WTC

**FIELD STATION - SHIFTING BORDERS**
**Architecture Master Studio 1718**
**Michiel Helbig  & Corneel Cannaerts**

**Yvonne van der Poel, Maarten Moens, Sivard Brémaud,
Jeanne Vancoppenolle, Dauwke Fredrix, Dries Coopman,
Juliet Plasschaert, Shirin Depreeuw, Joris Putteneers,
Thomas Ghyoot, Tjørven Rappelet, Olaf Mitka,
Arne Van de Velde, Janne Thaels, Joel Ekelof,
Emanuela Passadore, Arnold Monthe, Martin Sirakov,
Janusz Ziobrowski, Jehan Goethals, Sven De Smet,
Anna Eckes, Fons Galle**
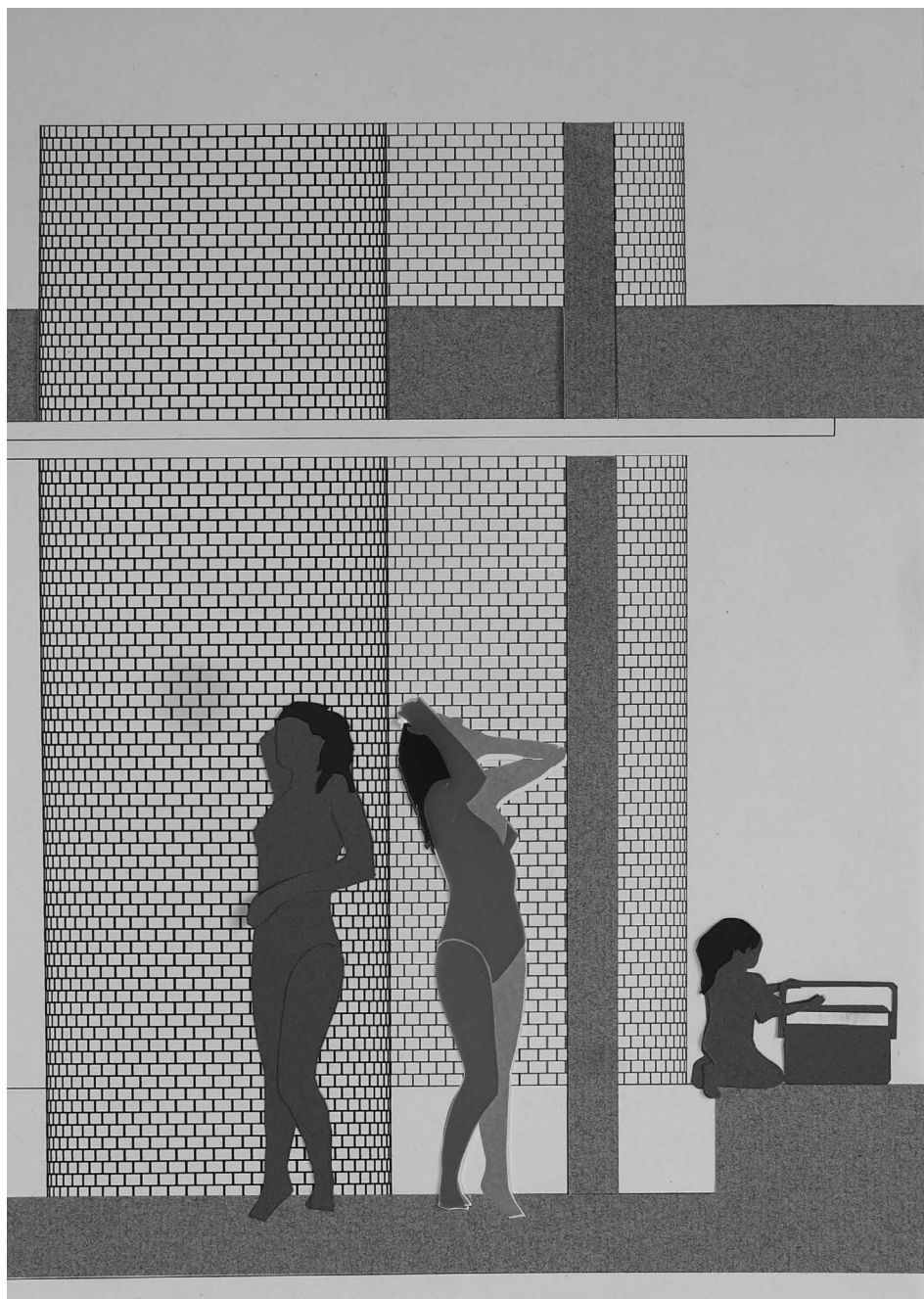
## BREAD AND BATH - YVONNE VAN DER POEL

In my design I would like to show a sharing economy that could exist, here in the WTC towers. The current sharing economy is mostly individualistic and monetary focused. Sharing is mostly materialistic and is paid for. The sharing of actions and rituals is a kind of economy that is centuries old. The image of the interior of a Flemish bath house ("Vlaamse stoof") from the 15th century shows this, eating and bathing are being combined here.

The image shows a domestic scene that we recognize but at the same time have forgotten. Domesticity en feeling at home are different from each other. Domesticity is more about warmth and making the area comfortable while feeling at home is less obvious en different for everyone.

"Feeling at home" is created by collecting memories.

Memories are carried along, you are continually making new memories or they are being triggered by elements and activities around you. The longer you stay in one location, the stronger your memories will be.

