses, perceptive," of things, "perceptible," from aisthanesai "to perceive (by the senses or by the mind), to feel,"

ARCHIVE

Ural
mountains

Усть-Сысольск
Ношчимский

Ночпасский

Кажимский

Кирсинский
1729

Слободской
Орлов
Вятка
Котельнич

Боровский Песковский
Климковский
1764
Главно-Холуницкий
Чёрно-Холуницкий
Омутнинский
1775      Залазнинский
1768

Полинск

Уржум
1772
Буйский

Малмыж

Казань
Мещинский
1749
Мамадыш   Елабуга
Лаишев   Бердытский
1747
Чистополь

Спасск

Ставрополь

Самара

Бузулук

Пудемский
1759
Глазов

Кокманский

Рождественский
1732
Воткинский
1759
Ижевский
1760

Бемыжевский 1756
Сюгинский
Ильдинский 1766

Бугульма
Верхне-Троицкий 1752
Нижне-Троицкий 1760
Усень-Ивановский
Белебей

Бугуруслан

Стерлитамак

Вижаихинский
1899
Чердынь

Вёловский
1906
Кутимский
1890
Воскресенский
Петропавловский 1758
1758

Соликамск
Верх.и Ниж.      1730
Пыскорские   Троицкий
Дедюхин   1722
1856  Ленва

Богословский 1758

Надеждинский

Кувинский  Таманский
Елизавето-1798
Пожевской
1811  Пожевской
Кизеловский

Всеволодо-Вильвенский
1818
Александровский
1789

Никитинский
(Майкорский)
1761   1735
Чёрмозский

Добрянский
1754

Висимский

Хохловский

Нытвенский 1756
1760
Очёрский
Павловский
1817  Оханск
Юго-Камский
1746
Аннинский 1760
Курашимский 1741
1795
Бизярский 1740

Оса

Юго-Кнауфский
1740

Шерменевский

Уинский
Бикбардинский
Камбарский
1761  Николаевский
Верх.и Ниж.
Саранинские

Сарапул

Михайловский 1808
Верх. Артинский
1787

Архангело-
Пашийский
1785     1883
Кусьинский
Лысьвенский
1787

Мотовилихинский
1723
Сюзвинский
1789

Егошихинский
в.1740,н.1735
Бымовский
1735
Чермозский

Шаквинский 1741

Молебский

Суксунский
1729,1740

Красноуфимск

Чердынь

Вёловский
1906

Верхотурский
1759

Нижне-Турьинский 1766

Верхне-Турьинский 1737
Кушвинский (Благодать) 1735

Теплогорский

Верх,1769 и Ниж,1724 Синячихинские
Верхне-Сусанские 1753
Алапаевский 1703

Салдинские
1722  Сылвинский 1739

Ревдинский 1734

Шайтанский
1732
Бисертский
1728

Нижне-Сусанский 1735

Шуралинский 1716
Верхне-Нейвинский 1762

Режевской 1773

Тагильские
Нижне-1725
Черноисточинский 1728
Висимо-Уткинские
1741
Висимо-Шайтанский
1790

Утёмский 1726
Сылвинский

Староуткинский
1729,1742

Атигский 1789
Бисерский 1742
Серги 1743
Ниже,1742и верх,1728
Бугалышский

Уткинский 1729

Пышминский 1763
Верхн.1726

Верх-Исетский
1726

Березовский 1757
Сысертские Ниж.и Сред.1732, Верх.1849

Ревдинский 1723

YEKATERINBURG
Ниж.1802 и верх,1726 исетские

Полевской 1722

Северский 1735

Каменский (Островская) 1700

Долматов

Шадринск

Шемахинский

Нязепетровский 1747

Верх. Уфалейский
Нижне-Уфалейский 1753
Каслинский 1746
Ниж.Кыштымский 1757
1755 Верх.Кыштымский

Кусинский
1789
Златоуст
Златоустовский 1752
Ниж.Златоустовский 1753

Челябинск

Бирск

Миньярский 1784
Верх.Симский
1756  Ниж.Симский

Илекский   Минский
1756
Уст-Катавский
Усть-Катавский1776
Сатиинский
Юрюзанский 1758

Миасский1776

Благовещенский
Лемезинский
Катав-Ивановский 1755

Уфа

Варзино-Алексеевский
1760

Архангельский
1753

Тирлянский

Инзерский

Верхнеуральск

Троицк

Верхоторские
Воскресенский   1735
1735

Кано-Никольский 1751

Богоявленский
1751
Велоорский 1762
Зигазинский   Узянский 1777

Лапышинский
Спасский 1761

Авзяно-Петровские
Верх. 1753
Ниж.1756   Кагинский 1769

Ural
mountains

Kazachstan border

## LOCATING YEKATERINBURG:

## TERRITORIES

This map shows the location of Yekaterinburg on a bigger scale to show its position to the Ural mountains. Yekaterinburg is one of the many cities that finds its origin in mining. The map shows the many industries around the Ural mountains that over time all claimed their territories to secure their mines to maintain their economy. Yekaterinburg eventually became the economic powerhouse of the complete Ural region and keeps this status until now.

Ural
mountains

YEKATERINBURG

Kazachstan border

Ural
mountains

**EURASIAN BORDERS**
.......... Modern general border
—·—·— Strahlenberg border
——— Physical represented border

0
150
50
300
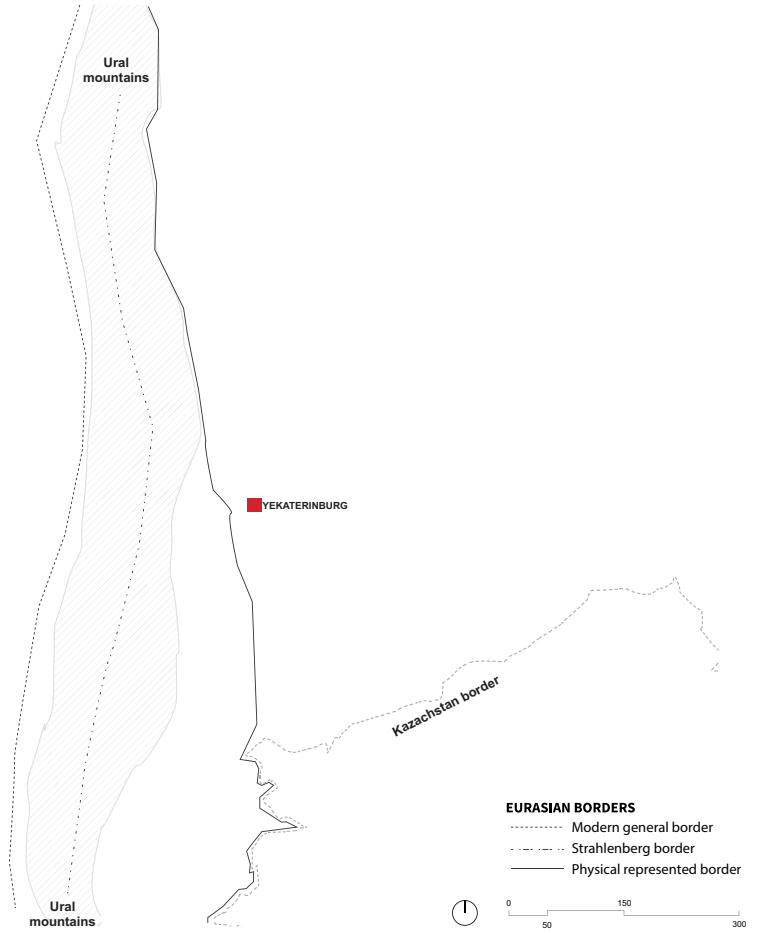
## LOCATING YEKATERINBURG:

## BORDERS

This map shows the location of Yekaterinburg on a bigger scale to show its position to the Ural mountains. What is worth mentioning is the three different fomalized Eurasian borders that are present today. One being the modern general border following the Ural river, the second being the Strahlenberg border following the tips of the Ural mountains and the third one being physically present by monuments that point out the border between Europe and Asia.
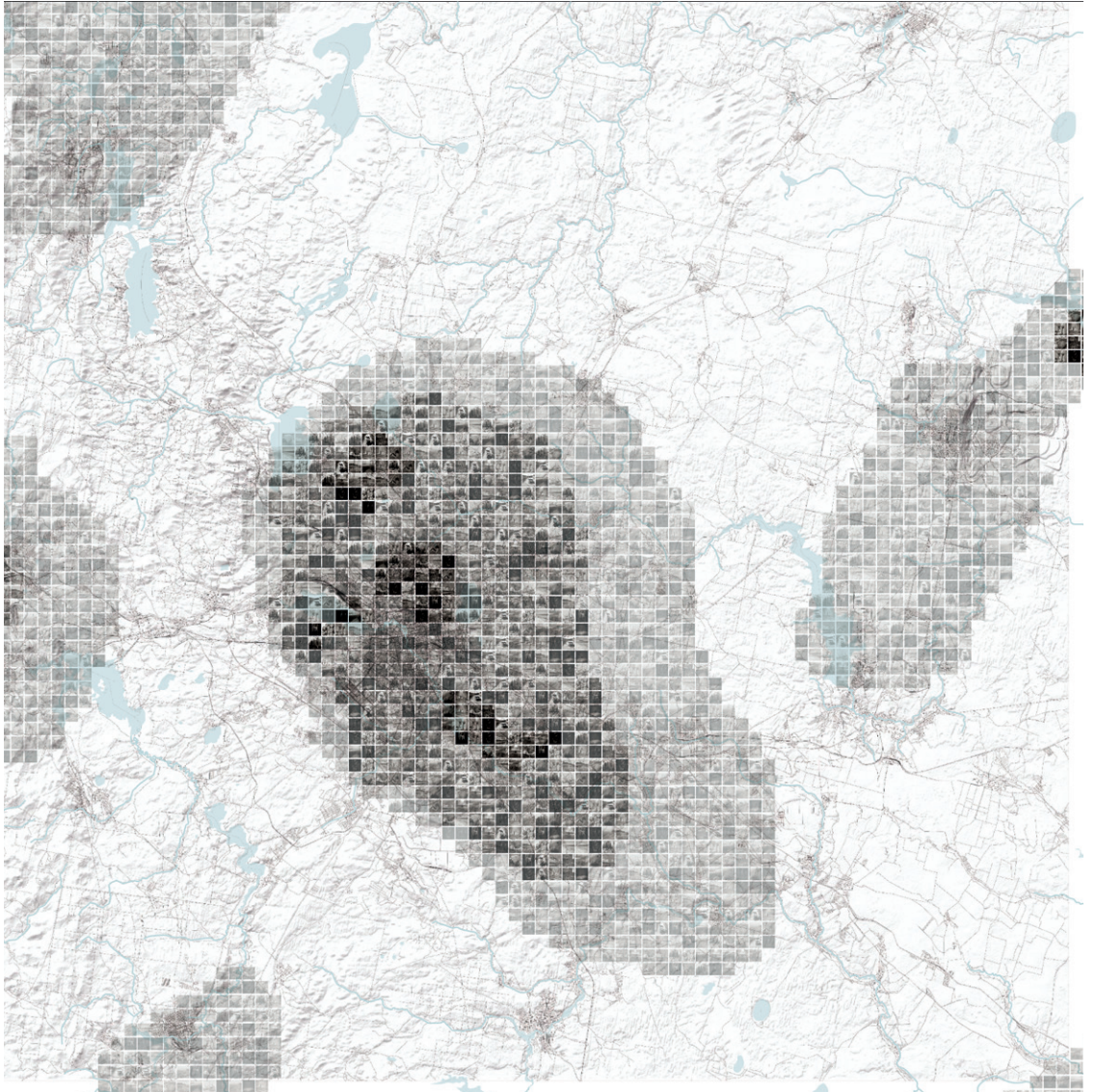
## MAP OF THE OLIGOPTICON

This map portrays territories of industrial pollution in Yekaterinburg, with an experimental method of collages of photos of local industrial entropic landscapes, mixed with frames from Andrei Tarkovsky's movie Stalker (more on this in the next sub-chapter). This way of representation is a reflection of Bruno Latour's theory of the oligopticon, where the overall system can be observed from its fragments, as long as some certain connections between things exist. On the basis of this, different transparency of the photos represents different level of pollution, while looking from afar the different photos should be a whole gradient greyscale cloud.

POLLUTED LAKES:

ORDERED BY COLOR

This graph shows the polluted and discolored lakes found in and around Yekaterinburg. These lakes vary in color due to the materials mined around these lakes. The red lakes for example are this color because of the copper mines. By ordering the lakes by color you create a color pallette that contributed to the graphical representation of the uncanny.
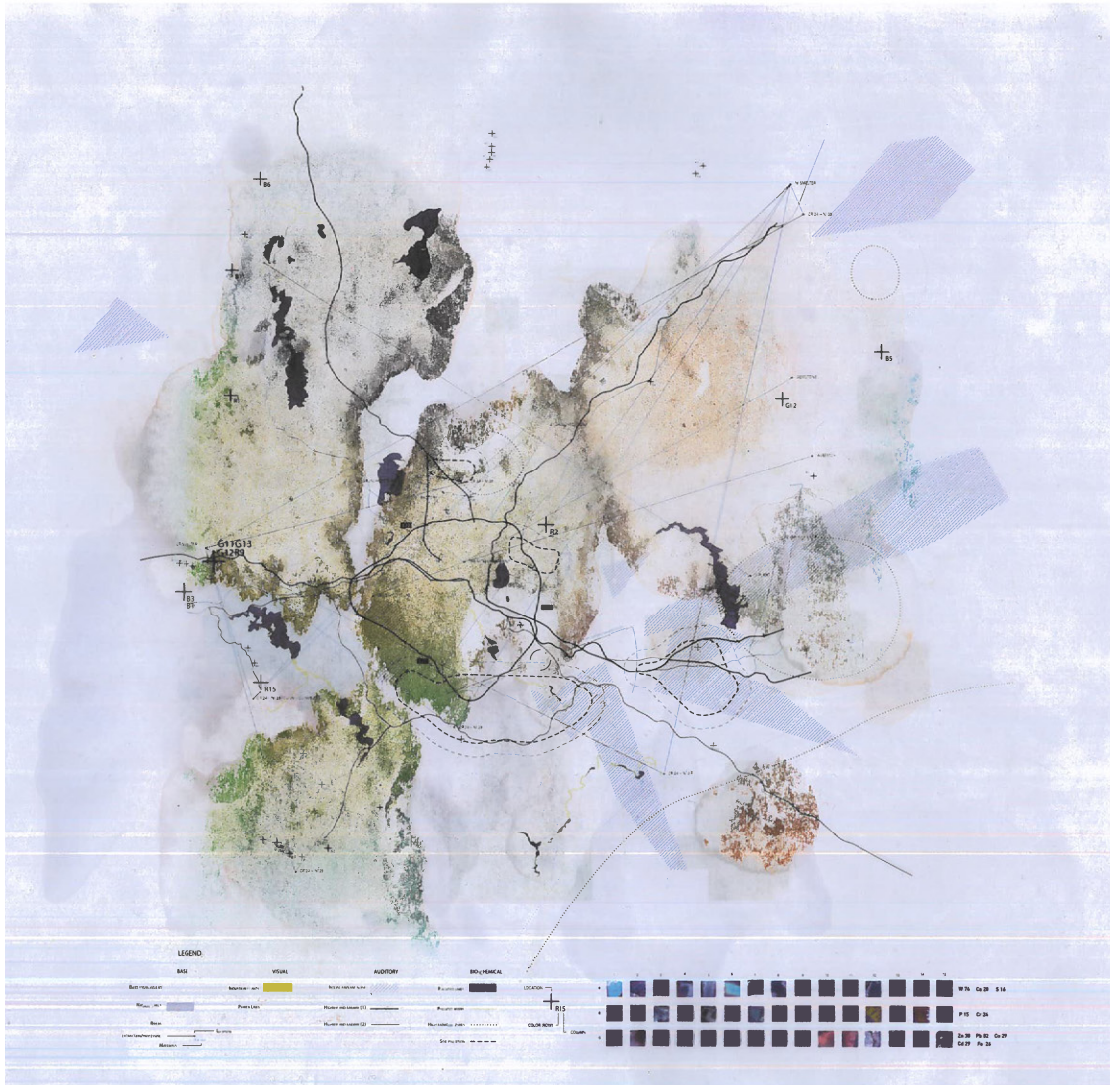
## POLLUTION AS GRAPHIC NATTRATIVE:

## ACETON COLOR TESTINGS

We tested the use of aceton to 'burn' the paper in a way the pollution 'burns' the geography surrounding it. We produced this starting by mapping the position of the single plants over the territory. Once the location was mapped, color distribution was added to it in the form of a gradient map. A field of color in which the distribution of the materials and minerals extracted determines the type and location of the colours.
Afterwards, the individual locations of the industrial plants were used as a geographical reference for the 'burning' of the colours with acetone.

**STALKER**

COVER OF THE STALKER MOVIE, 1979

ANDREI
TARKOVSKY'S:

STALKER (1979)

Stalker is a Science fiction art movie directed by Andrei Tarkovsky, loosely based on the novel from 1979, Roadside Picnic. The film combines elements of science fiction with dramatic philosophical and psychological themes. Our main theme is 'The uncanny', explained by Freud as the psychological experience of something as strangely familiar, rather than simply mysterious. The film tells the story of a journey of two people going into a mysterious place led by the so-called stalker. Together they travel through the mysterious zone where a room exists which grants a person's innermost desire. The Zone is, then, itself a reminder to which people cannot find a purpose. Fascinated by its supernatural properties, they believe it is the sign of the future, but, in reality, the entire area is no more than an alien leftover, the cosmic past mistakenly perceived as a terrestrial future.

Michelangelo Antonioni's
# RED DESERT

COVER OF THE RED DESERT MOVIE, 1964

MICHELANGELO
ANTONIONI'S:

IL DESERTO ROSSO
(1964)

The Red Desert is an italian film directed by Michelangelo Antonini, with a main role for Monica Vitti. who is followed living in an industrial region in northern italy. The Woman (Vitta) tries to live a normal life with her son, but Antonini made the film in such a way that within every scene there is the constant background of industrial pollution. This notion of a normal day life within the sounds is very present within Yekaterinburg. Antonni tries to see the beauty within the industry, instead of focusing on the negative. A quote by Antoni about his choice of using industrialism whitin the movie is:

"It's too simplistic to say—as many people have done—that I am condemning the inhuman industrial world which oppresses the individuals and leads them to neurosis. My intention ... was to translate the poetry of the world, in which even factories can be beautiful. The line and curves of factories and their chimneys can be more beautiful than the outline of trees, which we are already too accustomed to seeing. It is a rich world, alive and serviceable ... The neurosis I sought to describe in Red Desert is above all a matter of adjusting. There are people who do adapt, and others who can't manage, perhaps because they are too tied to ways of life that are by now out-of-date"
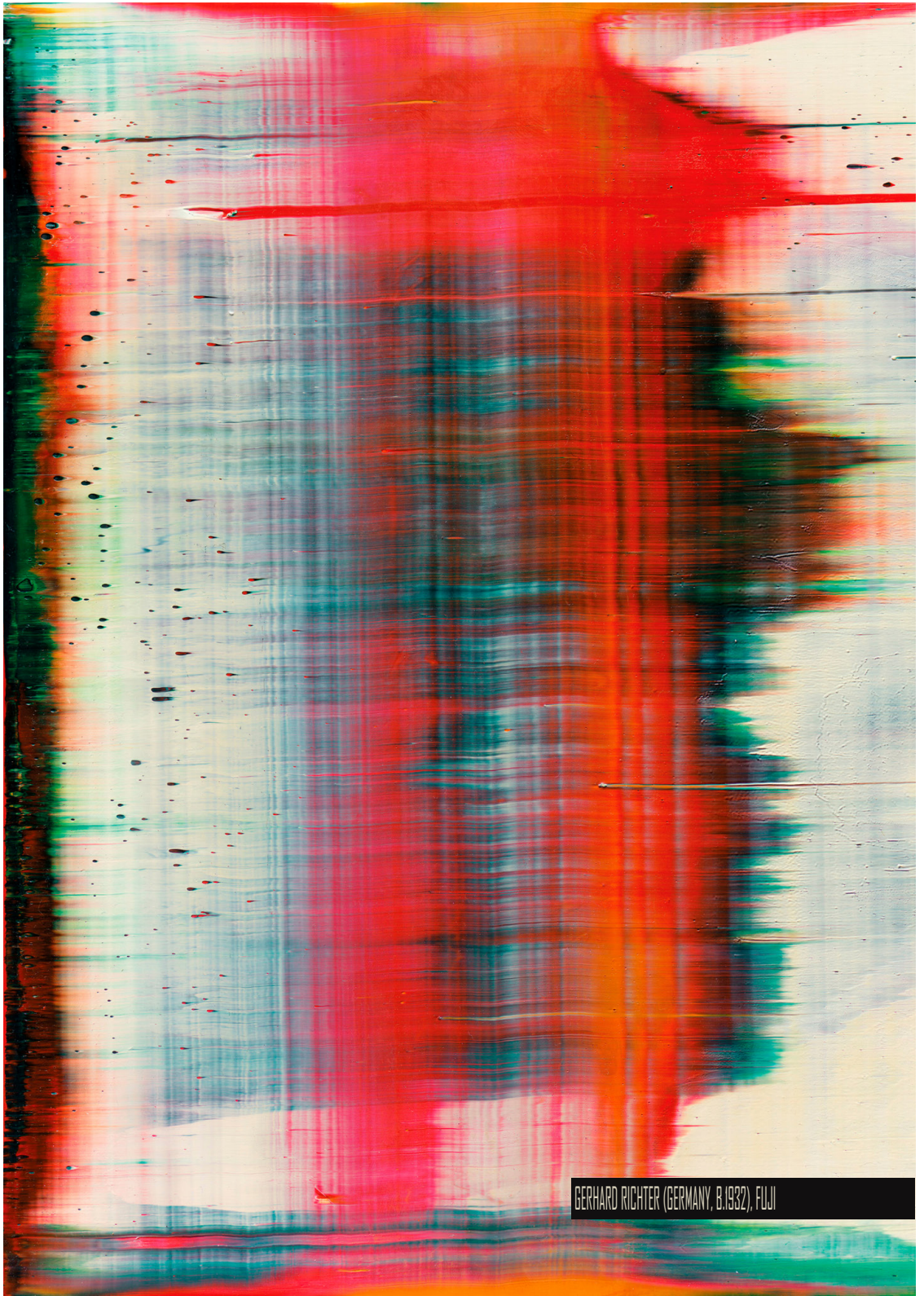
GERHARD RICHTER (GERMANY, B.1932), FUJI

## GERHARD RICHTER:

## FIGURATIVE ART

Richter tries to combine the figurative art with the abstract. In his early works he distorts pictures or objects into abstract colours. For us this was highly interesting in finding a way to make an abstract representation of the polluted lakes, which are in the same way as Richter's work highly graphic. The lakes still had the negative notation of being a polluted lake and not pure beauty in colour. Therefore we search for ways in representing their beauty. The work of Richter was helpful for this research.
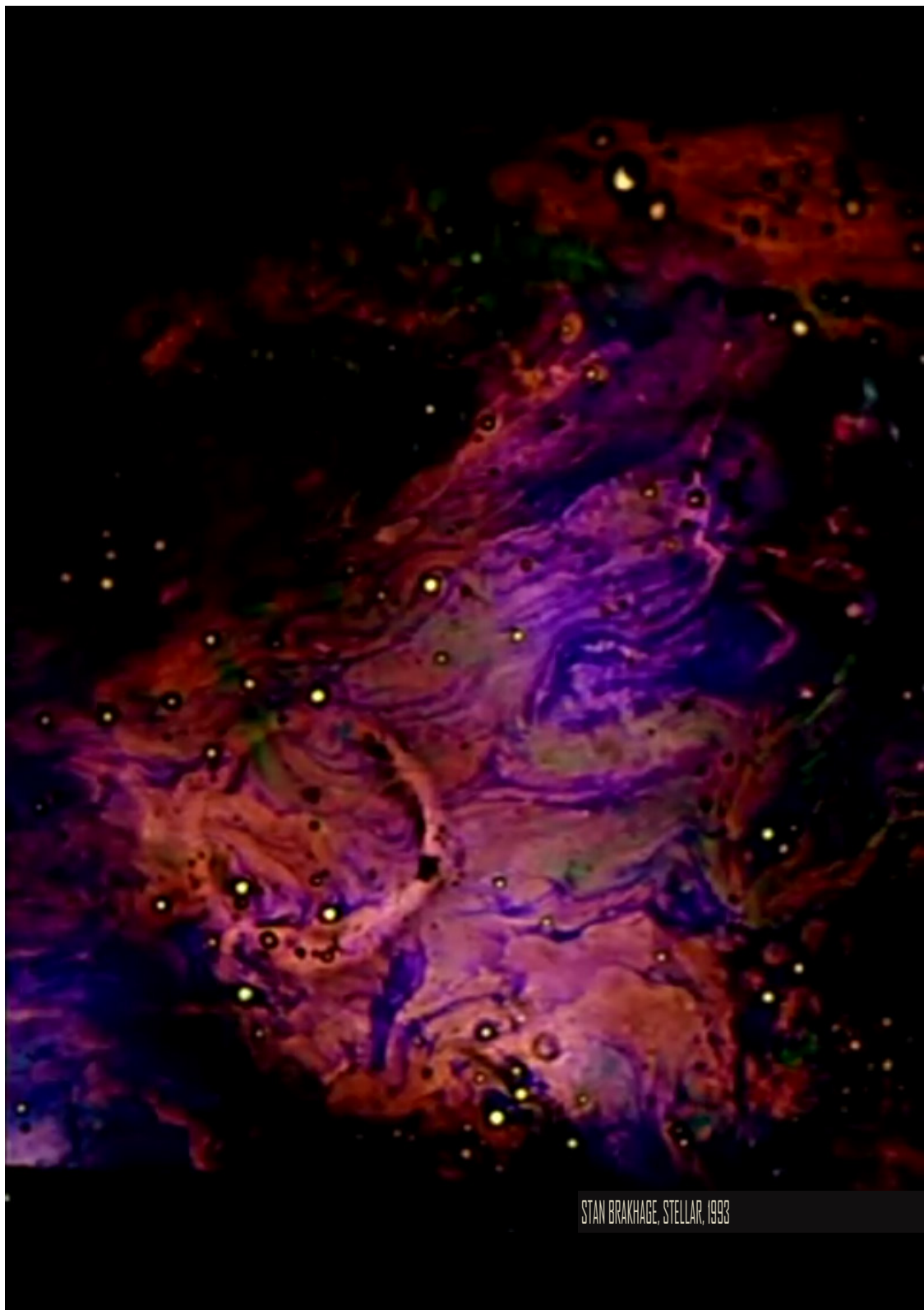
STAN BRAKHAGE, STELLAR, 1993

STAN BRAKHAGE:

THE VISUAL
PERCEPTION

Stan Brakhage was an experimental filmmaker who explored a series of visual perception without using a camera. In his silent films, the techniques such as rapid images, multiple exposures, inconsistent rhythm convey a sort of restless feeling. The production process of the disorder sequence involves hand-painted film frames and virtual editing. We are inspired by the phenomena of uncanny, the dynamic and stimulating visual images. Also, to challenge the relationship between visual reality and cinematic reality.

JACKSON POLLOCK, FREE FORM, MoMA, 1946

## JACKSON POLLOCK:

## DRIP-PAINTINGS

Jackson Pollock is known for the Abstract Expressionism, an art movement that can be charaterized by the free-associative gestures in paint known as 'action painting'. For our experiments in portraying the pollution in a disordered way but still slightly controlled, Pollock came as a good example on how to convey an expression by drip-painting.



EVERETT COLLECTION/REX

IVAN SEAL: EVERYWHERE AT THE END OF TIME STAGE 5 COVER, 2018

## THE CARETAKER:

## DEMENTIA BY SOUND

Leyland James Kirby has produced an album containing six stages under the name 'The Caretaker'. He is dedicated to exploring how music and memory relate (and deteriorate). Fist inspired by the slow ballroom music in 'The Shining' by Stanley Kubrick, Kirby made a distorted and slower version of ballroom music. Each stage of the album notes a new stage in dementia and the music changes with it to a point it becomes just noise with sometimes some familiar tones but always in a far distance. The loosing of what is familiar and what not portrays the same as the uncanny described by Freud. The album covers by

Kirby's life time friend Ivan Seal give a perfect representation of the music of the album 'An Empty Bliss Beyond This World' and 'Everywhere at the End of Time'.

INDIVIDUAL WORKS
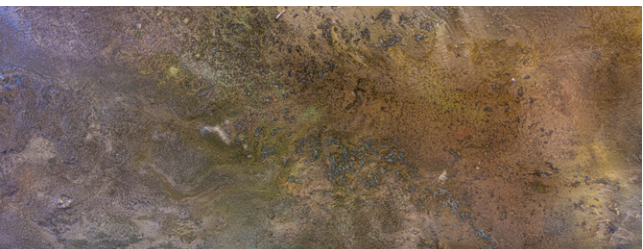
# THE CONTINUOUSLY WEATHERED BUILDING AND SPACE

## INTERVENTIONS AT BEREZOVSKY TAILINGS DEPOSIT, YEKATERINBURG

Han, Gongbu
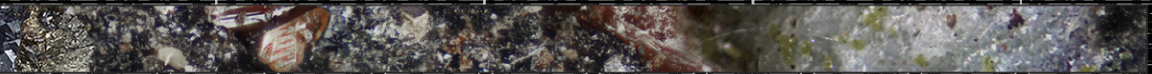
## TRANSCORPOREAL WEATHERING THEORY

Weathering, if we take it literally, means the corrosion of materials. But two feminist scholars Astrida Neimanis and Rachel Loewen Walker put forward a term 'transcorporeal weathering'.

"Despite being surrounded by warnings of resource depletion, predictions of changing weather patterns, and a growing cinematic imaginary of the world's end, there is neither panic nor any apparent affective comportment that would indicate that anyone really feels or fears this threat ...... without any mobilization of responsivity or sense that our bodies and our time are mutually implicated in environmental changes." [1]

"We can grasp the transcorporeality of weathering as a spatial overlap of human bodies and weathery nature. Rain might extend into our arthritic joints, sun might literally color our skin, and the chill of the wind might echo through the hidden hallways of our eardrums." [2]

Transcorporeal logic shifts away from 'the idea that climate change can be stopped or solved according to predetermined actions' asking "what should we do to stop climate change?", and instead asks "how is climate change changing me?" [3]

An attempt is made in this project to adapt the theory of transcorporeality to the realm of industrial impacts, because climate change and industrial impacts are similar to each other, in the sense that they can both be seen as the disturbance or damage to the natural environment, where human activity has played the main role combined with the feedbacks from the ecosystem, and in return has influenced the living conditions of people.

1        Neimanis, Astrida, and Rachel Loewen Walker. 2014. "Weathering : Climate Change and the "Thick Time" of Transcorporeality". Hypatia. 29 (3): 558-575.
2        Ibid.

3        Ibid.

Transcorporeal Weathering


Physical Weathering

## DEREK JARMAN'S GARDEN IN DUNGENESS

British artist Derek Jarman built a delicate garden in Dungeness, a headland by the sea in England, under the shadow of a nuclear plant. He moved to Dungeness after being diagnosed with AIDS in December 1986. His garden is a manifesto against the nationalist monumentality in Thatcherism, which was the dominant political ideology in the UK at that time. Thatcherism was hostile against social minority groups, including Jarman himself because he was homosexual. He built his garden from scrap metals and drift woods he collected from the beach. During this process, Jarman was being weathered from outside by the storm from the ocean, and at the same time inside by HIV. It was from this weathering that Jarman countered the linear spatialization of time and human progression in Thatcherism. In Jarman's garden there is a suspended temporality, instead of the serial temporality in Thatcherism. And in the transcorporeal weathering theory, very similar ideas could be found because the theory is also based on a non-linear time logic.

Jarman's garden has no boundary, or simply the horizon is his boundary, so it is impossible to tell where the garden starts and ends. At the front door of the garden, Jarman arranged some more rational, geometric shapes. As one moves to the west side, the geometric forms slowly disappear, and are replaced by the carefully arranged 'wilderness garden and sculptures', followed by the real wilder nature, with the nuclear plant in the distance. Through this transition, no clear differentiation can be sensed - only temporality remains.

The process of Derek Jarman crafting his garden stone by stone could be regarded as a perfect example of what a critical transcorporeal weathering process should be like.

Mapping of Derek Jarman's Garden



| | |
|---|---|
| ✏ | Vertical Elements |
| | The rational civilization world The colour of the ocean |
| | The colour of wilderness |
| | Plants in Jarman's garden |
| | The existence of nuclear plant |

View of Derek Jarman's
Garden



Jarman's plan of plants
arrangement
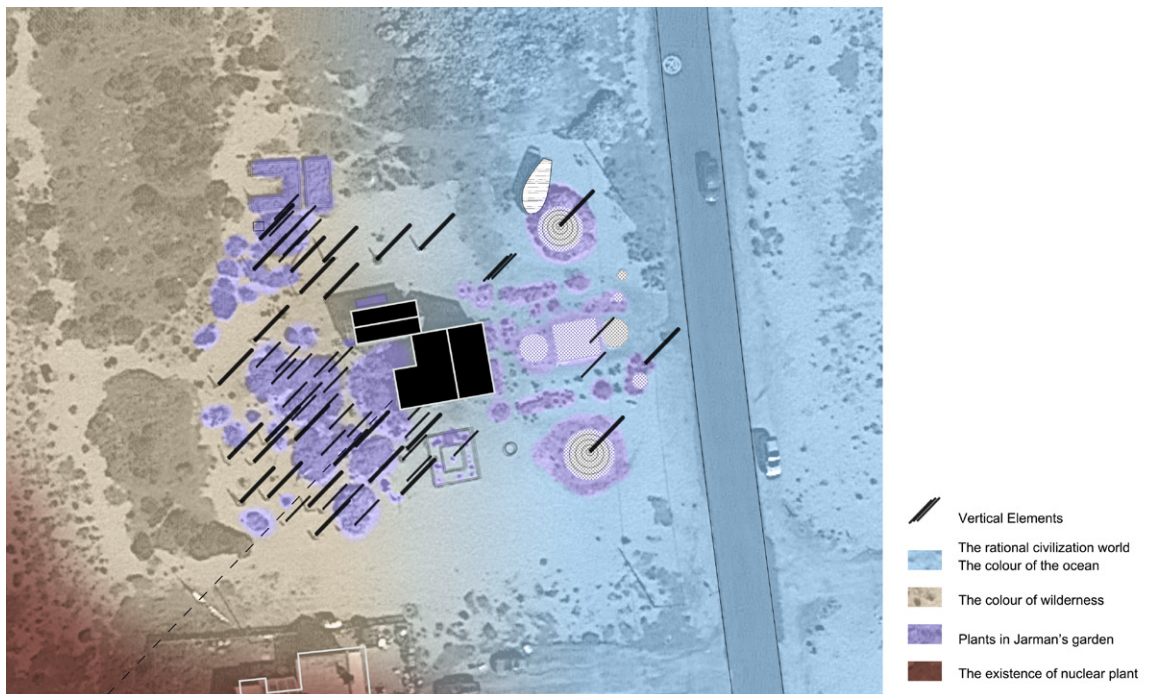
## CASE STUDY SITE LOCATION

Berezovsky deposit is located in a satellite city only 15 kilometers away from Yekaterinburg, named Berezovsky. It is a city with rich gold mines underground, and consequently severely influenced by mining activity.

Russian Gold was first discovered in Berezovsky in 1745, and since then it became the capital of Russian gold production. The site chosen is to the northeast of the city, and it is actually a deposit where the mine workers put the tailings from the mine, including sand and polluted ground water. As is shown here, the ores discovered here include a lot more than only gold ore, which brings different colors to the water rendered by different metal particles contained itself.

All of these different factors shaped the land-scape of this site, featuring horizontality and very rich textures as a result of weathering. What you can see here is actually the dyke built by the works for them to move between different dumps freely.

Yekaterinburg City      Berezovsky      Berezovsky Deposit (site)

Polluted ground water directly let to the deposit

Some ores first discovered in Berezovsky



Pyrite



Galena



Crocoite



Gold



Phoenicochroite

85

## SITE PLAN

The deposit is surrounded by factories, forests, rivers and residential areas consisting of dachas (the name of a traditional Russian country house). The area of the polluted water varies hugely at different historical times, and from the drawing it is clear that some areas are more likely to be submerged in water than others. Also in Berezovsky city there is a railway system to transport mineral to other places for further process.



| | Wood | | Ephemeral Ponds | | Industrial Infrastructures | | Natural Waterbody | — — — | Railway | – – – – – | Ephemeral Trails |
| | Trails in the wood | | Edges of flooded area | | Dachas | | Roads | | Pipeline | | |
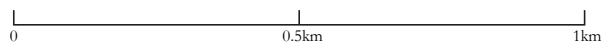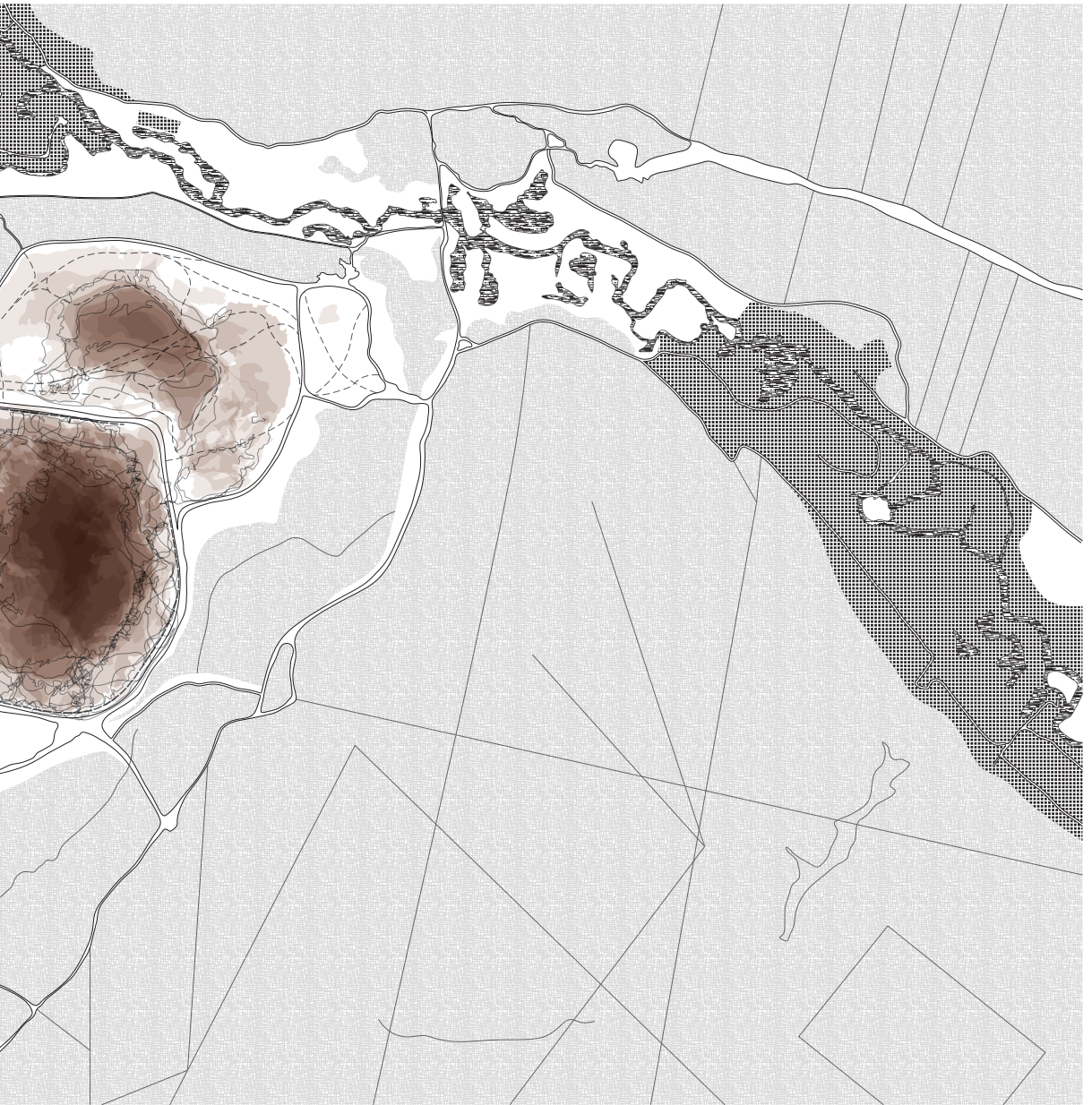
# COMPLEX SITE DRAWING I
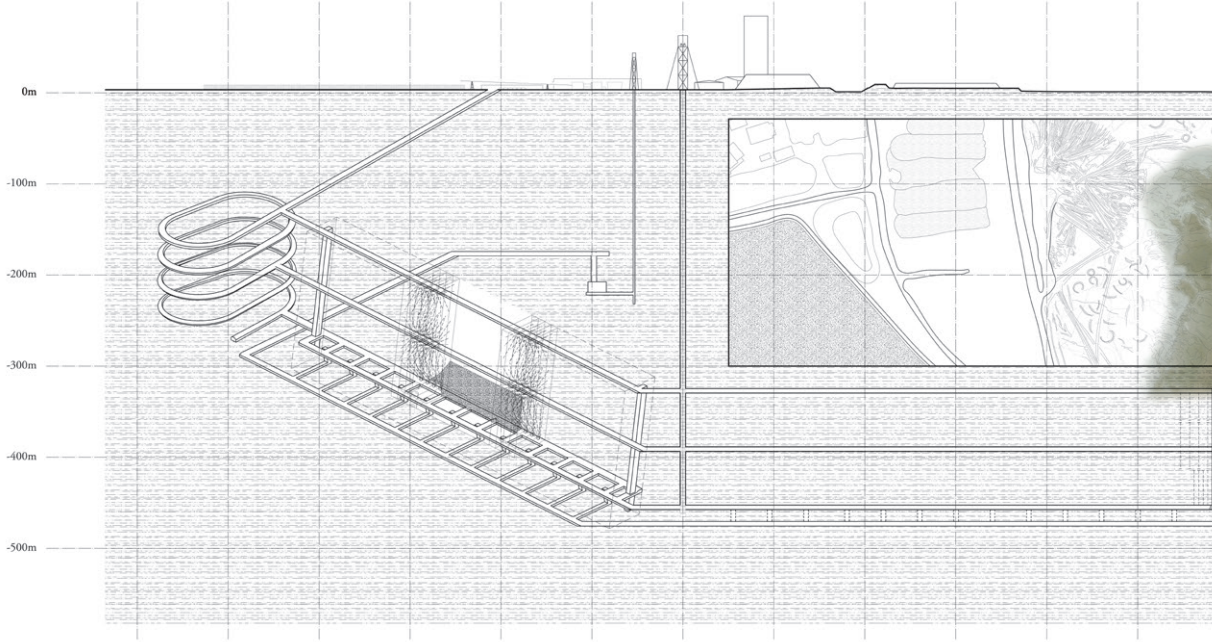


# COMPLEX SITE DRAWING II
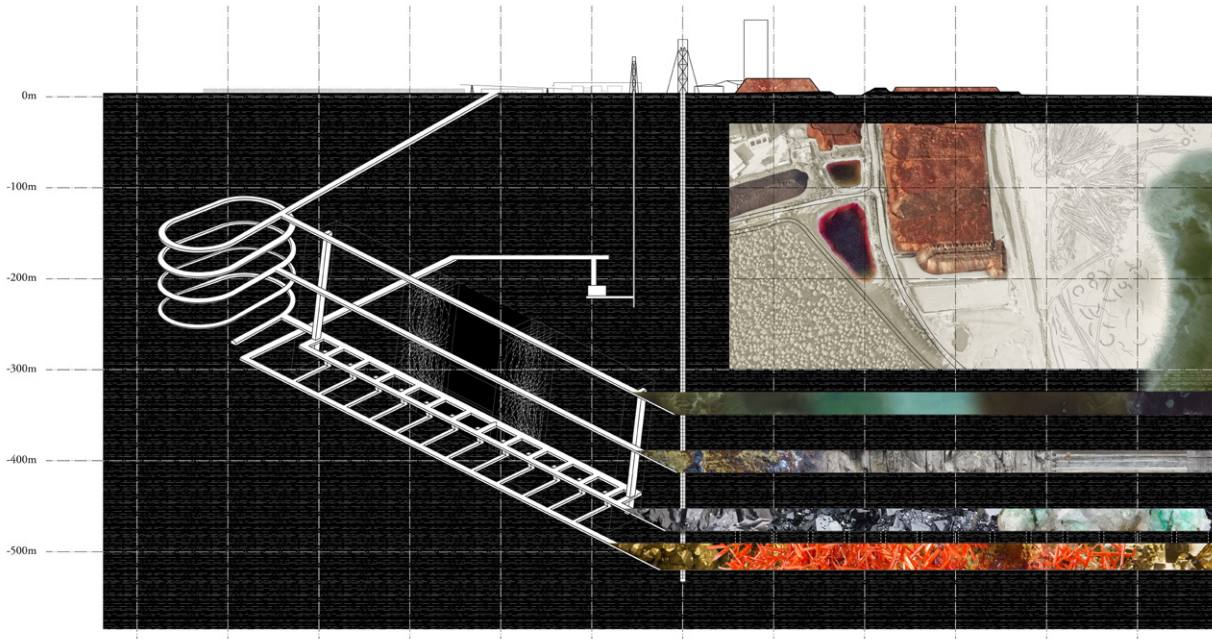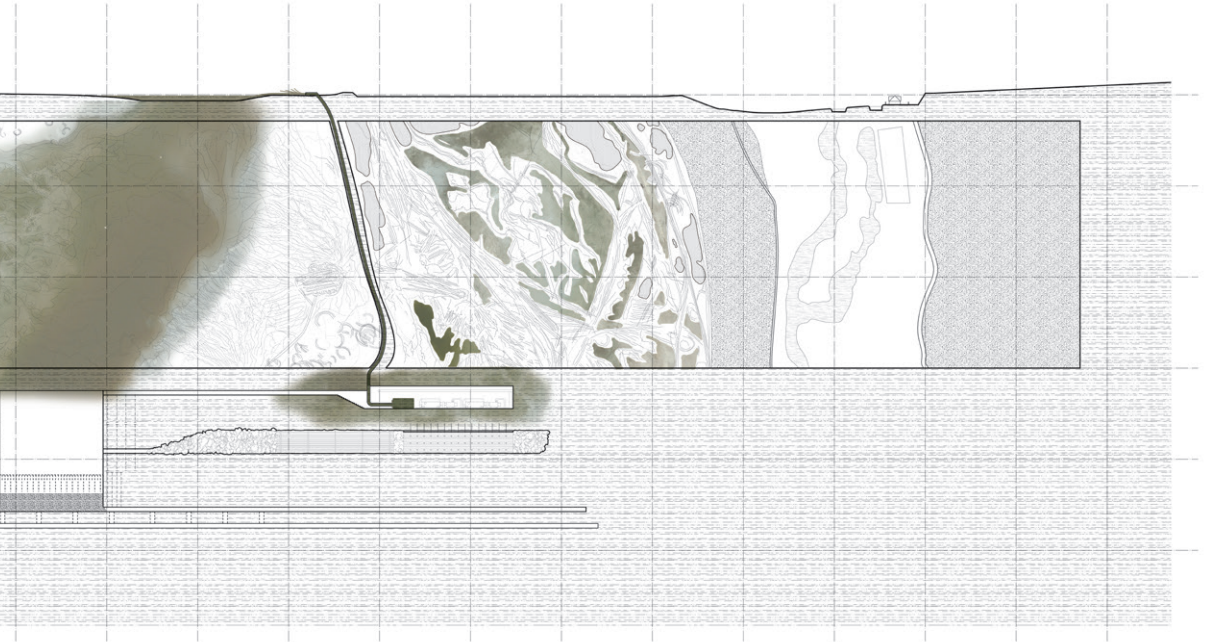
from nearby dachas.