The elementary spaces of the house shall be shared again in Bread and Bath, washing and eating as a common ritual.
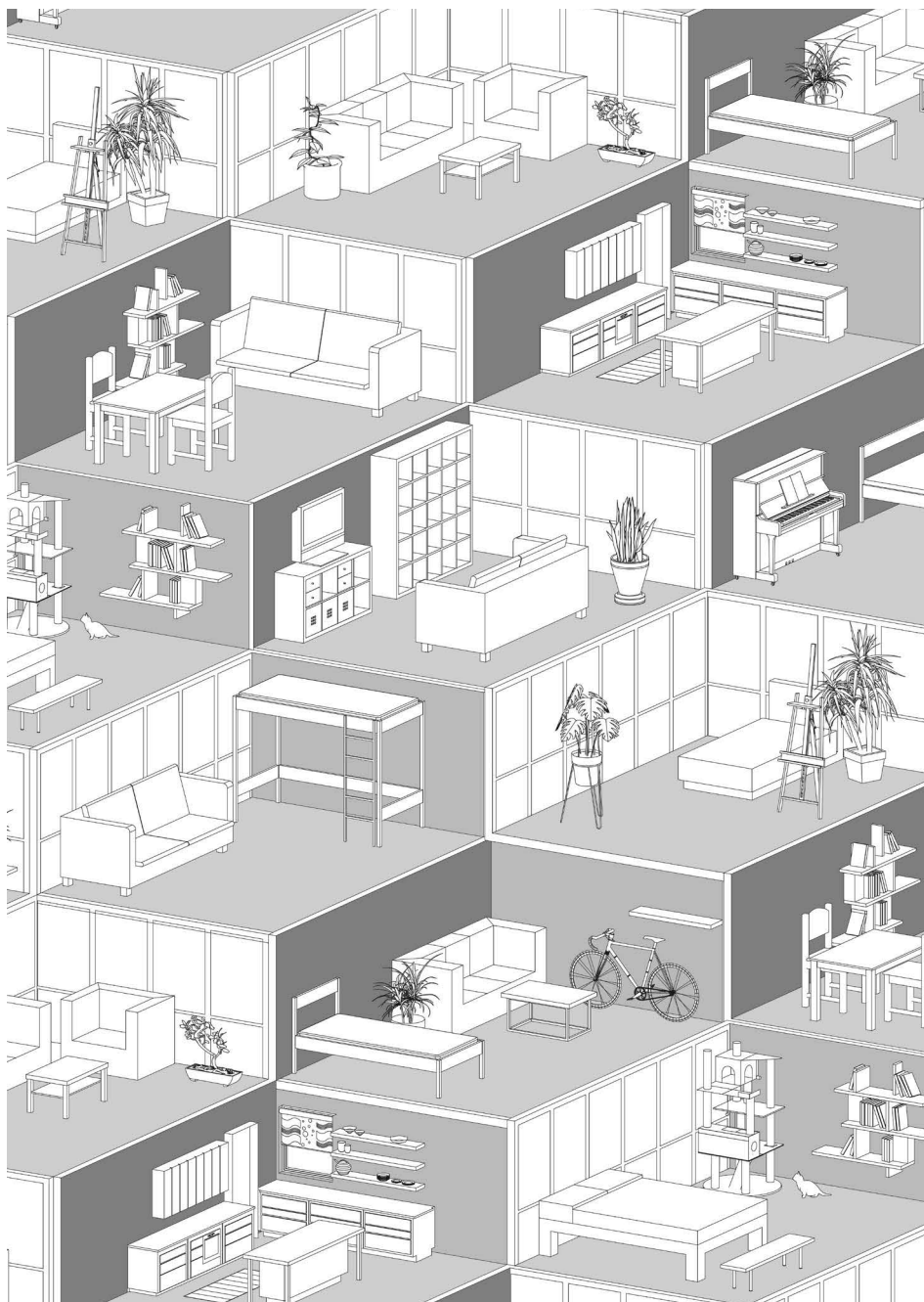
## SUNNY BLISS HABITAT WITH STUNNING VIEW - MAARTEN MOENS

The sharing economy as a gentrification tool.

Sharing is having, the basic principle of sharing economy. Or at least that's what they say on paper. The sharing economy as we know it is being mis-used. People are buying real estate purely out of speculation where they rent their second residence via sharing platforms such as Airbnb. This has a major impact on the quality of life in cities, which are increasingly being threatened. Cities like Rome, Barcelona, London, Venice, Berlin or Amster-dam, where the center is now dominated by tourism and where residents are feeling the urge to leave.

One in six homeowners in Amsterdam rent this property through Airbnb. In this way, the owner-occupied home becomes a way to generate income in addition to a place to live. A house has literally and figuratively more value. Airbnb is pushing up the housing prices in Amsterdam even more. Everyone is unhappy, residents, entrepreneurs, only the tourist is happy. Living in Amsterdam has become too expensive so the inhabitants are forced to move to the suburbs of the city.

In search of bliss.

Most real estate being sold are based on renders, digital interpretations of how a living unit will look like without the buyer actually being phys-ically present. How we try to create a clear, yet unrealistic image based on photographs to create as much profit as possible that oers the perfect domesticity. And not only the real estate sector pleads guilty but also multinationals like IKEA and television bring their version of the successful domesticity. There is clearly a difference between the relationship of daily life and the idyllic, perfect scenario that is being sold. We are therefore clearly looking for spaces that function as a kind of happiness machine or *bliss habitat*.

Airbnb distinguishes from traditional hotels by giving guests a "feeling at home" or belongingness and an "atypical place to stay" or uniqueness. What if I use Airbnb to convert WTC into *bliss habitats*? What if I design those habitats for a specific target audience who are looking for a certain domesticity? And how can I convince people to chose? Is there some kind of Airbnb cheat sheet? And how will WTC look like in its totality?
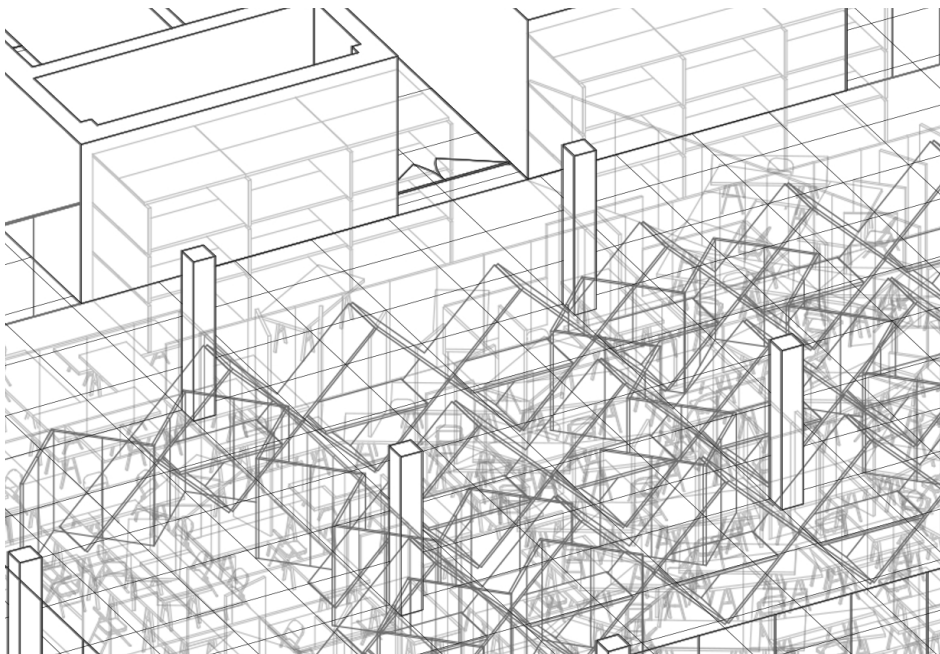
## AUTOSHUFFLE -  SIVARD BRÉMAUD

The position of architecture, as the world itself is facing an increasing complexity. There are more specialist, participants, technologies, subjects, areas, and materials. There is an enlargement of scale and numbers. More data means more options.

The ambition to give the discipline of architecture an extra push to keep up with the speed of technological change implies a complexity and end-less possibilities. Sam Chermayeff formulated: "*The way that we relate to each other is much more complex, at least more varied. The variety and complexity is reflected in all aspects of our life. Our connectivity, our physical mobility, the speed of technological change that all at ones make us a little crazy and also able to make us think in certain ways that we were not before. …. We're simply not getting the same level of options from our spaces as from our telephones. New opportunities for virtual connectivity wildly outstripe new opportunities for physical proximity.*"

How can one navigate through this matter and span the gap between the different scales and data, between concept and realisation?
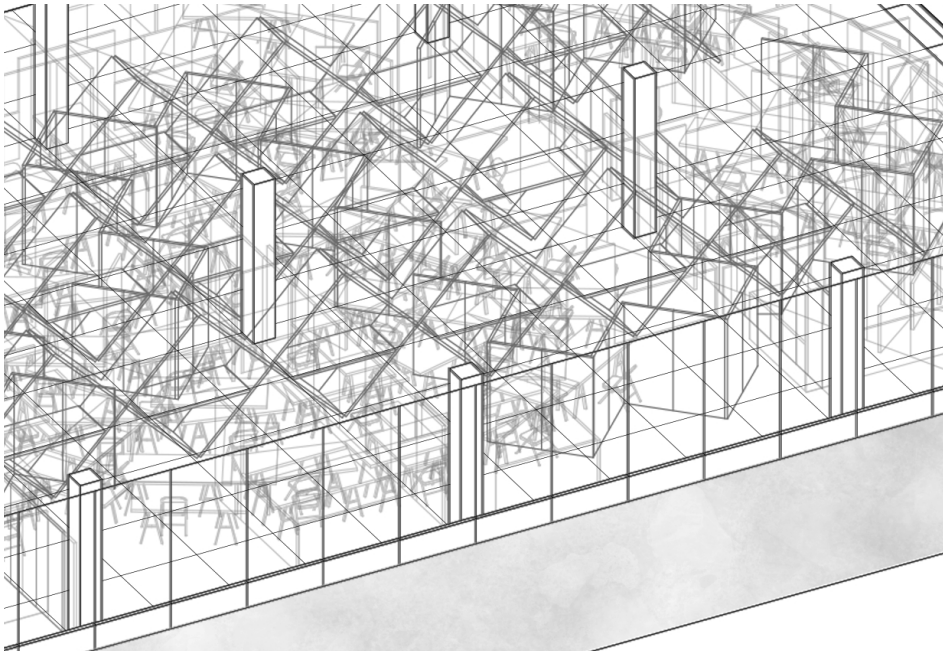
Can a path be created to enable the exploration of this domain? Can the virtual domain can be used as a tool?

Its technology can handle large amounts of data and systemically reveal complexities: It can achieve, update and connect databases, develop comparisons, visualize options, predict developments, and speculate on new directions.

It could also generate new places. This implies that the plan won't be produced by man but by program.

The program should, based on static environments and dynamic processes, be able to advise and create changing functionality and quantity according to different criteria for different users.

A mix, meaning different options and diversity, which is an added value, got lost along the way because of the limited possibility of the human brain to understand it. The complexity that such programs can handle goes much further than the human brain. A mix of functionalities can again be achieved.
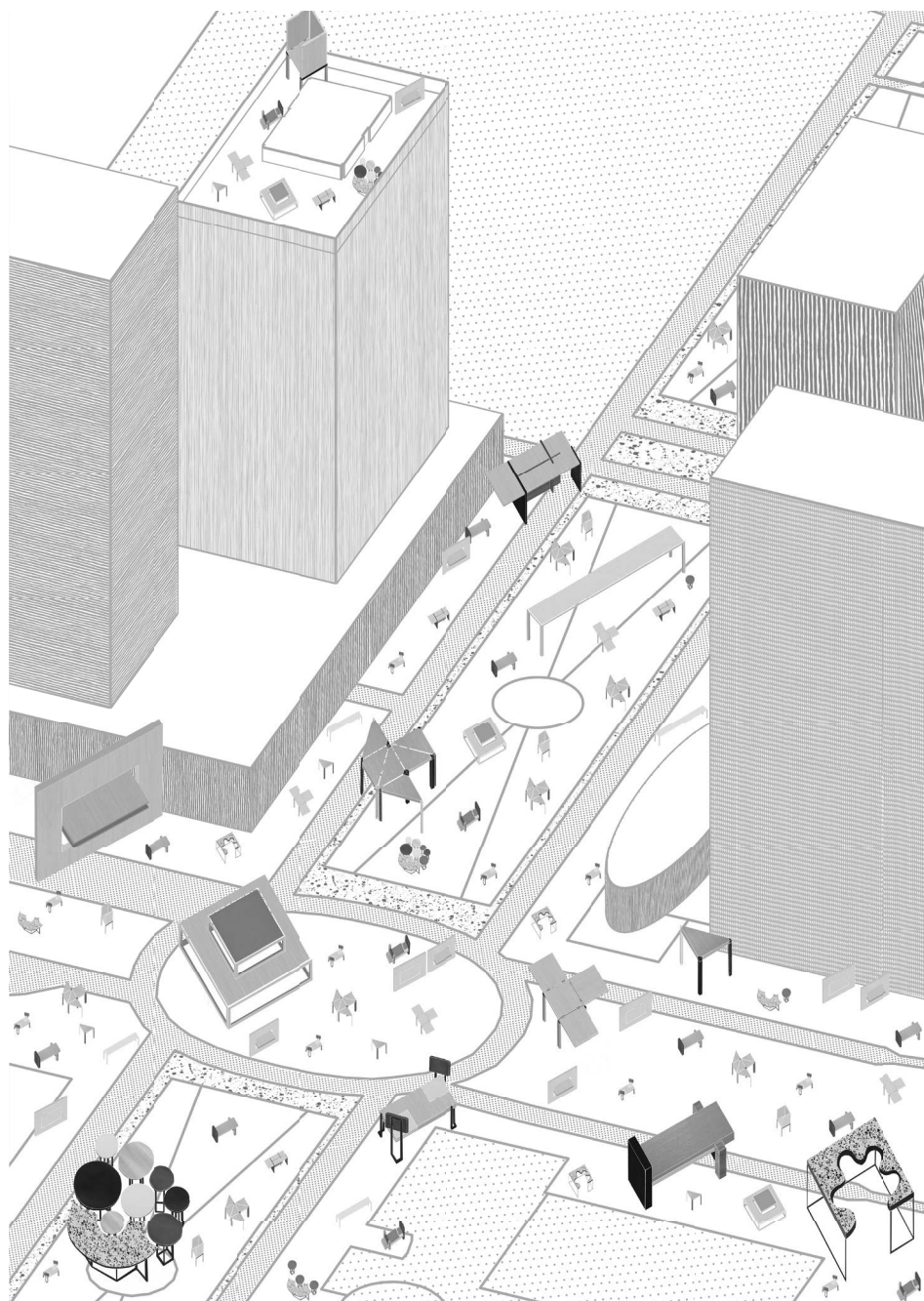
# À TABLE! - JEANNE VANCOPPENOLLE

Online we create big communities. We share a big part of our private life with a big part of the world. We can meet everyone, from everywhere on all sort of digital forums and platforms. We are open, we share thoughts, dreams and fears. But we remain single individuals, we feel alone, we walk alone, we eat alone, we talk alone. We Need to (re)discover that forum in our material world. We need a platform where we can meet every kind of background, every kind of spirit.

*Architecture is that material platform.*
*Public space is that material platform.*
*The station is that material platform.*
*The side walk is that material platform.*
*The elevator is that material platform.*
*The 24th floor will be that material platform.*

The table is the perfect interface. It's a materialization of the forum, the prehistoric version of it. The table has always brought people together and it still does. It's a universal thing. In every country, in every city people gather around something; an object, in most cases a table. By creating and putting tables in Brussels North, from the station to the 24th floor, we invite people to meet again, to talk to each other again, to be together. A network of tables has been created, every table is different.