**Phase 2**
Other shurbs appear and compete with sea buckthorn.

Sea buckthorn remains dominance over other plants for 10-15 years.

**Phase 4**
After 20 years, sea buckthorns begin to die. Those in the middle of the clump die first for lack of sunlight. The soil fertilised by dead sea buckthorn makes it possible for other shrubs and trees to grow. Finally other plants will replace the majority of sea buckthorns.
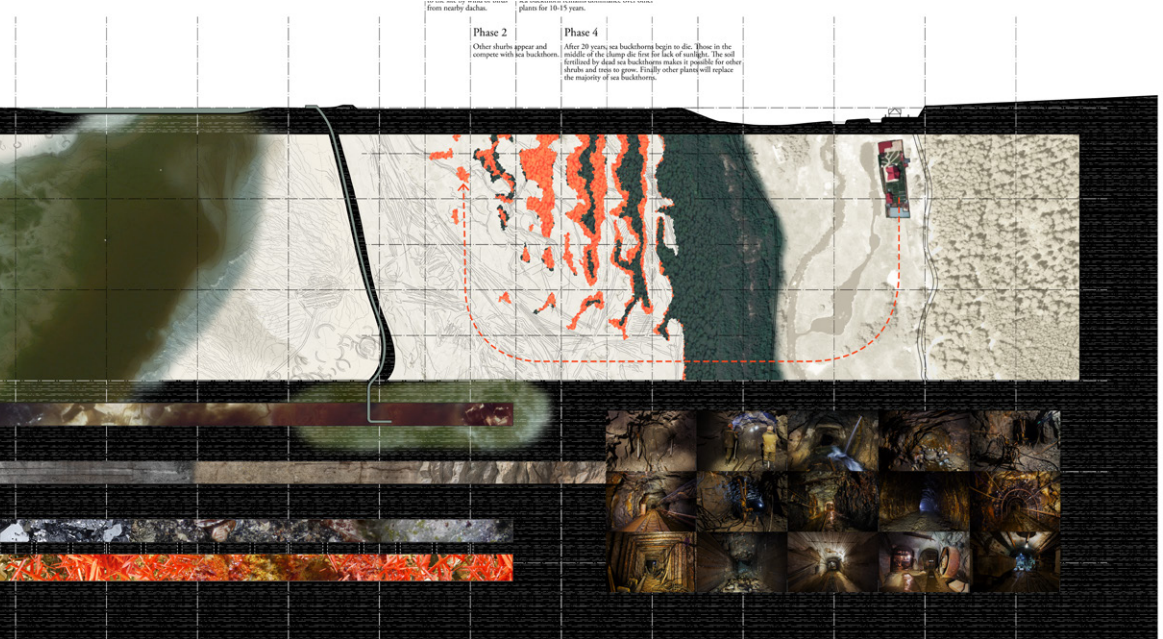
# CIRCULATION OF ORE

A special mining technique is used here, where they first divide the ore-bearing-rocks into these rectangular pieces, and then explode them one by one to let the ores fall into the lower tunnels, and then transport the ores from dedicated drift and shaft to the ground. Then the ores are roughly processed to be transported to other factories.
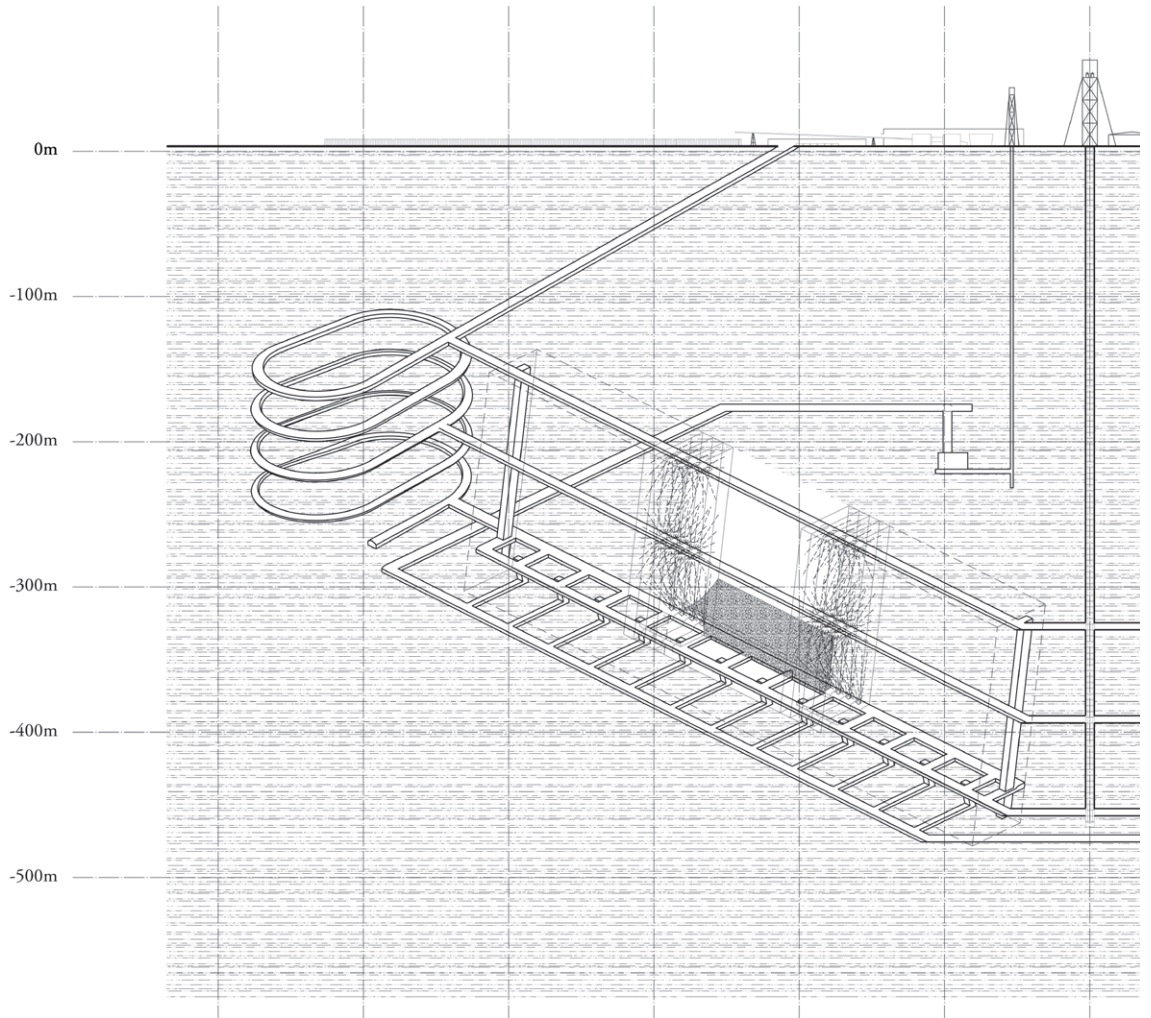
# CIRCULATION OF WATER AND CIRCULATION OF PEOPLE

The polluted water in the deposit is actually the ground water which needs to be drained for a good working environment. The ground water is pumped to the ground surface, and directly into the deposit. The water will remain there as a colored pond for some time, and finally sink into the earth again. Some of the water polluted by heavy metals get into the local water body and finally contaminate drinking water.

In the drawing there are three layers of texture from trails: first, the historical edges of the polluted water pond, which was already shown in the site plan; second, the trails of polluted water flowing, and finally the trails of people and vehicles moving. This layer is the most interesting one because it speaks about how visitors behave. What is already clear here is that the trails appear very close to each other, in this form of bunches, meaning that people turn to follow the previous trails when they are moving.
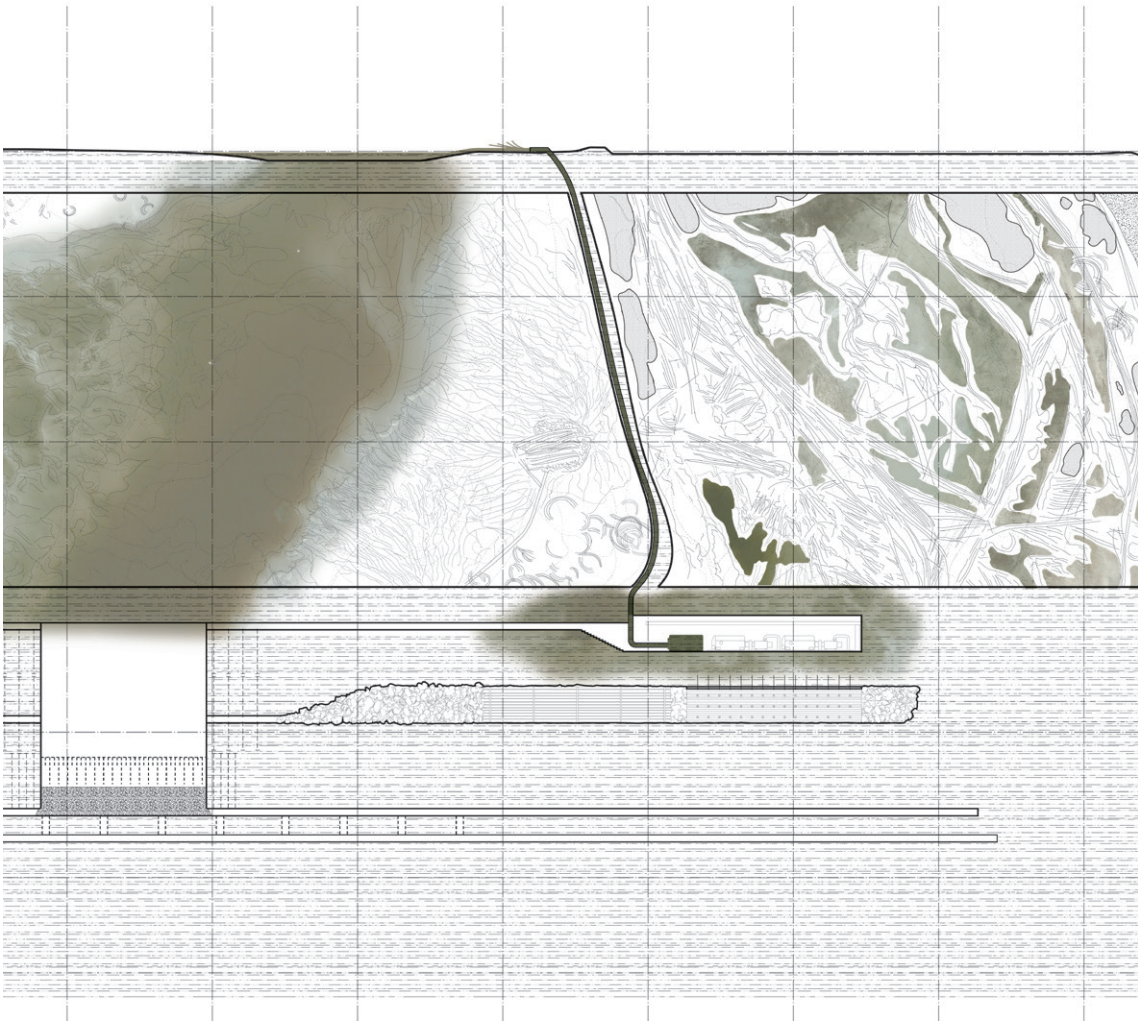
## ATMOSPHERE OF INDUSTRIAL LANDSCAPE

In this drawing depicting the atmosphere of the site, techniques James Corner used in his mappings to combine multiple layers of information in one drawing, is studied and adapted here.

The stripes here show different elements that give the place its color and atmosphere. The top one shows different colour of the polluted water, the second one shows different surfaces the mine workers are working with. And the bottom two stripes are the different kinds of ores first discovered in Berezovsky. They appear in these very rich colors, and this orange color appears many times on the site. It is the color of this beautiful mineral named crocoite, also the color of the sand deposits, and also the color of a kind of plant that is thriving on the site, which is called sea buckthorn.
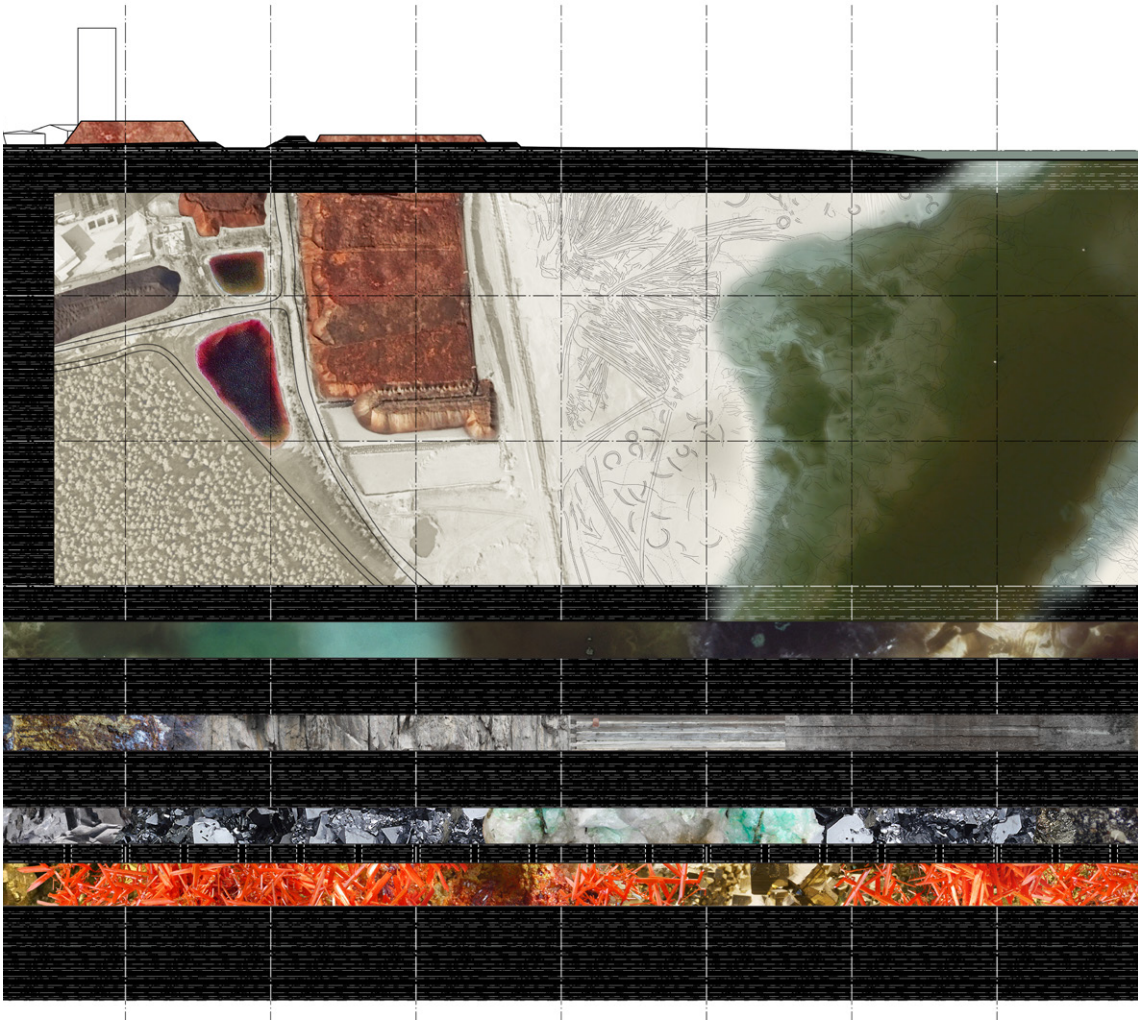
# ECOLOGICAL SUCCESSION

This part of the drawing shows the ecological succession which is happening in Berezovsky deposit. First, sea buckthorn is brought to the dunes of the site from some nearby dachas by wind or birds. Sea buckthorns have very high tolerance of drought so they began to thrive and killing other competing plants for a pretty long period. After 20 years, those sea buckthorns in the center of the thicket begin to die for short of sunlight. The soil is fertilized by those dead sea buckthorns and is ready for other taller trees to grow on it. And finally, the very majority of the sea buckthorns will be replaced by other plants, and it is only a matter of time before the place becomes a forest if no human mediation is given to the succession process. The ecological succession of plants can be seen as another form of weathering, because the soil condition is changed, the kinds of plants are also changed in turn.



Phase 1
Sea buckthorn was brought to the site by wind or birds from nearby dachas.

Phase 2
Other shurbs appear and compete with sea buckthorn.

Phase 3
Due to its fast growth and drought tolerance, sea buckthorn remains dominance over other plants for 10-15 years.

Phase 4
After 20 years, sea buckthorns begin to die. Those in the middle of the clump die first for lack of sunlight. The soil fertilized by dead sea buckthorns makes it possible for other shrubs and trees to grow. Finally other plants will replace the majority of sea buckthorns.

# MODUS OPERANDI MODEL: ATMOSPHERE

The model started from a topographical study of the site. A technique to provoke the process of weathering of metal sheets is applied to the model for a faster weathering. The colour of rust and patina are in the color similar to the polluted water in Berezovsky deposit, because the contain the same metal particles. The layered nature of the model is a reflection of the multiple driving forces that made this site what it is today.
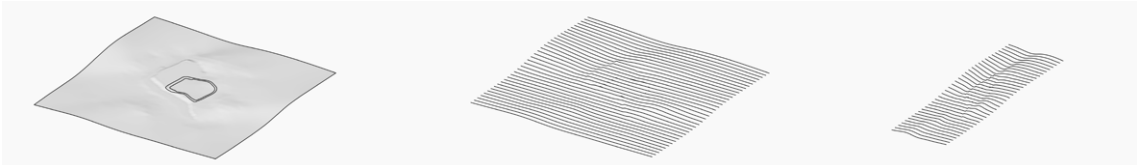


I. Site                    II. Contours              III. Manipulated Contours

## PROGRAM DEFINITION

Design a building in Berezovsky Sands that reflects the duality of weathering. Duality means:

1. The physical weathering, which could include the corrosion of materials and the degradation of the building as a whole. Therefore, materiality and the change of space over time must be paid special attention to in the design process. Different stages in the lifecycle should be addressed.

2. The transcorporeal weathering, which is human activities taking part in the physical weathering, and in turn people are weathered by the building (sunlight, humidity, temperature, certain feelings of being in the space, etcetera.), and the users might subsequently have deeper understandings of the industrial landscape, as a result of critical transcorporeal weathering.

1. Experiment with different types of materials.

2. Specify different stages of the lifecycle, which could be associated with the succession of biome, the different levels of material corrosion and the change of space due to the structural failure as a result of weathering.

3. Actively integrate human activities, as transcorporeal weathering. Existing behavior patterns are taken into consideration to guide the design. The final goal is to materialize the process of physical weathering and help visitors to internalize the facts of pollution, by providing a critical form of transcorporeal weathering.

## SPECIFYING DIFFERENT STAGES OF THE LIFECYCLE

The changing of the space as the building slowly weathers and degrades in the time is another form of physical weathering. The basic idea is that the building's space will change from a phase in its lifecycle to another, and during each phase of the lifecycle there is also another circulation of smaller phases of changing space. After the building has lost its functionality, its materials will continue to be weathered even for a longer period. That's why I made this comparison between its lifecycle and the lifecycle of mining and nuclear waste.



Gold first discovered in Berezovsky

Chernobyl disaster broke out

We are here

Berezovsky gold deposit depleted

Mining of Berezovsky deposit

**This project**

Phase 1

Phase 2

Radiation from Chernobyl disaster

1745          1986  2021          2145
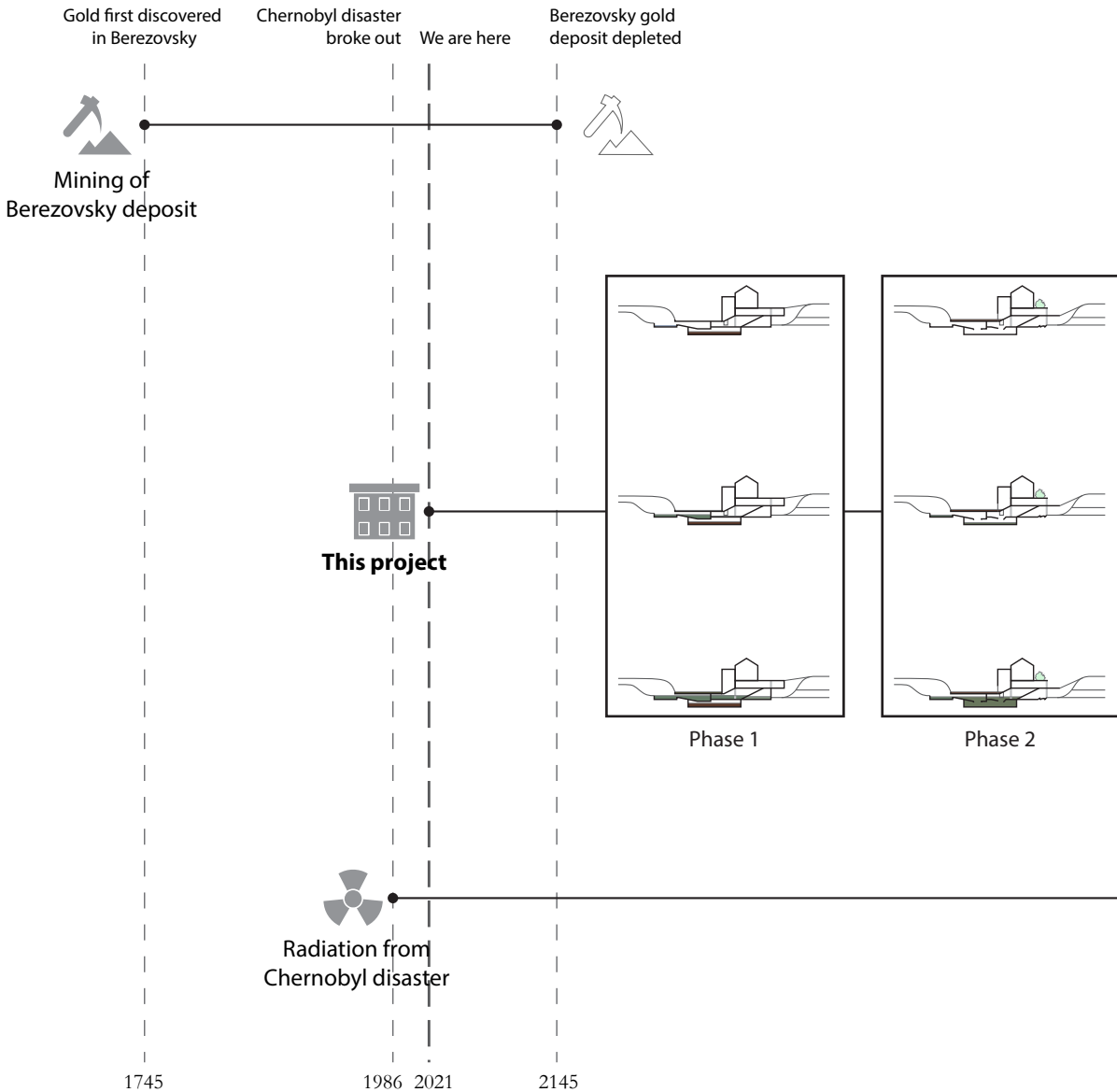
Phase X

Building functionality
dies away

The radiation completely
clears out
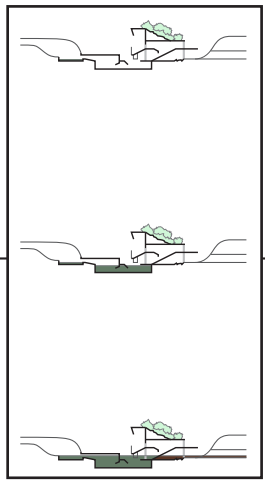
3021

21986

## MAKE A CRITICAL TRANSCORPOREAL WEATHERING POSSIBLE

The polluted water from the mines would be stored in some pools of the building. The different water with different colors and subsequently different chemicals from different time would first be stored separately, and later mixed together. In later phases some rooms would crack and

break down, so the water could submerge those spaces. During the whole lifecycle, the process of pollution and weathering is materialized here by the change of space, which would be very sensible to the visitors of the building. Except from the change of the water level, the ecological succession can be another factor that changes the spatiality of the building.



Phase 1-A

Phase 1-B

Phase 1-C

Phase 1

Phase 2-A

Phase 2-B

Phase 2-C

Phase 2

Phase X-A

Phase X-B

......

Phase X-C

......
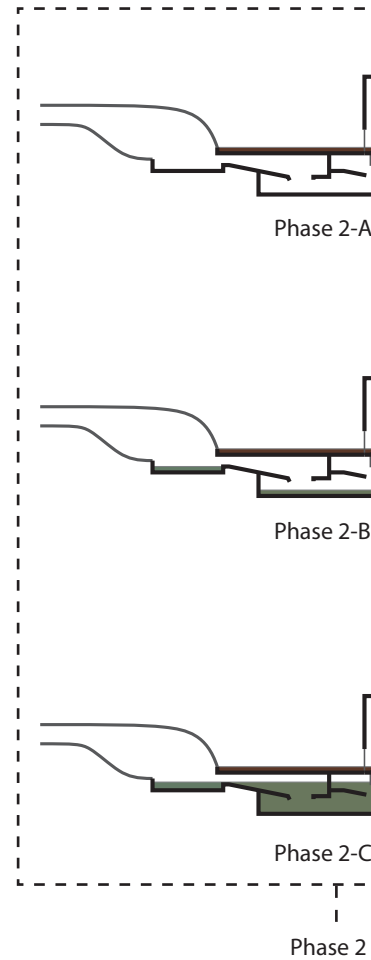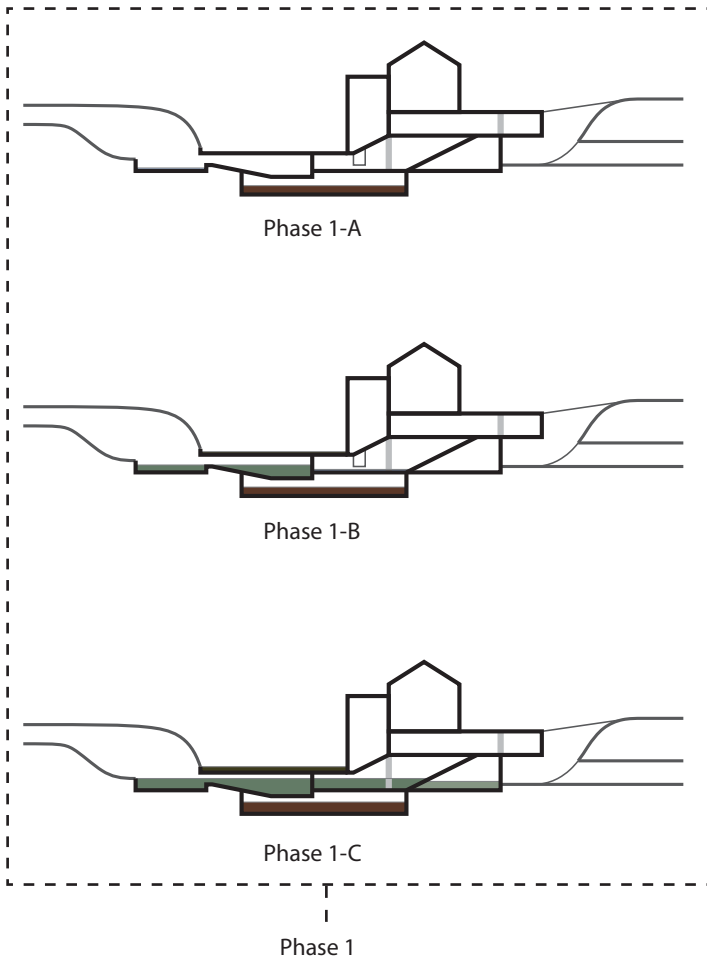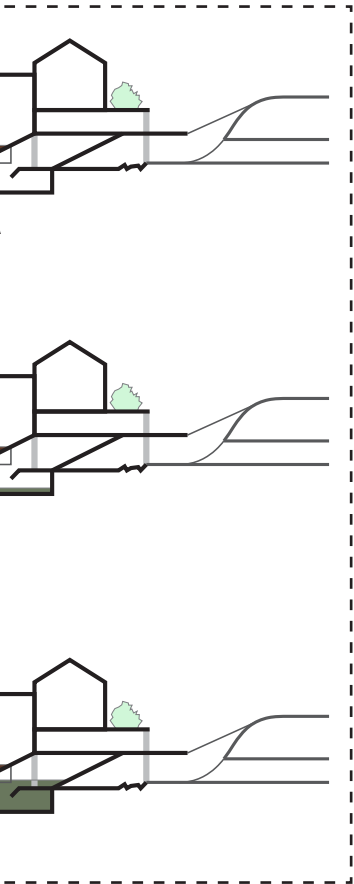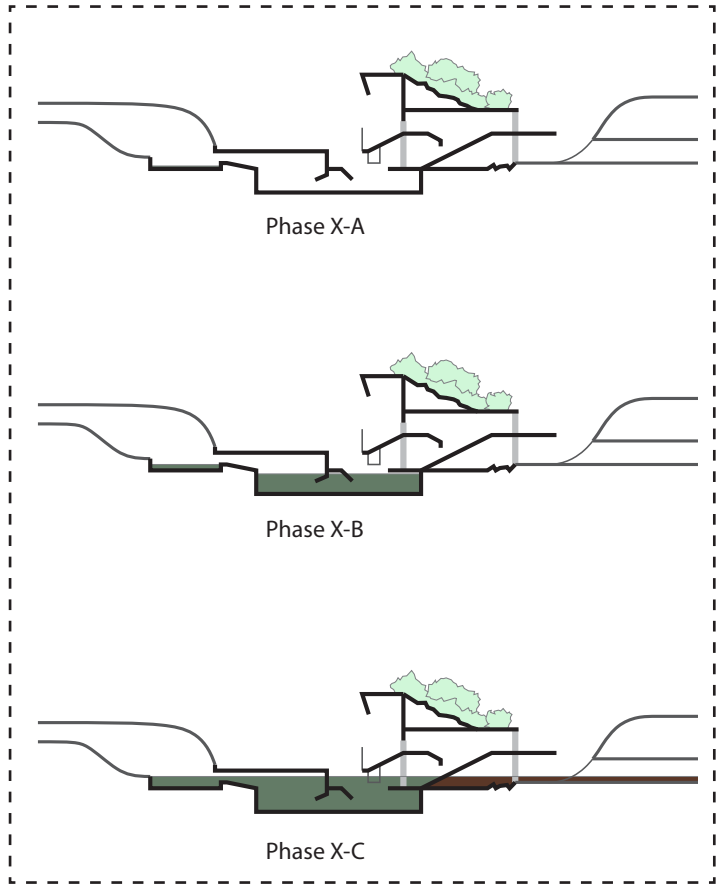
Phase X

# WEATHERING: AN ALTERNATIVE WAY OF UNDERSTANDING INDUSTRIAL IMPACT ON ENVIRONMENT AND HUMANS IN YEKATERINBURG

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## AN ALTERNATIVE UNDERSTANDING OF INDUSTRIAL LANDSCAPE IN YEKATERINBURG

The impact of industries on the environment always generates uncomfortable feelings, if one simply thinks of the scars on the ground such as pollution, pit lakes, man-made deserts, underground cavities as the result of mining (all referred to as 'industrial impact' or 'industrial landscape' in the following texts). However, certain aesthetics can be derived from such landscape. Blindingly beautiful images of the industrial landscape around Yekaterinburg, one of the most polluted Russian cities due to its heavy industries, are easily accessible on the internet: colourful polluted lakes with industrial plants standing in the background, or abandoned open pit mines appearing like mysterious ancient heritages. Such intriguing images can also be associated with a certain type of humid, entropic, post-apocalyptic aesthetics, similar to what made Andrei Tarkovsky's famous movie Stalker so fascinating.

This certain wasteland aesthetics are one kind of popular way to conceptualize the industrial impacts. Another way of understanding, which might be more influential than cultural aesthetics, is statistical data or mappings, based upon which people can easily build their impression of how severe a place is polluted, and certain policies in attempts to control or relive industrial impacts are made. For example, according to a 2003 research on caving craters and sinkholes as a result of underground mining in Berezovsky, a satellite city of Yekaterinburg, there is a total of about 600 thousand cubic meters of void holes underground,[1] exposing the residents to huge threat of sinking. By contrast, the funds from the Sverdlovsk region government are far from enough to erase such danger, regardless of the requirements from local Union of Gold Workers.[2]

However, neither abstract statistics nor image-based aesthetics can give us a real insight of what is actually happening around Yekaterinburg, what the causes are and how they have reshaped the local life. We need a 'transcorporeal' perspective - a term developed by Astrida Neimanis and Rachel Loewen Walker. Being transcorporeal, in her essay, means to go beyond the bifurcations of nature-culture or human-weather opposition, and instead to feel the process of 'weathering' where human body interacts

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1    "Старые Провалы и Воронки в Земле Угрожают Безопасности Жителей Березовского (Old Dips and Funnels in the Earth Threaten the Safety of Berezovsky Residents)," VIPERSON, April 16, 2003, http://viperson.ru/wind.php?ID=561410.

2    For details of the numbers of the funds, see Ksenia Dubicheva, "Эксперт: Жителям Березовского Не Стоит Бояться Провалов Почвы (Expert: Residents of Berezovsky Should Not Be Afraid of Soil Failures)," Российская газета (Российская газета, October 14, 2011), https://rg.ru/2011/10/14/reg-urfo/budget.html.

Such intriguing images can also be associated with a certain type of humid, entropic, post-apocalyptic aesthetics, similar to what made Andrei Tarkovsky's famous movie Stalker so fascinating.

intimately with the change of temperature, humidity, sunlight resonating in our skin, veins and nerves, for a better understanding and reaction to climate change.[1] This essay applies and adapts Neimanis' inspiring theory of transcorporeality to the realm of industrial impacts, because climate change and industrial impacts are similar to each other, in the sense that they can both be seen as the disturbance or damage to the natural environment, where human activity has played the main role combined with the feedbacks from the ecosystem, and in return has influenced the living conditions of people.

To clarify why we need an alternative transcorporeal understanding, the abstract, data-based monolithic perspective derives from neoliberal methods of controlling the decay of the environment by "mitigation, sustainability, cap and trade, renewable resources,"[2] which treat the globe simply as a milieu or a background for human survival, possible to be manipulated, transformed, controlled and made use of by humans. Such way of looking at the environment decay somehow extracts the subject of human body from the ecosystem it dwells in, in the meantime also triggering "a particular mode of relating to the earth, as though human beings are somehow separate from the natural elements". [3]

In Russia, nevertheless, even such top-down mode of dealing with environmental problems can be dampened by institutional inertia in the economic and political systems, where a heritage from the Communist system, the centrally planned economy, is still very much

influential, also inasmuch as that political motives has been leading the post-USSR era privatization,[4] resulting in huge obstacle in making and executing environmental policies. In this heavily historically involved Russian context, the treatment of environmental problems including industrial pollution, is more a political game. In reality, Urals has a long history of loosening its subsidiary role to the Russian sovereignty, from eighteenth century ever since when it feed the whole country with its rich resources and industrial products, while maintaining some autonomy as 'a state within a state'.[5] Not long after the dissolution of the USSR, the never officially recognized Ural Republic started by Eduard Rossel, the governor of the Sverdlovsk oblast then, existed from July 1 to November 9, 1993, with Yekaterinburg as its capital. The real pursuit behind the campaign was to gain priority over other Russian administrative regions, instead of real independence. Nevertheless, it still shows a certain degree of the urge for autonomy. The Ural Republic was finally terminated by Yeltsin, the first president of Russian Federation, who was born in Yekaterinburg himself.

There is no way that local political leaders, as well as citizens, can be without dissatisfaction to the domination from Moscow, also given its historic role as Russia's industrial heart, pumping the products all over the country, or even the world, leaving the pollution to itself. In an interview, Andrei Gavrilovsky, a successful local furniture businessman stated "the Moscow business comes here just to grab. If it doesn't

1       Neimanis, Astrida, and Rachel Loewen Walker. 2014. "Weathering: Climate Change and the "Thick Time" of Transcorporeality". Hypatia. 29 (3): 558-575, p560.
2       Ibid, p567.
3       Ibid, p567-568.

4       Söderholm, Patrik. "Environmental Policy in Transition Economies: Will Pollution Charges Work?" The Journal of Environment & Development 10, no. 4 (December 2001): 365–90, p376.
5       Dmitry Sarutov, "История Уральской Республики (History of the Ural Republic)," После Империи (After Empire), December 19, 2016, http://afterempire.info/2016/12/19/ural/.

work for nothing, they leave it. They don't care about the region, they spit, get out, work out until Friday and fly to Moscow for the weekend".[6] Therefore, it is necessary to move from the politicians' offices to the open fields around Yekaterinburg, where not only the factories and mines have already made their impact on the natural environment, but also have been used by locals as 'playgrounds'.

## INDUSTRIAL LANDSCAPE AS PLAYGROUND

Toxic and destructive as it is in its nature, the industrial landscape around Yekaterinburg seems to be happily accepted by locals as good tourist spots. The aforementioned aesthetics generated in those places have made them very popular for a vacation or simply as a location for eye-catching photographs to be posted on social media. On condition that the contamination has already spread to almost all the water systems in Yekaterinburg, some locals even swim in them, regardless of the risk of sickness. In fact, according to a local study of the water bodies, none of the local reservoirs are clean enough for people to swim,[7] so it is no wonder that the health conditions of local residents can be at risk.

In other words, the locals subjected themselves to the effects of industrial pollution on their own wills. During their close contact with the industrial landscape, the process of weathering already began. The active users of the industrial landscape are the first receivers of the transcorporeality of weathering. Similar to Astrida's description of the weathering process between human and the weather : "Rain might extend into our arthritic joints, sun might literally color our skin, and the chill of the wind might echo through the hidden hallways of our eardrums" [8], the industrial pollution has already weathered the locals. Their skin can get red and itchy, their respiratory system slowly decaying due to the long exposure to air pollution, and also the toxicity already infiltrated into the waterbody from which they get their drinking water. To this extent, the pollution has already become more than a simple backdrop for the locals, but a sandbox in which they live their everyday life, a kind of liquid already absorbed by and transforming their body. The way they sense the toxic effects of industries is hugely different from the policy makers or the administrators of the mining companies. Through their transcorporeal experience the question here shifts from "what should we do to repair industrial impacts?" to "how are industrial impacts affecting us".[9]

However, what is not sufficiently discussed in Astrida and Rachel's essay is what comes after we have understood the transcorporeality of weathering, and how we can respond to it through our praxis. What she mentioned as "a weather pattern, a heat-absorbent ocean, the pleasure of a late-fall swim, and the turn of a key in the ignition as the interconnected

6 Olesya Gerasimenko подписка подписка, "'Местных Ставить Нельзя - Они Договорятся и Устроят Республику,' ("You can't put the locals - they will agree and arrange a republic")" – Власть – Коммерсантъ (Журнал "Коммерсантъ Власть" №26 от 02.07.2012, стр. 11, July 1, 2012), https://www.kommersant.ru/doc/1966881.

7 "'Обезвоживание'. На Среднем Урале Нет Водоёмов Для Купания ("Dehydration". There are no swimming reservoirs in the Middle Urals)" Рамблер/доктор, July 4, 2018, https://doctor.rambler.ru/news/40248853-obezvozhivanie-na-srednem-urale-net-vodoemov-dlya-kupaniya/?updated.

8 Neimanis, Astrida, and Rachel Loewen Walker. 2014. "Weathering : Climate Change and the "Thick Time" of Transcorporeality". Hypatia. 29 (3): 558-575, p560.

9 An adaptation of Astrida and Rachel's text, originally: "This project shifts away from the dominant temporality of climate change discourse, where progress and sustainability narratives meld in the anticipatory mode of 'what should we do to stop climate change?' and instead asks 'how is climate change me

temporalities we call 'climate change'," is more a kind of intuitive response to weather change, although with the necessity of being responsible to direct this responsivity more consciously.[1] Therefore, we might start questioning what phenomena following this weathering have this critical nature. Here a criterion is proposed that, if the weathering process is followed by a critical behavior by the weathered human body, either as a conceptual response to what is happening, or as an attempt to internalize the scene (later referred to as subsequent phenomena), then this form of weathering, together with its subsequent phenomena, are critical.

If we first take a look at the popularity of Instagram photography in the industrial landscape, we can hardly say that they are critical. Even though they can be regarded as the end or the sum up of a transcorporeal weathering process, on condition that the travelers themselves are experiencing the industrial landscape themselves while assimilating and being assimilated by the environment, their action of taking pictures is simply a quotation of the reality, without any process of abstraction or conceptualization.[2] Moreover, some local blogs have listed a number of industrial landscapes as photography spots, advocating an image-consumption-based tourism. Such phenomena have the tendency towards what Fredric Jameson described as two major postmodern symptoms: the disappearance of history because reality is transformed into images, disabling contemporary society of remembering its past, and time fragmented

into a series of perpetual presents.[3] This answers the previous question why the aesthetic-based understanding of industrial impacts doesn't provide a transcorporeal view either. In order not to fall into this postmodern ideology and the trap of consumer-capitalism, the awareness of criticism in the weathering process is needed. There is a slightly more critical form of photography in Berezovsky. Yekaterinburg photographer Alexander Yozh Osipov has held several photography workshops in Berezovsky Sands, featuring post-apocalyptic themes which fit in well with the appearance of the environment. These photographs somehow seize the genius loci of Berezovsky Sands, while still not critical enough. From the various themes of his photographs, we might say that Alexander's works are not deeply analytical of the environment, because even the photographer himself didn't say much about the site connection. Instead, his organization of a photographic session always began with a predetermined theme.[4]

## A BRITISH INSPIRATION - DEREK JARMAN'S GARDEN AT DUNGENESS

In Dungeness, a headland on the coast of Kent, about 100 kilometers southeast of London, British artist Derek Jarman provides us with what could be understood as a critical

1 Neimanis, Astrida, and Rachel Loewen Walker. 2014. "Weathering : Climate Change and the "Thick Time" of Transcorporeality". Hypatia. 29 (3): 558-575, p573.
2 For the relationship between photography and nature, see Berger, John, and Geoff Dyer. 2013. Understanding a photograph. London: Penguin Books.

3 Foster, Hal, Habermas, Jürgen, Frampton, Kenneth, Krauss, Rosalind, Crimp, Douglas, Owens, Craig, Ulmer, Gregory L., Jameson, Fredric, Baudrillard, Jean, and Said, Edward W. 1983. The Anti-Aesthetic : Essays on Postmodern Culture. Bay Press, p125.
4 Yulia Zabaylovich, "Екатеринбургский Фотограф Создал в Березовских Песках Мир с Чудовищами и Тремя Иисусами (Yekaterinburg photographer created a world with monsters and three Jesus in Berezovsky Sands)," Новости Екатеринбурга, September 28, 2020, https://www.e1.ru/news/spool/news_id-69482977.html.

Alexander's works are not deeply analytical of the environment, because even the photographer himself didn't say much about the site connection. Instead, his organization of a photographic session always began with a predetermined theme.

subsequent phenomenon of weathering. Having been diagnosed with AIDS in December 1986, Jarman moved from London to Prospect Cottage, a previous fisherman's hut in Dungeness, where he built a small garden on the shingle beach under the shadow of a nuclear plant. Jarman's garden is deeply involved with his personal history of resistance against Thatcherism, which was the dominant political ideology in England around 1980s, with hostility against minor groups including himself being homosexual. Jarman sensed a nationalist monumentality in Thatcherism, where history was reshaped as a linear succession of causes and effects.[1] Such linear spatialization is also opposed in Astrida's essay, where she summed up the neo-liberal reliance on 'a linear earth time where past, present, and future make up a time-line of human progression, a chronos of self-actualization.'[2]

Jarman's argument against the monumental nationalist history might have originated from his several experiences in Villa Borghese, which was originally a place to house the owner Cardinal Scipione Borghese's large collection of classical art works, featuring several gay artists including Bernini and Caravaggio.[3] Scipione Borghese himself was also suspected to be homosexual. The garden of Villa Borghese was referred to as 'the shadow of Eden' by Jarman, where he once made love with his lover.[4] However, with some later additions to Villa Borghese, the originally intimate homosexual space was transformed into a space of nationalist monumentality. The addition included a circle of marble statues of Italian historical figures, a water clock and an Egyptian twin Pylon gateway, both obliquely reflecting the imperial fantasy of Italy at that time, which Jarman himself must have felt had similarities to Thatcherism.[5] It could be that Jarman was considering the same threat to an initially innocent, intimate queer space that he felt in the history of Villa Borghese when he started to craft his own garden as a homosexual sanctuary, warning himself not to let his garden become the second fallen Villa Borghese.

Prospect Cottage, the place he chose as his site was under the shadow of a local nuclear plant, which could be a metaphor of the hostile nationalist context in Britain at the time. Here, all the vertical elements hand-crafted by Jarman are all made from the materials he collected from the beach - drift woods, scrap metals and something he dismantled from existing derelict military structure remaining from World War II. The first level of weathering is here: Jarman countered the enduring monumentality in the immortal marble statues with the mortality given to his statues by the mortal materials he chose. Moreover, the whole garden itself and how it was made can be regarded as emerging from Jarman's transcorporeal understanding of the weathering processes within Dungeness' harsh environment, and also his struggle with HIV, which kept weathering his body from inside. In his journals, he had many picturesque descriptions of him and his cottage being

1      O'Quinn, D. 1999. "Gardening, History, and the Escape from Time: Derek Jarman's Modern Nature". OCTOBER -CAMBRIDGE MASSACHUSETTS-. (89): 113-126.
2      Neimanis, Astrida, and Rachel Loewen Walker. 2014. "Weathering : Climate Change and the "Thick Time" of Transcorporeality". Hypatia. 29 (3): 558-575, p567.
3      Livia Hengel, "A Brief History Of The Galleria Borghese," Culture Trip (The Culture Trip, August 20, 2016), https://theculturetrip.com/europe/italy/articles/a-brief-history-of-the-galleria-borghese/.
4      Jarman, Derek. 2009. Modern Nature. University of Minnesota Press, p14.
5      O'Quinn, D. 1999. "Gardening, History, and the Escape from Time: Derek Jarman's Modern Nature". OCTOBER -CAMBRIDGE MASSACHUSETTS-. (89): 113-126, p120-121.

'weathered':

The first dull waves of panic washed over me. I dressed fumbling in the dark. Feeling cold and nauseous I groped my way by the spectral beam of the lighthouse towards the kitchen at the back of the house, which was taking the full brunt of a storm increasing its intensity by the minute. I found a candle and lit it; if anything, its guttering flame increased my feelings of insecurity and isolation. Outside, the nuclear power station glowed in the dark. I blew out the candle. A fisherman's hut disintegrating seemed in the dark to be the house itself; every timber was stretched to breaking point. Now and again a board split from its neighbour, 80 years of tar and paint parting like a rifle shot. The house was breaking up. 1 sat and waited for the roof to blow away or a window to cave in.[6]

Through his struggle with the harsh shingle beach environment, Jarman slowly built up his small Eden. From an architectural perspective, some spatial characteristics of his garden constitutes his resistance against the decisive linear time of the historical monumentality of Thatcherism. First of all, his garden has no boundary, or simply the horizon is his boundary, so it is impossible to tell where his garden starts and ends. A visitor approaches his garden from the east side, following the road from the town to Dungeness, and ends up in front of the garden. The civilization world approaches the garden from the road, welcomed by the more rational, geometric shapes Jarman set up at his front door. As the visitor moves to the west side of the garden, the geometric forms slowly disappear, replaced by the carefully arranged 'wilderness', followed by the real wilder nature, with the nuclear plant in the distance. Through this transition, no clear differentiation can be sensed - only temporality remains.

Wild as it might seem, the garden is very much a genius creation of Jarman through much hardship, infused with his vernacular considerations. He carried out massive research and experiments of what kind of plants would grow in the infertile shingle. To let the plants survive, he buried soil and fertilizers underneath the shingle, without making them too obvious as flower beds. Moreover, he and his partner Keith Collins who took care of Jarman's garden after his death were widely supported by the local community at Dungeness, consisting an important spiritual part of the garden.[7] The style of Jarman's cottage: black tarred wood planks, came from the traditional fisherman's hut, which Jarman originally decorated with yellow frames of windows and doors. Such architectural style has been welcomed by house owners and designers who built their house later in the neighbourhood.

At this point, it is probably safe to conclude that the creation of Jarman's garden is a series of critical subsequent phenomena of his 'weathering' with the environment: the omnipresent influence from the nuclear plant, the careful choice of plants, the relationship with the community. Everything is vernacular, reflective of what is happening within the environment, the garden, and Jarman himself - the transcorporeal system, with Jarman, his partner and the local community 'no longer outside observers, able to examine, log data, and calculate a future, but right in the thick of things.'[8] From another point of view,

6        Jarman, Derek. 2009. Modern Nature. University of Minnesota Press, p19.

7        From the narrative of Johnny Bruce, "Johnny Bruce: Gardening at Prospect Cottage", October 2020, video, https://vimeo.com/453705083.

8        Neimanis, Astrida, and Rachel Loewen Walker. 2014. "Weathering : Climate Change and the "Thick Time" of Transcorporeality". Hypatia. 29 (3): 558-575, p569.

his garden is his own resistance against the historic time of Thatcherism, as well as his conceptualization of the societal atmosphere, both of which he realized through making his garden an aggregation of suspended temporalities. The garden is also the outcome of his transcorporeal weathering in relation to the hostile physical and societal environment.

## CONCLUSION

The process of weathering is happening in Yekaterinburg, where local people expose themselves to the toxic impacts of industrial production, entertaining themselves with and simultaneously being gradually damaged by them. We have already gone beyond two existing comparatively superficial ways of conceptualizing the industrial landscape in Yekaterinburg: the top-down data based political one and the post-modern image-based aesthetics, looking for what can be seen as a critical form of transcorporeal weathering. The first criterion is that, if the subject of weathering attempts to conceptualize or internalize the scene they are in, then the weathering process they are going through is critical. We can find this kind of critical weathering in Derek Jarman's garden, which bears much similarity to Yekaterinburg in terms of its harsh environment, and the omnipresence of industrial impacts (in Dungeness the existence of the nuclear plant). Together with the multiple layers of weathering in his garden, it is an ideal model for us to further the question 'how the industrial impacts in Yekaterinburg are shaping its people', with the aim of a critical conceptualization, which may be used as a guide for future in-site architectural practice. Moreover, his resistance against the nationalist monumentality is another outcome of his weathering with the environment, from which

we might get the second criterion of what is a 'critical weathering': a critical weathering should be guided towards or at least has the potential of responding to what has already happened and is still going on, for a better future. This criterion also agrees with Astrida and Rachel's original idea because, rather than totally negating the political efforts to stop global warming, she was still providing a way for us as individuals to better intervene in climate change. These two criteria can be seen as a development of its origin, an alternative way of understanding the industrial impacts, and also might serve as a guidance for the praxis to be carried out in the author's future architectural intervention in Yekaterinburg.

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# SOUL STATE IN ARCHITECTURE.

# GRADUATION ESSAY, WITH AS A CASE STUDY TERRAIN VAGUE AND THE CITY OF YEKATERINBURG.

Lenteren van, Sebastiaan
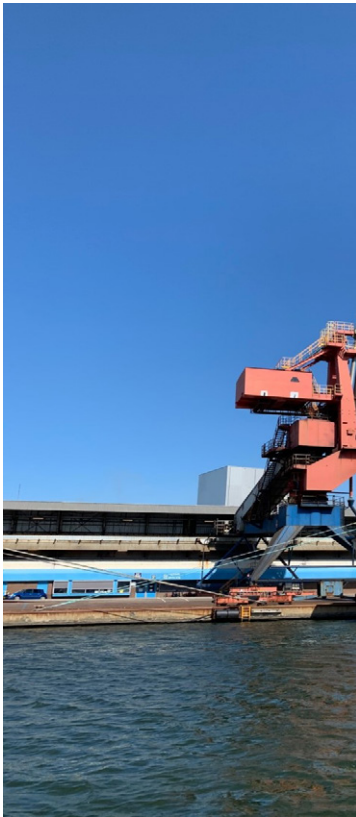
Facination, left over industrial areas within the city ( Terrain Vague )





Pictures above, Terneuzen 2020

Terrain vague,
"condition of these spaces as
internal to the city yet external
to its everyday use. It is a way to
describe places within the city
that where not
colonized by architecture yet".

Ignasi de Sola-Morales, 1995,



Manolo Laguillo



Johannes Linders



Thomas Struth

The Russian emotion, "Wierzbicka also describes that in Anglo-American discourse there is opposition between body and the mind while in Russia there is only the "Soul state" of emotions (The Dusha)". Wierzbicka 1992.

''How the granite is covered in ice…''
There'll be warm station beer,
there'll be a cloud overhead,

there'll be melancholy music –
I'm saying farewell for good.(…)

I was born – even now can't believe it –
in a labyrinth of factory yards
in that dove-like land, divided
between crooks and the nick a thousand years.
Boris Ryzhy

"How Ivan Ivanovich Quarreled with Ivan Nikiforovich", painting; Sergei Gribkov, story; Nikolai Gogol
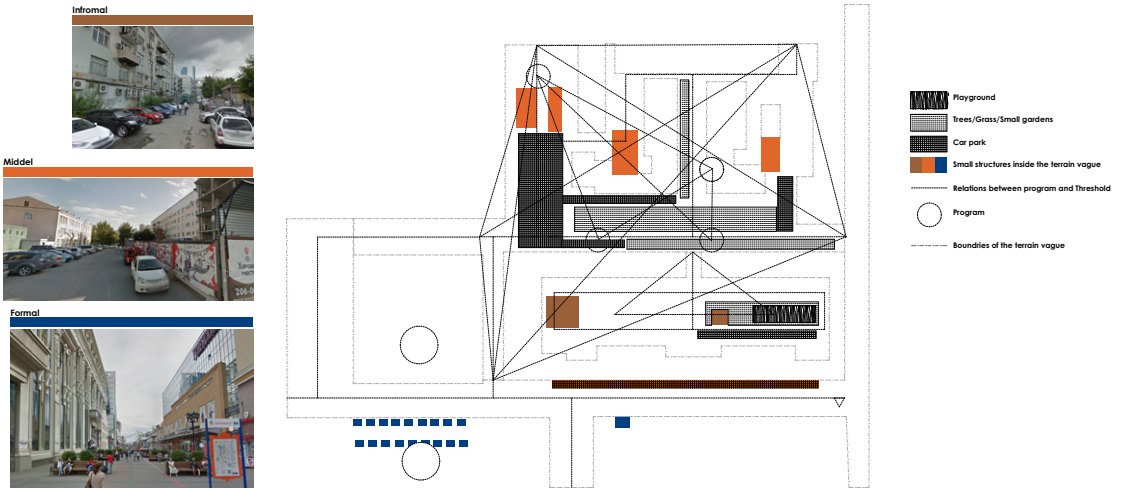
Tracing the terrain vague, own work

Terrain vague drawing of the ulitsa vay-erna, and the following drawings try to grasp the logic of the terrain vague that sits within the nature of the city of Yekaterinburg. While the logic of the terrain vague would be a 1% of these left-over spaces, this 1% logic within our case study would not be left-over spaces but more in the notion of these hyper capitalized spaces. these spaces offer an escape from the depressing nature of the Russian context. like in the tale of the two Ivans.

**Fromal**
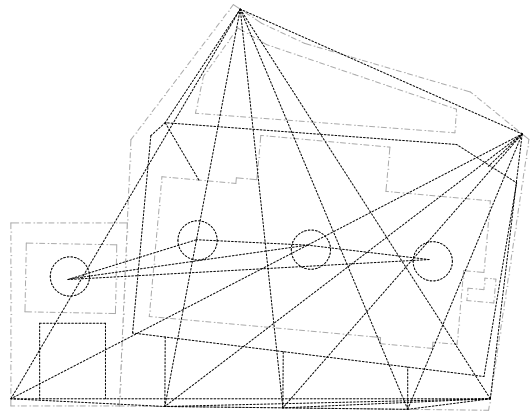


**Program**

- Car park
- Big flagship stores
- Playground
- Transport

**Materials**

- Mowed grass
- Flag poles
- Clean Asphalt
- Steel constructions

**Middel**
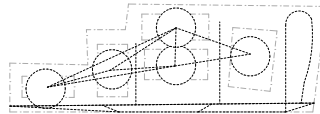


**Program**

- Car park
- Car dealers
- Playground
- Transport

**Materials**

- Mowed grass
- Flag poles
- Clean Asphalt
- Steel constructions

**Formal**
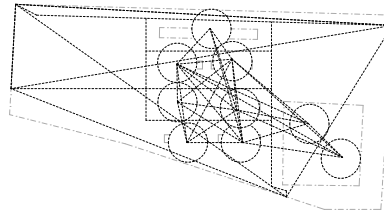


**Program**

- Car park
- Construction  market
- furniture store
- car parts

**Materials**

- Mowed grass
- Flag poles
- Clean Asphalt
- Steel constructions
- wooden costructions

**Formal**
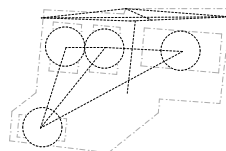


**Program**

- Car park
- High class car dealer
- Electronic store

**Materials**

- Mowed grass
- Flag poles
- Clean Asphalt
- Steel constructions
- Straight pavement

1. Cultural terrain vague
   - Spaces, where the cultural had to make place for globalising influences.

2. Mental terrain vague
   - Spaces, where anonymity takes the overhand.

3. Economical terrain vague
   - Spaces, where the economical activity of a former economical site still remain.

4. Ideological terrain vague
   - Spaces, where the ideology of a place still lingers.

5. Historical terrain vague.
   - Spaces, where history left its mark. Unlike the effects that occurred in the above.

6. Emotional terrain vague ( the Dusha )
   - Spaces, where the Russian emotion is absent.



How the granite is covered in ice,
and a frost lies on the ground
This town, frosted with memories,
I want to leave it for ever.
"Boris Ryzhy"
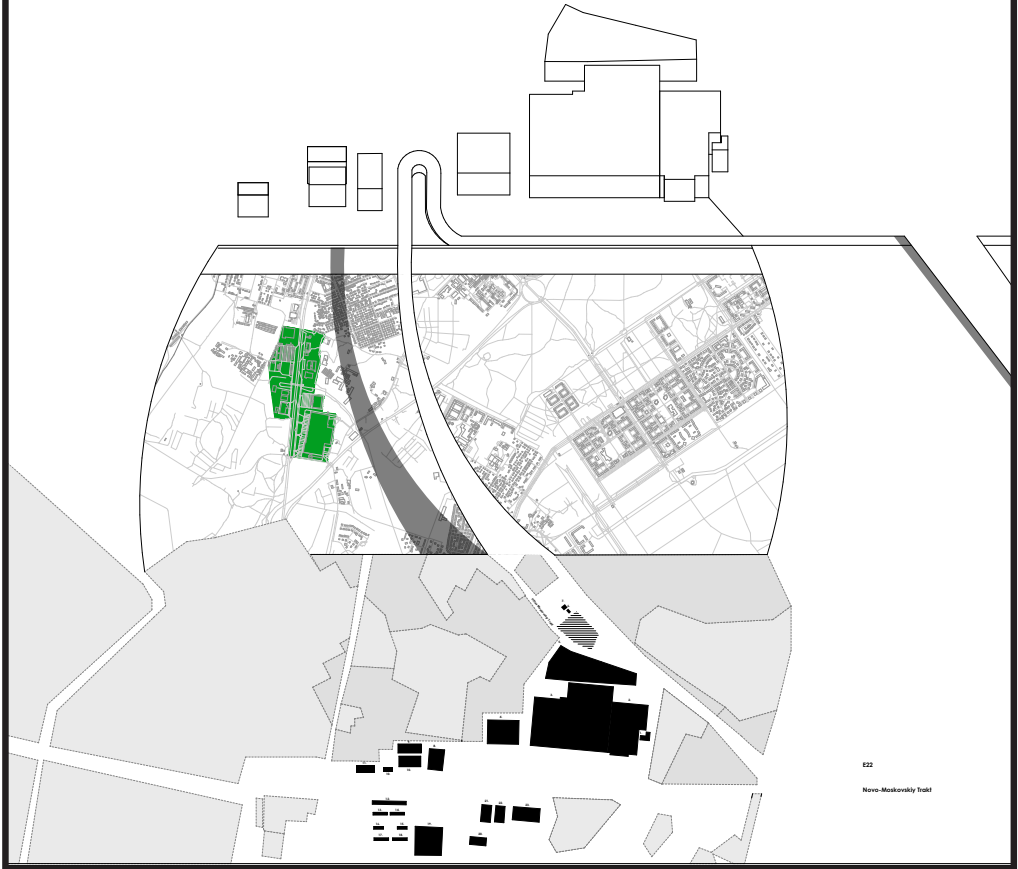
E22

Novo-Moskovskiy Trakt

119

# THE SHOPPING STREET TERRAIN VAGUE

**Infromal**



**Program**

- Car park
- Back of the store
- Playground

**Materials**

- Loose Concrete
- broken Asphalt
- Unattended Trees,grass,earth
- Weathered wooden constructions
- Rusted air conditioners

**Middel**
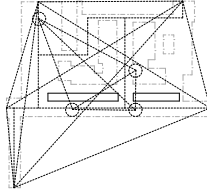


**Program**

- Car park
- Institute of Traumatology and Orthopedics
- Orthopedics shoe store
- Electronics store
- Drug store
- small gardens
- back alleys for movement

**Materials**

- Loose Concrete
- Asphalt
- Unattended Trees,grass,earth
- Weathered wooden constructions
- Street tiles

**Middel**
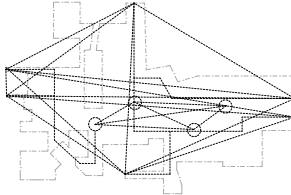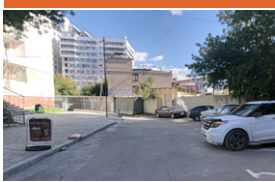


**Program**

- State Archive of Sverdlovsk Region
- shoe store
- sience centre
- buisness centre
- left over spaces

**Materials**

- Loose Concrete
- Asphalt
- Unattended Trees,grass,earth
- Weathered wooden constructions
- Broken street tiles
- Crooked pipes
- Old heaters

**Middel**
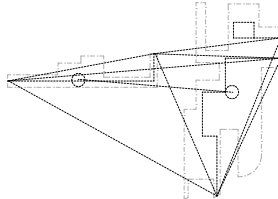


**Program**

- Back of store
- Restaurant
- infra for parking

**Materials**

- broken concrete
- Asphalt
- Unattended Trees,grass,earth
- Weathered wooden constructions
- Broken street tiles
- Electric wires

**Formal**
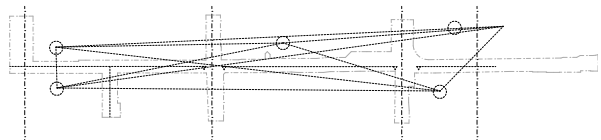


**Program**

- Shopping street.
- Meeting place
- place of leisure
- big schopping centers

**Materials**

- benches
- street tiles
- attended Trees,grass,
- paited wood and steel
- shop signs
- Electric wires

1. Cultural terrain vague
   - Spaces, where the cultural had to make place for globalising influences.
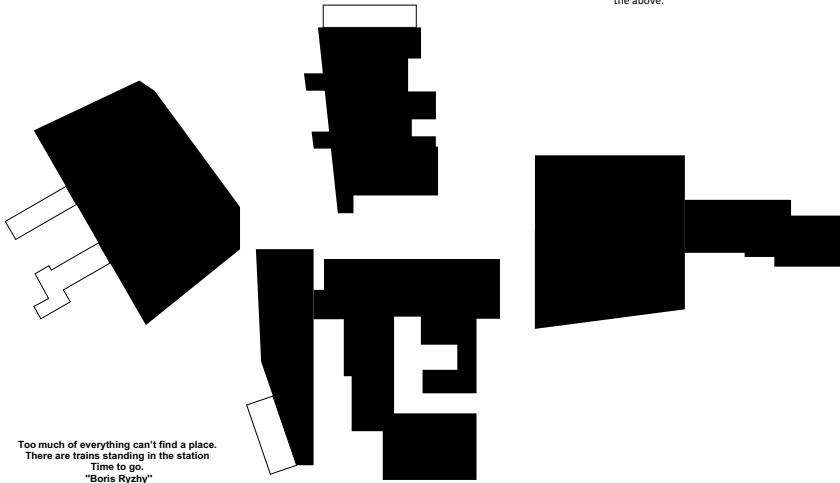
2. Mental terrain vague
   - Spaces, where anonymity takes the overhand.

3. Economical terrain vague
   - Spaces, where the economical activity of a former economical site still remain.

4. Ideological terrain vague
   - Spaces, where the ideology of a place still lingers.

5. Historical terrain vague.
   - Spaces, where history left its mark. Unlike the effects that occurred in the above.

6. Emotional terrain vague ( the Dusha )
   - Spaces, where the Russian emotion is absent.

I was born – even now can't believe it –
in a labyrinth of factory yards
in that dove-like land, divided
between crooks and the nick a thousand years.
"Boris Ryzhy"

Ulitsa Volodarskogo

Ulitsa Ukhtkogo

Ulitsa Marshala Zhukova

Ulitsa Marshala Zhukova

Ulitsa Khokhryakova

Prospekt Lenina

Ulitsa Malysheva

Ulitsa Sakka i Vanzetti

Ulitsa Kuybysheva

Ulitsa Narodnoy Voli

1905 Square

Train tracks

Universitetskiy Pereulok

Train tracks

Ulitsa Strelochnikov

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**Infromal**





**Program**
- Bus station
- Fast food

**Materials**
- Asphalt
- steel fences
- Stone ruble
- Electrical wires

**Infromal**





**Program**
- Car park
- dwelling patio
- Playground
- Restaurant
- Fast food

**Materials**
- unatended grass and trees
- small gardens
- Broken concrete
- Coroded steel

**Middle**





**Program**
- Bus station
- Tram station
- Restaurant
- Fast food
- terminal

**Materials**
- Concrete statue
- Attended trees
- Clean steel
- Apshalt
- Electric wire

**Infromal**
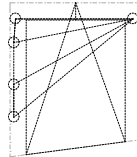




**Program**
- Car park
- Fishing store
- Army store

**Materials**
- Broken concrete
- Unattended trees
- Play ground
- Small gradens
- Broken asphalt
- Coroded steel
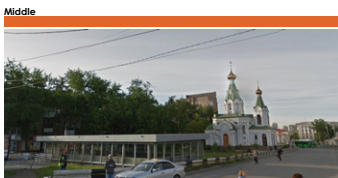
**Middle**





**Program**
- Church
- Metro entrance

**Materials**
- highway railing
- Attended trees and grass
- Clean steel
- Apshalt
- straight tiles
- flowers
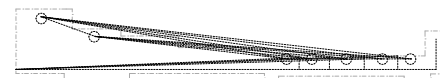
**Formal**





**Program**
- Train station
- Fast food
- car rental

**Materials**
- Attended trees and grass
- Clean steel
- Straight tiles
- Benches

1. Cultural terrain vague
   - Spaces, where the cultural had to make place for globalising influences.

2. Mental terrain vague
   - Spaces, where anonymity takes the overhand.

3. Economical terrain vague
   - Spaces, where the economical activity of a former economical site still remain.

4. Ideological terrain vague
   - Spaces, where the ideology of a place still lingers.

5. Historical terrain vague.
   - Spaces, where history left its mark. Unlike the effects that occurred in the above.

6. Emotional terrain vague ( the Dusha )
   - Spaces, where the Russian emotion is absent

**Too much of everything can't find a place.**
**There are trains standing in the station**
**Time to go.**
**"Boris Ryzhy"**

Ulitsa Chelyuskintsev

123

MODI OPERANDI WORKSHOP

I tried to find the atmosphere for the disign in the modi operandi workshop. I would like to start with model 2 and 3, where I tried to create a space of seclusion like Brodsky did in order to show the mental terrain vague.  As a conclusion in the search for an atmosphere, I would like to introduce for the mental a space of seclusion and ritual. And for the physical the act of tracing.
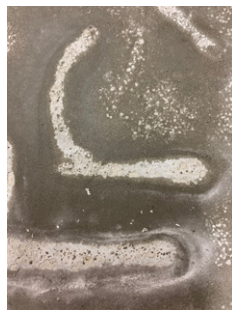
**Russian art,** while researching within the Russian modern art i came across many different pieces, what struck me was this notion of the chaos the country was in. In many works the self-awareness of the Russian landscape was very visible.



Rinat Voligamsi, Village near Road, 2016



Fransisco infante, Mirror installations , 1983



Dmitry Prigov, Composition from
the Scotch Tape Drawings Series, 2002

Cubism, the early-20th-century avant-garde art movement which revolutionized European painting and sculpture, and inspired related movements in music, literature and architecture. Cubism has been considered the most influential art movement of the 20th century. Its notion of portraying not only one perspective is highly interesting in a world that resolves in individualism. i wanted to use this technique to show
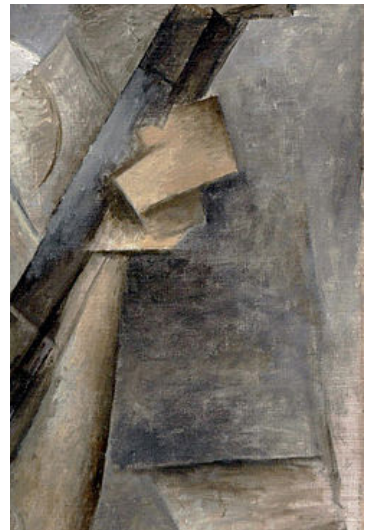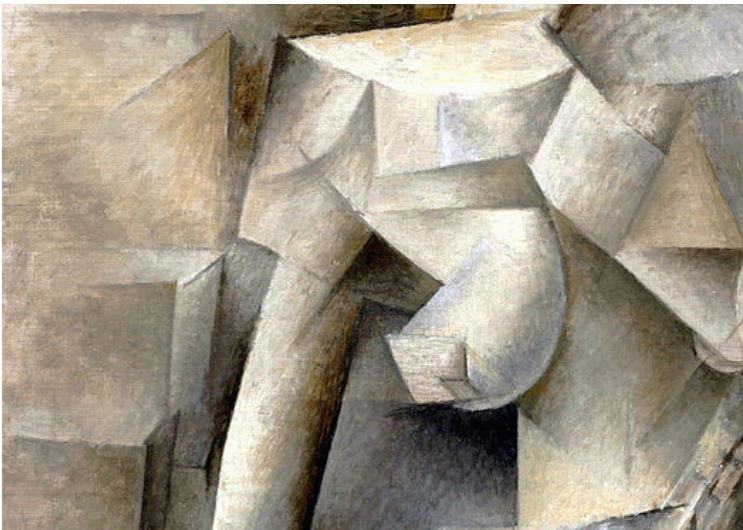


Pablo Picasso, 1910, Girl with a Mandolin

# Russian cubism,

started out as the west within the avant-garde movement but slowly transformed into supermatism. Malevich's whos work are most famous in this new art movent was not the only one, in fact within the russain avant garde there where many women who also followed this new movement like Olga razanova and Lyubov Popova.

Lyubov Popova, Painterly Architectonic, 1916

Pablo Picasso, Woman in Armchair, 1913/14


Olga Rozanova ,The Factory and the bridge,1913


Olga Rozanova , Metronome, 1914


sketch 1, own work perspective of
yekaterinburgs terrain vague


sketch 2, own work perspective of
yekaterinburgs terrain vague
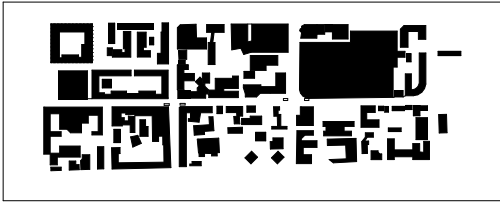
**2020**
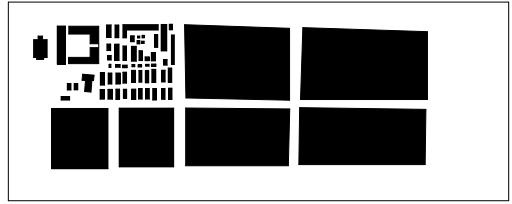


**1925**
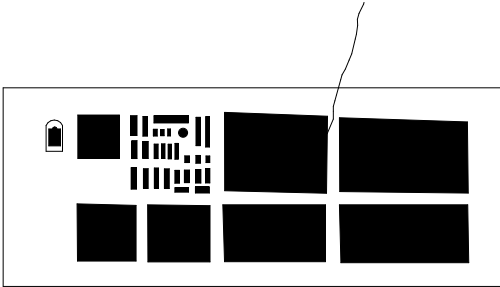


**1910**
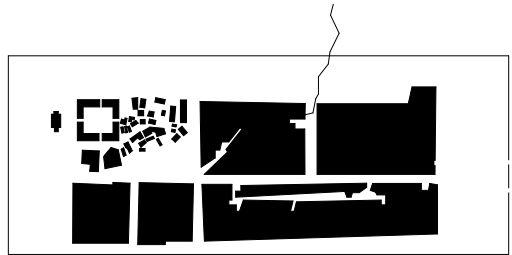


**1856**
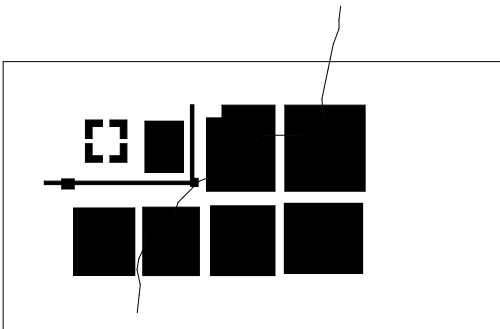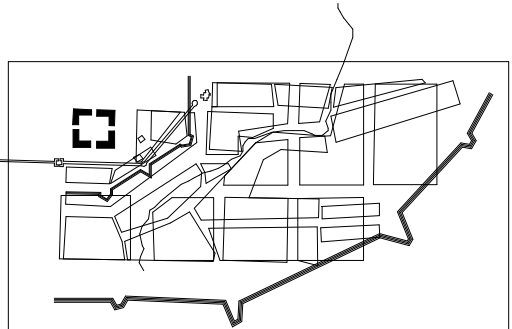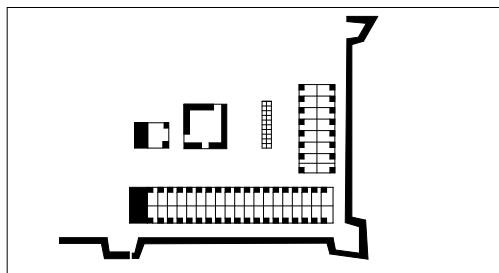


**1800**



**1776**



**1723**

Hisorical data of Ulitsa Vayerna
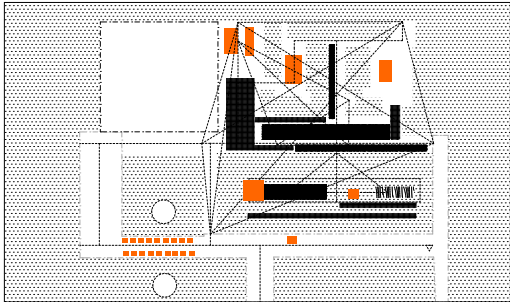


**2020**
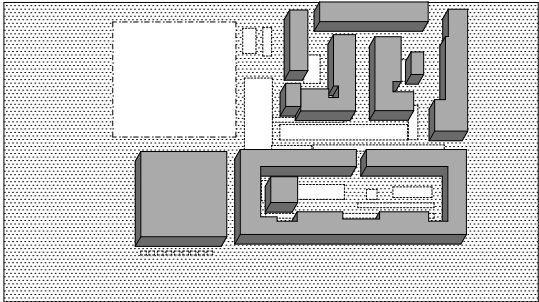


**2020**
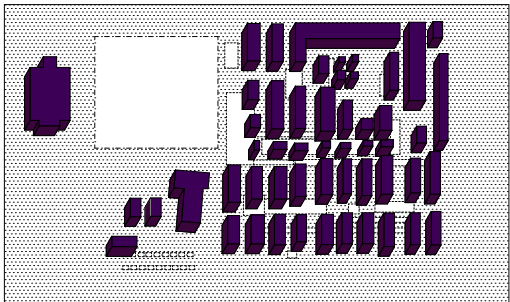


**1925**
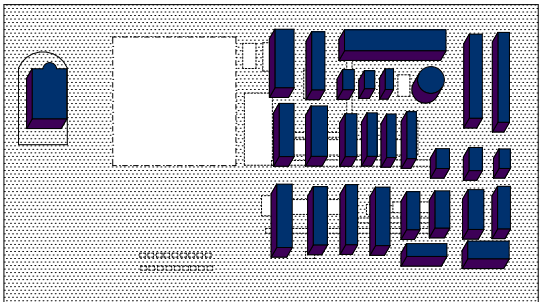


**1910**
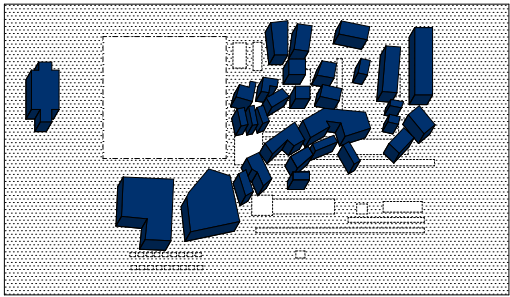


**1856**
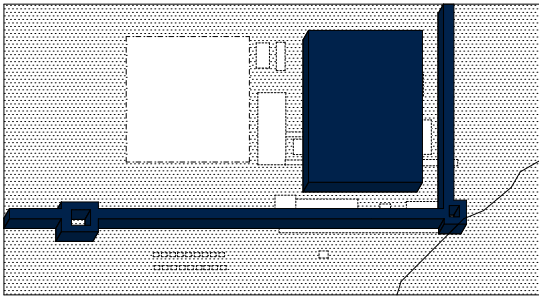


**1800**
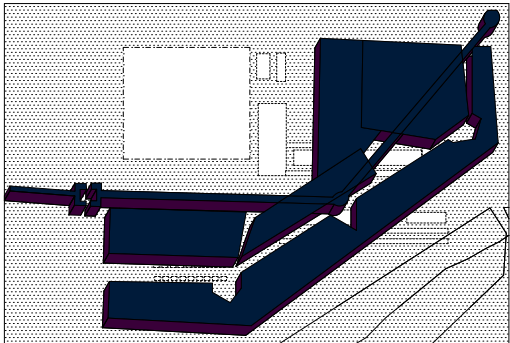


**1776**
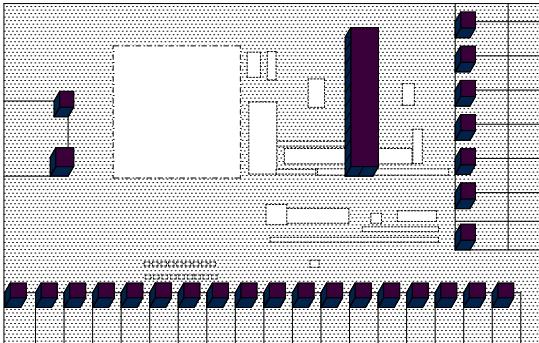


**1723**

Tracing the terrain vague, own work

Design intent, This drawing follows the logic of tracing the terrain vague. It acts like the drawing of an archaeologist site in order to bring the flows of time back into the project. but also to allow for multiple perspectives to be shown within the terrain vague as for most of its objects are hidden within.

# состояние души в архитектуре

Transl: soul state in architecture

Soul state in architecture.
Graduation essay, with as a case study
terrain vague and the city of Yekaterinburg.

Borders and Territories.
Emerging border conditions in Eurasia,
MSc3/4 program
AY 2020/21
AR3BO100
Student:  Bas van Lenteren.
Student number: 4981456
Tutors: Nishat Awan, Filip Geerts and Marc Schoonderbeek

## Abstract

In western modern cities there are these spots that still possesses objects of events that where once before. These objects are alienated objects within the modern city, they can take the observer to a place former to them. The topic of the terrain vague got my interest as the leftover of the industrial, within most industrial areas certain parts are redundant due to progression and have been left there to be taken over by nature. Terrain vague, a Term introduced in Anyplaces by Ignasi de Sola-Morales Rubio. (Davidson, 1995). Ignasi de Sola-Morales talks about these spaces as not being colonized by architecture. They are left over spaces or literary translated by its Latin words; vacant terrains. Is this western European term still viable within the context of a condition within the city of Yekaterinburg? What is the Russian terrain vague? How can the understanding of the Russian culture help to redefine the term in a way that it applies to cities where more places have the nature of the vacant place than the one of colonized architecture? Morales explained the terrain vague as a place to escape the city. Can the terrain vague be a place to escape the pressure of the city in a mental space, a space of seclusion? The state of the city resembles the nature of the Russians, an melancholic almost depressing state. But where does this come from and how can this search for the Russian emotion help to better define the Russian terrain vague? Looking at linguistics, the Russian emotion comes much more from the soul. Russian see the emotion much more as a state of the soul someone is in. Can this metal terrain vague express the soul state of the Russians? This depressing nature of the Russian leads to another understanding of the term terrain vague. It is much more within Russian context about a place which can take you away from a bad place. This turns around its premise of something that was un-colonised by capitalism towards a place where there are these archipelagos of freedom from the depression. Which then within Russian context are these capitalist non-places, creating a paradox which result back to the terrain vague that was mentioned by Ignasi de Sola-Morales?

Key words- Terrain vague, Yekaterinburg, Soul state, Non-place, Russian emotion, mental space, linguistics, cubism, The Ducha

## Content

# 1.Preface

In western modern cities there are these spots that still possesses objects of something that was once before. As they are alienated objects within the modern city they can take the observer to a place former to them. The topic of the terrain vague got my interest as the leftover of the industrial.

In the Netherlands these places of industrial left overs or historical events that have been neglected, are scarce since every square meter is regulated and looked after. When a project is renovated these left over objects are given almost a holy status. Not as severe as in city's as Rome, but still are considered to be valuable enough to be saved. As most of the modern cities have lost these objects that take you to the place they once belonged. Within Russia there is almost no culture of preserving objects that belonged to events, as they are just left in the landscape. This way of treating these objects relates very much to the term of the terrain vague as Ignasi de Sola-Morales described.

While researching Yekaterinburg I looked at the movie stalker, a Russian movie from 1979 by Andrej Tarkovski. In this movie the main character the stalker leads the writer and professor towards the zone, through a dreary landscape. They move through the landscape and come across these left over objects of something that was before, not knowing what or who created them this gave me a uncanny feeling, as if these objects where left by another being. Doing research into John Hejduk before, objects which were called non-architecture got my interest. As it implies to understand them in a different way, not only physical or being able to enter, but more on the mental level which of course is different for everyone else. For as every person that looks at it would bring their own culture or background into these objects. For me Hejduk did this with his Hanover masque, giving numerous objects which he called characters. He only gives a vague description in order to let the reader find its own inspiration. I believe architecture has to do the same in order to accommodate the differences that dominate the modern debate. Can something that speaks and inspire every one bring them together? In order to find this I try to imply it within the Russian city of Yekaterinburg, our case study. But before this can be done the Russian context has to be understood.

# 2. European terrain vague

## 2.1 The terrain vague

To start this essay I would like to introduce a term first used by Ignasi de Solà-Morales Rubió, the Terrain Vague. This term was used by Ignasi de Sola-Morales in an essay published in anyplace 1995. It was a way to describe places within the city that where not colonized by architecture yet. ( Ignasi de Sola-Morales, 1995, P28). He describes these places as un-habited, un-safe or un-productive. They have this kind of primordial way of showing the city as it is. While mostly given a negative notation and always beginning with UN-, Ignasi de Sola-Morales tries to let us see the potential within.

To further explain the terrain vague, its best to start with the translation of this French word, given by Ignasi de Sola-Morales. He starts by explaining the word ''Terrain'' explaining that in French this word leans more to a urban context instead of the English terrain which acquired more a geographical notion. ( Ignasi de Sola-Morales, 1995,). The word terrain does not need much explanation it mostly describes this part of land or part of a city, while the next word with in the term defines this first word ''Vague''. The word Vague is described as being a Latin word which decants from vacuus. Ignasi de Sola-Morales says that this Latin word can be understood as Vacant or Vacuum with an English meaning of Empty or unoccupied, yet also free, available, unengaged. ( Ignasi de Sola-Morales, 1995,).

A second meaning by Ignasi de Sola-Morales for the word vague is the Latin word vagus. In English meaning vague, and describes as indeterminate, imprecise, blurred, uncertain. This explanation of the term creates a paradox in his eye's as it implies this purely negative space not showing the expectation of mobility, free time or Liberty. ( Ignasi de Sola-Morales, 1995,).

The fact that the term terrain vague is in itself vague, leads to guess wich place Sola-Moralers meant with his term, it can almost describe any place within the city. This leads to many architects describing these kind of places in their own way here are some terms that have been used to describe abandoned, leftover areas: ''derelict land (Barr, 1969; Kivell & Hatfield, 1998; Oxenham, 1966); zero panorama, empty or abstract settings and dead spots (Smithson, 1996a/1967; 1996b/1968; 1970, as cited in Reynolds, 2003); vacant land (Bowman & Pagano, 2004; Northam, 1971); wasteland (Gemmell, 1977; Nabarro & Richards, 1980); il vuoto ( the void) (Borret, 1999; Secchi, 1989/1984);

urban wilds and urban sinks (Lynch, 1990); new, nameless places (Boeri, Lanzani, & Marini, 1993); dross (Lerup, 1994) and drosscape (Berger, 2006); no-man's land (Leong, 1998); dead zones and transgressive zones (Doron, 2000); superfluous landscapes (Nielson, 2002); spaces of uncertainty (Cupers & Miessen, 2002); and le Tiers-Paysage and les delaisses ("the Third Landscape" and, roughly, "leftover lands") (Clement, 2003). Other common terms, among others, include brownfields, in-between spaces, white areas, blank areas, and SLOAPs (Spaces Left Over After Planning) (Doron, 2007)." ( P.Barron, 2013,P3). Due to the abundance of terms describing the term of the city, I would like to stay with the term Ignasi de Sola-Morales described in his essay.

## 2.2 Terrain vague's capitalist precedency

While being a good term to describe places of potential within the city, the terrain vague has a bias relation towards the European city. In the essay of Ignasi de Sola-Morales he gives examples of photographers that where dealing with the term within city and most of them being in European or American city's. Looking at these photos, Sola-Morales gives a clear view into what he was meaning with the term. ''The triple signification of the French vague as wave, vacant, And vague appears in a multitude of photographic images. Recent photographers, from John Davies to David Plowden, Thomas Struth to Jannes Linders, Manolo Laguillo to Olivio Barbieri, have captured the condition of these spaces as internal to the city yet external to its everyday use.'' . ( Ignasi de Sola-Morales, 1995,) this quote not only gives clear examples but also the first explanation given by Morales of the terrain vague.

While not doing justice to the whole photographic series, this photo [1] from Manolo Laguillo represents the terrain vague, as it shows the late capitalism and leisure society of the post European era. Left overs of economic powers and where the city is no more.

Ignasi de Sola-Morales tries to explain this late capitalism areas with a sentence of Odo Marquand: ''the epoch of strangeness in front of the world''. For Ignasi de Sola-Morales this sentence picks up in the theme of the Unheimlich, as these places bring out the Stangers to ourselves.
The Term Unheimlich or in English Uncanny, is introduces by Freud in his essay Uncanny 1919. The term uncanny can interrupted or felt differently for people,

Figure 1  foto series 1977-1986, manolo laguillo

but what it has in common is this notion of concealment or hiddenness. An example of this being a mannequin standing in the dark, Not knowing whether it is a human or a doll.

This vagueness also sits within the terrain vague not knowing where it belongs to creating this feeling described by Freud. Looking at [1] one can say; is this nature, industry or city. This notion of the hidden factory behind the concrete wall also created this uncanny scenery. Within this photograph [1] your eyes start at nature and slowly go to ward's this almost as a dark cloud hanging over nature, industry.

## 3. Emotional Russians ?

### 3.1. The Dusha
Going to our case study; the city of Yekaterinburg, regional city of Sverdlovsk oblast and the third largest city of Russia.

These are only hard facts but do not show the true nature of the city. The nature of Russia has to be defined first. As from a distance it appears to be another city adopted by capitalist, after the fall of the USSR.
Looking towards the city as a person that grew up in the Netherlands. It's hard to understand the Russians. If not only being doused by the fastness of the territory that sits within this region. Whereas you can travel within the Netherlands from the south to the north in only 4 hours, this time would bring you within Russian context only further away from the city into nature.
The fact that Russia always has been left out in our western gaze does not help to understand it. Maybe my attempt to truly understand them is already failed by this gaze. Nonetheless in order to attempt to understand the Russians I began where the Russians are famous for, be-

sides the stereotypical vodka, or USSR nostalgia. The Russian literature, which is one of the most well-known and had its greatest period during the 19th century. This can maybe help to grasp their nature.

Staring from The Ducha also; the Russian soul which has been used within literature to describe the uniqueness of the Russian identity. Writers as Nikolai Gogol,Leo Tolstoy and Fyodor Dostoyevsky describe the Dusha. The best example for me being Gogol who wrote the book Tale of two ivans. This book describes two landowners by the name of Ivan. First they are neighbors and friends although they are different in appearance. Ivan Ivoanovich is tall thin and well spoken whereas Ivan Nikoforovich is short-fat and cuts to the point. One day Ivanovich notices a rifle that interest him and offers to trade it for all kinds of objects. Nikoforovich who is attached to this rifle

does not want to part from it. This trivial squabble derails and from that point on and they do everything to make each other's lives miserable. In the end the narrator goes back to the two neighbors completely worn out  and they still believe they are within their own right. The narrator then states: ''it's a dreary world, Gentleman'' This last part where Gogol states that it's  a depressing world and that everything we do does not matter is a theme throughout his work. It is often about his pessimistic view of the world.

Another example of this Dreary world, sits within a lot of Russian  poetry. For example the next poem by Anna Akhmatova 1919

"Why Is This Century Worse..."

Why is this century worse
than those others?
Maybe, because, in sadness and alarm,
It only touched the blackest of the ulcers,
But couldn't heal it in its span of time.

Else, in the West, the earthly sun endows
The roofs of cities with the morning light,
But, here, the White already marks a house,
And calls for crows, and the crows fly.

Akhmatova describes in the first part why this century is worse, sadness and alarm. But the next part is about the west where she describes city's with morning light on the roofs. While in Russia the white marks the roof. The viewing of Russia being sad and with snow, while look towards the west as being light and warm has a certain melancholy in it.  Another more contemporary example

of this melancholic an miserable state Russia seems to be in all the time is shown in a poem by Boris Ryzhy.

''How the granite is covered in ice…''

There'll be warm station beer, there'll be a cloud overhead, there'll be melancholy music –
I'm saying farewell for good.
(…)

I was born – even now can't believe it –
in a labyrinth of factory yards
in that dove-like land, divided
between crooks and the nick
a thousand years.

Boris Ryzhy lived his whole live in Yekaterinburg, until the age of twenty-six. He committed suicide while being successful and already achieved literal success. (Aleksey Purin,2005). In most of his work there is much melancholy and alcohol is

constantly mentioned.