The tables are divided into ten categories, ten chapters based on the shifting of privacy and property in our mixed reality. We extend the freedom we have online to the material world, but we also extend the barriers of it.

ON YOUR OWN - a private table.
HYBRID - two in one.
FORUM - where you can be yourself.
GIVE&TAKE - the table needs you.
FILTER - you are not as free as you think.
TRANSFORMER - multi-purpose.
DIVIDER - the table doesn't always bring together .
ACTIVATOR - a lure.
COLLECTOR - collecting people around the same object.
SHARING - where sharing is central.

# NATURAL AND ARTIFICIAL SHIFTING NOTIONS - DAUWKE FREDRIX

Nature and artificial: shifting notions is a project that explores the constant friction between the natural and artificial space existing on this planet. Looking at our mapped field guide raised question with contemporary approach;

What is "Natural"?

What is "Artificial"?

Is there a correct interaction between natural and artificial?

What are the effects of the artificial on the natural and vice versa?

In every way, in this modern era of global ecological shifting, we must question old and new ways of relations between the natural and artificial.

The exercise was thus to find out what determined natural and what artificial, for me as an individual. The project resulted in a debate (vision) on our future in which the natural and artificial are shifting or in other words a shift of our notion of what was called 'nature' and 'artificial'. With approaching the concept of nature and artificial in a new manner; speaking of the controlled and the uncontrolled.

The technosphere has become our new autonomous nature

Simultaneously our biosphere is becoming cultivated.

Machines are becoming biological

Simultaneously biological is becoming engineered.

We are creating new life in computers and data banks

Simultaneously engineering biological organisms.

This vision creates an outside world mastered by the technosphere, eating, slowly but surely, our trees away. We try to find new ways to preserve our so called nature. It is being reduced to an interior subject, fed by our technology.

Although this sound as a world of two opposites, it is not. It is rather a symbioses

Studio: Field Station

## ABSTRACTING NATURE – DRIES COOPMAN

Our research on Natural versus Artificial has been defined as an axis that tried to define this field Using different references and examples, we created a story which defines our view on this subject the best.

My personal work sets off from the idea we have of nature as defined in the common axis we have created. Nature is already a very present element in our lives. Be it from the planted park in your street to the "blue sky" screen-saver on your computer. We imitate, copy, enlarge and enhance elements out of nature in a very artificial way. This artificial imaging is in fact a replica of real nature in which devaluating elements that don't fit this polished idea of nature, are deleted. My design tries to visualize and question this evolution. The design is a stacking of existing mimics of nature in the core of the WTC. Going from bottom to top, the more abstract, artificial, virtual and dynamic the idea of nature becomes. The concrete core follows this idea of abstraction in plan and elevation. Starting from a very organic shape that supports the floor, to a floor that support itself. The choice of using the core to house these mimics matches the idea of the dislocation we create. Being it from the idea that we can ski everywhere, to the idea that you are in an endless natural landscape within a restricted tower building. More-over, artificial dynamic elements are incorporated as well when going to the top. A rock cave imitator will need a yearly restoration, but a whole virtual image can be changed with a mouse click on demand or request, when it's canvas is a fixed piece of cloth. As I choose to keep the WTC as an office building, employees will be present daily to enjoy this changeable theatre Their offices will be arranged around this inside out imitator of nature. And their desks and meeting rooms all craving to have a look on this true nature as if it was a screen-saver.
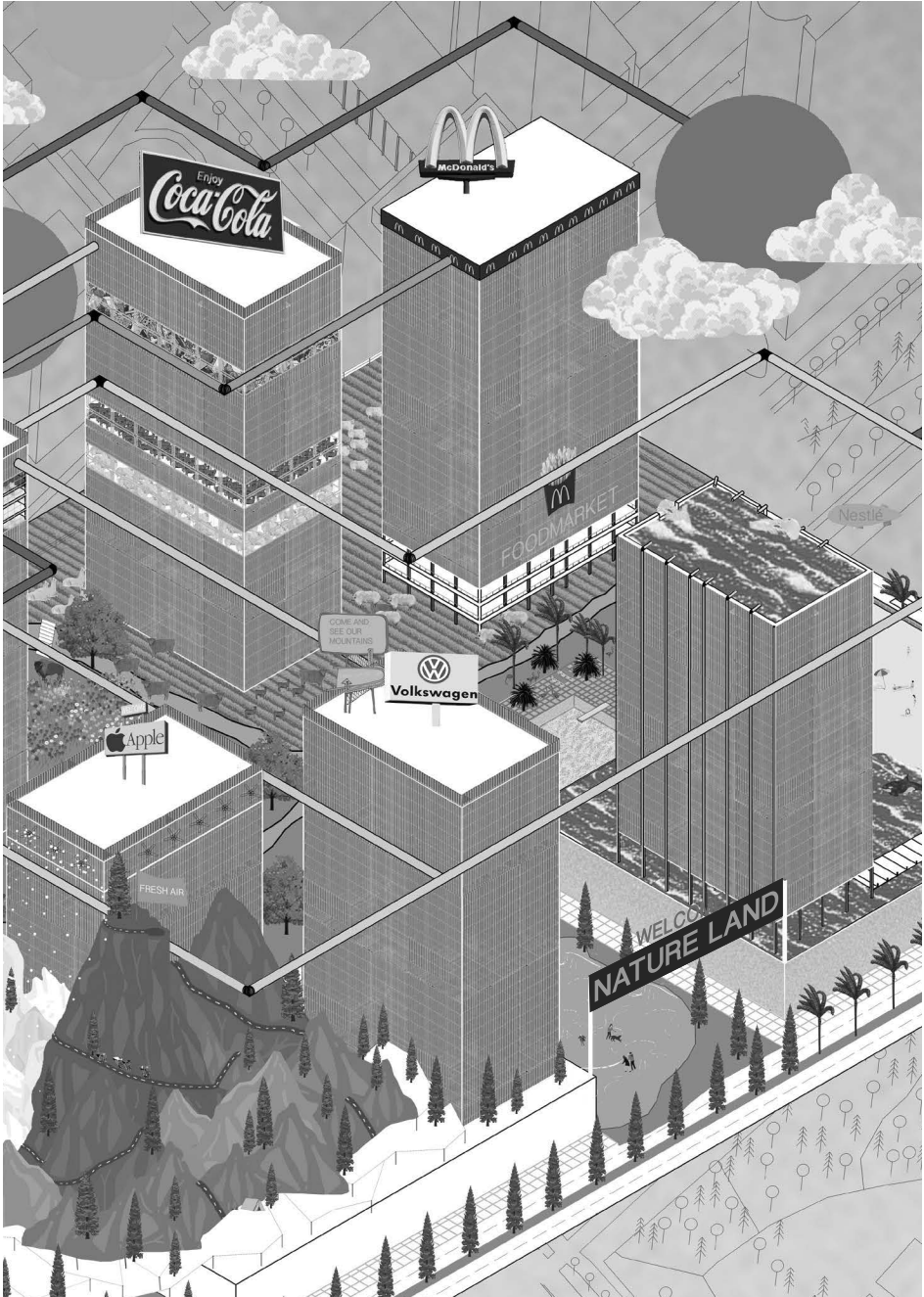
## NATURE LAND - JULIET PLASSCHAERT

A place where you can visit your memory of nature.