## 3.2. The body and the Mind

But why is this emotion so heavily visible within the Russian culture? Anna Wierzbicka a polish linguist at the Australian National University wrote numerous papers about the Russian emotional expression.   In her study of 1992 she tries to understand the relation between the Russian language and the emotions. In this study she describes the Russian as while under a lot of emotional stress and free expression having a high emotional temperature. (Wierzbicka 1992). She further explains the complexity of the language having multiple words to describe emotions whereas the English language only has one. Russians not only use words to describe emotions but use words to describe if a person has visible changed by its emotion.
''in Russian, the face, the

eyes, and indeed the person as a whole can be described as visibly changed for having cried. In an English translation, the meaning of such descriptions has to be altered, for there are no idiomatic ways of rendering it. For example, the expression zaplakannye glaza is rendered in RECDHB as "tear-reddened eyes," but really means more than that: "eyes visibly changed, showing that the per- son has cried" (not just "reddened"). (Wierzbicka 1998).

Another example of this is an experiment by Aneta Pavlenko who made an experiment between Russian and American students in order to find the differences between the emotional expression. She also states that the Russian emotions are much more linked to the body and are more dramatic (Aneta Pavlenko,2002). While also describing laughter and love. Both Wierzbicka and

Pavlenk describe this drama within the Russians, the way they describe their emotions. Wierzbicka also describes that in Anglo-American discourse there is opposition between body and the mind while in Russia there is only the ''Soul state'' of emotions (The Dusha). (Wierzbicka 1992).

In the figure above [2] by Albrecht Durer the emotion of melancholy is portrayed, which seems to be an emotion that is so heavily involved in the Russian culture. Erwin Panofsky an art history describes this drawing as being Durers phycological self-portrait. He is the angel with the compass and is sad because it cannot create these geometric objects. The angel can only imagine the object but is unable to create it in the real world.  Melancholia is as pure geometry unable to be achieved.

Staying  within the world of
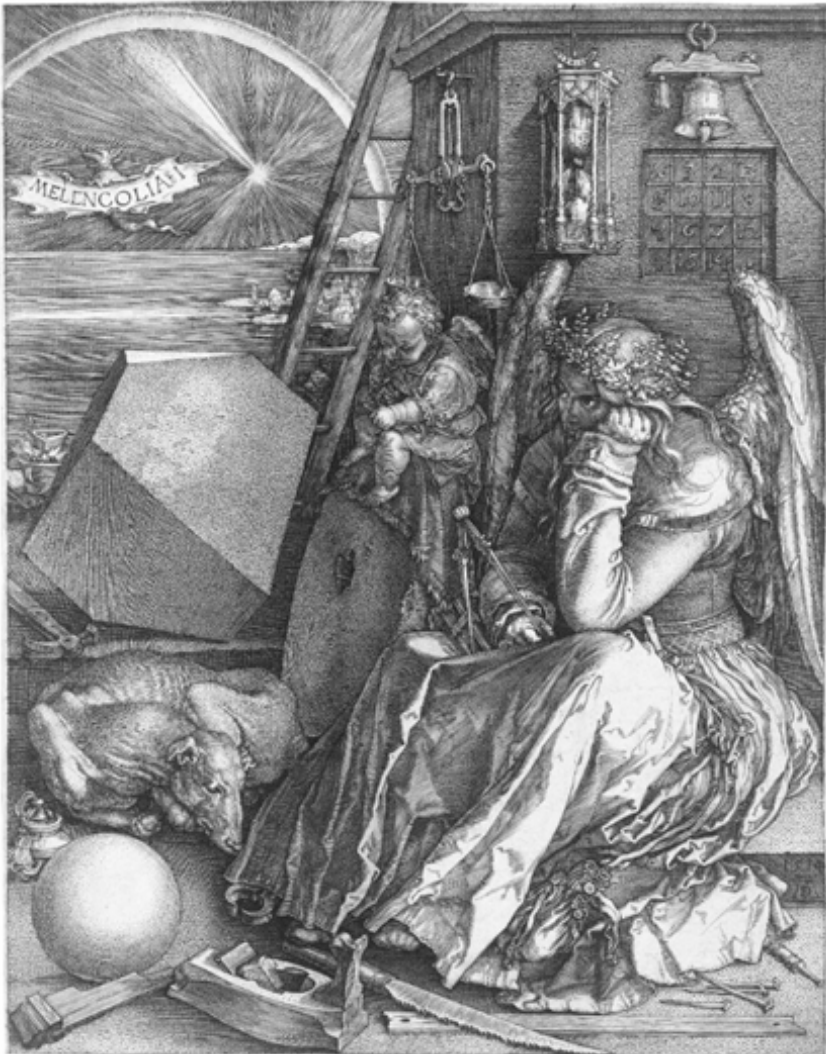
Figure 2 Melancolia, Albrecht Dürer,1514

Figure 3 Pablo Picasso 1913-1914 Woman in an Armchair

the arts an, art movement that dealt with geometry and the way space is received was the cubist movement. With main artists being Pablo Picasso and Georges Braque. Within Russia this movement gained followers with the most well know Marc Chagall but I also want to make plea for Lyubov popova and Olga Razanova who made beautiful cubist works within this Russian culture. For example Raznovas work ''The factory and the Bridge'' 1913 or ''Metronome'' 1914. The overall cubist move-ment tried to not create the perfect perspective of an image. It was more focused on how one would perceive a space. In order to perceive this space, they created multiple perspectives within one painting and thereby created an atmosphere rather than an image of the real viewed image. Looking at [3] Woman in an Armchair, there is almost no clear picture of a woman in an armchair, only an vaguely visible figure and parts of a chair. Instead of this clear image Picasso tries to lure the viewer into the painting and let the viewer create his own feeling. Do you see a lovely picture of a woman in a skirt or the dreadful one of a woman with her intestines out. (Ettinger, T. 1996) This Vagueness within the works of the cubist gave an entry into understanding the space called 'Terrain vague' within the context of Yekaterinburg. By layering different perspec-tive of a space in order to reveal its true atmosphere.

## 5. Russian terrain vague

To conclude, the paradoxical between the physical and the mental sits within Yeka-terinburg. Where the phys-ical in Yekaterinburg is this heavy industrialised city in the Urals, where the average temperature is 2C , where there is a constant dispirited melancholic state of the city, with almost no place to es-cape this nature. The city is currently also in this strange state of becoming a capital-ist city within its old Marxist background. While office sky scrapers begin to dominate the landscape Yekaterinburg's back alleys still possess the old nature of the city.

Going back to Ignasi de Sola-Morales terrain vague it can be described as being these moments of seclusion within the context of the modern urban city. Most of these spaces [1] are left overs. But what if these left overs are all over the city and beyond? Can these spaces still be seen as moments of seclusion or a place to escape the pressure of the melancholic Russian culture? Or are the spaces that con-tribute to this nature be the thing that haunts our western modern city's, the capitalist manifestation of shopping malls or big office buildings. They act within the city as

archipelago's of something different than the constant depression. By saying this the terrain vague of to Ignasi de Sola-Morale for me transforms from something physical as a wasteland to something mental or cultural, a place to escape. It is similar to Alexander Brodsky vodka pavilion [4]. He creates this secluded space with a ritual of drinking vodka while not only this small secluded space lets you escape the reality of the outside, also the act of drinking vodka lets you escape the physical state and bring you in a mental state of inebriation. This all in a space conceived out of old white painted window frames of a slaughter house, giving the room a melancholic kind of atmosphere.

The difference between the metal an real world, is displayed as; designing a beautiful capitalist shopping mall in order to escape the depression, resulting in a city which is taken over by this thinking and where there are only spaces left that relate to the western understanding of train vague. A place to escape the homogenous nature of the modern west city. It is therefore necessary to find a way to keep the richness of the Russian culture but also to create a place in order escape the depressing state. This is done by creating an new type of archipelago that functions as terrain vague in the changing nature of Yekaterinburg towards a homogenous western society. The drawing for the design project should explore the part

of the city or where the clash of western and Russian state collides. I therefore chose the street Uilitsa Vaynera, wich is the main shopping street with its big shopping malls and overabundance of capitalism. In this street, where the back alleys still have the Russian state but the front indicates where its heading towards. The paradox can be seen in this state where the the city is in now. Should it follow our way of thinking by letting us colonize their city or should they follow their Ducha. Exploring the back alleys in relation with the material, program, and history The drawing for the design project aims at the atmosphere of the place in order to preserve it, like the cubist did with their multiple perspectives.



Figure 4 Alexander Brodsky, Vodka Pavilion,2003, Photo by Yuri palmin

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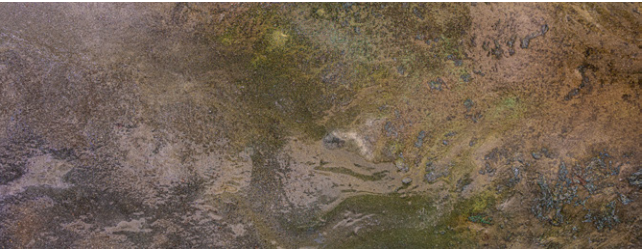
# TERRITORY AND

# TRANS-GRESSION

## FAILURE AND IDEOLOGY, AN IDEOLOGY OF FAILURE: ALTERNATIVE MODELS OF RESILIENCE IN POST-EXPLOITATION ZONES

Pantaleone, Pedro Daniel

**BORDERS&TERRITORIES**

# TERRITORY AND *TRANS*-GRESSION

FAILURE AND IDEOLOGY, AN IDEOLOGY OF FAILURE: ALTERNATIVE MODELS OF RESILIENCE
IN POST-EXPLOITATION ZONES

**PEDRO DANIEL PANTALEONE**

**DELFT UNIVERSITY OF TECHNOLOGY**

20
21

"*JE SUIS L'EMPIRE A LA FIN DE LA DECADANCE*"

PAUL VERLAIN,
*'LANGUEUR'*, 1884

# SPATIAL ANALYSIS

///

The spatial research is the qualitative and material understanding of the previous theoretical framework . In the specific case it was aimed at bringing forward the alternative qualities emerging from the spatial condition of coming after the industrial civilization of this territory.

In the case of Degtjarsk, trans-gression as an orientation of intentions coincides with an alternative direction emerging from the failure of the spatial purpose of an infrastructure. Along this direction, different qualities and conditions are revealed. In the attempt to instrumentalize them in a design proposition coherent with their significance, therefore, the aim of the spatial research was

that of understanding, classify, investigate what these qualities consist of.

More precisely the aim was to charachterize the spatial meaning of the fracturing of a previously ordered and controlled way of understanding space in its functionality and performance. In the framing of these characteristics, two main concepts best describe the feature of this kind of territoy: the notion of post-exploitation zones as anti-landscapes, and the technogenic qualities that give it such a connotation. (Muller and Trubina, 2020, Talento, Amado, Kullberg, 2020).

From the large scale to the site scale, qualities that emerge from the ontogenetical agency of a monothematic technical purpose are made visible trhough mapping and

drawing. Landscapes, spaces and objects are exposed in their process of shifting from a positive purpuseful condition, to a depleted and entropic one. The product of a 'breaking point', of a functional system collapsing, is in this way framed as a spatial counter-finality to the progressive intentions that informed its production.

MODERNITY

[PRO-GRESSIVE SPACE]
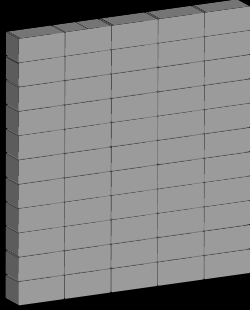
POST-MODERNITY

[DECONSTRUCTED SPACE]
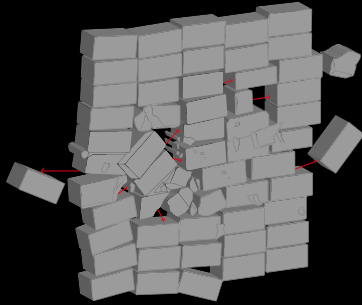
POST-MODERNITY

[TRANS-GRESSIVE SPACE]

REGIONAL



ПЕРВОУРАЛЬСК
PERVOURLASK

ЕКАТЕРИНБУРГ
EKATERINBURG

35KM

РЕВДА
REVDA

ДЕГТЯРСК
DEGTJARSK
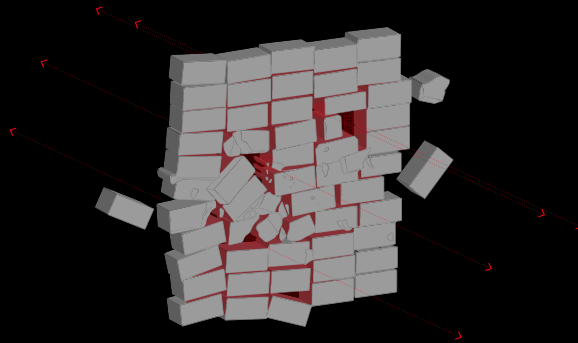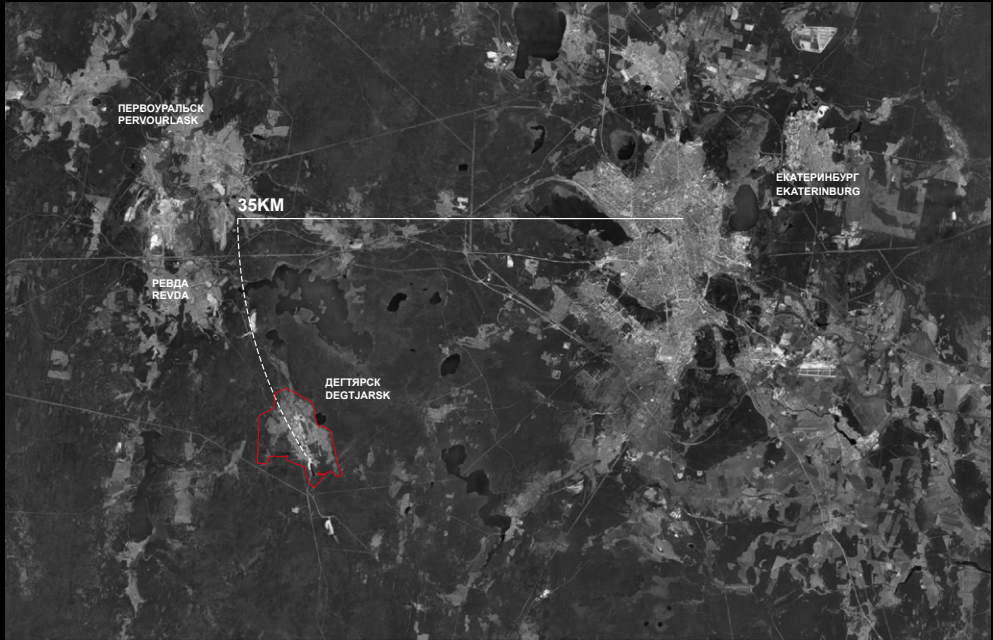
# THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

Sverdlovsk Oblast, Russia



3 - FURTHER PROCESSING / LOGISTICS

TO MOSCOW

ПЕРВОУРАЛЬСК
PERVOURLASK

CR SMELTER

2 - PROCESSING AND SMELTING

ТRAIN SHIPMENT

ЕКАТЕРИНБУРГ
EKATERINBURG

РЕВДА
REVDA

CU SMELTER

TO VLADIVOSTOCK

ДЕГТЯРСК
DEGTJARSK
CR 24 – NI 28 - CU 29 - ZN

1 - EXTRACTION OF ORE

CR 24 – NI 28

Полевской
POLEVSKOY
CR 24 – NI 28

## Legend

+ Industrial plant
— Logistical connection
--- Power line
····· Railway

5    20
0km    10    40

III



IV

THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

Degtjarsk, Russia

Дегтярск
Degtjarsk

LEGEND:

✛ LOCATION OF FORMER MINING SITE
···· RAILWAY
--- MUNICIPAL BORDER
₰₰ STREETS
▮ CONTAMINED WATER BODIES
▮ WATER BODIES
▢ MINING SITE AREA

0.5      2
0km   1        4

THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

Degtjarsk, Russia

Дегтярск
Degtjarsk

LEGEND:

--- MUNICIPAL BORDER
₰₰ STREETS
▬ FORESTED LAND
▨ DACHAS
▦ MULTI-STOREY
▬ WATER BODIES

0.5      2
0km   1        4

The mechanization of the territory and its subsequent failure bring about the dismantling of step-by-step operations. [II] From the large scale point of view, Degtjarsk´s role was the original step of this process, the extraction of resources. This monothematic purpose determined its urban layout as a paranthesis-like texture [V, VI]. A central spine of abandoned mining sites constitues the 'breaking point' of Degtjarsk. A point in whihc various technogenic elements emerge questioning the boundaries between what is natural and what is artificial. Two huge 300m high waste heap, challenge the prexisting topography [VII], as a result of exploitative pur-poses aimed at the movement of resources from  below the ground to its surface with the production of overburden as a collateral consequence [VIII]. A relation in section that caused this central 'zone' to be characterized as a different ecosystem [IX] with peculiar geological and ecosystemic conditions. High concentrations of metal in the ground differentiate the biotope of the zone in respect to its surroundings. technoigenic species [X] populate the waste heaps creating a discontinuity from the ecological point of view.

THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

Degtjarsk, Russia

Дегтярск
Degtjarsk

2.5km

5 km

Legend:

Waste heap
kapitalnaya nr.1

Waste heap
kapitalnaya nr.2

k-1: 5km and 2.5km
radius

k-2: 5km and 2.5km
radius

Mining site area

Topography

THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

kapitalnaya nr.2, Degtjarsk, Russia

1  Extraction of copper ore

2  Overburden accomodation

3  Mined Bulk consumption
   by the plant

4  Waste dump

5  End product shipment for
   smelting

IX



THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

Degtjarsk, Russia

Legend:

Volcanogenic rocks

Zone of the serovsko-Mausky fault

Igneous rocks of the Tagilsky downfold

Degtjarsky sub-volcanic complex

projection of the ore outcrop

Abandoned mines

X



THE TECHNOGENESIS OF DEGTJARSK
Operating system, out-of-place artefacts

Degtjarsk, Russia

BRASSICACEAE        ARABIS SAGITTATA        MATTHIOLA DAGHESTANICA        DRABA STYLARIS

GYPSOPHILA MURALIS        BROMUS INERMIS        BROMUS INERMIS

Robinia Pseudoacacia        Betula Pendula        Populus tremula

Further analysis proceeded in the specific site of design, the former Kapitalnaya nr.2 mine [XI]. The feature of the anti-landscape here acquire architectural and spatial connotations.

In order to understand them better therefore, a reverse of their debelation was carried out, isolating each of the objects present in the site and recosntructing their orderly composition and original functions.

This brought to the understanding of what happens when a the production of space as valuable for the operations it performs collapse.

A former hydro copper sedimentation tank now lays were once copper was used to be extracted from copper ore. Acidic water flowing through the structure substituted copper  with iron taken from metal scraps giving copper in the form of a brown mass at the bottom of a gutter. [XII] Once the functional tension that used to formally keep together this object is released, its material components let go and fall apart. Breaking the continuity of its orderly sequence of elements. [XIII] A copper ore sorting building loses its roof, the residue of which can be found around the object now. The plaster gets corroded revealing here and there the brick wall underneath, windows are cracked and the seriality in composition and symmetry is broken into singular elements. [XIV] A water tank in the same area gets surrounded by vegetation, and the metal sheets of its envelope fall apart (maybe they got removed?) revealing the layer of insulation underneath. What happens in the process of fragmentation of space, therefore, is the unveiling of a more essential and relational condition of architecture.

The exposure of its void, its negative, reveals the intrinsic physicality and materiality of space. When the continuity between object and function is broken, the contingency of space emerges from that subtraction.

**THE TECHNOGENESIS OF DEGTJARSK**
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA

Out of place artefact - Hydrocopper workshop
Performance: Separation of copper from copper ore
Status: negative

Out of place artefact - Ore sorting building
Performance: Ore sorting building
and logistic facility
Status: negative

Out of place artefact - Waste heap
Performance: negative
Status: negative

Out of place artefact - Administration building
Performance: Administrational: miners facility (dining rooms, showers, etc.
Status: partly negative

LEGEND:

OOPA

WASTE LAND

BUILDING

MAIN ROAD

RAILWAY

0m    125m    175m
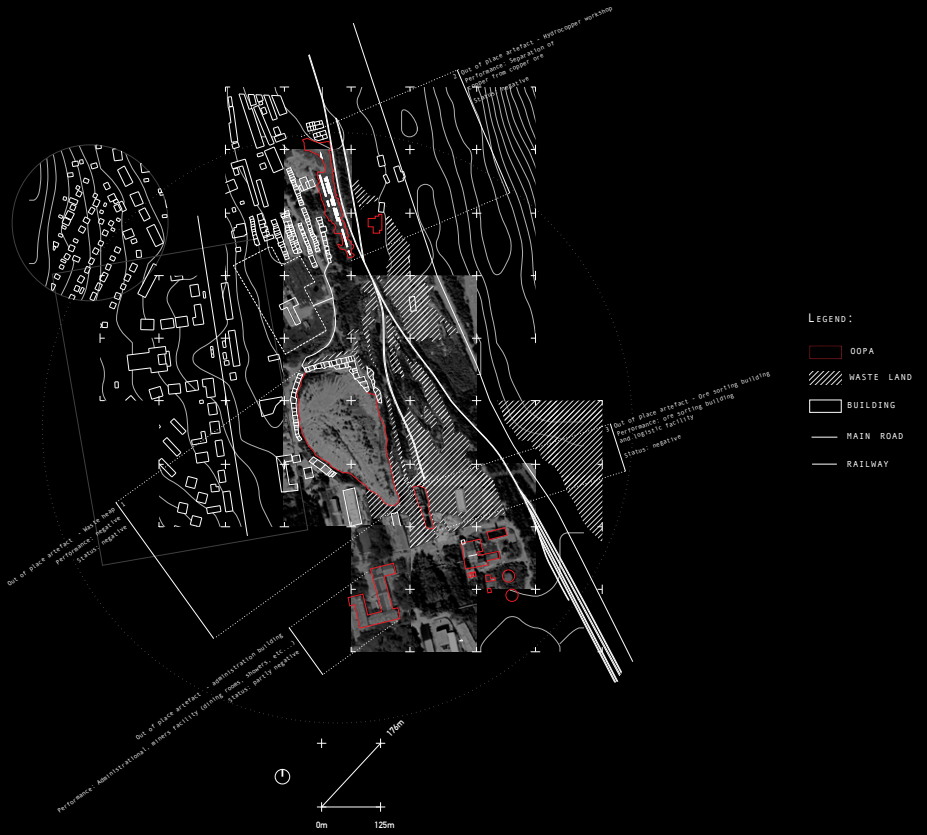
**THE TECHNOGENESIS OF DEGTJARSK**
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA
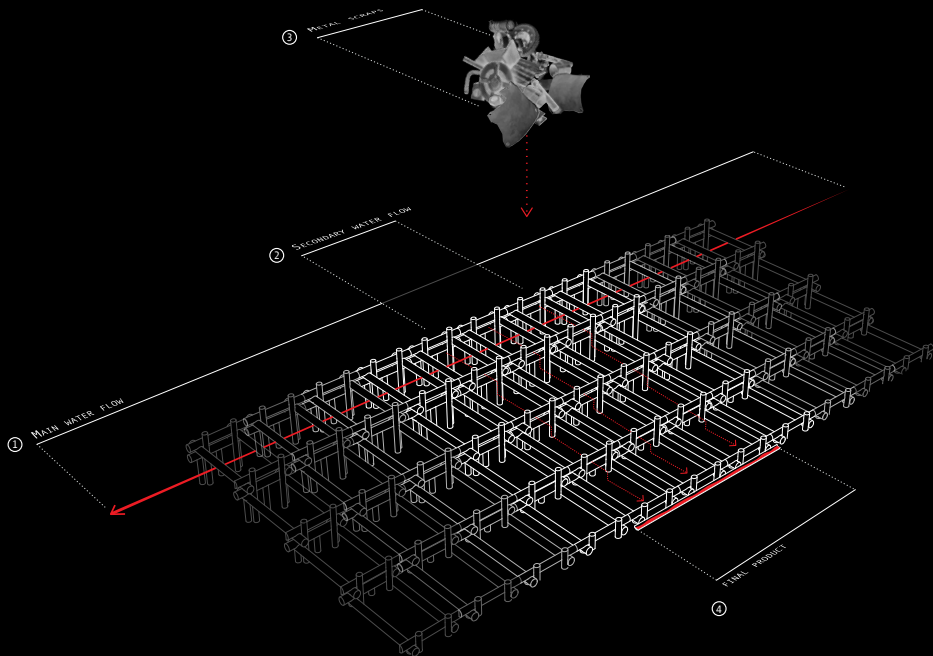


1   SLUDGE-FREE ACIDIC WATER FLOWS TRHOUGH THE STRUCTURE

2   DURING THE SMALL MOVEMENT OF WATER, A SUBSTITUTION REACTION TAKES PLACE: COPPER IN A SOLUTION OF COPPEER SULFATE GETS SUBSTITUTED BY IRON.

3   IRON SCRAPS FILTER AND PROVIDE THE IRON FOR THE REACTION TO TAKE PLACE

4   COPPER IS SEPARATED IN THE FORM OF A THICK BROWN MASS

**HYDRO-COPPER SEDIMENTATION TANK**

**THE TECHNOGENESIS OF DEGTJARSK**

KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA
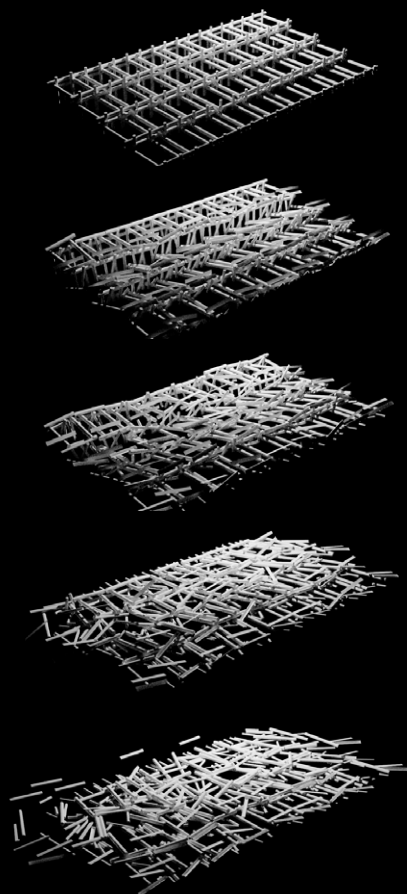


**HYDRO-COPPER SEDIMENTATION TANK**

# THE TECHNOGENESIS OF DEGTJARSK

KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS
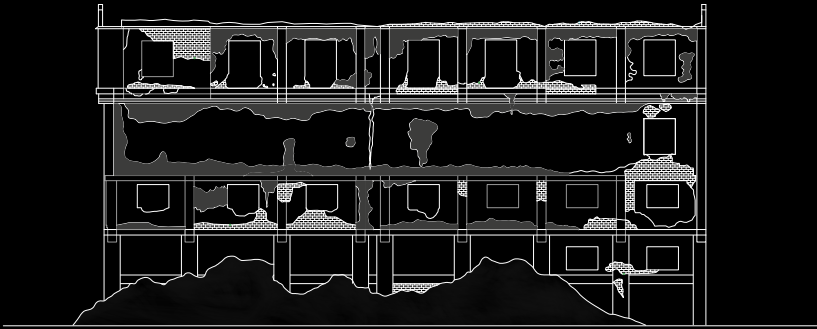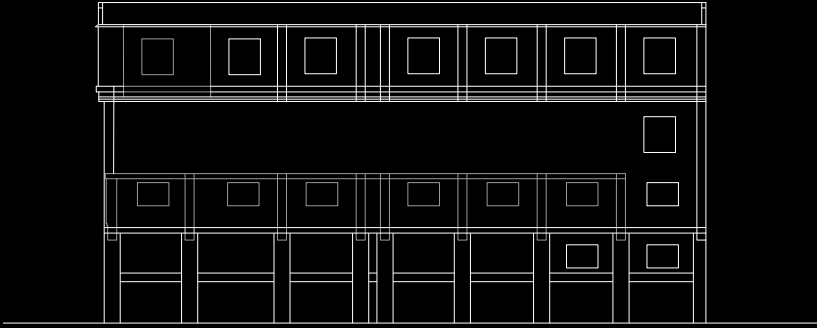
DEGTJARSK, RUSSIA



## COPPER ORE SORTING BUILDING

# THE TECHNOGENESIS OF DEGTJARSK
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA
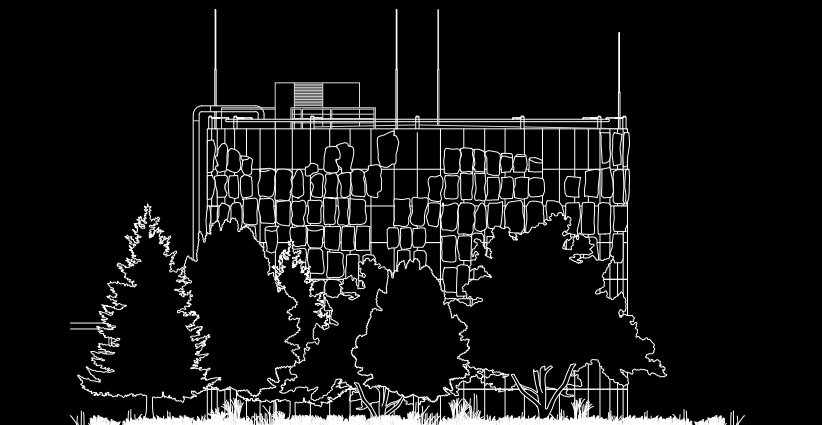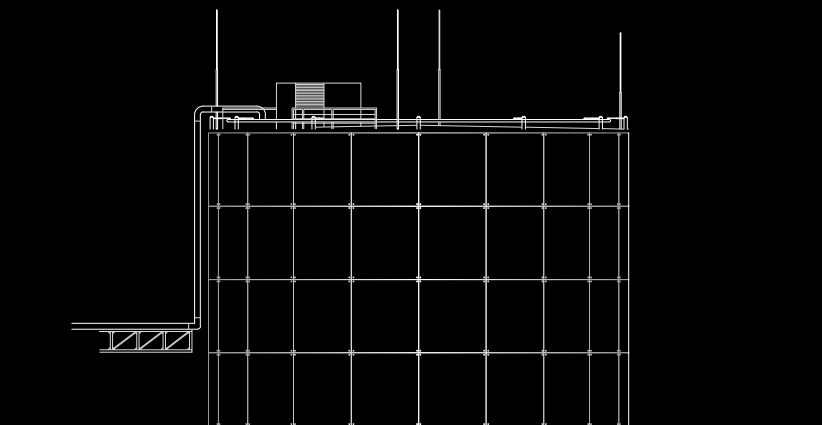
**WATER TANK**

# MODUS OPERANDI

# WORKSHOP

///

The modus operandi workshop is the hinge point between theoretical framework spatial analysis and design. With plastic experimentation, the focus on the qualities of fragmentation and destruction become operative.

They become aimed at the taking care and re-elaboration of waste and failure of an orderly system. They insist on the tension that the consequence of failure produces from a spatial point of view. As Nicola Emery puts it in his work "Destruction and Project",

'the spectrum of a different poiesis, strong of its provocative poverty, starts to wander around looking to organize, even if in a way that is still only allusive with rags and garbage, the meanings and forms of separation. the reverse of the city, its negative, its dead, begins to prove to be elaborable and creative'.

This parasitic behaviour in respect to the negative of progressive space is therefore investigated in two plastic experiments. The scavanging and re-elaboration of building waste material [XV] has been afterwards reorderd and distorted again.

A meta operation which consists of neglecting the purpuselessness of waste and to then re-iterate the process of its formation from the point of view of its formal and material interference. with a violent and destructive action.

From those fracture, then a parasitic and perpendicular movement emerges. In the second experiment [XVI] building waste is displyed in the act of falling apart, and a spatialization of the void inbetwen the fragments occurs as an operation of taking care and making intentional of that negative space.

Patches and stitches as a resistence to shattering.

Both these moments represent the subjective attempt to improvise, represent and valorize the alternative qualities that emerge from the fracturing of a previously functional and organized material structure.
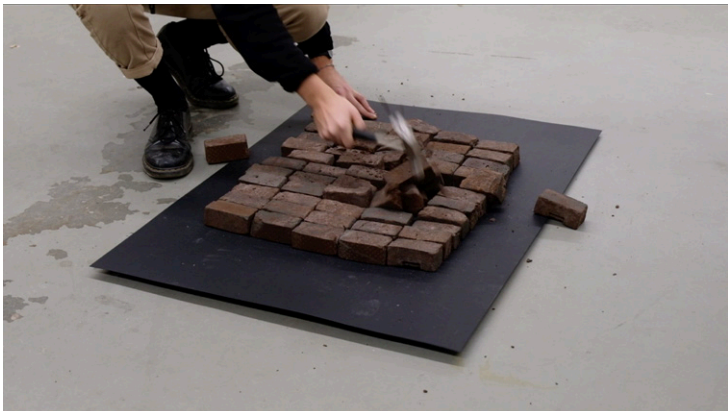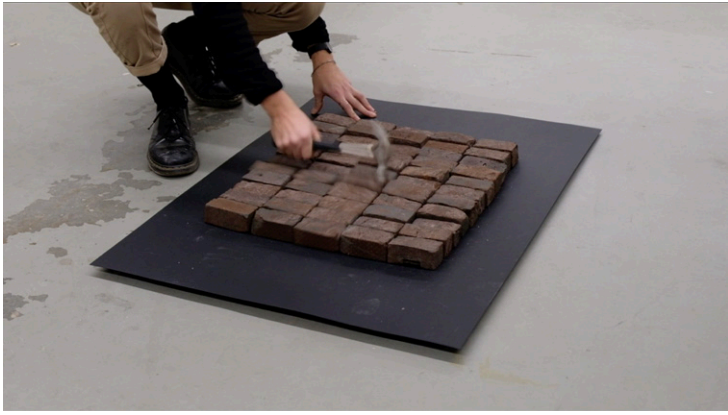
# DESIGN INTENTION

///

The collateral qualities of progressive space are finally brought back to a more essential architectural understanding. The breaking apart of a functional system, reveals the instrinsic phisicality of space as an ensemble of 'stuff'. [XVII]

When the mystification of space for the function it performs ceases to exist, the embodied and singular experience of it for its contingency is re-descovered. This unveiled 'dirtiness' or 'scrappiness' of space is what gives rise, as said, to practices of imporvisation in this region since long now, and are, in their specific acceptation in the spatial case of Degtjarsk, the final object of the design intention.

The fragmentation of objective space gives us back contingent and situated spatial circum-stances. A dilemma on the other hand arises from this same circumstances. How can we metabolize the structural presence of undeterminacy, improvisation, as part of a projectual operation such as design is.

In this repsect, therefore, the role of the architect/designer is also re-written, shifting from a heroic, resolutive position, to a more humble and contingent one. This means to incorporate the arrier-guarding behaviour proper of a post-failure condi-tion into a pre-liminar design that is infra-structural.

As a result designing consists of the projection of the process of recovery of the territory, rather than its final resolution.

In practical terms this means to design the spatial infrastructure necessary to intervene and interact with the residue of progressive space. [XVIII]
In this way the projectual basis of architecture wich tradi-tionally holds on de-ductive/in-ductive processes of control of its outcomes shifts towards the use of ab-ductive methods instead. The operation of trial and error of which ab-duction consists of is made possible by the structuring of this sillogism into three premises. A major premise, a minor one, and a conclusion. The second of these is dubious, and therefore the outcome results probable.
The minor premise, in the specific case, consists of the acknowledgement that the operation of 'taking care' and



XVII

OB-JECT                    SITUATION

GLOBAL
ABSOLUTE
POSITIVE
FORMAL

CONTINGENT
RELATIVE
DIFFERENTIAL
INFORMAL
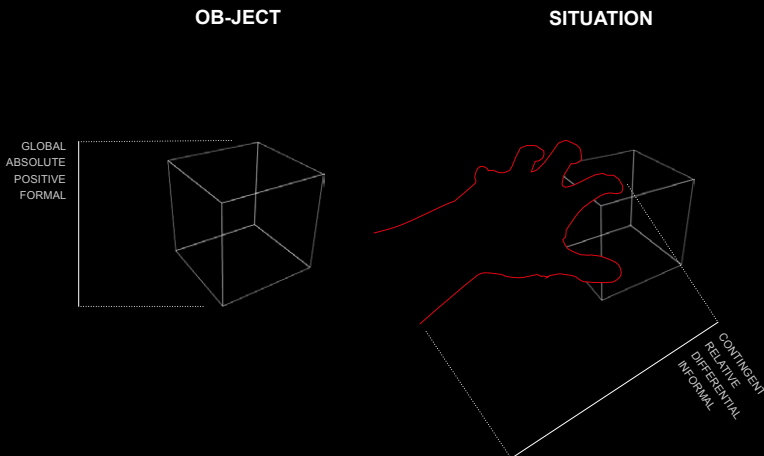
creative re-elaboration of the territoy by its users depends on a structural uncertainty: it can happen or not, here or there, when or whom. The preventive design of the infrastructure that can help and nudge these actions therefore is what gives to this design intention the characteristic of being improvisational as well.[XVIII] Supporting the action of cleaning, cutting, transporting, re-assembling, and whatever operation necessary for the users to interact with the post-exploitation zone becomes the function of the proposed designed space. A community of makers that slowly re-shape and appropriate the site and its objects.

DEDUCTION/INDUCTION

PRO-JECT

FUNCTIONAL OBJECT

AB-DUCTION

PRO-JECT

MAJOR PREMISE
[CERTAIN]

MINOR PREMISE
[DUBIOUS]

CONCLUSION
[PROBABLE]



INFRASTRUCTURE AND IMPROVISATION
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA

XVIII

SPACE FOR TOOLS

STORAGE
CLEANING

SPACE FOR MACHINERY
MANOUVERS

IMPROVISIONAL MOVEMENT

**INFRASTRUCTURE AND IMPROVISATION**
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA



ECOSYSTEM - LANDSCAPE
REHABILITATION
MJP - PASSIVE

INFRASTRUCTURE
ARTEFACTS
MJP - ACTIVE

INFRASTRUCTURE
ARTEFACTS
MJP - ACTIVE

BUILT ENVIRONMENT
REHABILITATION
MJP - PASSIVE

*TO CREATE BUILDINGS WHICH FUNCTION IS THE ONE OF
CREATING BUILDINGS WITH FUNCTIONS*

# INFRASTRUCTURE AND IMPROVISATION
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

Degtjarsk, Russia

PHYTOREMEDIATION

CONSTRUCTED WETLANDS

BIOSTIMULATION                                    LANDSCAPE

SPATIAL ORGANIZATION

OUTDOOR COMMON SPACES

REMEDIATION
DRILLING
USING
RESTING
CLASSIFYING
MOVING
CUTTING                          METAL WORKSHOP
TRANSPORTING
STORING                          WOOD WORKSHOP
LEANING
JOINING                          TESTING MATERIALS

TAKING CARE
EXPLAINING                       CLEANING AND DE-CONTAMINATION      INFRASTRUCTURE
CLEANING                         FACILITY                          OOPA
SMOOTHING
GRABBING                         STORAGE FACILITY
PROTOTYPING
CONSOLIDATING                    MACHINE HANGAR
PATCHING
ADDING                           EXPERIMENTAL SPACE

INDOOR COMMON SPACES

EXHIBITING SPACES

COMMON KNOWLEDGE SPACES          BUILT ENVIRONMENT

MACHINE TRAINING/LEARNING CENTER

# METASTABILITY
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

Degtjarsk, Russia

USE

WOOD-METAL WORKSHOP
CLEANING AND DE-CONTAMINATION
FACILITY
STORAGE FACILITY
EXPERIMENTAL CENTER

+

TIME +
-

PRE-LIMINAR                  PRO-JECTUAL

REMEDIATION

**THE TECHNOGENESIS OF DEGTJARSK**

KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA

LEGEND:

OOPA

WASTE LAND

BUILDING

MAIN ROAD

RAILWAY

0m 125m 175m

**INFRASTRUCTURE AND IMPROVISATION**
KAPITALNAYA NR2 ANTI-LANDSCAPE, OUT-OF-PLACE ARTEFACTS

DEGTJARSK, RUSSIA

**METASTABILITY**

KAPITALNAYA NR2  ANTI-LANDSCAPE,  OUT-OF-PLACE  ARTEFACTS

DEGTJARSK, RUSSIA

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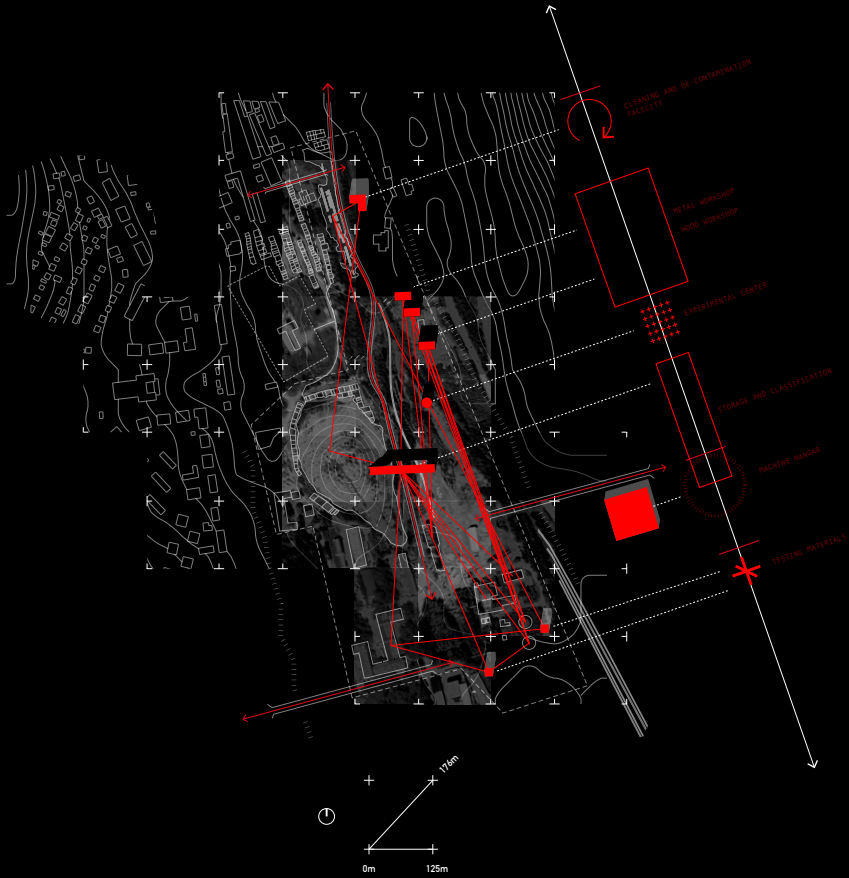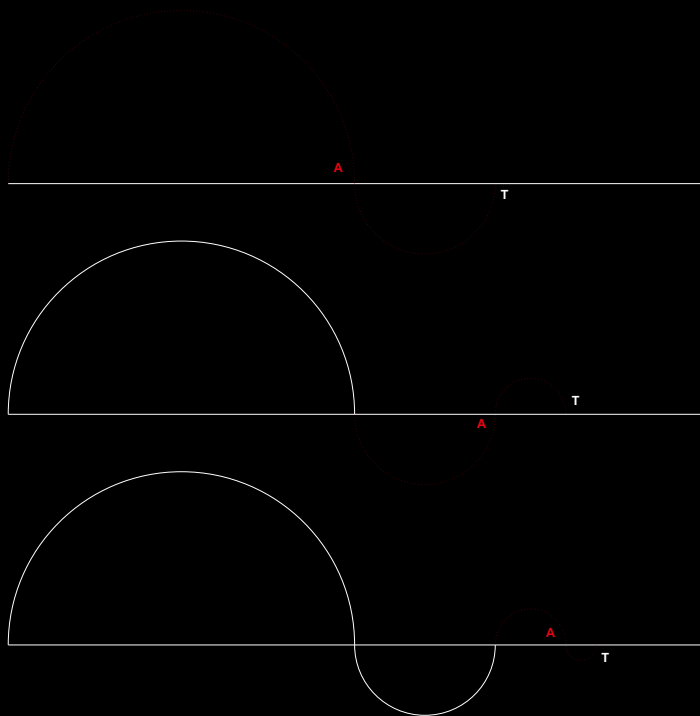
Parallel to the Minor premises and its objects, two major premises facilitate access and usability of the site. They constitute the major premises as they deal with the making possible for interaction to subsist, remediating to the toxicity or the collapse of buildings for example.

In being structure along these three premises the project, as said, becomes a provisional process, of which the final outcome cannot fully be determined, and that starts preliminarily and makes of the process of transforming, the object of design itself. [XXI] Temporality becomes a major component of such a process, therefore. The objects and functions proposed, eventually spark at the beginning and once all the objects are collected, or cleaned, or cut, etc they lose their purpose and get reused themselves, and disappear. Meanwhile, other spaces are created with the support of that infrastructure.

The condition of being always provisional and never perfect, the intentional and structural acceptance of undeterminacy as a tensional state in constant transformation characterize this system as a metastable equilibrium.

The constant subtraction of a final resolution I thought was well represented by Zeno's paradox [XXIV] of Achilles and the tortoise, as Simondon puts it: metastability arises from the incompatibility of the system with itself from what one could call the oversaturation of the system"

By making uncertainty the norm, making propulsive the negative outcome of failure a system remains under tension and is capable of modifying itself. Providing a self-regenerating trajectory along which meaning is formed from the unveiling of contingent situations.

"Negativity is political since it signals the vulnerability and contingency of every phenomenon that appears fully positive and replete. Negativity draws attention both to the instability of every form and to the contingency of all boundaries."

-MAROŠ KRIVÝ
INDUSTRIAL ARCHITECTURE AND NEGATIVITY: THE AESTHETICS OF ARCHITECTURE IN THE WORKS OF GORDON MATTA-CLARK, ROBERT SMITHSON AND BERND ANDHILLA BECHER, 2010

# TERRITORY AND *TRANS*-GRESSION.

FAILURE AND IDEOLOGY, AN IDEOLOGY OF FAILURE.

Pedro Daniel Pantaleone, 2020

Technische Universiteit Delft

BORDERS&TERRITORIES

MSc3/4 program

AY 2020/21

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# TABLE OF CONTENTS

# ABSTRACT

This essay is concerned with giving a theoretical background to a spatial research and design project that aims at exploring the possibility of alternative thinking in architecture.
The need for doing so is dictated by the emergence of a contradiction between material conditions of contemporary society and the foundations onto which the production of space is relaying. Progress and growth reached a saturation point in which the counter-finalities of their exercise have become unbearably heavy and unsustainable.
In the exploration of the negative to normality, progress, and its destructive part, it is attempted to draw trans-gress as the teleological alternative counterpart to an essentially objectivized way of thinking reality.

# INTRODUCTION

When the nature of post-industrial sites more and more gets tackled with alternatively: motionless conservation or persistently pro-gressive recycling of objects aimed at further capitalization, this writing attempts to contextualize the breaking apart of an idea of space, humans and the 'world', as we use to think of it and to make something else out of it.

This means to give a third way of looking at the corrupted fruits of modern growth and trying to propose a coherent response to it in terms of resilience and rehabilitation of exploited territories. To look at the fragments means to take care of them, not to swipe them away to move further in the same trajectory that produced that devastation. To look at the void between the fragments means to give voice to the 'part that has no part' that produced them, and to scavenge for a better world.

The motivation for doing so, therefore, will move from the necessity to metabolize ideological and material failure, because the exhaustion of ideas is now uncannily coinciding with the exhaustion of resources, energy, and meaning.

The starting point will therefore be ideas and ideologies, and what happens when they lack in producing purpose and meaning in terms of spatial production. This will proceed by analyzing modernity and the critical substrate that made it possible for it to fail. Science and technology as the consistency of the modern project are then related to the Russian context. This will allow us to talk about why is it relevant to precipitate these urgencies in the context of a small mining town near Yekaterinburg, as the links between ideology and Russian culture becomes stronger and the toxicity of Degtjarsk removes any opacity from the critical operation here attempted.

Finally, by pushing back and forth from the city, Degtjarsk, to its conceptualization and its role in disclosing trans-gressive movements in both spatial and philosophical terms, it will be attempted to outline the possibility of an alternative arising from that same failure.

One last note is necessary to specify what kind of orientation this writing has. Trans-gress is the attempt of giving an alternative, both philosophically, and therefore, architecturally, to our current societal progressive schemes. Nonetheless, for the sake of the programmatic criticism of those ideas, it is important though to underline that this condition is nothing that can be defined as 'new' or 'next'. It is the premise of this writing, and its content, to be retrospective and formulate a different direction arising from actions that were already put in place. This thinking, therefore, is only possible if emerging from the pre-existent conditions, and therefore lacks in 'originality' and 'novelty'.

# THE TECHNOGENESIS OF DEGTJARSK

Let us suppose I am standing in a field in the middle of nowhere. Well, not really, I am standing in a field in the countryside around Degtjarsk, near Yekaterinburg, in Russia.
I see nothing but grass, trees, birds, and so on. Nonetheless, in the distance, I can glimpse some buildings, a chimney, a power line. Is this enough to
compromise the 'purity' of the natural environment around me?
When the progressive civilization of the world is achieved, its territory has virtually reached a condition in which the relation between man-made artifacts and natural environments has merged and the border between the usual humanist distinction between these two cannot be clearly stated [Pepperell, 1995]. This condition consists of a new ecology, a synthetic and continuous entity.
The fact of seeing some kind of artifact virtually everywhere in the distance, therefore, necessarily shifts the attention from the meaning of something 'in itself' the grass field 'in itself', the power line 'in itself', to the relational space between them, that we can establish as 'meaningful'.
This conceptualization of space emerges from the need to overstep the very dichotomy between object and subject put in place by its homogenization. Instead, an ontogenetical correlationism that sees 'intra-dependent' entities that only exist in relation to each other [Kousulas, 2017, Barad, 2007] emerges from this condition. What is then referred to as the technogenesis of Degtjarsk is precisely the emergence of an alternative condition arising from the spatial outcome of a technologically progressive idea of 'civilization' that was, on the other hand, oriented in the opposite sense. Object-subject relations in a state of inter-dependencies, 'distinct beings in an antagonistic relationship with their surrounding' [Pepperell, 1995].
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The first settlers of Degtjarsk were coal burners who burned charcoal for the blast furnaces of the Revda iron-making plants. This area then started to be populated by miners of iron ore around mount Labaz. With the deepening of the works, the largest deposit of copper in the world was found and several mines started to open: creating a 'spine' of mining, in different spatial forms (open pit, underground, workshops for processing) that cut the city in half and lay on the west side of the mount Labaz. Huge mining facilities were pumping copper out of the ground and the city revolved around this activity and the idea of producing and progressing thanks to technological advancement.
The monothematic implementation of industrialization in the formation of spatial meaning in Degtjarsk constituted the normative agent in the production of space.
Now that the world has ended, and the mines are exhausted, the self-fulfilling agency of technology-made-intention emerges in its purposelessness. For this reason, Degtjarsk is the embodiment of a logic that made it possible for 'vitality and decadence, abundance and deprivation, lordship and reification coincide ruinously' [Emery, 2010]. Made it possible for the positive premise of progress to coincide with its demons in what results in being a quite literal materialization of failure. The fragments of this former splendor, now lay on the territory like splinters and are flooded or in material decay.
The analogy between an ideological collapse and a material one is less far-fetched than it seems. As explained by Muller and Tubrina who analyzed the post-soviet territory around Yekaterinburg, 'scraps clatter [clutter] especially post-Soviet space—the collapse of the USSR having been a "breakup" in quite a literal, material sense.' [Muller&Trubina, 2020].
This fragmentation is, moreover, of a particular kind. It is the dismantling of a certain ideology that had the pretension to insist on the 'mechanical',
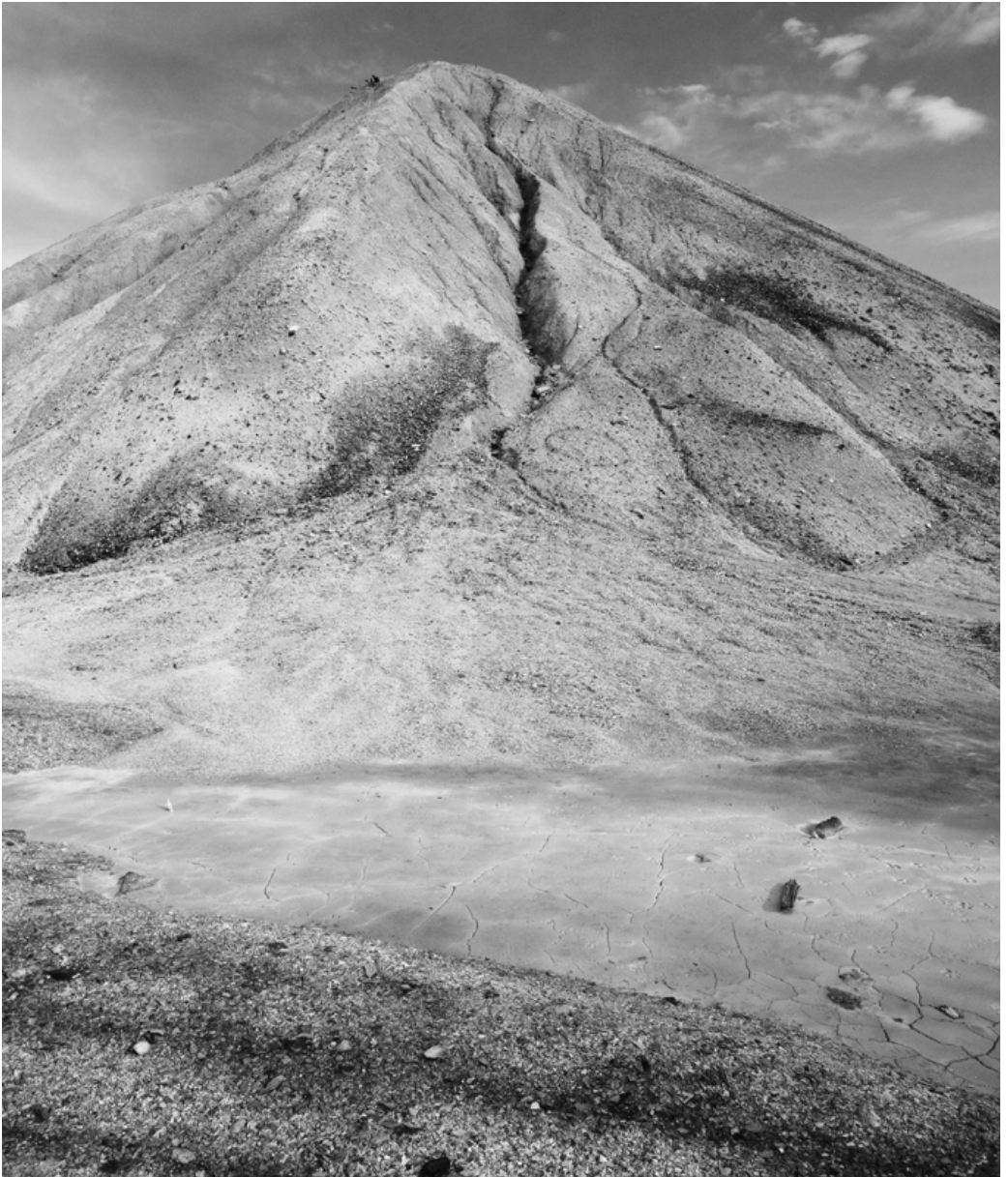
-waste heap of kapitalnaya nr.1 mine.

'functional' implementation of the territory as the intentional base holding the production of space. This makes therefore Degtjarsk the embodiment of a post-event condition consequential to the breakup of the modern project.

WHAT COMES AFTER THE HERO

To better understand how the emergence of an alternative condition from failure can take place, we shall at this point make explicit what are the problems and dynamics that gave rise to that failure.  We shall do that by critically understand how the 'faith' in a scientific-technical mentality acting as the ideological base of modernity [Meland, 1966] that informed the production of space in Degtjarsk, operates.

The post-ideological era presents itself as the residue of a formerly heroic moment in history. Finally, after years of spiritual non-sense, after millenniums of lies, prejudices, oppression, distorted images of reality, and dogmatism, Science came. It came to free man in an over-a-hundred-years effort to make reason prevail over humans' life, it came to make the very concept of humans prevail on humans, to liberate them, and make them believe in their powers.

The future, came, in its most promising, positive, acceptation: fresh, crystal clear, and objectively self-fulfilling, like a well-oiled shiny mechanism. From the Renaissance to le Corbusier, the project of modernity struggled against dark forces, and rationality came to the surface overthrowing every other ideological alternative, spiritual or political, [Meland 1966]. This created "a new common sense", that revolved around and started to merge "with the technical demands of industry, until science, together with industry, laid the ground for a new technological civilization" (Meland,1966). When this task is complete though, we are left empty, and reflective, and turn back to look at the consequences of ideas of the future we never had [Pepperell, 1995].
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When the dominance of an ideology that had the presumption of posing itself as definitive and absolute, for the sake of its powers, starts showing its internal contradictions and weaknesses, the very lack of that supposed coherence appears dreadful and irresolvable. When the counter-finalities of that project become so onerous that they are no longer bearable, sustainable, [Emery, 2010], that is when this positive ascension starts bending on its negative counterpart: destruction and devastation, as it is in the case of our mining town.
As we shall see, this outcome is somehow embedded in the premise of science made ideology a promise of freedom, from ourselves.

TECHNICAL DOMINANCE AND OBJECTIVIZATION OF EXISTENCE

"[Galileo] started from the practically comprehensible world ... and said to himself: wherever such a method [scientific,technical] has been developed, thanks to it the relativity of subjective apprehension has
also been overcome." [Husserl, 1936].

In this quest for liberation, as depicted by Husserl when trying to explain the intentions of this techno-scientific mentality, is where the critical fracture in modern thinking arises. Objectivity and objectivization as a means to 'free' man from relativity. In the need to understand entities, we decided to rule out ourselves from the equation. This means that to account for objectivity, humans have tried to practice an ideological suicide by externalizing their intentions in ob-jects. This, surely, leads to mechanical predictability. The capability to have an understanding of reality that is not bounded to a finite stand-point within its matrix and that can, therefore, manipulate it at once.
This manipulative modality (τέχνη) is only possible when reality is displayed at a glimpse in front

of our eyes. That is the etymological meaning of the word ob-jecto. Something that is in itself, and before us, put in existence. The ob-ject is an entity in itself, ultimate, and external from our relative judgment, as it possesses a determination even before and after us engaging with it.

This creates a world in which things can, and should, be considered as entities in themselves, ultimately defined in their objectivity.

This externalization in an objective world is both powerful and destructive.

It is powerful because it is essentially manipulative. It allows for predictability to subsist. The need and desire for control obtained through objectivity though are what annihilate us. Heidegger puts it beautifully on this matter stating that 'the forgetfulness of being, implies that the entity is what is powerful and being is the will to power' [Heidegger, 2017]. To put it this way means that in the need to escape ourselves we grasp the proximity of material reality which allows us to control it and manipulate it, giving us powers, and the will to that power is what becomes our mode of existence, our driver, our intensity, a condition described as 'being as machination' [Heidegger, 2017].

To dissolve the limits of our finitude is what gives the operation of objectivization an absolute connotation. To be ab-soluto, which means to be 'without constraints' which is the power given us by the creation of a reality to which we do not participate, actually succeeding in dissolving our constraints and expanding our being.

The disintegration of borders and limits is what makes modern man omni- ultra- and hyper-, an end-less entity, capable, of competing with God, [Freud, 1930]. They give him powers to escape the differential locality of a finite being, calculating and therefore controlling and dominating. The destructive side of this kind of behavior though manifests itself in that same negation of finiteness. This produces an annihilation, necessary to achieve 'final resoluteness', of the

relative and unprecise nature of bodily beings like humans. As an effect, the subject is denied in its validity and an overthrowing of the human, for the sake of the powers of the human itself, is operated in favor of the dominance of technique. This is when practicality and functionality rule as guiding principles of societal schemes which have, like technique itself, one and one only guiding principle: obtaining maximum results with minimum effort, which is to say, optimization. This is the driver that lays at the base of rhetorics of modernity such as the ones of growth, advancement, novelty, and progress.

Although, a cycle that excludes the subject from its formation is alienating and ends up consuming itself in its autoreferentiality. In Jameson's words "post-modernism being in itself little more than one more stage of modernism" [Jameson, 1991], or the exacerbation of an ideology incapable of generating meaning if not only for itself. This exclusion, or negation, produces a post-modern subject which is reflective and 'arriere-gard', narcissistic and depressive because is caught in the moment typical of when we had a plan and that plan goes wrong, and we had not thought of alternatives [Fisher, 2009]. This description is called by Fisher as 'reflexive impotence' and is characterized as the acknowledgment that 'things are bad, but we can't do anything about it' [Fisher, 2009]. Things are bad as the result of a failure and we see no alternative around us.

MODERNITY AND/AS THE SOVIET UNION

What is at stake here is therefore the relevance in alternative thinking, belief systems, and ideologies in an age so marked by previous failures that cannot escape putting pre-fixes on already established conceptualizations of life.

An event that symbolically marked the failure of the modern project was the fall of the Soviet Union.

Although controversial and multi-faceted, that event marked the ideological failure of soviet socialism, giving rise to conditions named as well as post-soviet.

For this event to account for the failure of the whole modernist project, it must be acknowledged that Marx's modernity consisted of his belief in a rational dimension of men. Eventually, with science and technology, objectivity, and calculus one could even predict when and why capitalism would have failed, which is to say Marx's historical materialism or an objectivization of history. In addition to that, we must remind that "Soviet-type planning, is the apogee of Fordism, Lenin embraced Taylor and the stop-watch. Soviet industrialization was centered on the construction of giant industrial plants, the majority of them based on western mass-pro-duction technology" [Scott, 1998]. For many, the promise in the liberatory dimension of socialist life was the most truthful accomplishment of a rational and rationalizing ideology. Krishan Kumar states that "The end of the century, the end of communism, and the end – say – of modernity, seem to possess at least an 'elective affinity' for one another" [Kumar, 1995]. In this respect, Soviet ideology itself made of the routinization of novelty and the progressive idea of the future the main agent of its propaganda, embedding it in its culture, and promoting a 'new man, the Bolshevik specialist, engineer or functionary, [who] came to represent a new code of social ethics, which was sometimes simply called Kultura. In keeping with the cult of technology and science, Kultura emphasized punctuality, cleanness, and business-like directness'[Scott, 1998]. In soviet and post-soviet society we, therefore, find a clear link between, ideology, technique, history, and alternative social narratives. To the failure of the Soviet project, the world that came after, is 'with no alternative', and, as said before, once accomplished, this flattening is empty and meaningless.

## POST-SOVIET RADICALIZATION

For these reasons, therefore, the Russian context becomes extremely relevant in terms of the relation between soviet society and modernism and the emergence of a possible 'ideology of failure.' The same paradoxical nature that fuelled the coming of western modern and communist ideas from Europe in what seemed to be a distant and non-suitable context for that culture and theories to land, is now radicalizing the crisis of its failure. When talking about the paradoxical inception of ideas from the west Mikhail Epstein in 'The Origins and Meaning of Russian Postmodernism' points out that 'the same paradox pertains to the problem of Russian postmodernism. As a phenomenon which seems to be purely Western, in the final analysis, exposes its lasting affinity with some principal aspects of Russian national traditions.' [Epstein, 1995]. The traditions that Epstein is referring to are the ones concerning a recurrent detachment in Russian culture between reality and a simulacrum of reality, which can be traced back to imperial times in which the symbol of this idealization of reality is the city of St. Petersburg a city

which was "composed entirely of fabrications, designs, ravings, and visions" [Epstein, 1995]. A city in which three revolutions could take place, in light of its nature as a stage for conceptualizations of realities to take place.

In this context, the externalization of reality into distant 'objects' that occurs in the modern techno-scientific ideology, happens to match perfectly with the culture of a country that is 'more susceptible to mistaking phantasms for real creatures'[Epstein, 1995]. The production of simulacra of reality being the heart of a pro-to-post-modernity in Debord's work when saying that "the whole life of societies in which modern production conditions prevail is an immense accumulation of spectacles. Everything that was directly experienced
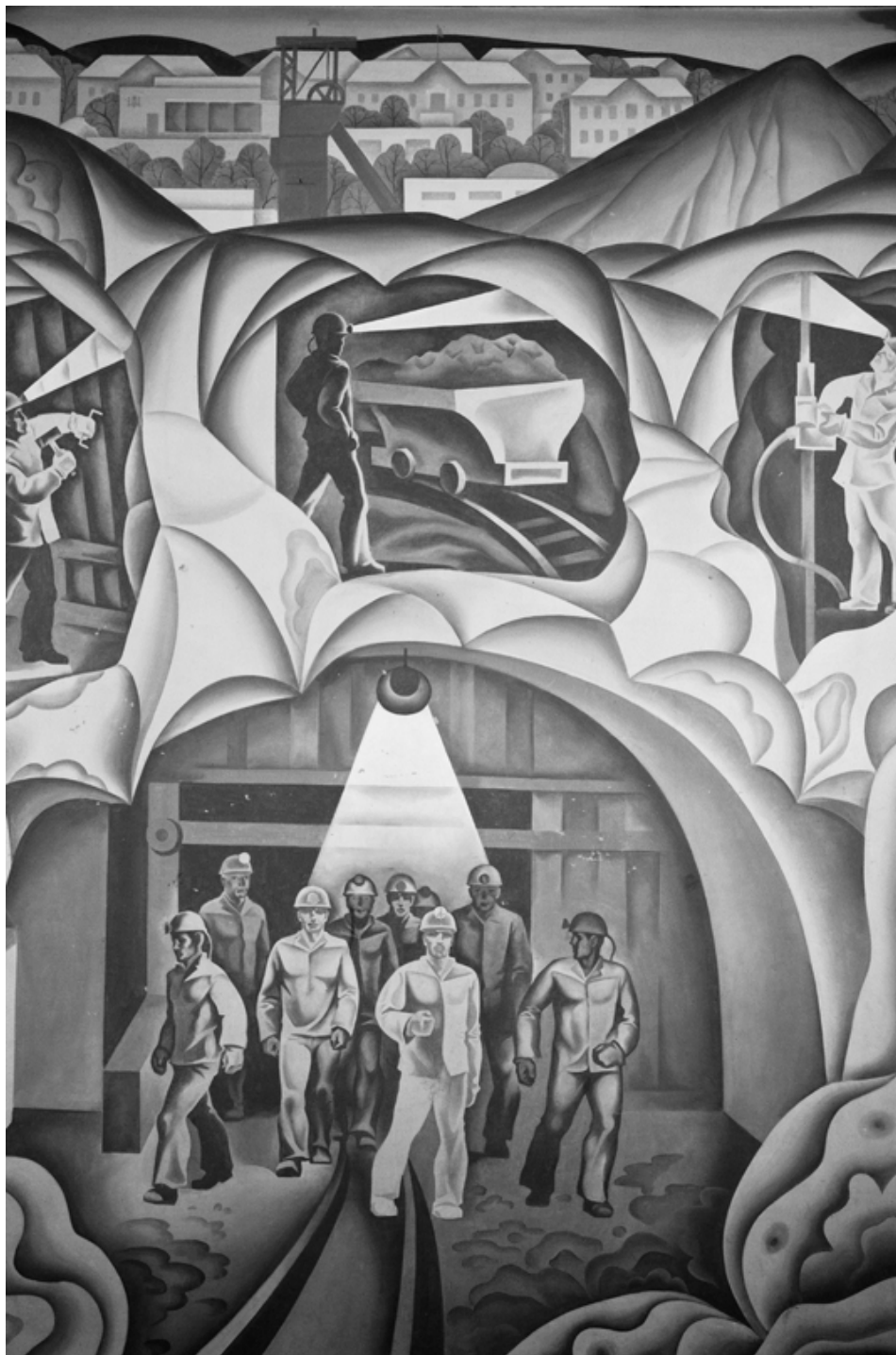
-Soviet era murale in Degtjarsk

has moved away into a representation" [Debord, 1969]. A world of externalized objects which are forced and fitted into reality, acting as its substitute.

For its preventive inclination towards objectivization, therefore, Russian culture embraced and superimposed modern culture onto its territory more radically than other countries, and now the signs of its collapse are even more evident.

To an even higher degree of radicalization, the more explicit spatial productions of this criticality are to be found in cities in which the only purpose was the development of the progressive culture of modernity like Degtjarsk. What is called in Russian: Sostgorod, cities born out of the utopia of industrialization.


A TRANSVERSAL ORIENTATION TO-
WARDS FAILURE


From this crisis, and the persistence of crisis, a preventive accounting for the negative outcome of a progressive idea became here a teleology in itself.

The condition of metaphorical and material breakdown present in the territory of Yekaterinburg described in Muller and Trubina's work as 'scrappiness' leads them to say that the detachment of reality from simulacra mentioned above, always made necessary to have a transversal orientation toward the 'dirtiness' of the real world, which is 'always provisional and never perfect'[Muller&Trubina, 2020].

One that took into account since the beginning the possibility, if not the necessity, of failure.

In this regard, the same authors state that 'Against the prevailing stereotype of Soviet urban planning…had to reconcile the expectations laid down in countless plans with the unexpected events that kept overtaking those very plans: shortages of material and personnel, changes in political will, adverse environmental conditions and so on' [Muller&Trubina, 2020]

Scrap, material detriments, fragments, and

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corrupted residues now populate and degrade Degtjarsk. Because failure is not metabolized, the differentiated product of growth is delegitimized as 'waste'.

The inhabitants of this place, once deprived of that social intention are left empty and unidentified. Many of the miners of the city are not alive nowadays because of the toxicity of copper. Far from changing the path, normality in Degtjarsk proceeds in the exasperation of that same progressive logic. Waste and toxicity are normalized and although most of the mines are closed or abandoned a limestone quarry together with industrial plants in the nearby villages is what keeps the city going.

The aimless continuation of a failed project, the non-ideological ideology of post-modernity gives rise to feelings of bleak nostalgia. When this seemingly infinite ascension clashes, it produces, as said, fragments, this time being of a sociological nature.

Hereunder are given as an example extracts of people living in Degtjarsk who commented on various on-line platforms about their city.


'Nice, big stadium. If it is repaired it will be generally super. It is not functioning at the moment.'

Comment taken from Google maps reviews. [emphasis added by the author, translation by the author]


'Earlier in our city people were different. The trash was taken out on schedule. Now they can't bring it to the tank. I meet a lot of ugly faces in the street before there were none. Drunkards, drug addicts. People don't need anything, everyone cares about their won happiness'.

The comment is taken from https://uralmines.ru/degtyarskij-rudnik/, blog discussion [translation by the author]

'The brightest years are passed in Degtjarsk. Dad and I went around all the woods. How rich they were. Dad knew every source you could quench your thirst. After what you see, you acutely feel how life flows away and nothing can be turned back.'

It is particularly interesting that by 'accident' we can find in these words hints to certain escapism that has been the way of trans-gressing the defiant nature of civilization from Baudelaire to the beat generation. This brings us closer to resistances that can metabolize the failure of progress, or, even better than that, that can make intentional and structural the necessary differential nature of a teleology.

This brings us closer to the concept of trans-gression itself as an alternative model that rises from this condition. The 'revival of the dead' as Emery calls it, is the making intentional of the 'ugliness' of civilization, the 'normalization' of the destructive shortage of civilized space.

As the inevitable product of pro-jections, destructions can be implemented in the form of different spatial or architectural gestures. To pick up Baudelaire, and Emery on Baudelaire, to whom the notion of artificial paradises meant a congruence with an alternative, transversal reality, we see how 'the spectrum of a different poiesis, strong of its provocative poverty, starts to wander around looking to organize, even if in a way that is still only allusive with rags and garbage, the meanings and forms of separation. the reverse of the city, its negative, its dead, begins to prove to be elaborable and creative' [Emery, 2010].

THE MEANINGFUL NEGATIVE OF
TRANS-GRESSION

In the context of Degtjarsk, one might ask why is it not possible to 'recover' the territory after the ugly industry has abandoned it. It is my intention here to stay as much as possible distant from those intentions. For the sake of that same performative mentality, to repurpose failure into something productive is a continuation of that same logic, a logic which would wish to 'hurry to reintegrate the waste and the refusal too much, again, mercantilly, to the productive.'[Emery, 2010].

Instead, the nihilism produced by that failure can be turned into a double negative, a 'Revolutionary nihilism' which is 'nihilism-against-immanent-nihilism'[Emery, 2010] of the dominance of modern pro-gressive thinking. Accepting finitude and our limitations are the trans-gressive movement towards the territory that allows us to speak relationally of it. Allows us to value the meaning of being imperfect and always relative. In this sense, a trans-gression is both and at the same time the agent and consequence of that failure. Because when something of a pro-gressive nature falls apart, it shows us how meaningless and eventually nihilistic the conception of space seen through the monothematic lenses of 'performance' is. In this respect, the aesthetic condition that arises when function is stripped from function-aimed objects is a landscape characterized by out-of-place artifacts. 'Useless' follies scatter the territory constituting an anti-landscape [Talento, Amado, and Kullberg, 2020], a discontinuity, as the nature of a fracture is, that is singular in its 'emptiness' and which "appearance indicates a breaking point' [Talento, Amado, and Kullberg, 2020].

To better understand this concept one might look at Matta Clark's work. Here the negative element of progressive ideas of architecture which expose the fallacy of performative and functional space is highly relevant. In the same way, the rush to give

'performance' to decadence is seen as an exasperation of the logic that produced that decadence. Matta Clark's holes in buildings soon to be torn down, expose the role of the negative produced in such decadence as the signifier of the architectural object itself. They make of subtraction, the agent and consequence of an ideological discrepancy as they expose negativity as being 'political since it signals the vulnerability and contingency of every phenomenon that appears fully positive and replete. Negativity draws attention both to the instability of every form and to the contingency of all boundaries.' [Krivý, 2010].

The negative of 'optimal function', shows how the performative side of space is doomed to expose itself, soon or later, in its fallacy, and in that fallacy to reveal something else: the nature of the architectural organism as a fragmented body, an ensemble that is signified by difference as their agglomerate. As in the case of the Degtjarsk's territory, no element is independent of the others, and the only meaningful part is the one missing from the one to the other, the relation.

If Degtjarsk then is the territorialization of a void, it is in that fallacy that progress already exposed its vulnerability and boundaries.

In the operation of establishing boundaries, the trans-gressive idea of failure becomes clear. In Foucault's words, 'Transgression is an action which involves the limit.' It 'shines light over boundaries' actively generating when overpassing them' and 'showing the limitedness of the limit'[Simons, 1995]. By making explicit the finitude of any social project, even the ones which were shouting for absoluteness, transgression reveals the limitation, by moving through the negative.

It becomes now evident then how the sooner we integrate limitation, unpredictability, and the possibility of failure into our projects, the sooner we will liberate ourselves from vicious cycles of control.

## TRANS-GRESSION, DIFFERENCE, AND METASTABILITY

A specification on the nature of the term trans-gression is now needed. Although it surely indicates a particular kind of behavior that challenges authority, we shall retrieve its etymological meaning as one that overcomes something, or that 'cuts' it perpendicularly.

The latter significance is fully understood if trans-gression is juxtaposed to pro-gression, as this essay intends to propose the former as an alternative to the latter. If a pro-gression is a linear vertical and ascensional movement, a trans-gression of this movement is its 'perpendicular', is a movement which is aimed at broadening the field of activity of a certain entity, by inserting it in a relative dimension, and bringing down the otherwise absolute trajectory onto a relativized and multilinear dimension. That is why the fall of one both has its cause and its consequence in the other.

The broadening of this monodimensional perspective is, furthermore, of a specific kind of quality, and refers to a particular action which is the one of differentiation. By 'crossing over' something else, trans-gression enacts a qualitative jump towards the 'making intentional' of a discontinuity. The 'path' of a transgressive movement is, therefore, made of the deviant elements in respect to a normative trajectory. This action of differentiating or deviating, give transgressive movement negative properties concerning the differentiated space in which it moves. This is what makes it a 'nonpositive affirmation' [Simons, 1995], which is what makes it possible for it to be a teleology. To affirm something is to determine it, to give meaning to it, to actively create and establish an entity for what it is. This agency makes transgression a trajectory along which meaning is formed. Furthermore, a trajectory which is structured on the acknowledgment of difference, or that lives of the constant withdrawal of determination of an entity's being.

Harp-Kadochka mine. Improvised construction along the Kurganovo-Degtyarsk road

This constant state of tension, which provides the determination of a system as a perpetual indeterminacy, is defined as a state of meta-stability, arising from "the incompatibility of the system with itself from what one could call the over-saturation of the system" [Simondon, 2017]. By making uncertainty the norm, a system remains under tension and is capable of modifying itself [Simondon, 2017].

These properties of trans-gression resonate in spatial terms with a practice of 'taking care' of the unpredicted similar to the Baudelairian behavior we explored earlier. They operate an overturning of spatial qualities that move from the positive, explicit, and objectively defined, to the negative, ambiguous, and relational. They establish intentionality which is based on the acknowledgment that we and the products we make are almost perfect but never as such. They establish a tendency towards the acceptance of imperfection and the intentional experience of it.

TRANS-GRESSION AND IMPROVISATION

Progress as an intention behind modern thinking resulted in practices of planning, control, and pro-jection of intentions. We have already established by tracing relations between these modes of action, and a dominance of technique over the intentional base of modernity that an objectivization of existence for the sake of aiming at the 'purification', 'liberation' of the finite being is what informs these actions. However, when finitude is accepted as a value and not as a plague, transgression is the intention that informs practices of improvisation, caretaking, and intro-jection as modes that always also represent a subjectification of the ones involved in their operative translation.

Moreover, because of its differential nature, its emergence from a shortage, improvisation as a trans-gressive operation is essentially local and dependent on the specificity and contingency of the situation in which one is operating.

In the practice of improvising spatial production, failure becomes structurally implemented. It is the premise of it. Because of this condition, the principles of predictability and certainty achieved through technical control lose significance. In this operation of 'revival of the dead', we find a different form of poiesis that uses technique as an abductive normative support rather than a dominant aimless precision. A restored infra-structural level of technical knowledge holds the action of trial and error that is performed in such practice as the result of a metabolization of failure, which becomes a fundamental part of creation.

The improvisational outcome of transgression finally suits the specificity of a place which has a particular inclination towards it: 'improvisation is perhaps easier in those liminal spaces of the Global East to which Ekaterinburg belongs and which are epistemologically located somewhere between, or beyond, North and South' [Muller&Trubina, 2020]. This in-betweenness is the opportunity, according to Muller and Trubina, to make use of a structural ambiguity that makes it possible for trans-gressive intentionality to become normative. This would mean a constant regeneration of norm and counter-norm actively forming the space in between them and creating 'different modes of carving out a living between dominant structures and creative destruction.'[Muller&Trubina, 2020]. Participation between the structural and preliminary, and the negative of it: the, encouraged, chance of failure of that structure. Failing therefore becomes an act of creation. Failing something, instead of doing something is what establishes that entity in its being, delimitates its borders by transgressing them.

The technogenic condition of Degtjarsk eventually, overturns the very conception of space that produced it and brings about an inherently relational condition which makes of difference the source of its meaning, and uncertainty the purpose of its stability.

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# THE ARCHITECTURAL INTERMEZZO

# THE QUALITATIVE NATURE OF THE LIMINAL PLACE IN A TRANSITIONAL SPACE.

Rijn van, Sander Cornelis
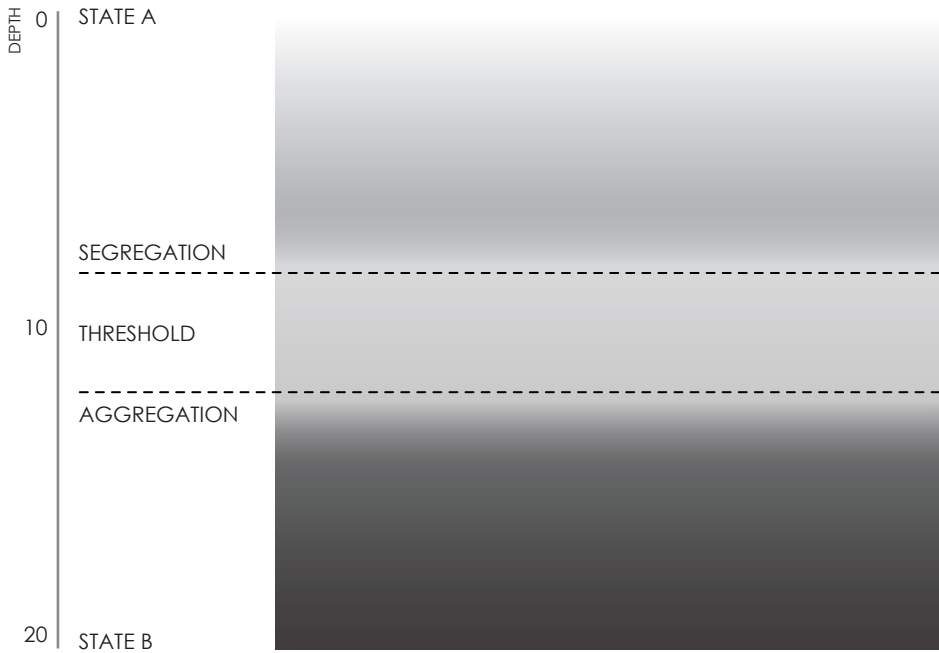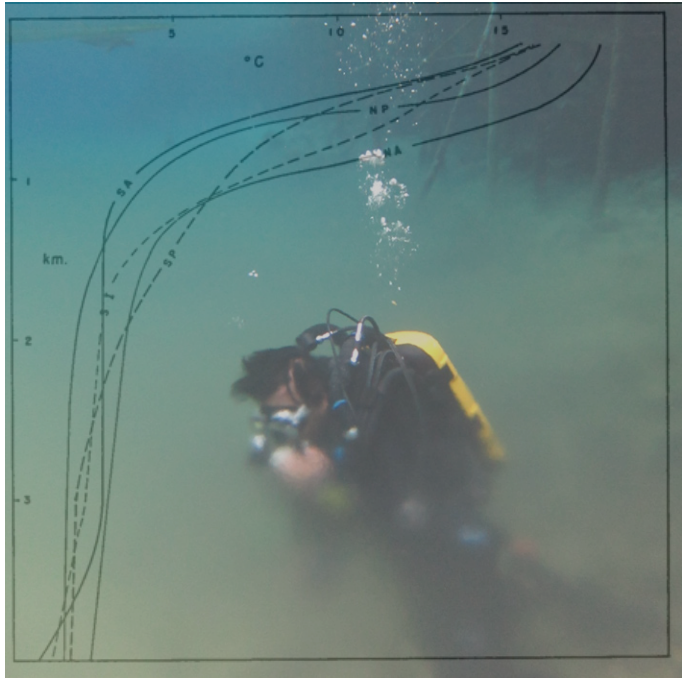
## INSPIRATION

One of my personal passions is scuba diving. I remember that during my first boat dive, when I went down holding the anchor line tight, around ten meters depth I saw something rather strange. There was a vagueness in the water and when I went through it I felt cold, the colours where even more blue and the sounds of boats I could hear before disappeared.

This vagueness in the water is also known as the thermocline. This rapid shift of temperature comes from different water currents clashing together, creating a kind of film that separates the two currents from each other. This transition however, was in my experience, like an initiation. I first segregated from my first reality of warm water with the sound of the boats and clicking of the anchor line against the boat. Then I came in the threshold where there was this vagueness of mixed temperatures, sounds and colours and finally I had to adapt to the much colder temperature and the new atmosphere, but when I did, it gave me calmness.

This form of transition is in the anthropology called a liminal transition. When I dove deeper into this topic, it really fascinated me, hence why this also is the main theme of my design project.

EXPERIENCE >

ACTIVITY

ACTIVITY

ACTIVITY

ACTIVITY

ACTIVITY

ACTIVITY

ACTIVITY

TIME >

ATMOSPHERE >
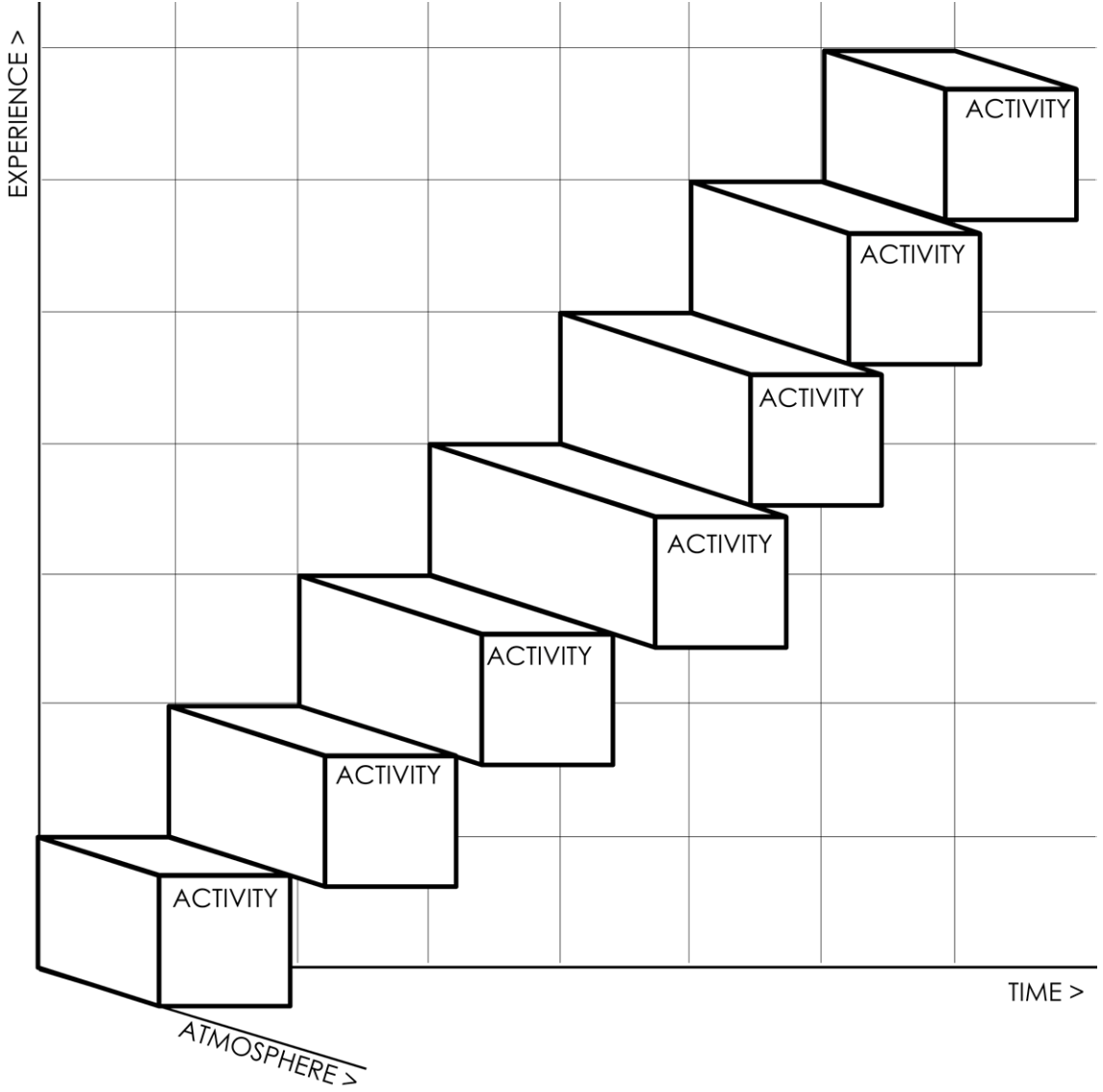
# LIMINALITY

The most important thing to start with is what liminality actually means. Liminal comes from the Latin Limen that means threshold. And that makes sense, while as I described the thermocline, there is a separating element between the warm and cold water current. But the theme liminal in anthropology finds its origin in the rite of passage, most common in initiation rites. Arnold van Gennep already wrote in 1901 about rituals consisting of three stages, the segregation, the margin and the aggregation. It took until 1967 when Victor Turner redefined the margin phase as the liminal. He wrote that important parts of this liminal phase were to get rid of the structure of society and to be sort of reborn from the ambiguity.

Also an important part of liminality is communitas. Victor Turner saw in the rites of passage that during liminal process, people were bonding and especially in this phase where there was no structure. He said:

"The first is of society as a structured, differentiated, and often hierarchical system of politico-legal-economic positions with many types of evaluation, separating men in terms of "more" or "less". The second, which emerges recognizably in the liminal period, is of society as an unstructured or rudimentarily structured and relatively undifferentiated comitatus, community, or even communion of equal individuals who submit together to the general authority of the ritual elders." (Turner, 1969)

A recent example where communitas can be seen is when the first monolith in Utah appeared. There was no structure to this, it just happened. But what followed was a worldwide phenomenon where different monoliths appeared and disappeared without further explanation. This created a communitas feeling around the whole world and created a bonding in a pandemic period. This is an rather interesting fact that separation can be overcome by entering a liminal period.

4 main elements that help with making the liminal period more tangible are:
- Time;
- Experience;
- Atmosphere;
- Activity.

I made this graph to portray the relation of these four elements to each other. On the x-axis is time, because of the temporal nature of liminality, everything needs to happen within a certain period. During this time, you build up experience of the new phase. You start with a zero point and from there you gradually built it up. Another important factor is atmosphere, here portrayed on the z-axis. In rituals there is a lot of symbolism that convey a certain atmosphere. These are done during a variety of activities. The more atmospheric the activity is, the greater the activity is during the liminal period.

*Peters, S. (2018). Non-places [Photo]. Sarah Peters Photography. http://www.sarahpetersphotography.com/non-places#0*

## LIMINAL SPACE

This is however, how interesting it may be, a rather psychological approach. Only the individual or group that goes through the ritual has this experience. But what place evokes this kind of liminality? You could say a place with a lot of symbolism and a certain threshold might be this kind of place. A good example for this are the Torii's in Japan. These Torii's are functioning as the gateway from the mundane to the sacred. But this is just a symbolic and religion bound 'element' that functions as a portrayal of a threshold, rather than a place that is a threshold.

I therefore looked, besides the liminal space, also to the non-place from Marc Augé. The non-place is an anonymous place to people where they do not intent to stay for too long and functions as a kind of pit-stop. Examples of these non-places are hotels, gas stations, airports etcetera. He describes the experience of being in a non-place as follows:

"A person entering the space of non-place is relieved of his usual determinants. He becomes no more than what he does or experiences in the role of passenger, customer or driver"

This ties well in with the liminal space I mentioned before. Combining the two therefore gives a place that finds itself in a liminal state, or:

"A place that is in a transitional phase where it has passed the point of no return and has segregated from its previous state but is not yet aggregated to the next state. This place does still have elements from its former status and begins to show signs of its future status, but in its place becomes something particular with its own characteristics."

This definition I created myself to get a grasp on the find for places that are fitting to these qualities. But in my personal research this was also the greatest challenge.

*Passage from Boris Ryzhy's:*

## how the granite is covered in ice



Так гранит покрывается наледью
и стоят на земле холода, -
этот город, покрывшийся памятью,
я покинуть хочу навсегда.
Будет теплое пиво вокзальное,
будет облако над головой,
будет музыка очень печальная -
я навеки прощаюсь с тобой.
Больше неба, тепла, человечности.
Больше черного горя, поэт.
Ни к чему разговоры о вечности,
а точнее, о том, чего нет.

How the granite is covered in ice,
and a frost lies on the ground
This town, frosted with memories,
I want to leave it for ever.
There'll be warm station beer,
there'll be a cloud overhead,
there'll be melancholy music –
I'm saying farewell for good.
More than sky, warmth, humanity,
more than dark sorrow, the poet.
Pointless discussing the eternal,
or anything that simply isn't.