We live in a world where the artificial dominates. There is a constant friction between natural and artificial space existing on this planet.

The density is growing, but are we able to compromise and give up some of our personal space to integrate nature in our habitat?
Or will it come this far that there won't be any nature left?
Such that there is just a memory of the pristine nature.
What roll will nature, in the wildest sense, play in such an increase density?

What if we could live sustainably and close to nature?
My idea is to show the extreme influence that the artificial, paired with technology, can make to our way of living. With the technology that keeps growing, we have the possibility to integrate nature back into the city. In this way "nature" is used as a product. Multinationals of all categories sell various types of environments and thus form a micro-climate on there own. Every company has his own specific mark and gives it back to the citizens.

There won't be any nature left outside the city, so people have to come to town to visit and experience nature like they used to.
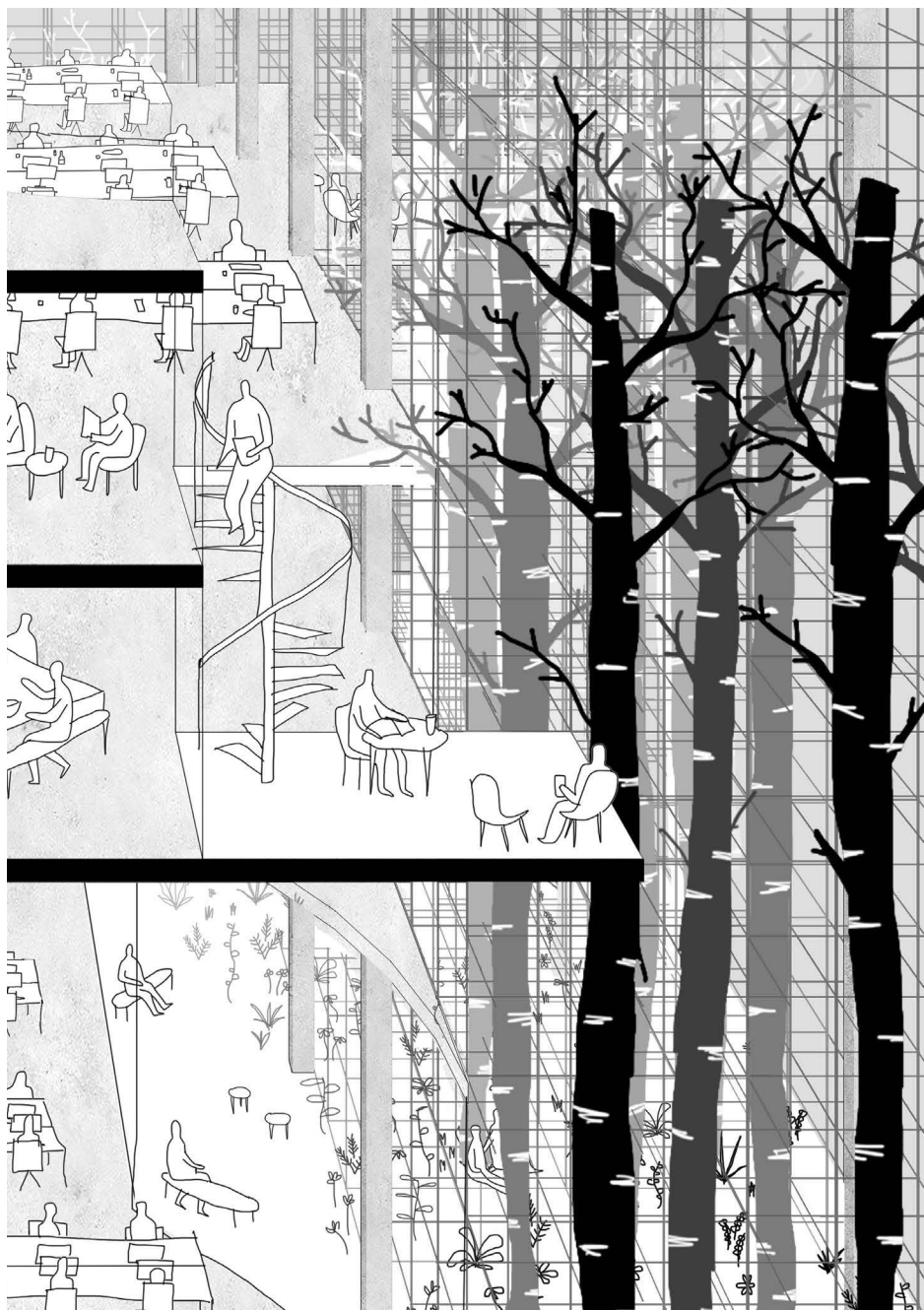
**(RE)INTRODUCING NATURE - SHIRIN DEPREEUW**

This project explores the possibilities of re-introducing natural elements back into an artificial environment.

The lines between those fields are blurring. In the Anthropocene artificial and natural elements have merged into each other. Now we can look at what lies in between these fields. Every situation is a hybrid, containing elements from the two extremes.

So we can question if there still is nature untouched by mankind? Do we need the artificial or the natural? Do we need a combination of the artificial and the natural? And is there a correct interaction between the artificial and the natural?

Many strategies are being used to reintroduce nature into the artificial world creating these hybrids. Yet in an artificial environment as an office district and its buildings there usually is no nature present, it doesn't seems to be of any importance. Why is this? Natural environments are associated with places to relax, to take a break, to escape, to breath. They are also seen as faraway places, almost untouchable.

So how can an office building benefit from the introduction of natural ele- ments? How can the office district benefit from this? What are the effects of the artificial on the natural, and vice versa?

## PROTOZOA - JORIS PUTTENEERS

Exploration of the architectural prototype after the singularity.

As described by prolific scientist and theorist Ray Kurzweil, technological singularity is defined as a moment in human history where the human intelligence is artificially enhanced to transverse and transgress into a form of intelligence that is not a direct consequence of natural evolutionary processes, but rather as manifest destiny, or artificial intelligence. Kurzweil defines this historic moment as a necessity that originates as an outcome of our own shortcomings to adapt into the hyperbolic growth in the speed in which collective technological progress evolves.

It is defined as an intended and designed form of human evolution, both cognitive and material, defined by our own lack of understanding and ability to comprehend the tools that we create for our own existence due to our stagnant and slow biological progress. Yet it is bound to become the foremost medium in which we will re-calibrate the relationship between humans, technology and nature.

Such proposition has its precedent in our understanding of the self-organizing, or intelligent, properties of natural systems. Our analytical models of self-organizing, self generating and self evolving systems are based on the mathematical abstractions we created to translate these systems into media that we can comprehend, communicate and eventually materialize.

The objective of this project is to create a coherent architectural prototype that will act as a formal vessel to fulfil a number of idealized conditions related to hierarchy, structure, program and other architectural criteria after the singularity. The end goal is to create an architectural system that can later on be tailored toward a particular context or problem, allowing the system to "self generate" based on varying parameters.