A          Seperation          Limen          Aggregation          B
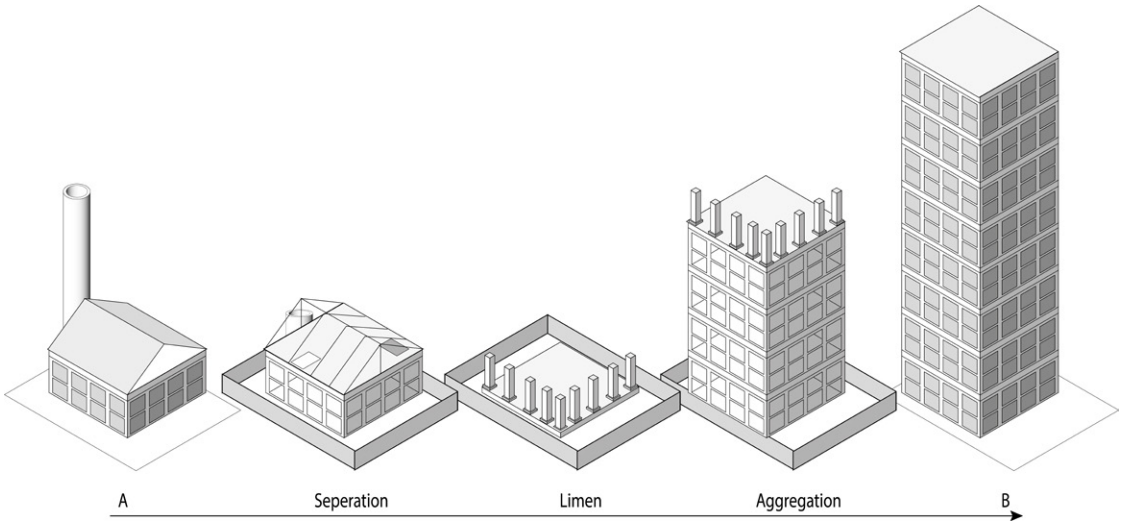
## PERSONAL RESEARCH

The city where I am doing my research is Yekaterinburg in Russia. This city lies against the Ural mountains that are rich of many natural resources. This, and it has always been the biggest contribution to the economy of the city. The city started as a fortified mining plant and that same industrial core is still very present. During the Soviet era this was even strengthened and with soviet housing blocks and many extra industrial factories, it became one of Russia's biggest industrial cities. However, now the city is transitioning. It is slowly transforming from an industrial (post-soviet) city to a free market service oriented city where skyscrapers are being built and old factories and mines are being closed. The current industrial culture will and is changing from a city for work and living and outside the city for recreation, to a city to work and recreate and outside the city for living.

This transition got me to the search for liminal places within or just outside Yekaterinburg. I started with the construction process, you find a liminal phase where the factory transforms into an office building. In this case there is a phase normally high fences are the trace of the liminality, blocking the pedestrians from hazard, but in another way also make the people adapt to the new situation that is temporarily created because they have to go around or through a new route that will disorientate them. However, the trivial nature of construction sites made it unfitting for further research, also because of the short span of this phase.

## STARAYA LINZA

But then I found a place that was the perfect example of a liminal place. A deserted mine called Staraya Linza. This once functioned as a talc quarry but after finding a better spot, the miners abandoned the mine and only the pumping house stayed functional in case they would re-activate the mine in the future. However, did this not happen and the pumping house stopped pumping. From here the liminal place was really born. Slowly the

mine filled up with water and within 5 years the whole mine was turned into a lake in the middle of a forest.
The filling up of the mine created something special, while the people that visited the mine had to adopt their activities to its current state, which you can see in the activities. This reminds me a lot of the amphitheatres where they would fill up the theatre with water to hold naumachia's. This brought many people together while it was a sight to behold.
I started to analyse this mine from the prin-

ciples of the screenplay series of Bernard Tschumi, where he used stills from a variety of movies and tracked the movement by the principles of Mark Johnson and translated that into a space.
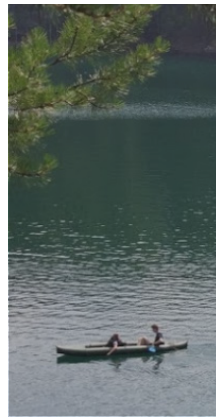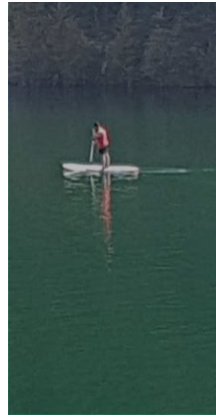
This began with the overall transition of the mine where the accessibility and containment were important guiding themes. Followed up where the activity that was first controlling the water but eventually was pushed away by it. This need of adaptation is quite interesting. This followed up by the staircase. This triv-

ial element, to go up or down, changed its function throughout the transition from a transportation for going up and down to a containment, to a pier element, to a peninsula ending to be a floating island.

I ended with some atmospheric shots of the mine to see the find qualities like wetness and fog, perspective and reflection, entropy and transgression that gave the tools to make the liminal place more tangible.
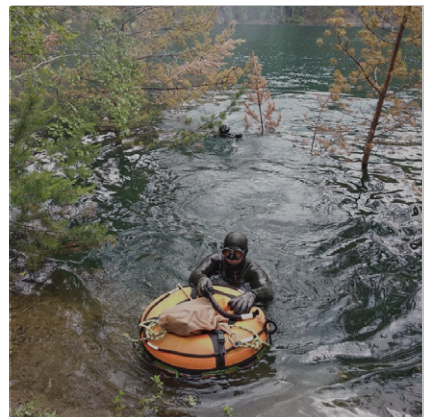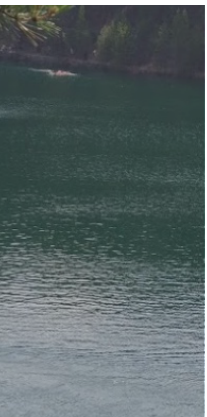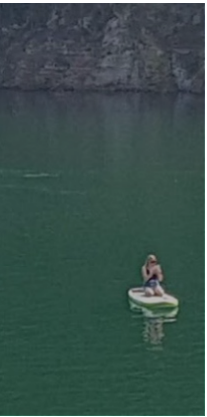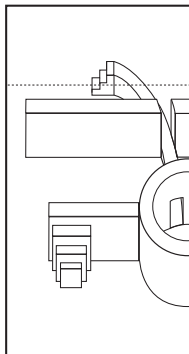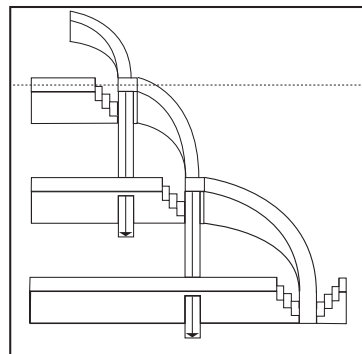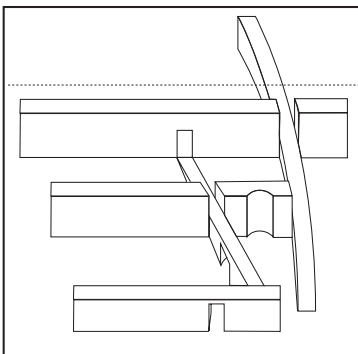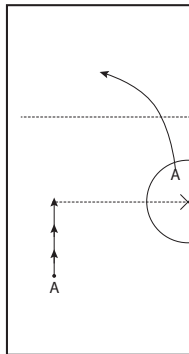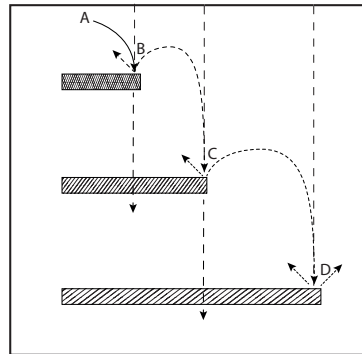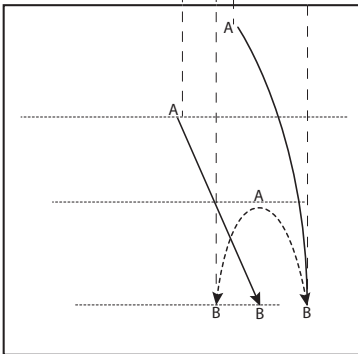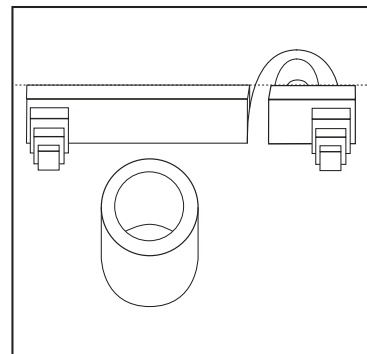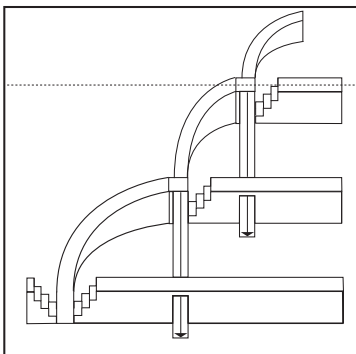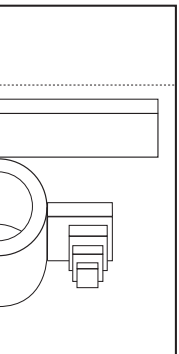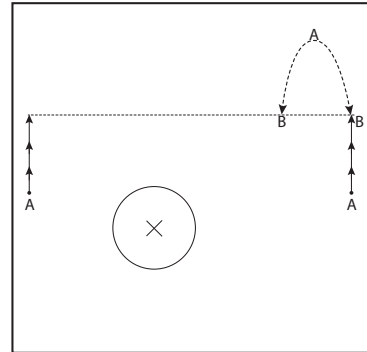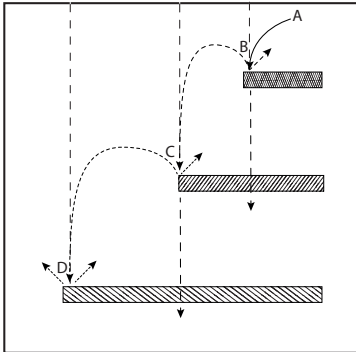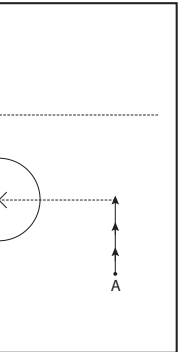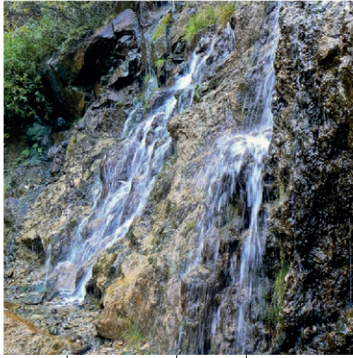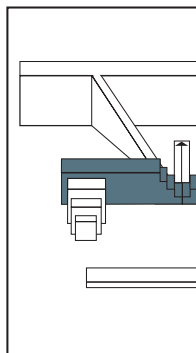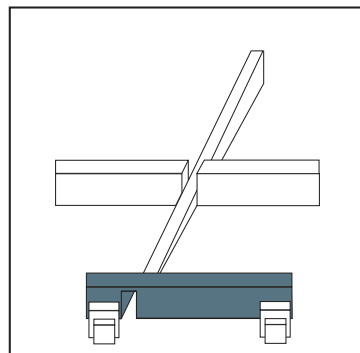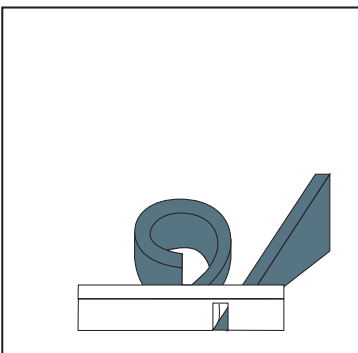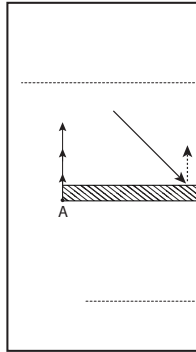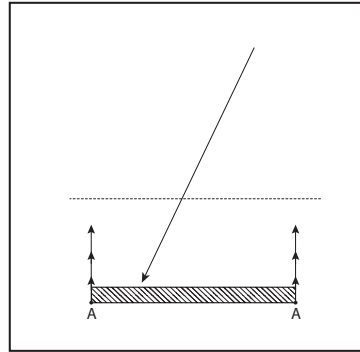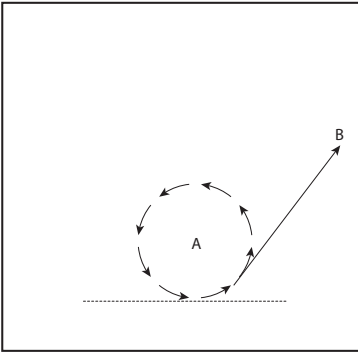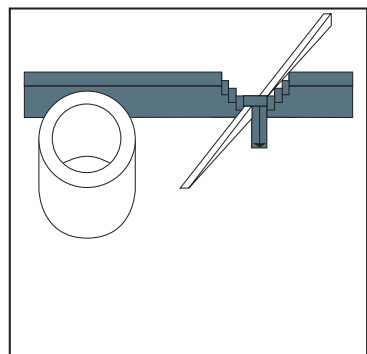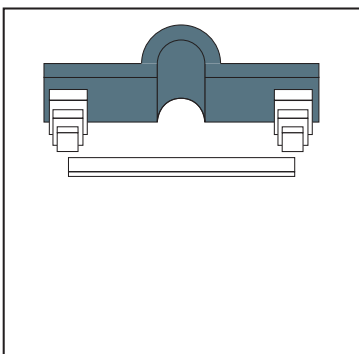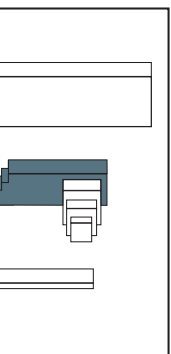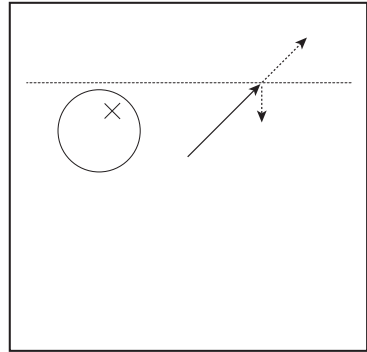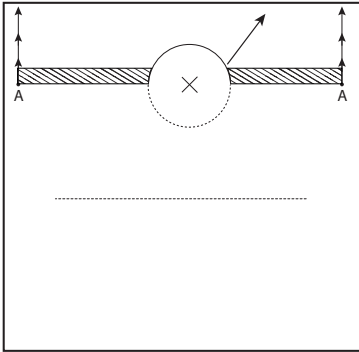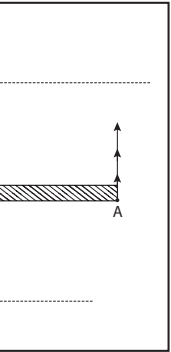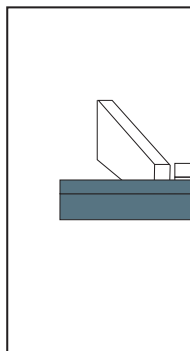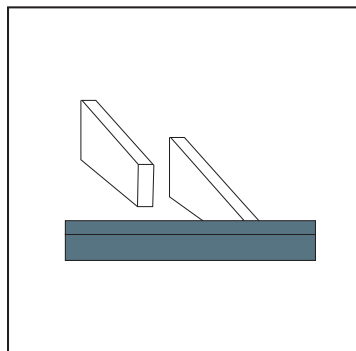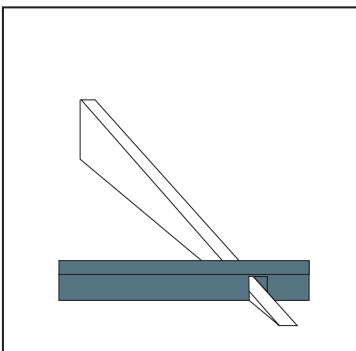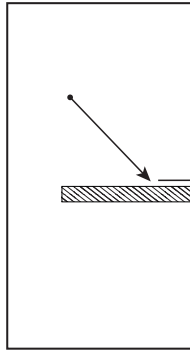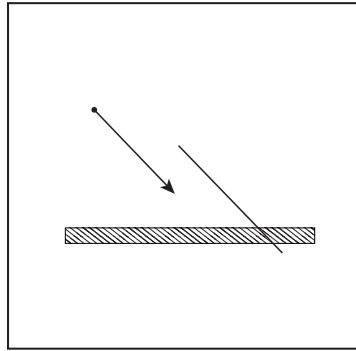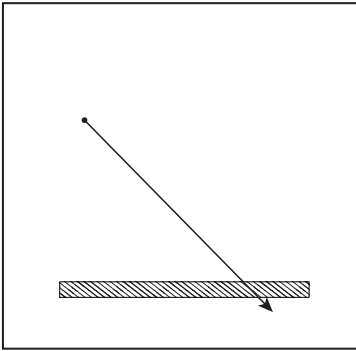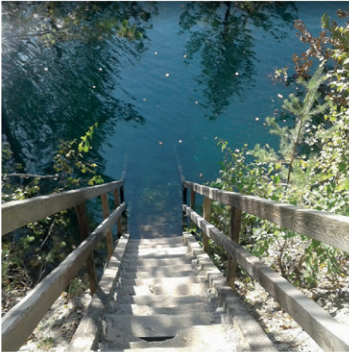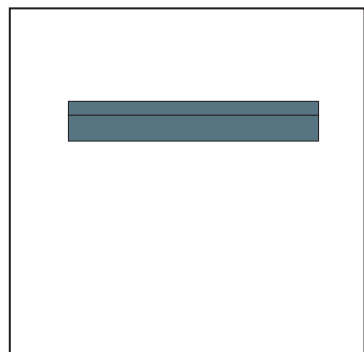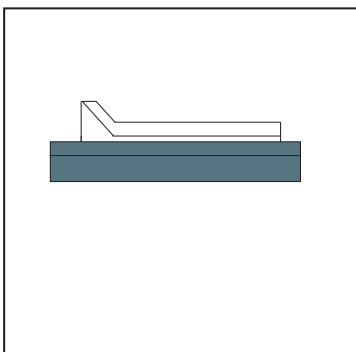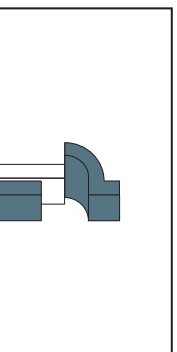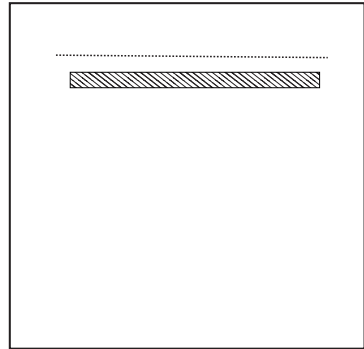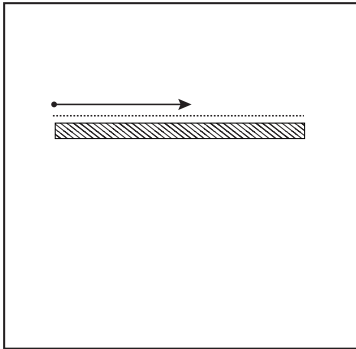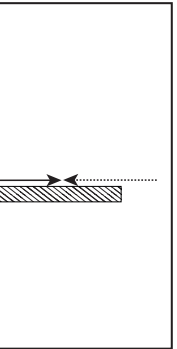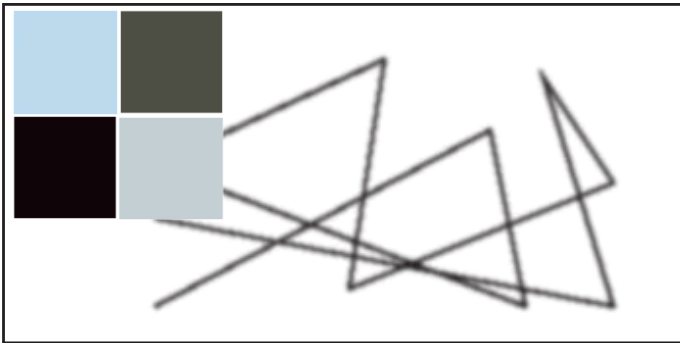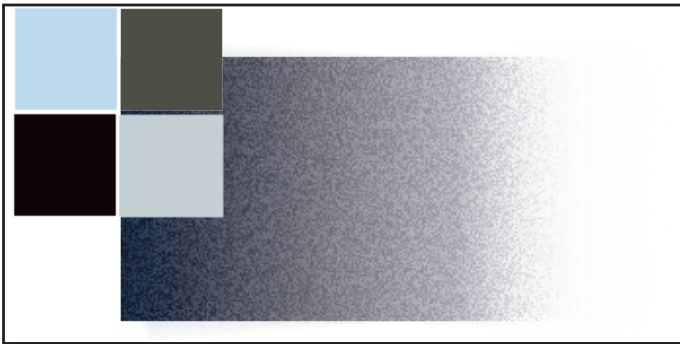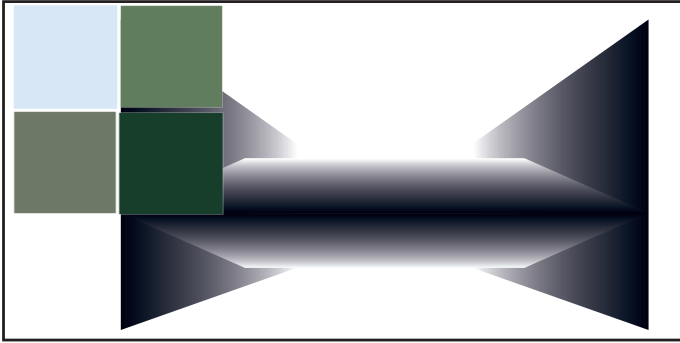
## MODUS OPERANDI 1

The Modus operandi worked for me for answering the question how to physicalize the liminal place.
For my 2.5 dimension I worked with a collage that I casted in concrete to get the negative out of it. It partly broke but this helped me with the entropic nature of the liminal place. The pieces that are stuck can be compared with the staircase that got a new function in its new state. The overall style however, has some similarities to the continuous monument by Superstudio. But where the blocky element of Superstudio overrules the landscape, with my model it is the other way around. The assembly got me into the wetness part where I worked with a variety of fluids and made a model out of it that blurred the more ordered nature of the background, portraying the liminal by referencing to the thermocline.
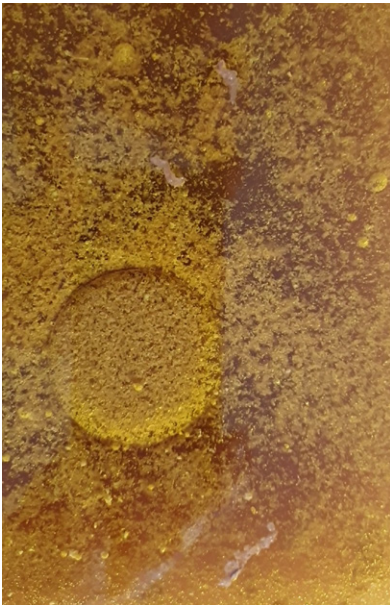
## MODUS OPERANDI 2

The last model had to do with atmosphere and by using two different types of concrete, one structured and one unstructured, I wanted to physicalize the threshold between the two states as a long way working with perspective. The model shares resemblance with the water temple by Tadao Ando where it works the other way around. From a lily pond with an overview of the mundane world you descend through the water to enter the temple or the sacred.

The modus operandi taught me that the atmospheric qualities of the liminal place as I found them in Staraya Linza can be portrayed in many ways, but again, the themes of wetness, perspective, reflection and entropy are key in the anti-structural nature of the liminal.
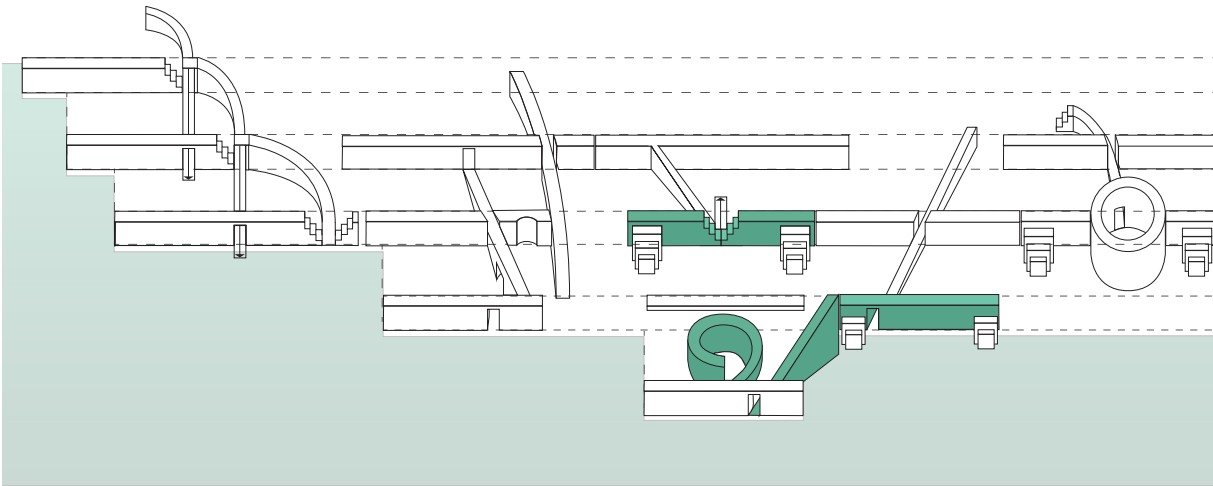
## GRADUATION PLAN

For the graduation plan I revisit Staraya Linza. This place gave me a lot of inspiration and brings together all elements of the liminal place. I started by combining the drawings I made for my personal research into a section of the mine. This overview shows the different activities the mine during its transition created. I followed this up by translating this section into the graph of the liminal where time, experience and atmosphere are on the axis. The liminal place is also defined by the different water levels that create different usage, this is shown in the isometric view and section of the mine where the staircase works as a reference.

This combined gives a drawing giving all the elements of the liminal place and makes Staraya Linza THE perfect example and it would therefore be a good place for my design.
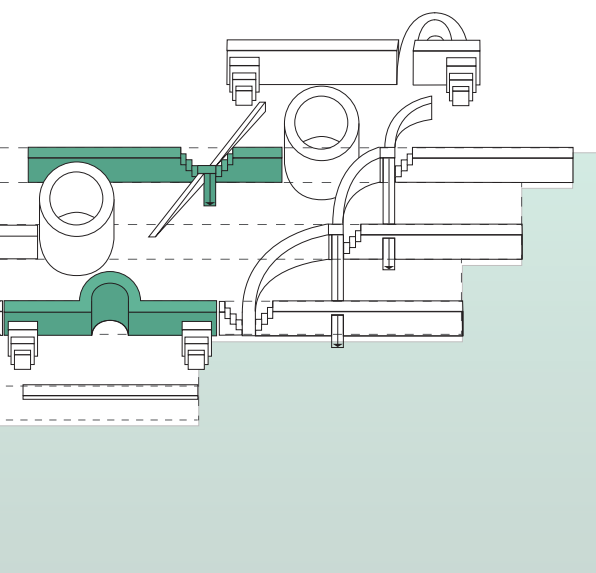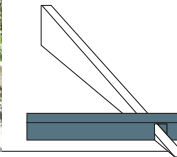
EXPERIENCE >
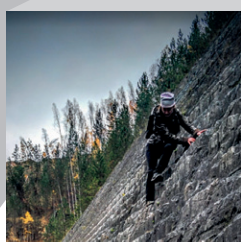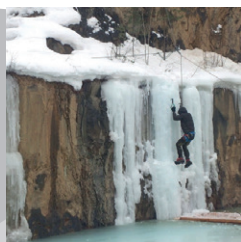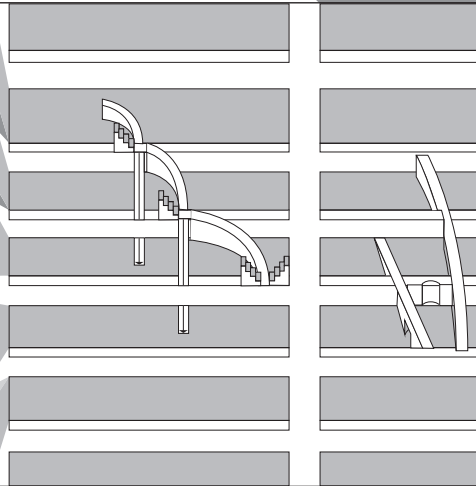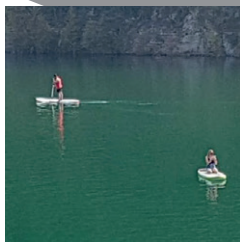
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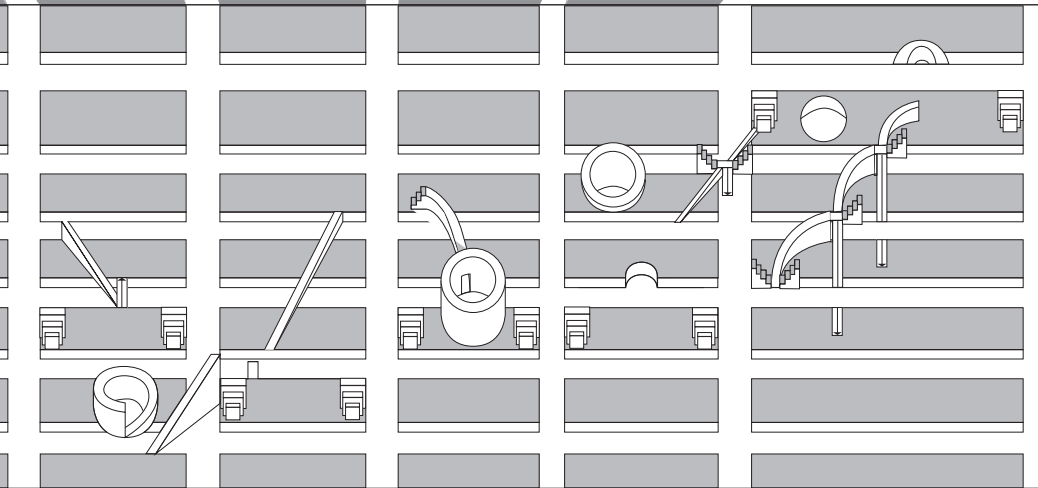
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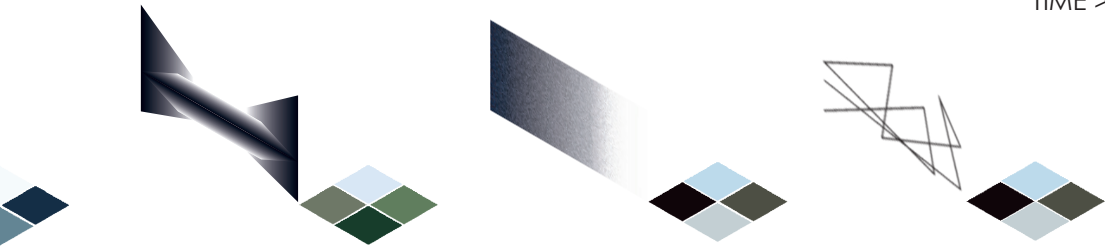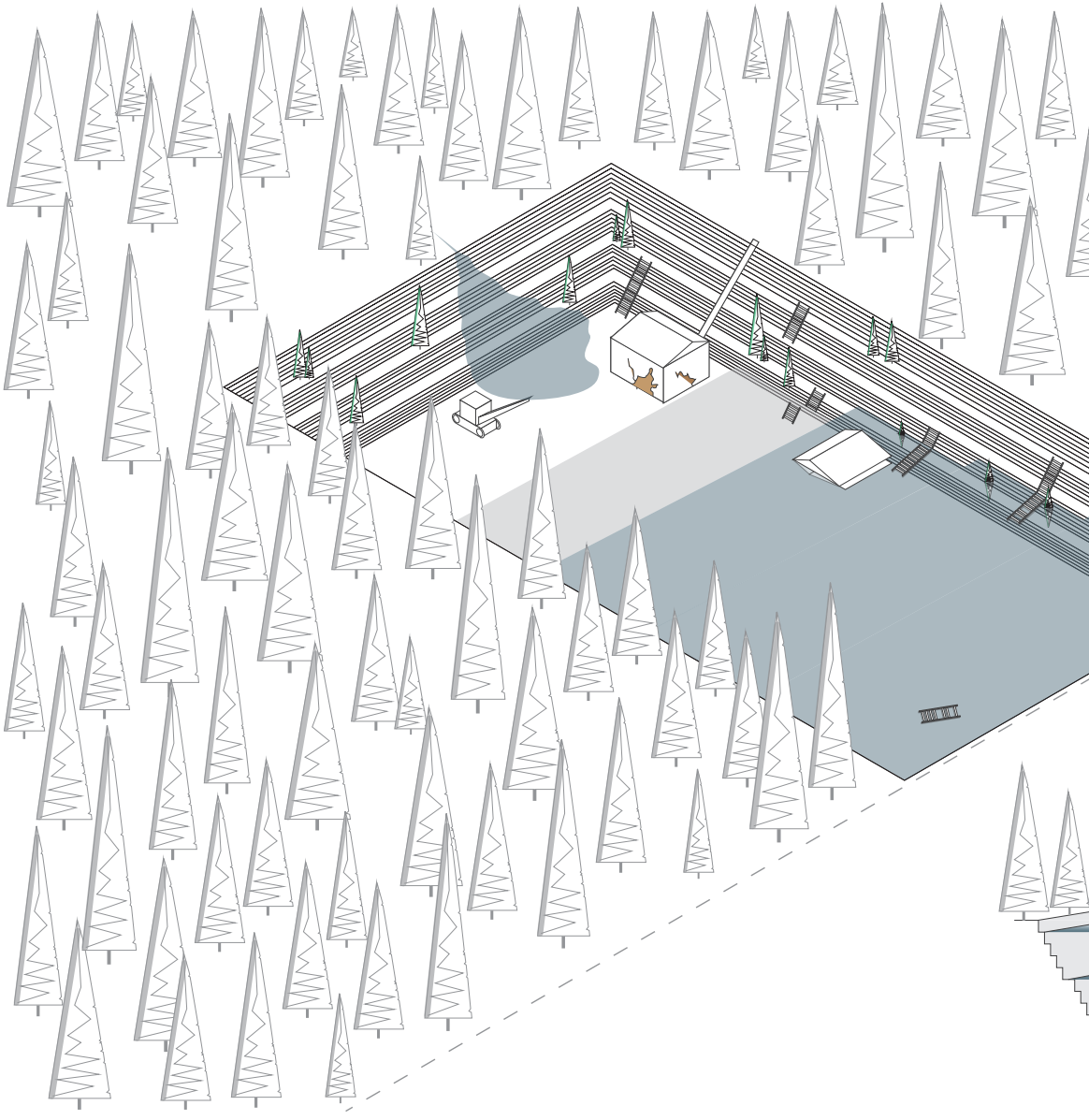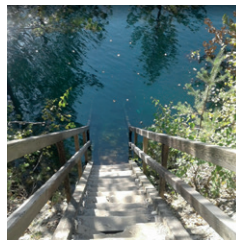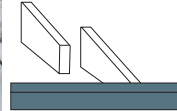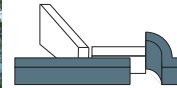
## LOCATION
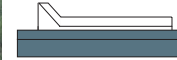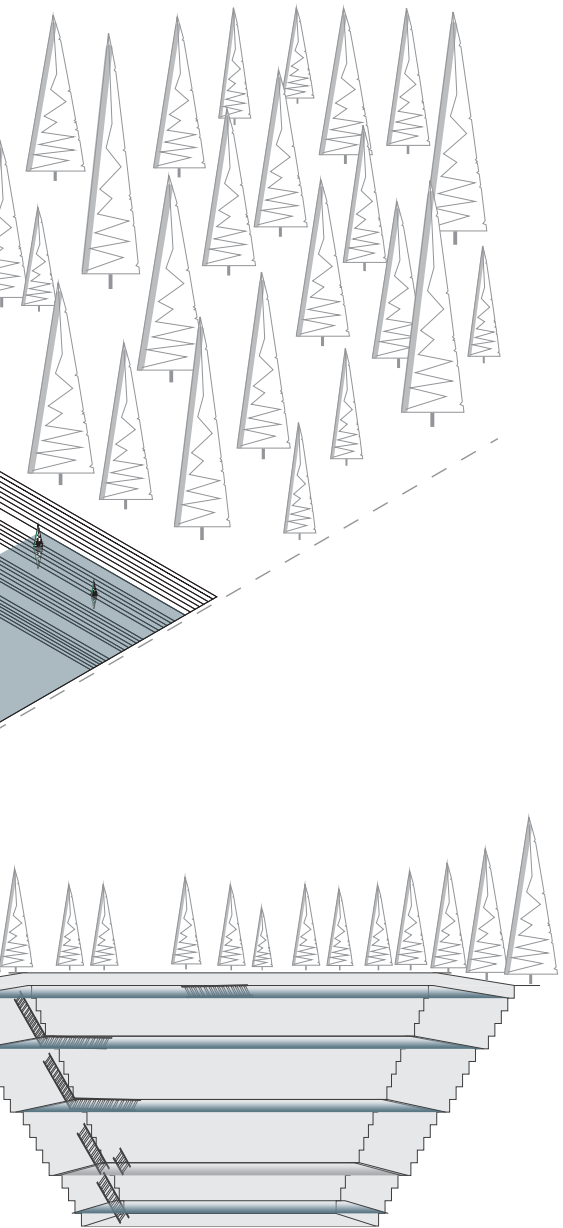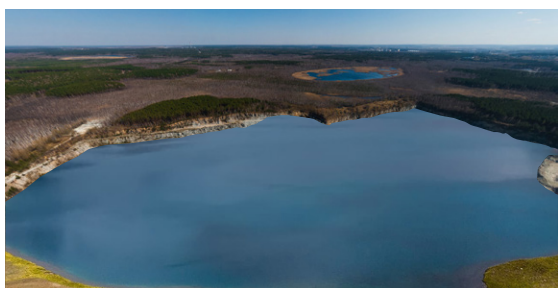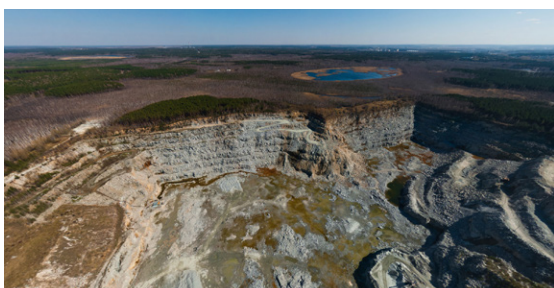
My location became the Shartash granite quarry in Yekaterinburg. This mine is still in function, but as a hypothetical statement you could argue that in the transition of Yekaterinburg will force the mining activities to stop and desert the quarry. If they would then stop pumping out the water, the same fate will happen to this mine as did for Staraya Linza, it will become a big lake.

The urban setting is on the east side of the city and lies near some important roads making its connectivity to the city and its surroundings perfect to integrate recreation into the city.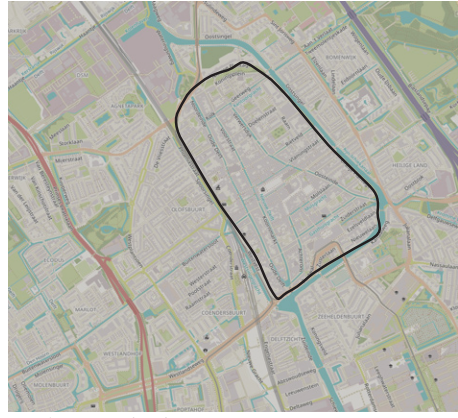 Because it is a granite mine, there is a lot of building material available as well. The scale is comparable to the old city center of Delft and with its depth of around 100 meters the Nieuwe Kerk of Delft would completely fit inside it.

The design will be guided by the characteristics of the liminal place, Time, Experience, Atmosphere and Activity. Important will also be the study of multi-functionality of trivial elements. I will also look into other post-soviet cities that already went through the threshold from industrial to free-market oriented (Tbilisi, Georgia/Moscow, Russia). These findings will then be placed in a temporal space where the constant change of the place evokes a constant re-qualification of the usable space.
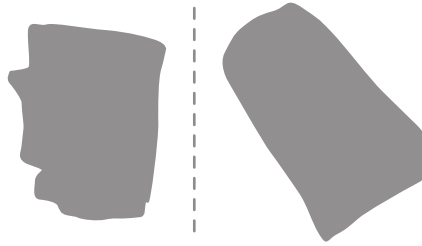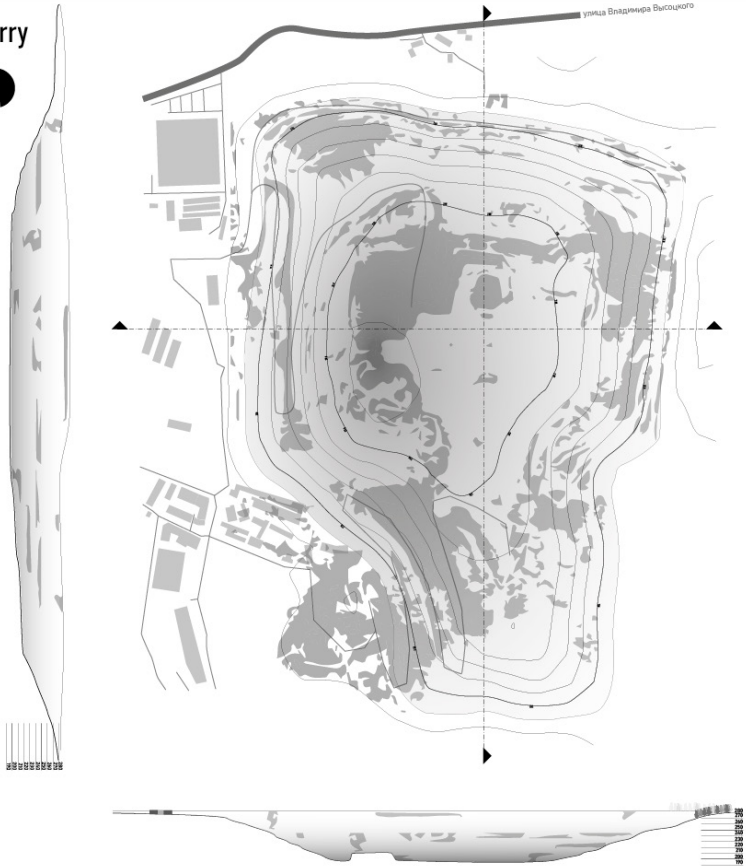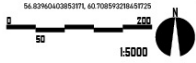
*Shartash granite quarry*

*Old city center of Delft*



## Shartash Granite Quarry

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улица Владимира Высоцкого

## CONCLUSION OF RESEARCH

To conclude, The project places itself in a rather undiscovered topic in architecture, liminality. The liminal transition is something that happens a lot, but is mostly only analysed in a retrospective manner. By creating a physical liminal design you evoke a more prospective view on how we experience liminality. I hope that my design can create a change for the architecture profession to re-evaluate the way we build. Where we almost always create a temporary design that is static throughout time instead of being able and encouraging in re-qualify it.

The design will put great emphasis on communitas as well while it should reform the social relations that are now often clashing in a transforming place to let them come together. By the usage of wetness, reflectivity, perspective, entropy and transgression, it will strengthen the liminal motive mentioned before and can in its place redirect the current retrospective view on liminal transitions to a more prospective view. This will increase the knowledge of what qualitative nature lies within introducing liminality into the architectural profession. By building upon theories that were often only viewed from an anthropological eye, a more physical approach might give many new insights on how we as humans interact with architecture and transitions.

THE ARCHITECTURAL INTERMEZZO

Sander van Rijn

# ABSTRACT

This theoretical thesis will dive into the ambiguous nature of a place transitioning from one way into the other. This transition can happen in many ways. It can come by radical shifts, by splits, as a smooth transition, by co-existence of two opposing elements, as a fusion, an ephemeral occurrence or as a transition with a liminal experience. The latter comes forth from the passage from the one into the other which creates a new anti-structural (Turner, 1967) type of condition with a set of specific characteristics.

While liminality is often described from the anthropological realm, we should be able to trace it back to architecture as well. Therefore we should look at liminality from a psychological as well as a physical point of view. To create a better understanding of the matter, the thesis will first explore the psychological side of liminality. The ideas of Victor Turner and Arnold van Gennep about the special phase in the 'rite of passage'. Physical examples can be found in the non-place proposed by Marc Augé. In these non-places we find generative elements that evoke the same ambiguous feelings people experience during the liminal phase. From this the definition of the Liminal place comes in, or, a physical place where the liminal experience is created by the generative elements of the non-place. This liminal place is in a transitional phase where it has passed the point of no return and has segregated from its previous state but is not yet aggregated to its next state. This place does still have elements from its former status and begins to show signs of its future status, but in its place becomes something particular with its own characteristics.

To find the non-place elements that create a liminal experience, James Turrell comes to mind. His work with experiencing light is, especially with Roden Crater a good example of the psychological experience of liminality. A physical example can be found in the deserted mine 'Staraya Linza' close to Yekaterinburg, Russia. This mine became deserted and since the pumping house stopped working, filled up with water, with the industrial mine transitioning into a recreative lake. The in-between period shows examples of different movements and by tracing this in the same manner as Bernard Tschumi has done with the Manhattan transcripts, the non-place elements can be easier spotted.

The case study city for the project will be Yekaterinburg. The city of Yekaterinburg is still in the phase of transitioning from a post-industrial city into a service oriented city. This has created some liminal places where there has emerged a specific type of urbanism. At these specific places a intervention could emphasize or make the liminal experience more visible.

# KEY-WORDS

# OPENING

## INTRODUCING THE LIMINAL

One of my big passions is scuba-diving. My father was already doing scuba-diving and because of my mom's claustrophobia he always missed a diving buddy. That buddy became me and I remember the first boat-dive in the south of France. From the boat I saw the red rocks of the coastline of Théoule sur Mer and the sun reflecting on the waves. Because it was just a small boat, you had to sit on the edge and let yourself fall backwards, just like a trust fall. Before I knew it we were descending holding the anchor line tight, me even tighter. Here something strange happened, because around 10 meters before we were at the reefs, I saw a wrinkle in the water, like there was another layer of the sea. Later I found out that this is called the thermocline, or, a rapid shift in temperature because of different currents. This simply explained natural phenomena caused me to feel colder, but also mentally it felt I was in a phase of disorientation. This ambiguous experience gave a new dimension to how I perceived the quality of transitioning from one place to another, being more conscious of the effects it creates. In the architectural profession the threshold is often viewed from the notion and characteristics of the differences from your starting point A to your destination point B, however, the characteristics of the in-between are not often that well pointed out. What this creates is a space focussed especially on the qualities of A and B, but, as I pointed out with the thermocline, it is well possible that the highest quality is in that threshold phase itself.

The transition of the thermocline can be seen as an liminal experience. Liminality often stays in the realm of the anthropology because it is, most of the time, a phycological occurrence that Victor Turner (1964) described as the subject of passage ritual is, in the liminal phase, structurally, therefore not physically, "invisible"."

However, if we would take the notion of the liminal to the more "visible" or "physical" (image 1), what kind of examples then show up? While 'Limen' is Latin for threshold or margin, it should be seen as a place on a threshold or as a place on the margin. The latter is described by Rob Shields (1991, p.3) as follows: "Marginal places … are not necessarily on geographical peripheries but, …, they have been placed on the periphery of cultural systems of space in which places are ranked relative to each other."

Besides the liminal transition, there is a variety of other types that are sometimes seen as liminal experiences, but are quite different in nature, because the liminal moment or the outcomes are different. However, these are rather interesting phenomena to compare with the liminal transition, especially to make clear how particular the liminal transition with all of its qualities is.

This theoretical thesis will therefore dive into the ambiguous nature of a place transitioning from one status into another, with the liminal transition is most valuable, because of the special characteristics and qualities it has. Then by looking at a city that is in a transitioning phase, I want to ask the following: "How can liminality be used in architecture to form a qualitative new phase in a transitioning space?"

By looking at a city that is in a transitioning phase, I want to ask the following: "How can liminality be used in architecture to form a qualitative new phase in a transitioning space?"



Image 1:"Thermocline: the liminal gate into the deep sea" Own work (2020)

## CHAPTER 1 (SEGREGATION): CATEGORIZATION OF TYPES OF TRANSITIONS

In our lives we are accustomed to many changes. Sometimes these changes are radical, sometimes you only find out later that you made a change. This change from one state, style, form or place to another is called 'transition' from the Latin 'trans' meaning: on the other side of; and 'iti ' meaning: go, proceed; therefore "to go to the other side". But in that regard,  there is a number of transitions. All these transitions have different characteristics and examples that needs to be categorized for better understanding to how liminal transition differs from the other mentioned transition types. As can be seen in table 1, these categories can be represented by a mathematical equation and by a simplified line drawing.

| Transition type: | Formula: | Graphic representation: |
|---|---|---|
| Hard | $A = B$ | |
| Smooth | $A = B$ | |
| Split | $A = A1 + B2$ | |
| Coexistence | $A + B = AB$ | |
| Fusing | $A + B = C$ | |
| Ephemeral | $A = B = A$ | |
| Liminal | $A = AB = B$ <br> $A = C = B$ | |

## 1.1 TRANSITIONS (HARD, SMOOTH, SPLIT, CO-EXISTENCE, FUSING AND EPHEMERAL)

To start its best to begin with the hard shift. This type of transition happens during a radical shift between A to B. Physical elements are from putting on the light to the dry and rain season around the equator. This shift might disorientate you for a short amount of time because of the contrasting characteristics between A and B, like going from dark to light and from dry to wet in the brought up examples. As a psychological example, a epiphanic moment can well be regarded as a hard shift, because it is a sudden transition from being unknowing to being enlightened. The liminal period here is however, little to non-existent because it is the moment you need to get accustomed to the new reality that might feel disorientating. The smooth transition is where you go from A to B without rapid or radical shifts. The passage of time is normally, with no special occurrences a relatively smooth transition. The seasons in the northern and southern hemisphere are having smooth transitions between winter, spring, summer and autumn. Psychologically dementia and Parkinson disease are an example of a slow deuterating mind and slowly losing the grip on life. There is as well a short accumulation phase that might feel a bit ambiguous as well.

A split can be seen that point A divides in B1 and B2. Especially phycological examples can be given for this transition type. For example, a divorce causes a split between two people, but in its place also between minds; people who develop schizophrenia are losing their own reality with many contrasting 'voices' within their head (Picchioni & Murray, 2007).
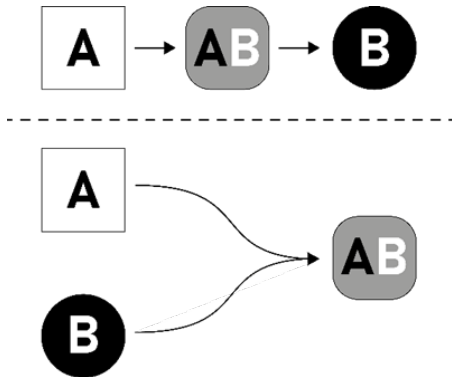
Physical examples can be found in geographic occurrences where through time rivers can divide land that causes originally the same nature and species to change from each other over time.

Co-existence is a transition type that comes close to forming a bond where A and B forms AB. A coalition between two political parties but also the Cold War are good examples of political co-existences. If there happens to form a new state from A and B, say C, then we talk about fusing. Fusing happens in a broad variety of ways. This type of transition is seen in science, cuisine, mythology, etc.. Scientific fusions can create new elements from two other elements, in cuisine where different cultural cuisines might create a new type of food, like in the Netherlands, where the Dutch/Belgian fries and cheese are mixed with the Turkish doner kebab creating the so-called kapsalon. In mythology fusion can be seen in entities fused together creating hybrids. These so-called liminal beings are for example the centaur (half man half bull), harpies (half man half bird) and sphynx (half man half lion). That the word liminal is used here is because of the derivation of l men, or, threshold, because the liminal beings are on a threshold of two different entities.

The ephemeral transition is a transition that only lasts a certain amount of time before it goes back to its former state. Especially events like festivals and concerts, but also movies or reading a book might give an ephemeral feeling. You become detached from the 'normal' state and feel if you are in a different state. Most of the time you can choose for this to happen and in this case the ephemeral transition is called a liminoid experience (Huang, 2018).

## 1.2 LIMINAL TRANSITIONS

The liminal transition is harder to physically define while it is mostly described as an event or experience by an individual or a group (then called 'communitas'). The most known examples of liminality are when someone enters a cult or becomes a member by a rite. The letting go of the past state but not being in the next state creates a new in-between state where neither state is fully present. While this is somewhat like a fusion, the liminality does not form from two already present states or elements, but rather between the two states (image 2). To give an example, fusing would be a man and a horse together becoming a centaur and liminality would be a man transforming into a horse but being a centaur in the middle of the transformation. The liminal transition therefore contains a special element that, besides from the liminoid experience, creates a 'temporary' moment of something new. Besides the thermocline as mentioned in the preface, brackish water at river mounds is another example of a liminal condition. Being a mix of sweet and salt water, it evoked some specific ecosystems around this place, with their own characteristics to thrive.



Image 2: This image shows the difference between the two notions of hybrids. The top being the liminal transition where the hybrid is halfway through the transition and down the fusing transition where the hybrid is the result of the transition.
Own work (2020)

## CHAPTER 2 (LIMEN):
## LIMINAL SPACE & NON-PLACE
## AS LIMINAL PLACE

From the previous chapter we know that the liminal transition is characterized by the new and distinct state it causes. However, how this can be 'mastered' in a way that you can have certain elements that put a liminal transition in motion is not easily done. Therefore a good definition of how liminality can be implemented within architecture might help with this.

### 2.1 LIMINALITY & LIMINAL SPACE
Liminality is defined as "The transitional period or phase of a rite of passage, during which the participant lacks social status or rank, remains anonymous, shows obedience and humility, and follows prescribed forms of conduct, dress, etc." (Dictionary.com, 2021). This definition shows it is not directly well-suited for architecture because the original

'founders' of liminality, Arnold van Gennep and Victor Turner are talking on the cultural rites (Gennep et al., 1961)(Turner, 1964). The only direct link that can be made to architecture is that there are buildings made for these rites like temples or freemason lodges. However, these buildings are not guiding in the experience of liminality but rather the other way around. By looking at the characteristics of liminality, it might give some hints to what really makes this experience so enriching. This brings me to a the liminal space, mostly used in religious thematics because it leans still to the experience of rites. Richard Rohr, author and Franciscan friar, noted it as follows:

"Where we are betwixt and between the familiar and the completely unknown. There alone is our old world left behind, while we are not yet sure of the new existence. That's a good space where genuine newness can begin. Get there often and stay as long as you can by whatever means possible…This is the sacred space where the old world is able to fall apart, and a bigger world is revealed. If we don't encounter liminal space in our lives, we start idealizing normalcy." (Rohr, 1999, p. 155-156)

This notation of the Liminal space is notably influenced by Turner, because the phrase betwixt and between is the title of his book about liminality. It is nonetheless the right way to describe the atmospheric quality, while you are in an in-between phase where you find an ambiguous notion of reality, or betwixt (image 3). But again, also the liminal space fails to note some physical elements or relics that defines the space in itself, keeping it a rather personal psychological experience.
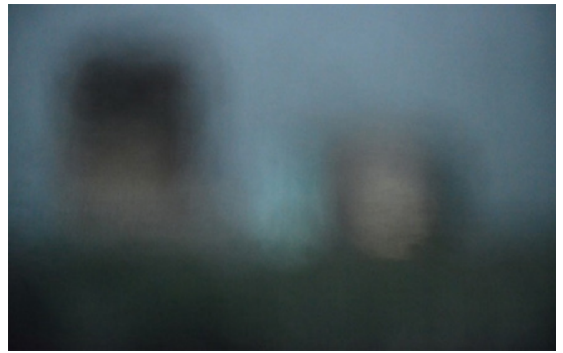


Image 3: Liminal Space, Jurek Wajdowicz (2013)

## 2.2 NON-PLACE

From another point of view we can look into the non-place that was proposed by Marc Augé in 1995. The non-place is a place also on the threshold between starting point and destination, or rather, the place without personal affiliation to it. Examples of these non-places are hotels, gas stations, airports or other public transport places. As Marc Augé states it:

"A person entering the space of non-place is relieved of his usual determinants. He becomes no more than what he does or experiences in the role of passenger, customer or driver" (Augé, 1995, p. 103).

This is almost the same as Turner described how a person that goes through a rite feels during the liminal period, not in control and feeling more as a passenger being guided through the phase of transition. But there is some subjectivity to the non-place as well. For example, the people, like hotel-employees, that go to a non-place every day, will not experience it as an anonymous place anymore and it is therefore again not particularly bound to the place itself but more to the reception of its user.

Image 4: non-places, Sarah Peters Photography (2018)

## 2.3 LIMINAL PLACE

If we combine the terms of liminal space and non-place, we get a place that is in a transitional phase where it has passed the point of no return and has segregated from its previous state but is not yet aggregated to the next state. This place does still have elements from its former status and begins to show signs of its future status, but in its place becomes something particular with its own characteristics. What is most important is that all these terms, liminality, liminal space and non-place find their core in the in-between moment where the previous state and future state could be seen as normal.

To find the liminal place in a physical manner, you almost need to be able to look into the future because it demands you to know what the next phase will be. In the built environment this is not easy to find. However, if you would be able to control the experience of the transition and/or see examples where liminality has happened which could happen again, there might be some valuable elements that can be used to (re-)create liminal places.

## 2.4 RODEN CRATER, JAMES TURRELL

One example that plays with the idea to create new insights by experiencing the building is James Turrell's Roden Crater (image 5a). This large-scale art project in the Painted Desert region of Northern Arizona situated within a volcanic cinder cone (image 5b) goes about the experience of the perception and contemplation of light, time and landscape. Whilst it is not completed yet, one part of it already portrays the vision of Turrell.
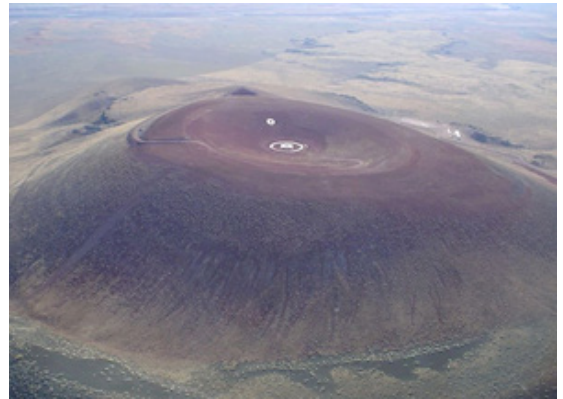


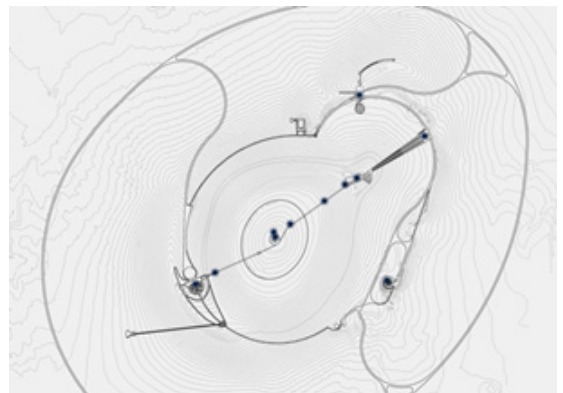Image 5a: Aerial view of Roden Crater. (2015) Patowary

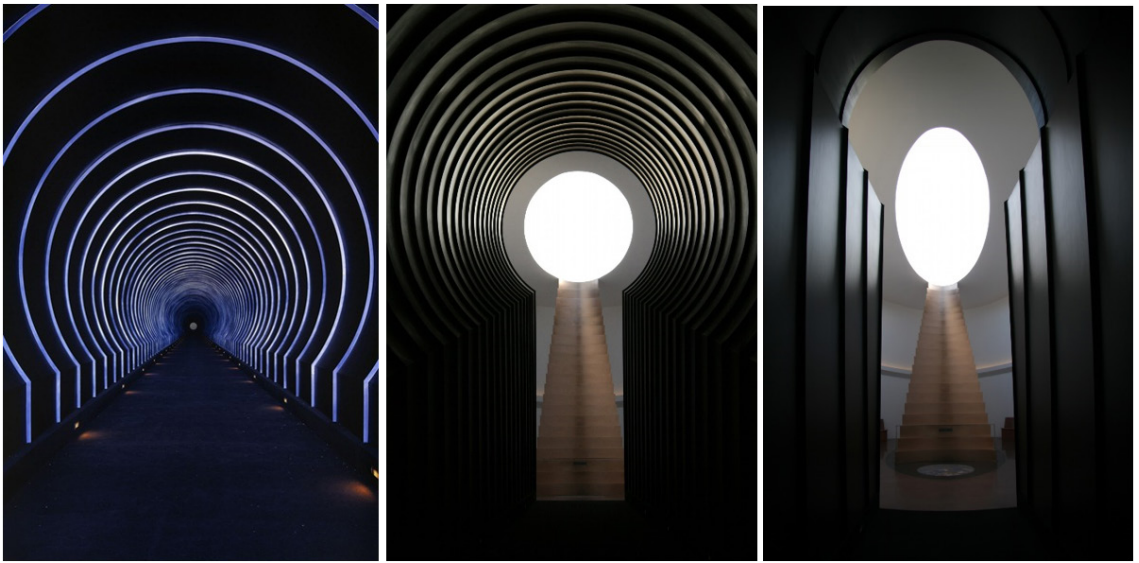

Image 5b: Map of Roden Crater. (N.D) Roden-crater.com

Image 6a,b,c: Alpha east tunnel. (Holzherr, n.d.-6a)(Krupp, n.d.-6b,c)

This part follows, starting from outside of the crater to the crater's eye a straight path called the alpha (east) route (image 7). Two special experiences are found here. One being the sun and moon stone, a black square stone with white marble in the middle showing the different eclipses like the native American Fajada Butte in New Mexico (Corner & McLean, 1996, pp. 165–167). The other being the tunnel where you see a circle in the distance (image 6a), a white light that becomes brighter the closer you get to it (image 6b). But suddenly you realize that the circle you have been looking at actually is an eclipse on a steep angle (image 6c).

Here is where the liminal experience takes place. On this point you are separated from the knowledge you looked to a circle, but slowly gets aggregated to the new reality, that it has become an eclipse (image 8). From there you continue to the crater's eye where the famous skybox from Turrell is shown.
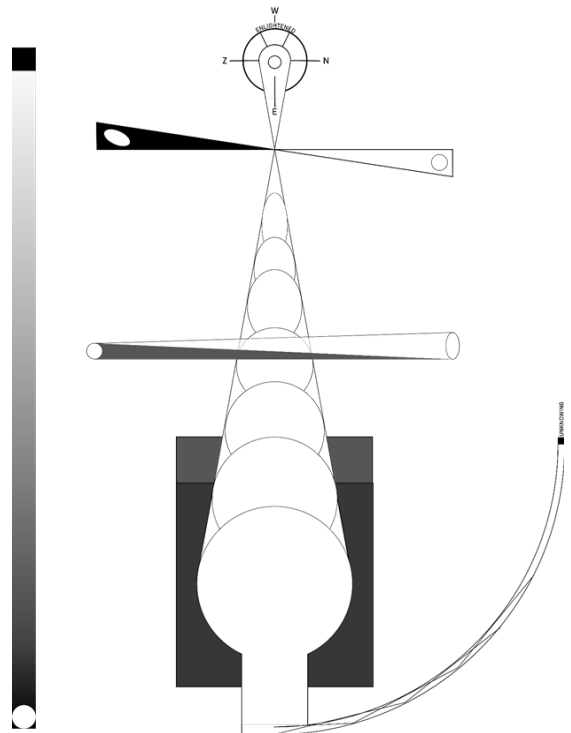


Image 7: mapping of the Roden Crater from the curved tunnel to the alpha route that guides you from the sun/moon room to the center of the crater crossing the eclipse. Own work.
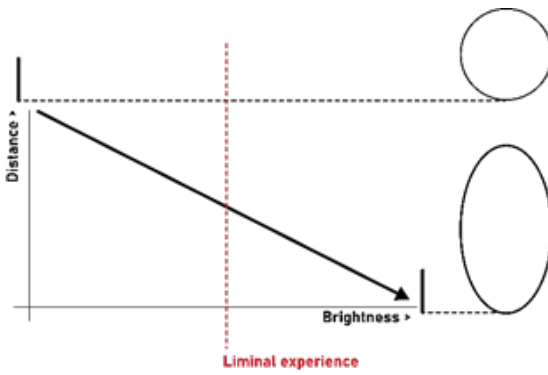
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Image 8: Diagram of the liminal experience at Roden Crater. Own work.

## 2.5 STARAYA LINZA, RUSSIA

A second example of a liminal place is Staraya Linza, situated twenty five kilometers from the center of Yekaterinburg, Russia. Staraya Linza is a former talc mine that became deserted. This created a rip in the landscapes of tens to a hundred meters deep that became neglect-ed over time. Because of groundwater levels mostly being higher than the depth of a mine, a pumping installation is used to pump away the water that flows into the mine through aquifers. When this pumping stopped the lake slowly filled up, to its current lake status.

Nowadays it is a place where recreation can take place like swimming, supping and scuba diving (image 9).

What is most interesting is that in the phase between mining and being a lake, Staraya Linza was used as well. In its derelict and transgressive state people found the place for recreational purposes as well. Putting camp fires and using the pupming house as shelter gave it a new destination which eventually would end up dissapearing under the water surface. This fate is an interesting fact that a place in transition can have a phase where the future is already set, but gives place for new activities, or, a qualitative liminal place in a transitioning space. The tools that offered this liminality are for example the pumping house as mentioned before, but also the stairs leading down, becoming a pier when the water rose and the roof of the shed becoming a platform to dive from. These rather trivial and anonymous elements trace back to the elements that can be seen in non-places and with that, it physicalizes the liminal space as well.
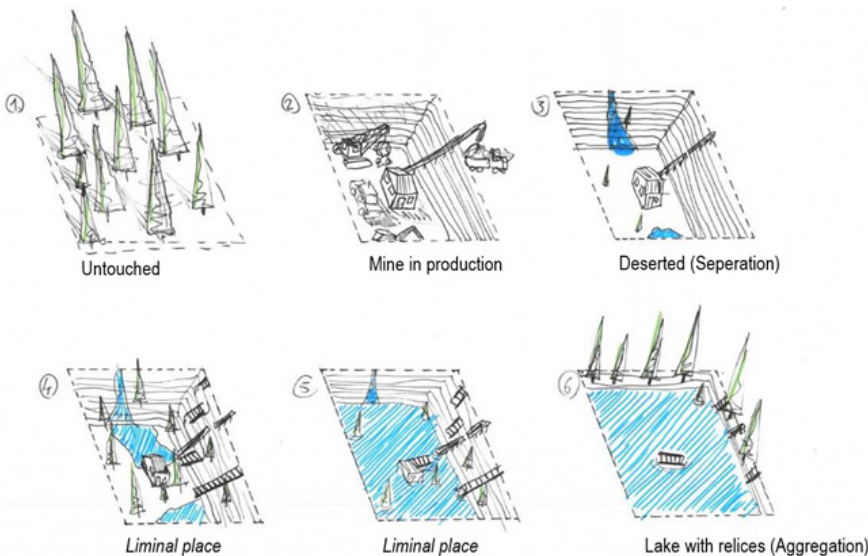


Image 9: Different phases Staraya Linza went through. Own work.

# CHAPTER 3 (AGGREGATION): LIMINAL PLACES IN YEKATERINBURG

The Staraya Linza mine from the previous chapter is as said near to Yekaterinburg. Yekaterinburg itself is a city in transition from being a fully industrial city into a service city. This is causing a co-existence of heavy industry still in function, office blocks being built and free-time (recreation) slowly being built into the culture happening all at the same time.

A rather special phenomenon visible in the city is that the skyscraper offices that are being built, are all built in a cylindrical shape, which could be argued are a reminiscent of the factory pipes once (and still visible) ruling the skyline of Yekaterinburg. The architecture itself is a fusing hybrid transition while the general square office building and the industry pipe already exist. For the bigger urban scale these buildings contribute to a more liminal hybrid transition, while the city contains buildings now that are accustomed to the 'previous' industrial state to the 'next' economic city, making Yekaterinburg a liminal place itself (image 10).

But if you scale down again to the process of the building, the transformation again finds itself in a liminal state, where the factory transforms into an office building. In this, and any other urban renewals, there is a phase where the past context is left but there is no sign of the renewal yet. In this phase (image 11), normally high fences are the trace of this moment, blocking the pedestrians from hazard, but in another way also make the people adapt to the new situation that is temporarily created. People have to go around or through a new route that will disorientate them, also making this a liminal place.

Interesting in these examples is the variety of elements contributing to the liminal place. These elements are characteristic for having a liminal character. These are normally trivial but become to special use in the liminal place as mentioned in the previous chapter.



Image 10: The hybrid in-between design of a skyscraper in Yekaterinburg fusing the appearance of the industrial past with the function of an office building.
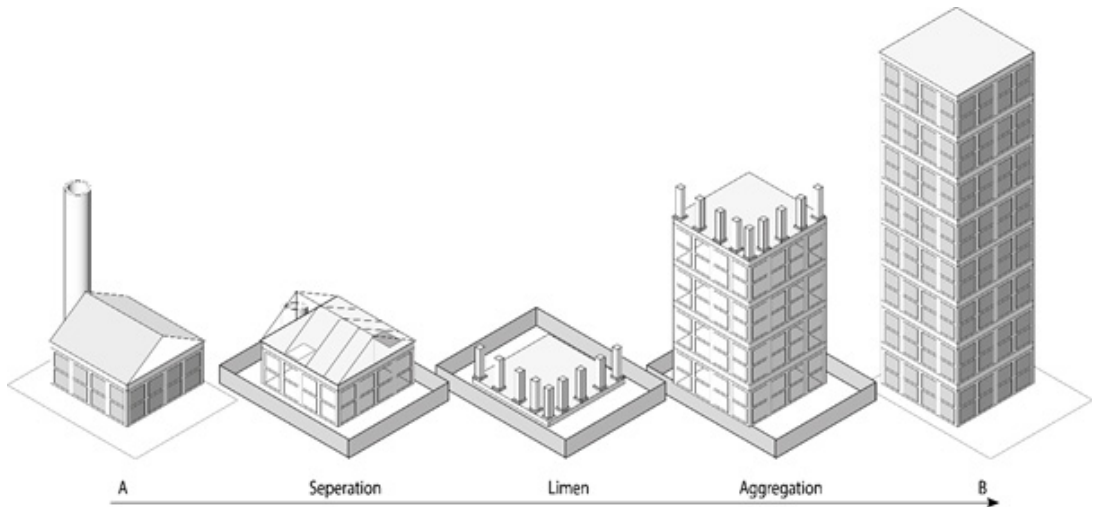
Image 11: The transformation of a factory into a high rise office with the construction site as the liminal phase. Own work.

## CLOSING

If we look back to the preface of this essay, it started with the scuba diving experience where I found myself in a place where I could not really place what I felt but where I knew that I was in a phase between two other states. This evoked the question if this liminal experience could be used in architecture to form a qualitative new phase in a transitioning space.

It is hard to really find clear examples of places in the built environment that gives the same experience as the thermocline, in one way because it is many times a rather sub-jective experience, but on the other hand it is always a temporary event as well. A limi-nal place is therefore always guided by the notion of the experience and time (you could even say temporality). There are indeed examples of places that deliver this feeling of liminality and have specific qualities to them. In architecture important parts to look at are therefore places where transformation will take place, but instead of it being a rather one-time psychological experience like at the non-place, the place should be able to re-activate this liminal experience every time you visit it again.

Therefore, the next time when my father and I will go scuba diving, I will ask him to follow me, slowly descending to ten meters and just hang there, in the middle of our journey, the surface above, the reef below, to contemplate on the change we feel when we experience the qualities of the liminal place called the thermocline.

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# THICKNESS OF BORDERS

# THRESHOLD AS MEDIATION
# IN AN URBAN SPACE

Shih, Yi-Chen

Inspiration

Project studies

My interest
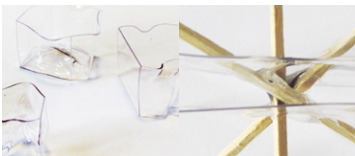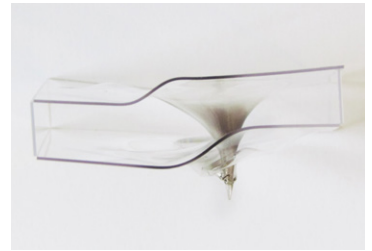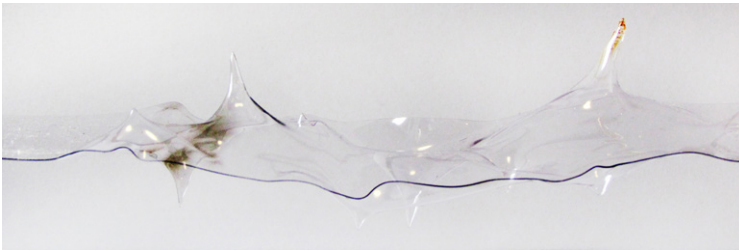Architectural elements
Movement of people

Architectural and philosophical discourses
Architectural projects
Putin's Walk at the Kremlin
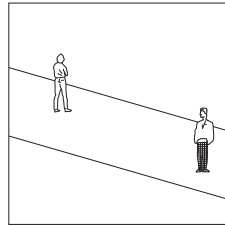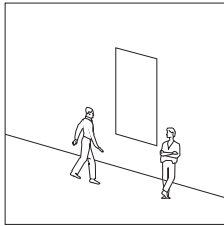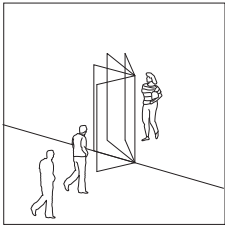
DOOR

WINDOW

BRIDGE



MODI OPERANDI workshop: Assemblage of temperature, pinching and positions

INSPIRATION

My interest is in movement of people and how do people use architectural elements such as doors and windows. Do you remember how many doors you have walked through in a day? Movement is linear, much like language. it can be deconstructed into many images and moments. When the field is constructed by a series of images that we perceived, it becomes a personal and unique presence. Therefore, the city is constructed by those images. If we don't travel, there is no border. Additionally, doors represent enclosure and limits as well as movement, which include a demand to connect and divide us. Windows extend the outside without the intention of movement. Bridges reveal and collect a connection with their surroundings. Notably, we can realize that the bridge indicates how to establish a connection where there is a separation, and the door shows an interaction of separation and connection.

# The city

Urban scale
Square scale
Building scale

# Intention

Design a threshold?
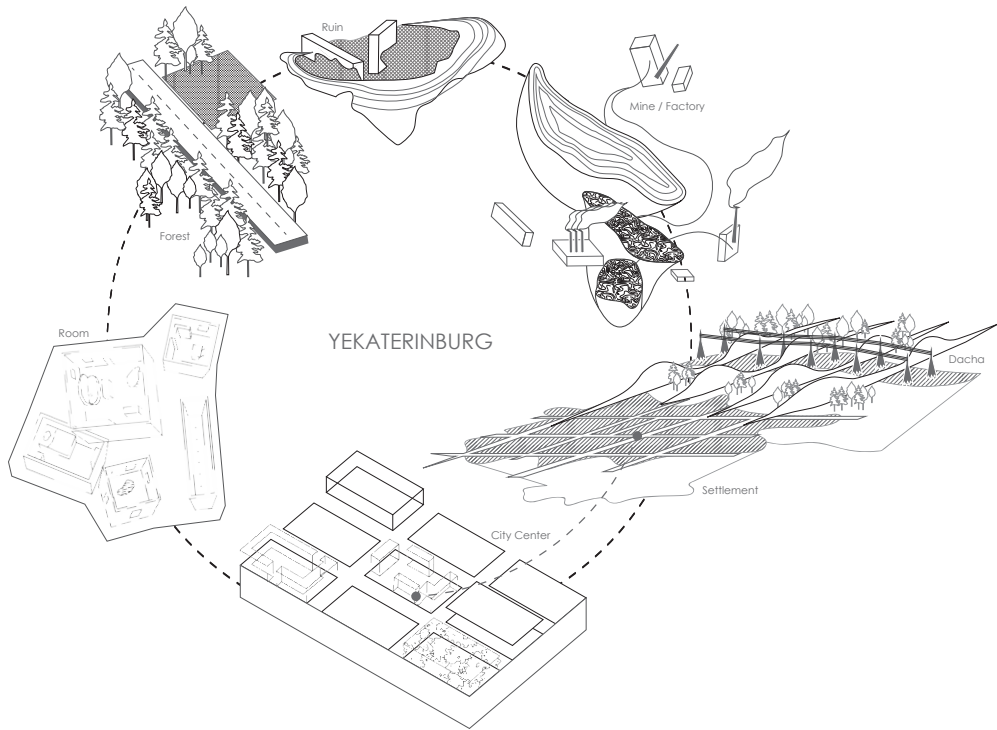
YEKATERINBURG
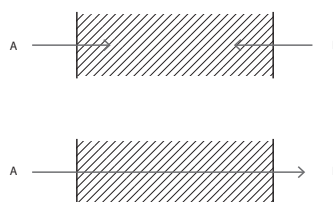
Yekaterinburg, RUSSIA
There is a culture of movement in Yekaterin-burg. Russian people move from one to the other house in summer or vacations. Also, learning from our group mapping, this city consists of the city center, satellite cities, settlements, dacha areas underneath the powerline, industries, abandoned elements in landscape and the highway network.
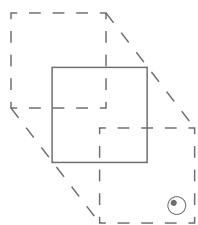
01.

02.

03.

## THEORY STUDIES

le Corbusier (01.) considered that the threshold is a sequence consisting of doors and their extended thickness. The threshold, such as stairs, or corridors, is a mediation to form what the externalized interior and interiorized exteriors are. Aldo van Eyck (02.), declared the thresholds provide a critical role in the transition between the public and private spheres. The threshold is also called the shape of the in-between. He focused on the constitutive meaning of in-between conditions and people. A building should present a resemblance to a human being. For instance, he mentioned that man breathes in and out, but can architecture do the same? My understanding from Elizabeth Grosz (03.) The in-between is static and influenced, while the threshold is active and transgressive. The threshold can engage and mediate the movement of people and sublimate the in-between into space with a position.
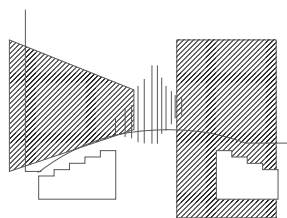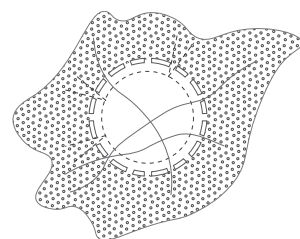


01.
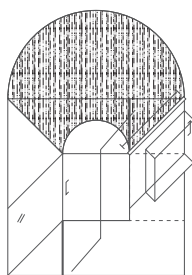
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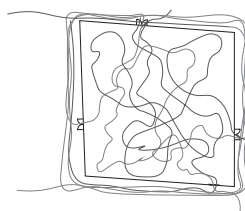
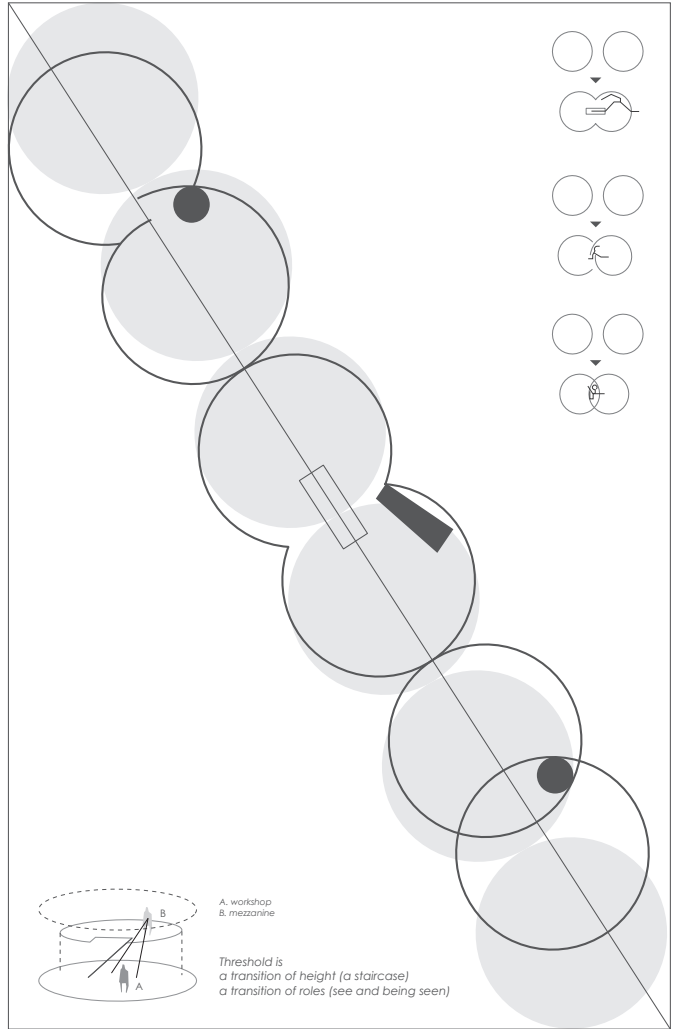03.

04

## PROJECT STUDIES

01. The thresholds is a bridge
(The pedestrian bridge of Fondazione Querini Stampalia,1869)
02. Threshold is an extended door (The penthouse, 1931)
03. Threshold is a building in a cluster of buildings (KAIT Workshop, 2008)
04. Threshold is a building in a wild field (Old doors pavilion, 2009)

*Melnikov*

*House*

*Threshold and Circulation Space*

03. a room for creating
02. bedroom is a lab
01. living spaces

ceiling

floor

ceiling

floor

A. workshop
B. mezzanine

*Threshold is
a transition of height (a staircase)
a transition of roles (see and being seen)*
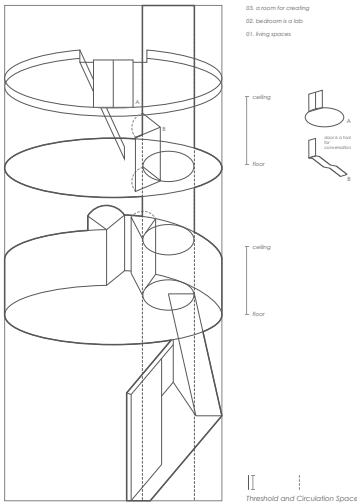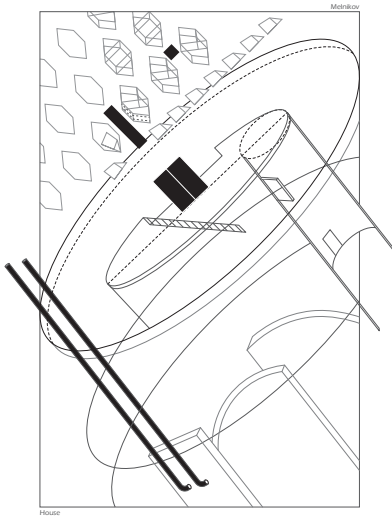
## PROJECT STUDIES

Melnikov House, 1929, a symbol of Constructivism Architecture. The threshold is an intersection between two circles and an edge. The circle is an interesting shape because, in the interior, the intersections form different thicknesses. For example, the corridor, the staircase, and the two walls overlapped a little are located on each floor respectively.

Hence, people have different experiences while crossing. Also, if a person is walking at the edge of the circle, he would see the surroundings, which get the feeling that they are in the center. This is the reason why the edge is a threshold. It provides a view from both sides. Dual identities.
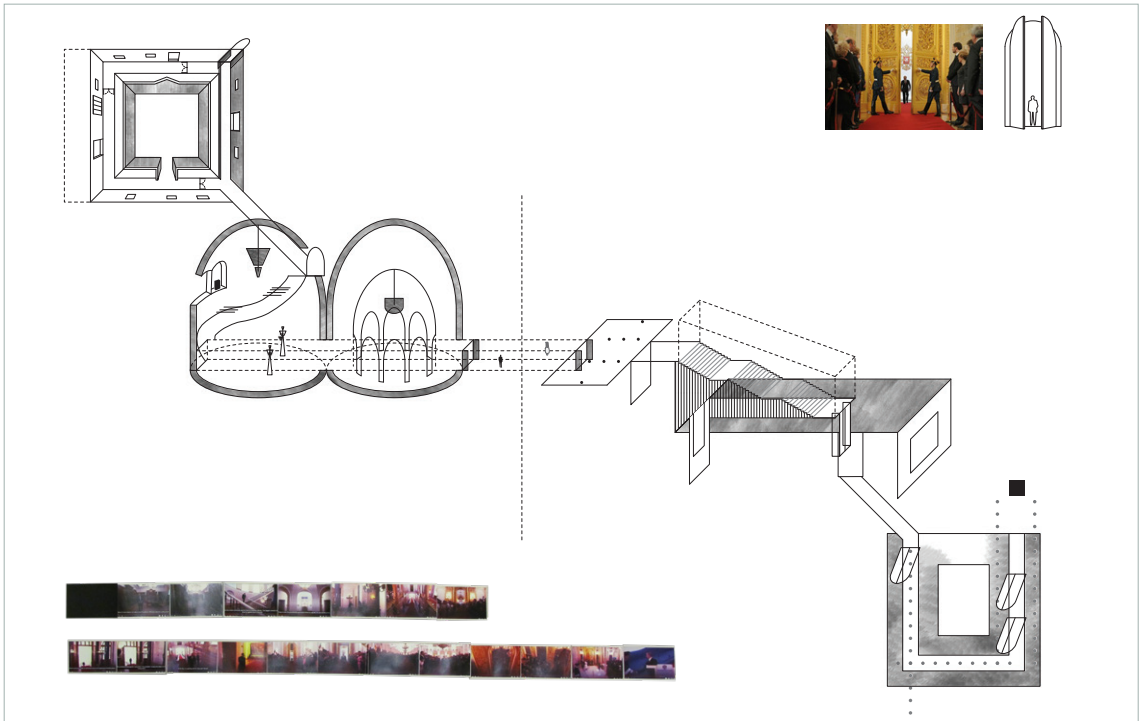
01_Putin's walk on the inauguration day. Interior Depiction (the sequence)



A room with tables, phones

A room with paintings, cabinets, doors, windows

A ROOM WITH ...

- The sequence of the walk corresponds to the time; the pieces of time correspond to a room of the palace

Change of States

- A threshold has transitional property and is a place that can be experienced
- Transition refers to a change from a state/type to another
- A crucial factor of threshold is THICKNESS

Putin at the pinacle office walk alone

go into a public state (the dome)

orient himself

choose a direction

leave the building

centricity

walk as an object [walk at the eyes]

centricity

look up of the starting point [1] and the route behind the opening [2]
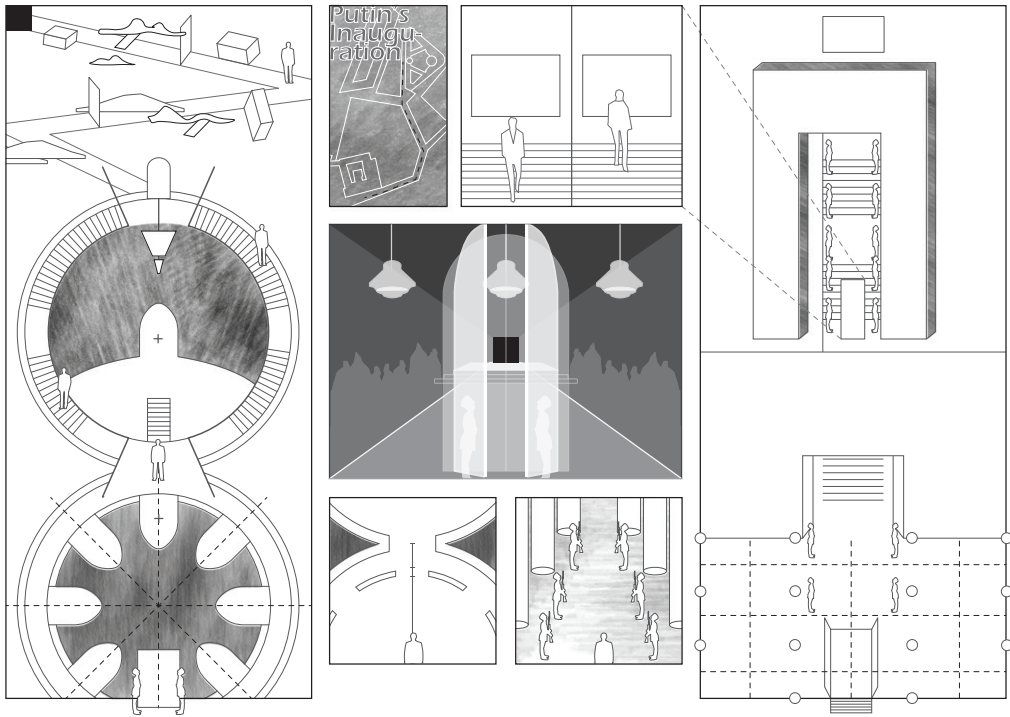
vertical relation the floor is threshold

lamps and columns define the axis, and orientation

a border of mirror

A room with three golden doors

door
walker

How do doors become entrances?

the function of entrances is about (re-)orienting the directions for the walkers

go inside
walk with others

orient
himself

go
upstair

go into the state
of seeing and being seen

his role:
the leader
of soldiers

his role:
be seen by the citizens
(become a focus of view)

20 c.m.

president
constitution

02_ Index and Analysis

258

03_ Individual and Collective power
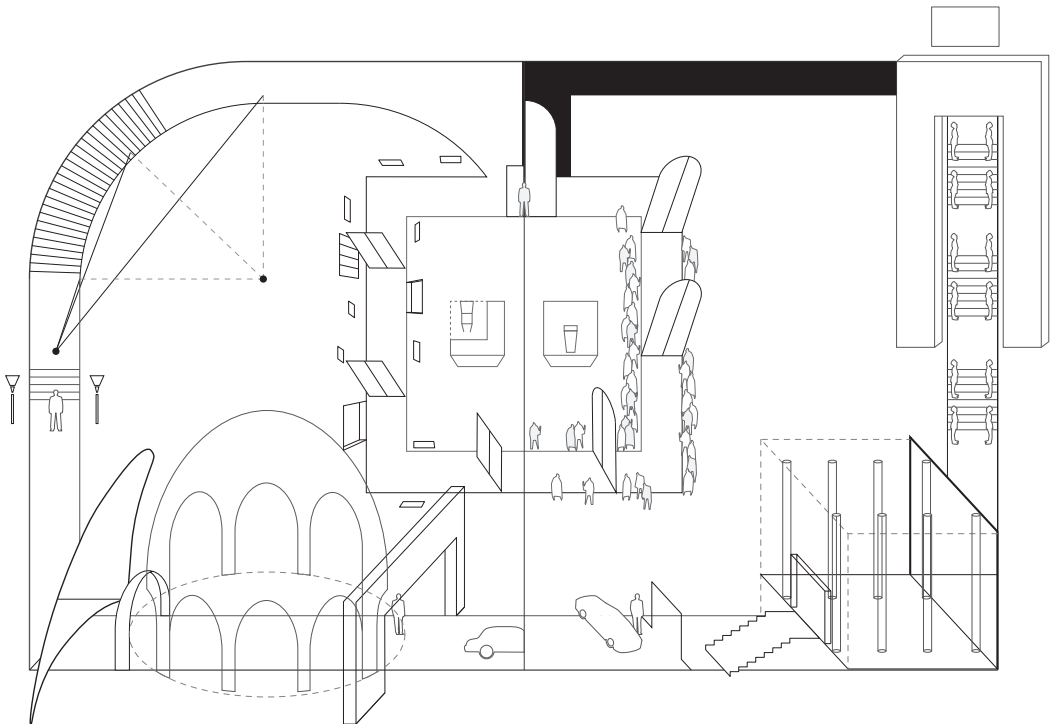


04_ Narritive and Thresholds

PROJECT STUDIES_ PUTIN'S WALK

● Putin's walk is a film, presents a series of scenes of his walking from his office to the Kremlin podium. I noticed the golden door which scale is not as the common doors as we know, so that would be involved with other meanings. Also, it reminds me of Le Corbusier's discourse: if architectural elements are thickened, they would become a threshold. In social space, the door creates the threshold, to cut a portion of the continuity. (01)

● As an observer, through the third-person perspective to approach an objective understanding of how do the interior elements, spatial configurations, and movement change/enhance the states of powers or individual's roles. Basically, thresholds refer to a transition from one state/type to another. During the moving process, there are various behaviors and interactions generated by a given moment. (02)

● Individual power reinforced by the objects (the height and symmetry of the doors, chandelier positions, and the windows) On the other hand, a public notation generated from the audience and the ritual itself; the events, in turn, give the palace building a collective power. Thus, palace not only on behalf of an individual. If there are public events that happened temporarily, this type of building will be a public interior. (03)

● The three thresholds are concluded afterward. The edge of vault changes his view from walking at the center to the edge. Compared to most of the time he walks in the middle of the route, this section is particular that the center is a void. Secondly, the two entrances with arches and columns, which configuration orients the directions from single to multiple ways. Thirdly, the long/wide staircase, regarded as a thickened space in between the floors, not just a connection for walking. Allowing events to happen on it. (04)

CONCLUSION OF ALL PROJECT STUDIES
In sum up, there are three thresold ideas.
(1) The threshold is a space that conveys a present moment that exists through the enhancement of sense and emotion. It mainly focuses on the feeling of being present in the moment.