Terminology used to accompany this process:

Morphogenesis // Morphodynamics // Self Organizing Systems

Smart/dumb Agent Based Systems // Iterative protocols

Behavioural Patterns: flocks, swarms // Attraction and Diffusion Systems

Strange Attractors (Lorentz and Clifford) // Sarcomere Organizations

Frei Otto Wool Pattern //  Emergence // Algorithmic and generative Systems
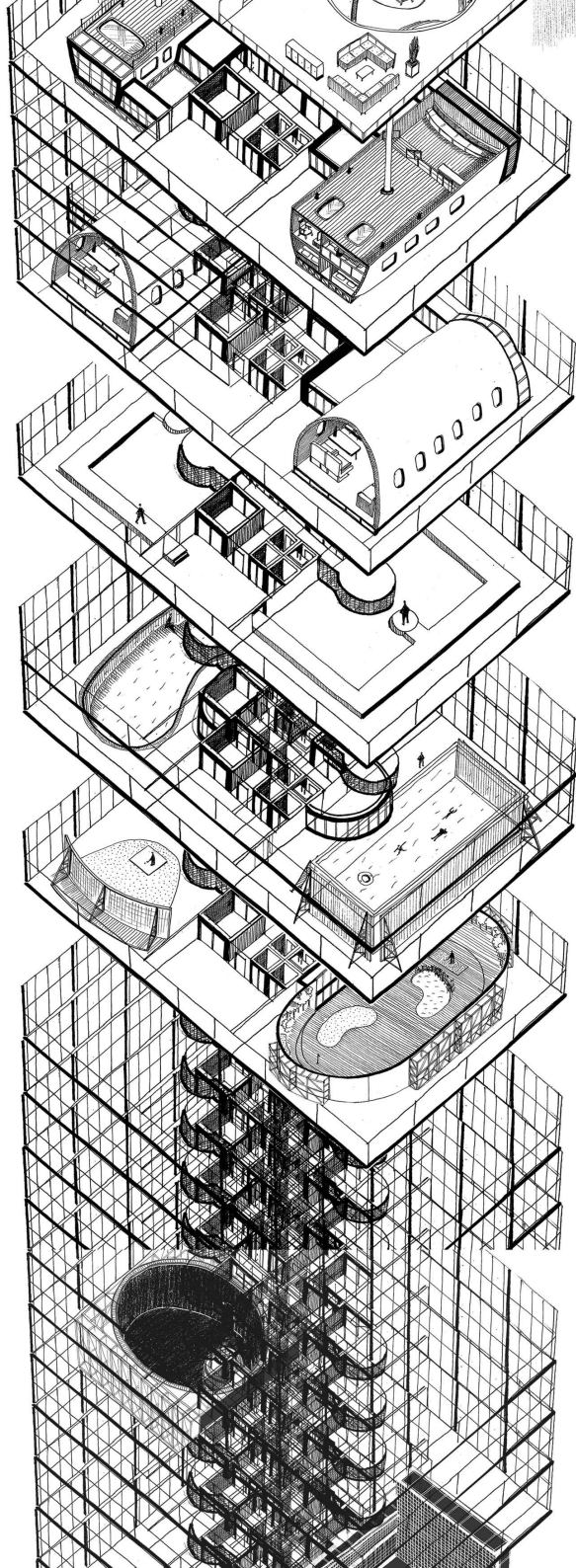
## B.I.T.C.H. - THOMAS GHYOOT

In a consumer capitalist technology driven society, personal data has probably become our most valuable asset. In this time where Corporate surveillance and automation are no longer taboo, we face the creation of a new massive un-working class: "The Useless". people devoid of any economic, political or even artistic value, who contribute nothing to the prosperity, power and glory of society. This useless-class will not merely be unemployed - it will be unemployable.

In a not so distant future, the WTC buildings have been bought by Brussels International Testing Company & Housing or B.I.T.C.H. They offer the useless a way out of misery,a new purpose in life.

By registering and signing as employees of 'BITCH' they get a place to live and access to their basic needs. The useless will be introduced to - and 'educated' about the world of the High society. Their jobs will consist of being placed in decadent, luxurious spaces and acting high-end while being monitored and surveilled every second of the day. These jobs differ in time and duration depending on the nature of the activity or spatial experience that will be tested. They live a Comfortable and carefree life in return for data'.

FORM FOLLOWS INFORMATION

## FORM FOLLOWS INFORMATION - TJØRVEN RAPPELET

Architects were gatekeepers of the building profession, architecture was a true *métier.* No one in the building process had more mastery than the architect. But as technology rises, the contemporary architect is fading. Our mastery is shifting to other professions, it is shifting to experts in the field of technology of architecture. The architects only mastery is left in the material part of building. With the uprising of Building Information Modeling/ Management we tend to think in a performative way. The drawing loses all importance, it's the information, the data we collect from it which matters. Architects no longer build a design, they built information.

As a critic towards these problems a new archetype is designed using Building Information Modeling software. An exemplary form that transcends any cultural difference and from which more complex forms can be generated and used in the architecture of the future. Composition will no longer be formed by metric modules or golden ratios. Inaugurating a new relationship based on the ideal measures provided by the resulting material. The value of the objects is not only material, but also poetic. Rather than referring to unchanging ontological structures, this new architectural paradigm is determined by contingency.
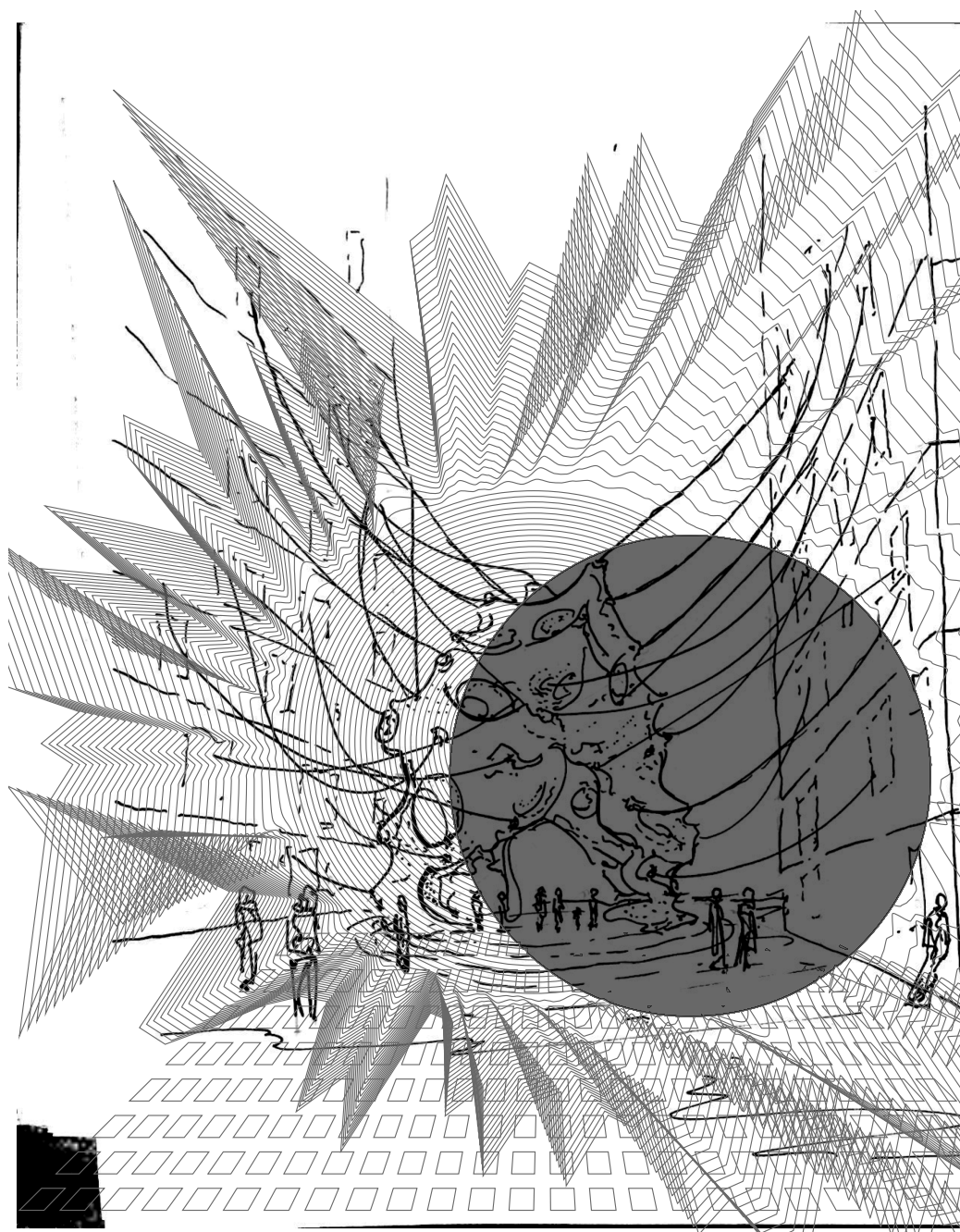
# RUINS OF THE FUTURE - OLAF MITKA