(2) The threshold is a space of a non-present moment that exists through the evocation of memory and imagination. There is a link to past or traditions.

(3) The threshold can be understood as a transitional space which imposes meanings on a blank. Events give the intention a temporal dimension, and threshold allows the blank (the place where the events take place) temporarily becomes another type of space, such as a public interior.

Thickness of borders
Threshold as mediation in an urban space



THE CITY

In this phase, thresholds and in-betweenness are picked up and analyzed in the following pages. Where are the threshold and the place that has the potential to be a threshold?

Intermediary spaces, buffer spaces, and lefto-ver spaces are involved in this spatial analysis which is categorized into three sub-titles, urban scale, square scale, and building scale.

NOVOURALSK

REZH

Yekaterinburg

PERVOURALSK

ASBEST

airport

POLEVSKOY

SYSERT
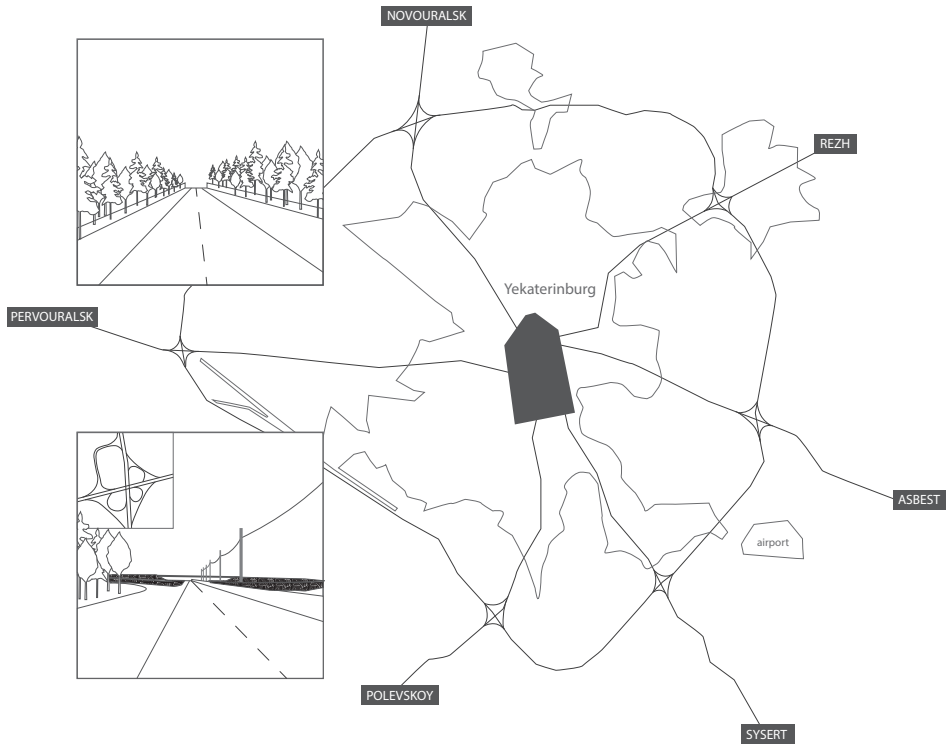
URBAN SCALE

Construction and destruction may seem to be opposites, but they are actually in one con-
cept. Any object will be deconstructed in the process of construction. The infrastructure plays
a critical role in connecting the cities. Transportation gives the circular highway an identity as
an ephemeral city border. People move by car, they would aware of the two sides which are
Yekaterinburg and the outside of it at a moment. Thus, the quality of the threshold conveys the
orientation and re-organizes the definition of the territory. The highway is a threshold.

| Residential area | Dacha / Single-houses area | Industry | Planned natural area | River |

## SQUARE SCALE

Obviously, Yekaterinburg can be seen as many zones with main functions such as residential area, dacha/ single house area, industrial area, and planned natural area. There are two kinds of squares. One is in the grid city center; the other is in the interstice. What forms will the squares appear in the grid system? Is it a threshold or an in-betweenness?

MODI OPERANDI workshop: Degree of Separation and Connection
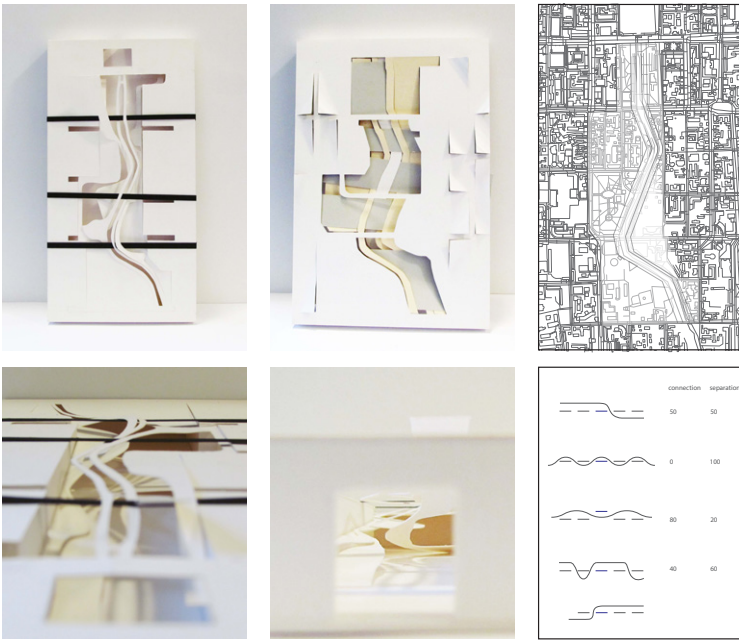
Threshold is a space can mediate and clarify two oppositional states.

The model conveys the degree of connection and separation in the sunken riverbank area. Weaving is an act for making, the meaning is that the two directions interact together and generating a relationship between the top and the bottom. This thickness creates a network that can be the place where thresholds occur.

## SQUARE SCALE_ RIVERBANK

What would be if the urban grids are getting closer from two sides to the middle? Notably, the boundaries between the organic river and regular grids are a key to observe and examine urban activities. How do the citizens enter/leave the leisure area which is located at the center of Yekaterinburg? Also, opposite of the grid, it is a threshold with a historical memory evocation, and an awareness of people's position while crossing on the bridge.

About the history (fig.1), the superposition includes the traces of the vertical objects (the order of Lenin, the fortress, the incomplete TV tower), symbolizing the power and conflicting values, have been erased and many

museum buildings have been added after them. Moreover, when people realize that their actions are becoming different from their usual habits, there is a border. Besides, in the mapping (fig.2), the river is separated into four sections according to the bridges. The positions of thresholds, leftover spaces, various walkings, landscape elements, sight range, building types are depicted; in order to understand the relations of square composition and walking. The corner street entrances and the linear staircase are thresholds; the former is a part of the bridge and that of the sunken area simultaneously and the staircase blurs the boundary between the ground and water.

| 1 | Riverbank History |
|---|---|
| 2 | Map of the people's movement and spatial property |

0     1     2     3     4     1.6km

sunken riverbank area
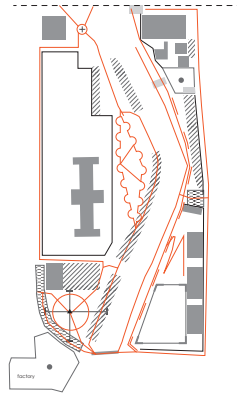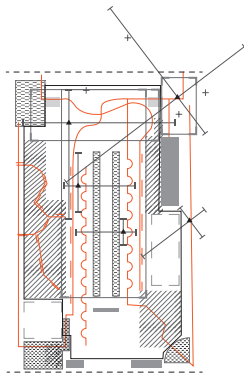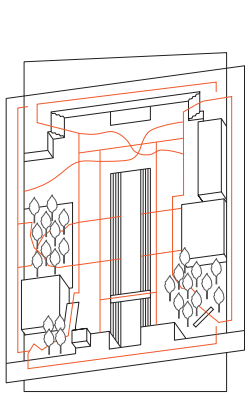
urban fabric

museum
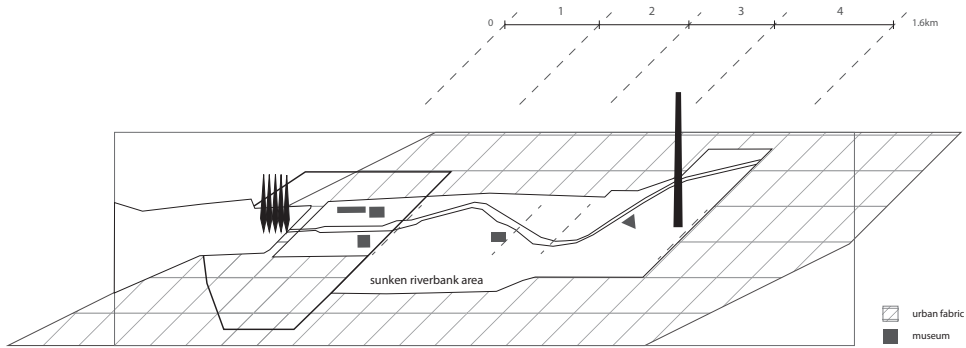
**Order of Lenin**

- a symbol of the city's
labor history

**Fortress / Factory**

- the city was expanded
from the factory

**Half- finished Soviet-era TV tower**

- suicide Tower
- a part of history, city
identity

factory

LEGEND

——— walking

∿∿∿ the time of staying is longer than that of walking

══ the time of staying is shorter than that of walking

■ building

▨ staircase

⊞ parking lot

--- bridge

—— separation
(fence, wall)

✛ tower,
sculpture

⊥ sight range

☐ square

⊙ in-between space
(tiny piece of land
or leftover space)

⌐⌐ building
⌞⌟ (the entrances connected
with both sides)

▨ threshold

▨ vertical elements in landscape
e.g. trees

construction site

265

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| pedestrian road | | tram stop | | bus stop | | Neighborhood | |
| forest park | | billboard | | service station | | collective housing | |
| museum | | rail road | | parking lot | | settlement | |
| unknown | | | | leftover spaces, road verge | | factory | |
| office | | | | | | shopping mall complex | |
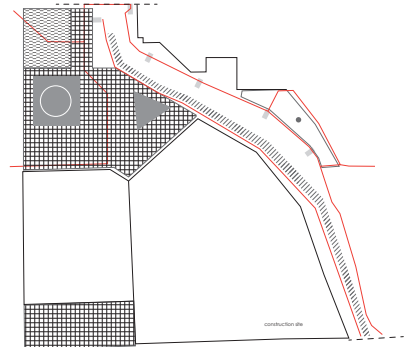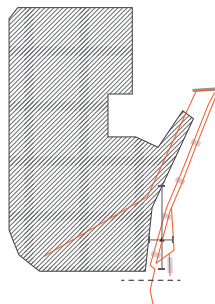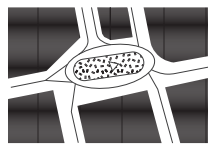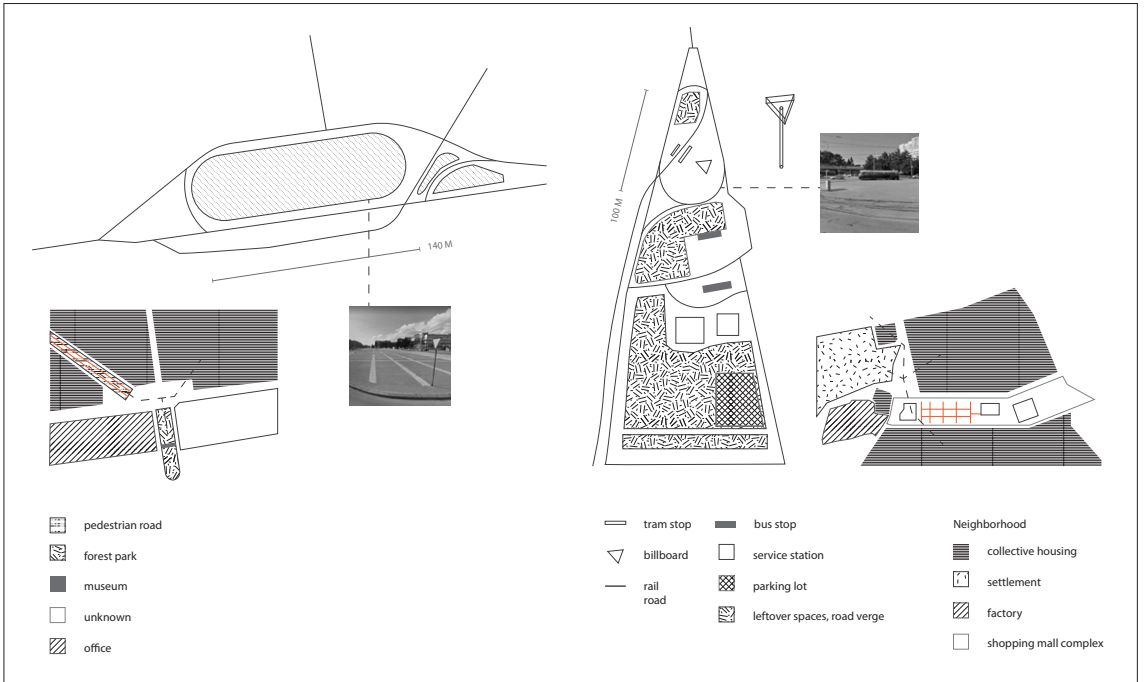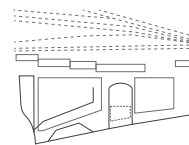
roundabout tree island        train station square        park in-between housings
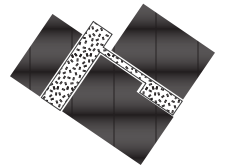
## SQUARE SCALE_ ROUNDABOUT ISLAND, PARKS

The second type is the intersection in-between the zones. The square areas are formed by the two boundaries; the rails and the ground higher than the road. Both are functional-oriented. For instance, the station square composes of a billboard and service stations. The circular form has the ability to integrate the surrounding landscape, which is a potential position to activate events and let people stay and move as a transfer point or destination; not just an empty place for waiting. In addition, there are various roundabout islands, affiliated squares, and parks in Yekaterinburg.

soft edge

playground

entrance

private garden, house    parking lot    private garden, house

SETTLEMENT

shop

soft edge

playground

parking lot    parking lot    entrance

COLLECTIVE HOUSING

separation

avenue
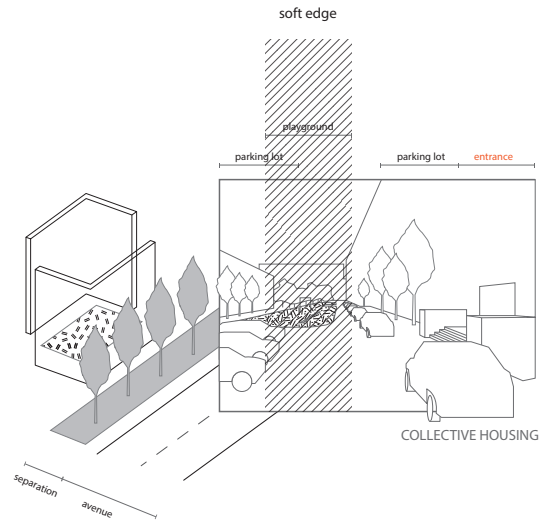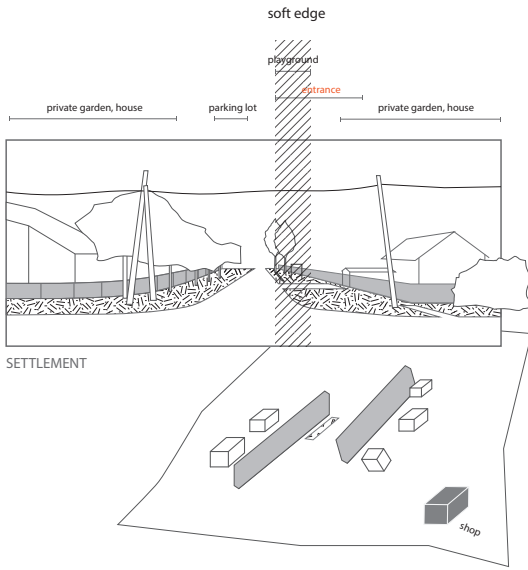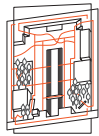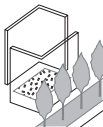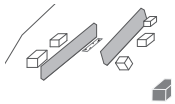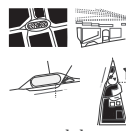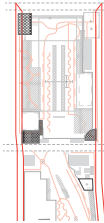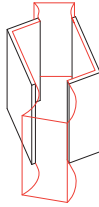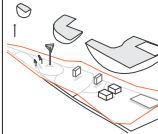
## BUILDING SCALE_ COLLECTIVE HOUSING, SINGLE HOUSE

The single houses in settlement and dacha areas and the collective housings are the two main residential types. In the settlement, it is no public spaces except a store, and the self-built playground is the only type at the edges of the houses and roads. The ambiance is anarchy. In contrast, the latter one is located in the grid system; the green belt space is a separation between the housings and the avenue. The threshold consists of parking lot, playground, roads, tiny lands behind the buildings, called soft edge. It conveys the life between buildings.

## INTENTION_ DESIGN A THRESHOLD

What is the mediation in Yekaterinburg? Mediation is the function of the thresholds.
The list indicates the quality and value of the places and the design proposal elaborated based on what is being mediated.

| | It is a Threshold | | | | It is a potential to be a threshold |
|---|---|---|---|---|---|
| | | | square scale | | |
| |  |  |  |  |  |
| | the riverbank | collective housings | park | roundabout | single houses |
| Quality | Orientated, Dual | Cohesive, Dual | Orientated, Temporal | | Temporal, Anarchy |
| Value | (1)history evocation (2)awareness of their position while crossing on the bridge (3)realize their actions are different from usual habits | (1)soft edge (life between buildings) (2)a space for staying for a long time ( a meeting point) (3)eense of belonging | a meeting point | a transfer point for traffic or people flow | (1)soft edge (2)Sense of belonging |
| What is being mediated?  | (1) Urban block system & Urban nature (regular grid & leisure riverbank) (2) Movement speeds (vehicle & people flow) | (1) Sense of domain (door & street) (leaving & entering) | (1) Accessibility of green spaces (the role for a home) | | |
| Design practice | Enhancing the threshold | Extending the threshold Redefing what is an entrance | | Organizing an unify, a network for the traffic and the citizen | Realigning publicness of community |
| Architectural intervention (proposed programs/types) |  Enhance the border relationship between the riverbank and the neighborhoods |  Re-define what is an entrance to deal with the way people enter and leave | |  How do people interact with the ground-rails that define the in-between islands? | How to deal with publicness without interfering with the current degree of privacy? |

METHOD of the Research-design

This research-design started with the human dimension and the view; to explore the ways and feelings in which people experience thresholds in the spaces of different scales Also, to observe the urban states through a top-down view at the same time.

The process explores the specific characteristics, formation conditions, and value of thresholds to urban life in Yekaterinburg. With a phenomenological perspective, trying to activate the potential of the thickness of borders in the urban and architectural scales.

Firstly, the research analyzes the thresholds and in-betweenness in architectural discourses and studies. In the meantime, the thresholds' ideas of the project studies are carried out according to the spatial configuration and how does the movement interact with the spaces. Secondly, creating a series of drawings and narratives through the urban investigation and the understandings of thresholds. Between the action of crossing and the surrounding characteristics, delimiting is a way to clarify how the thresholds which are transited and interacted-oriented is shaped in the context of Yekaterinburg. Finally, further architectural approaches and interventions will be transformed by the research outcomes.

collective housings          courtyard

sidewalk
pedestrian street          street corner

linear park

a room          Residential Area/Block          Road System          riverbank

park

roundabout

single houses          street sides
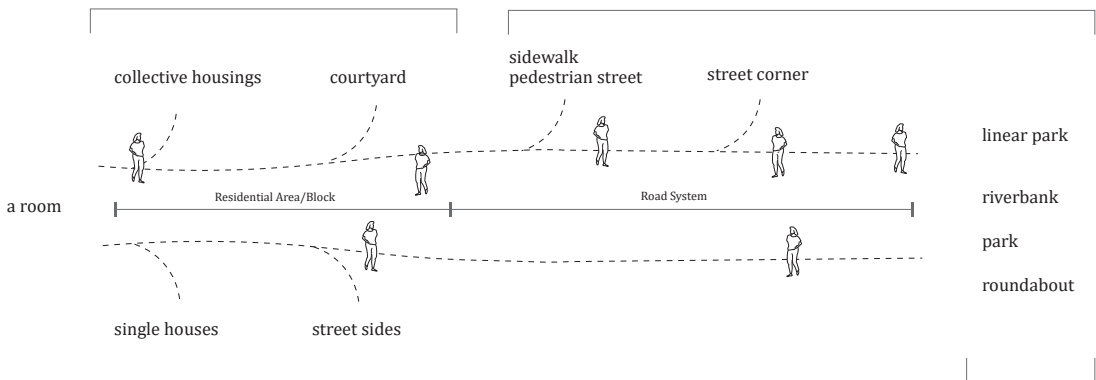
A SEQUENCE > DESIGN PROPOSAL

A sequence aims to be a foundation for shaping a disorder walking-friendly city. Overall, the outcomes could be interior, exterior, or public interior.

## ENHANCING THE STREET CORNER

The street corners are a part of the road and of the sunken area, mediating different heights. Enhancing the threshold represents the renovation of the borders between inside and outside the area.

> a memory palace



01.  02.  03.  04.

## RE-DEFINING THE ENTRANCES

01. Re-define what is an entrance to deal with the way people enter and leave
02. Thickening the doors and windows re-arranging the parking lot, green spaces and residents' route

> a courtyard design

03.

> an edge design

04. architectural intervention

> a public house

> a pavilion

01.



02.

## LAYERING, REARRANGING

01. The surface integrates the objects

02. The ground-rails are the limits for shaping spaces
> a hovering bridge
> a bridge of house

03. Approaching the rails
How do people interact with the ground-rails that define the in-between islands?



03.



## SITE CHOICE

The act is to retrieve/extract one of the sections (e.g. from collective housings to courtyard) from the sequence drawing. After that, correspond it to the sites in the city; there are some site choices because the spatial elements involved in the sequence can be applied to many locations.

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03.





## SITE CHOICE
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# THRESHOLD AS A THICKNESS OF BORDERS

Revealing a vision of threshold through the conversation
of theories, projects, and people's movement

## ABSTRACT

Borders affect both spatial properties and human behaviors. The way people experience spaces determines the thickness of borders, and the thickness is the space of threshold. This paper aims to clarify the people's perception of their surroundings in a movement, providing insights for the functions of threshold and its importance is explained in the spatial configuration. The paper explores the ways and feelings in which people experience thresholds in spaces of different scales and properties. How do the thresholds as an architectural concept mediate the spatial properties and people's movement? Movement of people is a basis, while the several projects provided descriptions about how threshold interact with space and people. The paper also analyzed the architectural and philosophical discourses and established observations on Putin'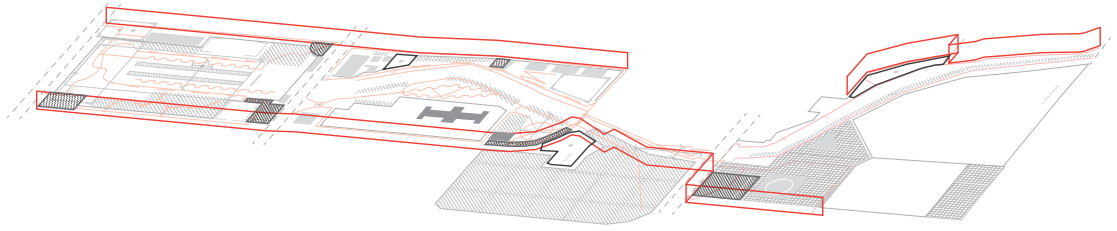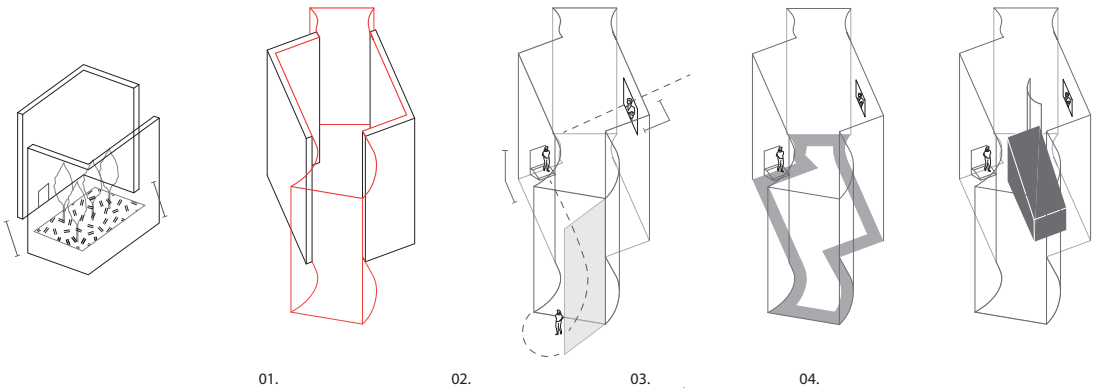s walk through the several threshold ideas drawn from the theories and project studies; to determine how events, movement, and spatial sequences perceived and reacted to the thickness of borders. Based on visitors' and observers' views, several conditions for the functions and construction of threshold are proposed. The paper concludes with a reflection and a new insight of threshold, giving designers another way of thinking about borders in this rapid-changing world.

Key Words – threshold, movement of people, sequence, transition, architectural elements

Meanings of the research – the relevance is to make a conversation with designers through several perspectives from which to examine the relationship between threshold and spatial sequence in design practice. This paper explores how spaces are shaped by underlying people's movement, and vice versa, contributing to the quality of border thinking between two spatial states, whether public or private, inside or outside, visible or invisible.

# INTRODUCTION:
# ONE AND ANOTHER. WAYS OF SEEING AN ENVIRONMENT

Do you remember how many doors you have walked through in a day? It is a curiosity came to my mind one day. In the architectural career, everything about construction must be considered on the drawings, such as walls, doors, columns. However, when people are in a state of movement, their behaviors are engraved in memory through the accumulation of experience. The hippocampus manipulates memory capacity. If we have an experience of opening a door, the series of the movement is recorded by the sensory cortex. Next time, the perceivers know intuitively how to open it even if they watch a door in a film. Such fixed patterns of behavior allow doors and windows to be understood as functional objects, and our interaction with them is instantaneous. Nevertheless, if the logic is reversed, that is, a field is not designed already, but it is shaped by behaviors?

We experience different kinds of movement every day, vertical, horizontal, at different speeds; they are sequential movements. When the field is constructed by a series of images that the individual perceived, it becomes a personal and unique presence. Thus, the city is a collection of images of places such as my home, streets, corners, and sky. The connection between the images is attributed to a process of movement. Also, the walker is aware of the presence of the others, which is in the images.

In fact, the urban environment has been changed by superimpositions of history and global deterritorialization; various things are composed. Within the interweaving of scales, the scale of bodies is a minimum to measure the spatial environment. There is a concept of the nature of organisms, called Umwelt, which is established by a biologist, Jakob von Uexküll. Different creatures receive different levels of information from their surroundings. All of them live in a subjective world consists of species-specific perceptions. How can movement be read? Movement is linear, much like language; it can be deconstructed into many images and slices of time. The collective behavioral experience can shape the collective memory of a city. Similarly, spatial design can also disturb behavior patterns. Both are interchangeable. In that sense, threshold could be regarded as an action (intangible) or a door (tangible).

The methodology of this paper begins with architectural and philosophical discourses for understanding the relations and meanings of in-between and threshold. With the two roles, participants and designer, to clarify the thresholds in several projects involving a single or dual nature; and unfolding the new ways of approaching our surroundings through the various ideas of thresholds.

# CHAPTER 1: NARRATIVES OF THRESHOLDS
1.1 In-between and threshold

This paragraph essentially discusses the understanding of the concepts of in-between and threshold in the context of Grosz's argument. She was inspired by philosophical theories which are related to in-betweenness, identity, and difference. Also, she took the approach of thought discussed in philosophy to ask how to keep architecture open to its outside? How to force architecture to think? What is exteriority? After that, she declared the concept of in-between and the relationship between nature, culture, architecture, and power.

She believed that for Deleuze, the middle is always the privileged starting point, from which ideas begin, at the intersection of two series, events or processes. And thought is something between one and another, as there is a binarized thought between the outside and the inside. However, the outside and the inside are not necessarily opposed; the outside can be a mutable inside, and the inside can be a fold of the outside. Concerning in-between, Grosz quoted Plato's idea that the space of in-between is a strange space because it does not have its boundaries and position, yet, its boundaries and position are determined from outside. Hence, it has the potential to allow all things to exist, like a void space. More precisely, the space of in-between can be a place for mediation of identity since it is unknown. Its openness to the future transcends cohesion, giving rise to the possibility which we can predict things based on time.

The notion of difference becomes a reference for us to think the outside; for example, Grosz mentions that the binary exists when one defines the others (the city or another person) in one's image. Once the idea of 'in-between' corresponds to the notion of 'I and the other,' 'The in-between is what fosters and enables the other's transition from being the other of the one to its own becoming, to reconstituting another relation, in different terms.' Also, the change of identity fragment and complicate time and space. As a result, the space of in-between is futuristic, dynamic, and temporal.

Besides, within the concept of the structures of binarization, she discussed culture and architecture, which have oppositional pairs. It means the two realms can sometimes be proposed to merge or incorporate the other according to one. Nature is at the center of the understanding of culture and architecture. As a response to what is the status of the natural? She argues that bodies are natural.  The body is a base for explaining the relationship between culture and architecture, the living and nonorganic. The interaction of the body redefines and regulates the field of architecture and culture, which two are the outcomes of natural manipulation. In my opinion, the body is the medium for triggering the relationship.

Nevertheless, architecture forms the interface between culture and nature. Is this interface in-between or threshold? As Grosz considered, the in-between is an 'outside' capable of dealing with various complexities; it is a state of transiting and transforming information. It is similar to the discussion in the architectural concept of threshold: a change from one to another. In contrast, in her perspective of building, the in-between lacks a fundamental identity, lacks a form, and is a space without a position. From my view, such a state gives the potential to the notion that people's movement could shape a field. How can the in-between spaces be designed? Shall we focus on the design of its exterior? I summarize that the in-between is static and influenced, while the threshold is active and transgressive. Adding the two prerequisites of spatial design, environment, and users, the space of the threshold can engage and mediate the movement of people and sublimate the in-between into space with a position.

1.2 Thresholds in architectural discourses

What is the definition of threshold in general? Changing from one to another implies movement, transition, crossing, and the object framed in a door frame. This object includes different meanings in cultural aspects; for example, the height of the threshold is about forty-five centimeters installed in the door frame of Chinese temples; people must behave the action of bowing their heads while entering. Besides, in Japanese culture, the door curtain is an object which changes behaviors and conveys time. As it is hung on the door frame to signify a shop's opening, people bend down and lower their heads to pass through the door. In these two cases, do the objects enhance the feeling of crossing when people feel unfamiliar and non-conventional with the way they experience doors? More precisely, people would become aware intensely that they move from one space to another, although it is in a few seconds.

There are two architects who discussed threshold and movement in their discourses, Le Corbusier and Aldo van Eyck. Firstly, in Le Corbusier's notebooks of The Voyage d'Orient, the threshold is a sequence consisting of doors and their extended thickness, which the authors called it 'configuration of a threshold.' The threshold, such as stairs, passages, and corridors, is a mediation. Moreover, Le Corbusier declared buildings and cities are constructed within the framework of a unified order; between them, the ideas of 'Externalized interior' and that of 'interiorized exteriors' are mentioned in several cases. The latter is exemplified by two staircase types, one as a connection which allows accessing external spaces; the other is an extension of outdoor landscapes. From my point of view, Le Corbusier described the former more in terms of externality in architecture. The threshold is related to the sequence where the threshold can internalize the exterior, turning it into an internalized exterior. Particularly, the position of the observers, inside or outside, determines the perception they feel from outside. The threshold becomes a space that frames the environment so that it forms a sequence. For instance, in the sketches, the colonnade he depicted is a threshold. With the different exterior spaces observed from an interior space, the threshold acts as an extension of the external series of views. Also, he indicated that 'the thresholds show a relation between various exterior spaces take on particular importance.' Hence, the function of the threshold is not only to provide varied options for physically entering a courtyard but also to thicken the spatial sequence between surroundings and the place you stay. For me, the threshold can be a kind of window, bringing its outside in.

Secondly, the representative of Structuralism, Aldo van Eyck, argued that thresholds provide a critical role in the transition between the public and private spheres. The 'threshold' is also called the 'shape of the in-between.' His theory of in-between was inspired by philosopher Martin Buber's perspective about human relationships. Martin demonstrated that the interval between I and You forms a duality; dialogue is the basis of life. Both of being given and being received presence in the 'in-between' simultaneously. Base on it, Van Eyck mentioned this relativity that man breathes in and out, but can architecture do the same? From a structural insight, a building should present a resemblance to a human being. Therefore, integrating his theories and works, for instance, Sonsbeek Pavilion and Wheel of Heaven Church, I believe that In-between is a condition between A and B. The relationship between A and B can be the same layer (part/whole) or in opposition to each other (public/private). The relationship between A and B can be the same layer (for instance, part and whole) or in opposition to each other (public and private). As mentions above, spatializing the in-between relation of A and B creates a threshold. The threshold is a whole space which can activate in-between conditions of various forms, such as linear or central spaces, where people meet, stay, interact, and leave.

In contrast to Le Corbusier's theory of the sequence of thresholds and external/internal environment through the lens of the observer. Aldo van Eyck who claimed that returning to humanism within architectural design, focused more on the constitutive significance of in-between conditions and man within them. Similarly, both stated the 'in-between' in the period of Modernism and Team10, respectively. Van Eyck even declared that space and time need to be replaced by place and occasion. They all discuss the four dimensions, human, time, space, and environment, which are essential under their theories with different focuses.

Threshold as a mediation. It mediates difference, contrast, interior and exterior, city and building, communication between people, and the rhythm of walking. The following paragraphs will focus on people's movement and how the projects affect perception; through the three types of walking according to scale. The following three sub-chapters correspond to the projects, the bridge (1869) of Carlo Scarpa, the house (1931) of Le Corbusier and his wife, and KAIT Workshop (2008) by Junya Ishigami respectively.

1.3 Walk at the detail and home

The small pedestrian bridge of Fondazione Querini Stampalia is a threshold space in detail scales. Notably, the notion of asymmetry is displayed at its height, steps, and handrails designs. In the following description, the height and steps are taken as an instance. The height requirements are reflected underneath and above the bridge, allowing gondolas to pass and keep a distance with the lintel of building entry. The bridge has the ability to serve as a connection, but it makes two distinctions in response to the needs of the surroundings—both connected and separated. Furthermore, the delicate arrangement of the steps subdivides the rhythm of treading. It makes an ambiguity with the dual functions, a span across the river, and a threshold. Thus, in this view, this bridge enhances the various experiences of the crossing. In addition to visual experiences, tactile sensation also shapes memory. In the experiment of observation of touch, even an inanimate object touches another inanimate object, the displacement of the touch causes activation in a shared neural circuitry. The detail design of the bridge embodies the haptic composing of materials touching each other.

Secondly, walking at home, the threshold plays a vital role in constructing a narrative in domestic spaces. Regarding the penthouse, Le Corbusier, and his wife's house, the façade is parallel to the street while the mat well on the ground is skewed slightly. It implies that people can subconsciously perceive from the front door through once's feet and eyes about the direction of the route. Notably, it is meticulous that this small act of how to open a door has been designed, considering the behavioral continuity and perceptual order. Moreover, in the one part of the following sequence, Le Corbusier wanted to indicate a deep threshold through a vast door (a door with a wardrobe) located at the ends of the vaults, connecting their private and public room (bedroom and dining room). With this spatial configuration, the threshold creates an intense sensation of depth, which is coherent with the surrounding architectural elements and shadow. In this relation, the threshold is constructed as an outcome of thickening doors.

1.4 Blur a difference

The notion of relativity and duality is mentioned in van Eyck's theory, also in the chapter of Le Corbusier on the externalized interior, and interiorized exteriors. Japan gives another duality, between natural and artificial. In Japanese culture, the atmosphere of in-between and ambiguous presence in life. Yoshinobu Ashihara mentioned 'Japanese gardens at first glance look very natural; on closer examination, however, they reveal themselves to be very elaborate, man-made miniatures of nature and to be different from Negative Space, which is true nature.' Obviously, Japanese architects have been exploring the boundary between nature and architecture and the ambiguity for a long time.

Is it nature in architecture, or architecture in nature? I believe Ishigami is the representative architect. In the KAIT Workshop, which is a whole transparent interior without toilets, the columns are arranged like trees placed on the landscape, providing circulation and different activities. The workshop building is a threshold which frees the walk from the planned outdoor paths. Each visitor can create their route within the boundary of the façade. On the other hand, the walkway of the Water Garden is planned in between the ponds which the water levels are precisely controlled. The experience of movement is purified in this garden which behind the logic of architectural design but seemingly looks natural. To sum up, both projects blur the threshold by a consistent spatial hierarchy. The movement of people allows the building and the garden to become the threshold which transcends interior's scale.

1.5 Types of thresholds

Compared to these projects, two main types of thresholds can be distinguished clearly. Firstly, the threshold is a space that conveys a present moment that exists through the enhancement of sense and emotion. It mainly focuses on the feeling of being present in the moment. For instance, most indoor circulation guides the users to feel the view, the light, and a series of 'objects that provoke a poetic reaction' in the penthouse. They were designed as if a scenario that arranges the view of corners, rooms, and the ways of entry for each encounter carefully. Based on it, curiosity or determination would drive people to experience further. Secondly, the threshold is a space of a non-present moment that exists through the evocation of memory and imagination. There is a link to past or traditions. For instance, a subconscious sense of culture is concealed in contemporary Japanese architecture. This threshold can trigger nostalgia, a collective memory, and includes an ability to recall memories.

# CHAPTER 2: INDOOR MOVEMENT AND PUBLIC INTERIOR
## 2.1 Privacy, culture and palace as a public interior

The public interior is a space which transitions people's perceptions of spatial states, involving the degrees of public and private. It creates a mental state of having a realm, and visitors can behave as if they were in a public place, but there are still subject to some restrictions. People intuitively associate it with rooms when it comes to the word Interior; many of which constitute a building that can be regarded as a miniature city. The palace is such a place with complex structures and functions, for instance, Palazzo Ducale.

While experiencing interiors, the places they are visiting are planned. The power or authority of the owner is clearly felt, and one never feels a sense of belonging.  However, due to transformation or contemporary tendency, the type of palace has been added with different functions, such as theatres and museums. Its role has also changed; it partly transited from an individual or royal power, which is entirely representative of the host, to a public interior that interacts with visitors. Once the transition occurs, the threshold is placed between the public and the private. The visitors would expect the secrets of the country's history, architectural elements, and the palace's imaginary life to be revealed.

I admire what Jacques Herzog mentions in the interview about the turbine hall in the Tate museum. They transformed the public interior because Londoners are used to the density of tourists and scale of cathedrals; thus, the high hall would not frighten the visitors. Notably, this view considers the cultural nature of the locals, or rather a collective memory. That is one of the threshold types discussed in chapter one. Besides, what about Russian culture? Is it possible to understand cultures and architectural aesthetics through languages? Ryue Nishizawa shared his view about verbal contexts in the film Tokyo Ride, that "The European architecture belongs to the continent culture, Chinese too. For me, they are really like 'noun.' Their language is really made of nouns, like bricks stuck on each other. It's very logistical. But Japanese and South Asian architecture is more like 'verb.' I think. The language that they use is more elusive. More like a moving feeling." However, the notion of privacy is not a part of Russian culture; there is no word in Russian for characterizing the spaces that should be private for people.

2.2 Walk in a palace, Putin's Walk and power

In addition to the transformation of the palace, the palace motif was followed in infrastructure. The subway stations of the Soviet Union were designed as 'people's palaces' during Stalin's tenure, which is a way of commuting for the working class and a medium for conveying patriotism. As the times changed, art, politics, dreams, and hopes are all displayed in this transportation system. Palace exists in Russian history and culture. It has been transforming from a mysterious and undisclosed building to a concept that can be integrated with publicity. This building type is diverse, which even in modernism, constructivist architecture somehow is regarded as a kind of palace.

Additionally, as a medium of communication and interaction, the media affects the spread of information in small ways and international change in large ways. It exposes personal privacy or disguises humanity as a tool for political propaganda. The media also allows us to become an observer, watching Putin's walk in the Kremlin from a third-person perspective. In 2018, a film was funded by the Russian government called **Putin's Walk**, which presents a series of scenes of his walking from his office to the Kremlin podium on the inauguration day. This chapter discusses his walking process through the threshold ideas mentioned before which are established based on the fundamental condition of threshold: from one state to another. The relationship between several elements is juxtaposed with it, the power of people, architectural elements, and spatial configuration.

A few scenes after leaving the office, Putin walks in the middle of the narrow corridors in which the scenery paintings, storage cabinets, doors, and windows are allocated on both sides of the walls. After that, there are two domes in-between the corridors and the exterior. At the first dome, Putin walks down the staircase located at the edge; the centricity is a void space, and the threshold is embodied at the edge of the dome. However, after he reaches the ground floor, he becomes the center of symmetry. The vaulted structure of the second dome forms eight routes that spread out from the center, strengthening the walker's sense of orientation. In this sequence, the second dome is regarded as an entrance that returns his position from an eccentric state to a central state. Thus, it seems that the entrance is a threshold which involves a function of re-orienting the directions for the walker. Besides, the openings and paintings on both sides introduce two sorts of exteriors in the corridors; a fixed landscape spread throughout the country and the actual landscape outside the palace. The routes convey the ambiance of the present and history as if it is a slideshow. Walking from the linear room (the corridor) to the symbolic room (the dome), the interior spaces framed by the camera lens will inspire audiences to think about Putin's awareness of his identity.

After he arrives at the other building by car, the others intervene in the scenes; the sense of ritual becomes more intense. The interface between the exterior and the interior is a cubic entrance, with rows of columns serving the same function as the arches of the second dome. The columns manipulate the movement of people from randomly to being guided into the big staircase. In this case, the entrance space acts as a threshold for orienting.

After that, he walks on the routes surrounded by the soldiers who are lined up. Going upstairs from the ground floor to the first floor which with a mirror and a huge painting hanging at each end of the staircase, every object in the palace seems to let People imagine its corresponding symbolic meaning. Is the big staircase a threshold? Excluding its functionality, the rest of the conditions make the staircase an extended thickness of floor opening. The thickness includes transitions to other rooms and possibilities of allowing others and events to engage, not just as a connection. Finally, the inauguration is set in the luxurious interior where the positions of the golden doors and the citizens confine the movement within the grand palace to a linear route with a red carpet. It is an axis leading to the stage. After the first golden door is opened, two kinds of power appear; one is individual power reinforced by objects: the height and symmetry of the doors, chandelier positions, and windows; the other is collective power. A public nota-tion generated from the audience and the ritual itself; the events, in turn, give the palace build-ing collective power. Palace not only on behalf of an individual. Therefore, how to use doors is no longer a focus; spatial constraints and movement apparently make an interior inflexible, but practically it is a careful arrangement on the placement and time of architectural elements and power appearances.

Consequently, the threshold can be understood as a transitional space which imposes mean-ings on a blank. Events give the intention a temporal dimension, and threshold allows the blank (the place where the events take place) temporarily becomes another type of space, such as a public interior.


2.3 New views of thresholds

The scenario of the film begins and ends between two similarly scaled functions: the office and the stage, which characteristic is not private entirely and is temporary respectively. If 'the absence of absolute privacy' can be the cultural context of contemporary Russia, the palace will become a kind of public interior with interventions of activities or media. The Kremlin is a city without absolute privacy; it only has two states, one is not revealed, and the other has already been revealed. Within urban scales, does threshold have the potential to become a disclosure between the known and the unknown? For instance, to expose foundations of ancient walls or a roof of palace, where the people's movement cannot reach easily.

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## CONCLUSION

In December 2020, the Earth reached a time when human-made materials outweigh the total mass of all living biomass. I wonder if it is necessary to construct new buildings. Difference shapes border thinking. It generates collision and interweaving of forms which is the relations that threshold is explored in architectural theory and design. "**We now understand that the 'global' has become an unattainable ideal.**" which is a statement of the exhibition, You and I Don't Live on the Same Planet.

Borders affect spatial properties and human behavior. The way people experience place determines the thickness of the borders, which is also the threshold space. Threshold and movement of people are mutually dependent on each other. Movement and perception shape the threshold, while the space provides various possibilities of movement.

The threshold is a space with multiple configuration possibilities. There is a wide range of compositional elements such as a subtle design of joints and materials, architectural elements that stimulate perceptual behavior, and free plans. Furthermore, it can be a temporary place triggered by events or activities, where the threshold adds additional characteristics to an existing interior. To sum up, the threshold can challenge a fixed definition of borders in a city or reveals the existing but invisible border state.

In a city, there are dualistic spatial relations. It is significant to think of urban conditions through the palace building as a miniature city model. It assumes that public space is no longer built from an empty land but instead deals with the relationship between borders and interfaces within existing conditions, such as an active, mobile environment. Does the threshold have great potential to become an activating space for urban living?

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The graduation studio 'Border Conditions along the New Silk Road' focusses on sites where spatial conditions have emerged that are 'teeming with suggestive meanings and unexpected potential' but are hardly analysed within contemporary architectural discourse. The studio investigates contemporary border conditions within the larger urban and territorial scale, with a special emphasis on the relationship between architecture and its socio-political context(s). B&T views the contemporary city as an 'urban universe' of spatial conditions, which consists of constellations of elements seemingly without any relative weight. To think of an 'architectural project' in such a context means to engage in a speculative approach directed to alternative formulations of architecture, all based on a fundamental understanding of fragmentation and complexity. In the graduation studio, these new reformulations are instigated by, and at the same time applied to the controversial 'New Silk Road'.

BORDERS & TERRITORIES