The "I" who speaks in this story is not the author. Rather, he hopes that you might see yourself in this ''I" and understand this story as your own. The ''I" is has no name. The ''I" is a walker who investigate the collapsed world.

Take a deep breath. Imagine you are a century ahead in time. AI_God suddenly disappeared. The world has no memory, legacy was forgotten. Architecture has to be created again.

You are walking around in the Zone_0003 - WTC towers in Brussels Noord which are a transit points with scraps of AI based virtual universe; space on the edge of material and mental structures; mythic and real contestation in which people now live.

WELCOME TO THE DESERT OF THE REAL

RUINS OF THE FUTURE investigates the topic of post-AI world through the storytelling booklet which illustrates the future reality after AI_God disappearance, focused on urgent problems and present possible solutions. The intention with merging anticipatory writings and fictional designs was to cast a web of future explorations, where the economic, social, and technological patterns emerging today would be brought to their full realization.

This project uses the role of representation in architectural drawing as a way to actively engage in between the co-mingling of the fiction/fantasy and the real. Readers are looking through the eyes of habitant of Zone_0003 Brussels WTC.

Through the superimposition between the AI_God's world of virtuality and the real universe the project is able to construct a world that begins to expand beyond the realms of reality and at the same time trying to solve problems in physical world by architectural interventions inspired by Book of Genesis. The plot is set in a future Brussels, but the problems and concerns that motivate its setting are beyond the place. Presented interventions can be read as warnings for nowadays.

# HETEROTOPIAN INTERVENTIONS - ARNE VAN DE VELDE

*"The heterotopia begins to function fully when people find themselves in a sort of absolute break with their traditional time."*

- Michel Foucault

Modern society is not proving to be as stress-free as we would have hoped and through a combination of being overworked and underpaid, the day-to-day routine of life in the twenty-first century is not as easy as we may have thought it might have been. The obvious answer to combat the stresses of every-day-life is to take a break and do something completely different to what we're used to.

When everything repeats itself every day, you can get stuck in the daily grind. Then you forget about all the other wonderful things. The design proposal is a generator that questions the user's everyday routines and objects. The generator is going to help you take back the otherness based on those everyday objects.

Everyone lives in a different place, on different conditions, with different people. Your heterotopian intervention isn't the milkman's heterotopian intervention. The generator helps you create something unique yourself.

The generator uses heterotopias and affordances to help the user create an exclusive intervention. An affordance is the relationship between a person and an object. False and hidden affordances have unexpected uses. That is what the generator is looking for in the heterotopian interventions. It tries to generate objects with different affordances.

The selection of elements and affordances is based on normal objects and the different functions of items. These universal objects have more purposes then appears at first sight. The generator will help you to use some of these objects differently, so there is a break with continuity of everyday use and space. Even though it is made with banal objects, there will be a break of fixed living habits. That is the purpose of the generator.

After using the generator, it is time for the user to construct/design/dream of the heterotopian intervention. Breaking down elements and put them back together with the affordances and heterotopias in mind.

EAT/SLEEP/'FILL IN BLANK SPACE'/ REPEAT
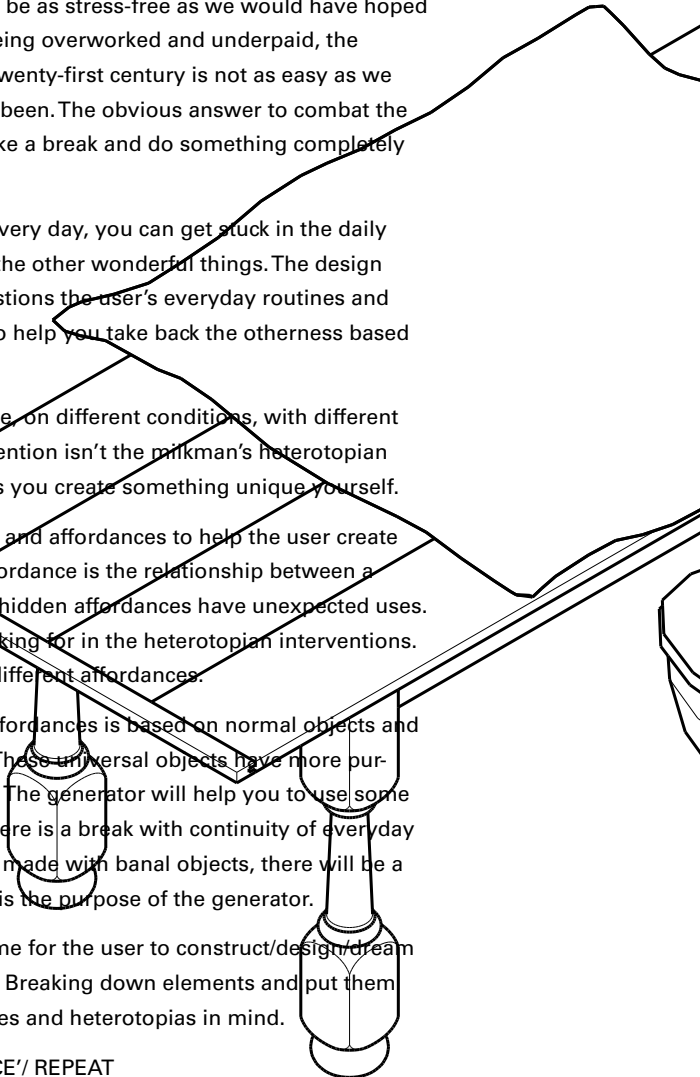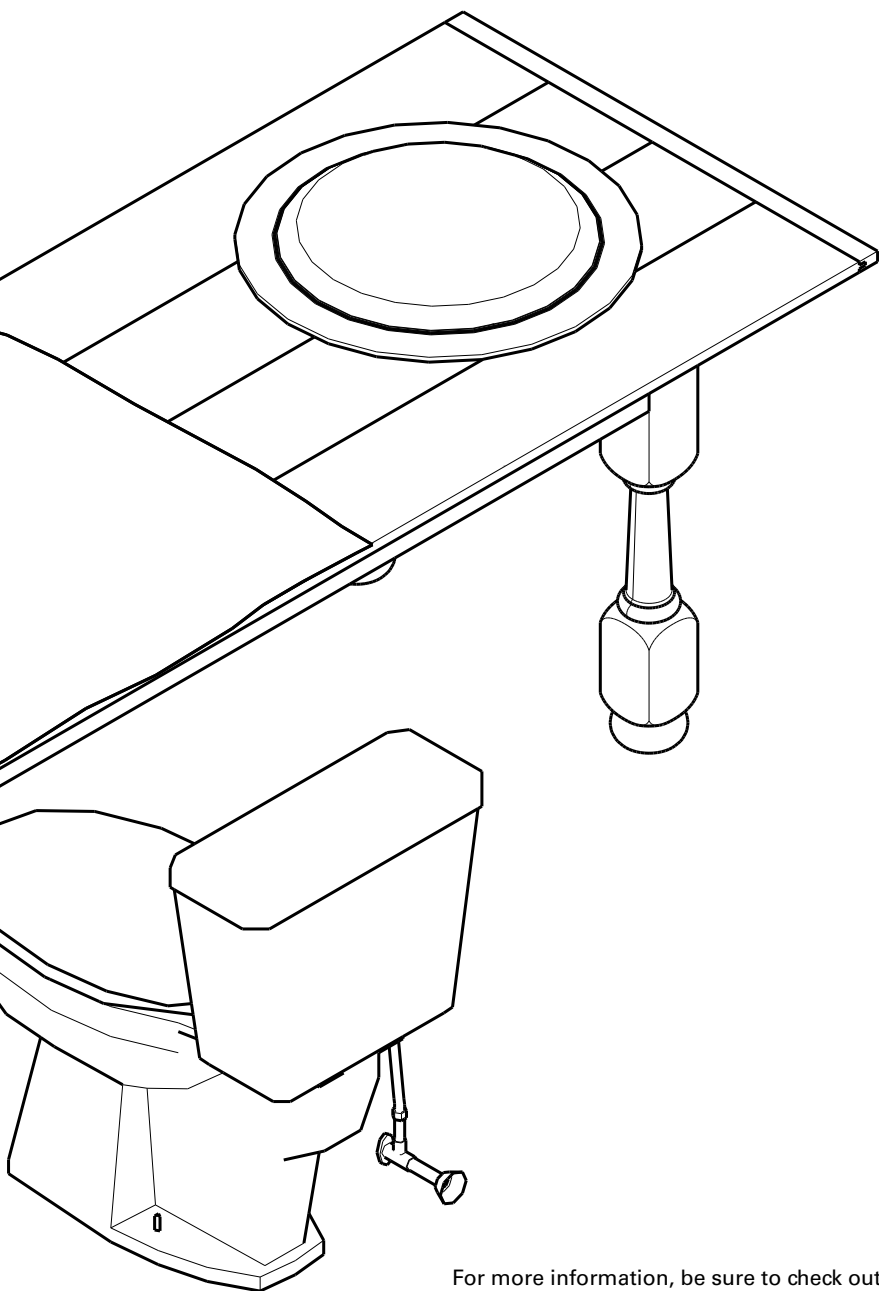
For more information, be sure to check out this webpage:
www.heterotopianinterventions.com

## [RE]CLAIMING COMMERCIALISED SPACE - JANNE THAELS

Since forever, claiming space has been an human need.

We conquered and colonized the world and after that was done, we went to the moon. Our history is one of claiming, again and again. Due to this claiming of space through the years, we live in a world where every piece of space is labelled as either public or private.

If we focus on what we today call public space, we find ourselves in a place where everything we see is commercialized. Space is paid for by money or by polluting our visual world (so called advertising).

We are in need of a free public space.

And to fill this need we take back our right to the city.

This charter is introduced to reclaim the city on an architectural level, it exists out of three parts:

1. THE CHARTER

What is it? Why does is exists? Who benefits from it?

There is also a lexicon included for further explanation.

2. THE ASSESSMENT OF EXISTING PUBLIC SPACES

By making this assessment we get an insight on how we currently organize our Public space.

We look at different places and compare them by using the same parameters.

3. THE CASE STUDY

This is an example of how the charter could be applied to the Northern Quarter of Brussels and more specific to The WTC Tower I.

The charter states that Every building used for commercial purposes

Is required to give back 1% of its volume to the public!

By adding an new program to existing buildings it creates a mosaic of free public space, commercial spaces and private spaces, interacting with each other. These spaces can be occupied by a variety of people for a spectrum of activities. Groups can gather together and people can connect with each other.

It creates a counterweight for all the existing commercial spaces. It brings balance.

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## KNOW THY[DIGITAL]SELF - JOEL EKELOF

Passively we claim more space than we think of, with our habits, hobbies, values and dreams, we interact with the world in small but subtle ways that change our surrounding after our needs. Usually all those small changes isn't noticeable but the changes becomes more apparent over time. Like a feedback loop those changes also changes ourselves and our needs over time, a dialogue of interactions with you and your neighbourhood.

Today with smart-phones in everybody's pockets and more and more smart things in our surroundings,we and the city becomes digital and grow even more complex communities, but for the first time we can track our data and thus our interactions in the first place. The heartbeat of the city may literally become the heartbeat of the citizen.

The classical city changed slower than us, and thus our own needs is in control, but the digital city changes faster than ever. A sudden change,

as Pokémon Go showed, can completely change how people behave and interact with the city. Due to the fast pace of change, our own need may be in trouble.

Reclaiming ourself is needed more than ever and there is a possibility for a more symbiotic relationship with our data. It can be used by others to control us, but it can also be used by us to control ourself. Self development with the help of our quantified data and analytical algorithms can teach us more about ourself than you could possibly imagine.

Another possibility is also to see and explore the view of others in a new way by lending their data and experience their filters. We all lives in small communities, even in the big city we only experience and claim a fraction of everything since we seldom question or change our habits. All around you there is people who think, use and experience your city in different ways, invisible but now accessible.

*"To know is to insert something into what is real, and hence to distort reality".*

Italo Calvino, Multiplicity

## MEMORIES FROM A PSYCHO-NEO-GEOGRAPHY DÉRIVE - EMANUELA PASSADORE

This project translocates situationist concepts of psychogeography and dérive into digital "neogeography,"with a Trip Journal documenting three different kinds of Walk, using the smart-phone application DériveApp: an urban walk taking pictures, a Google Street View walk, and a walk through Google Earth 3D.

This is my deambulation, my détournement, my flanerie. But in three Realities.

I transgressed the division between virtual and real via three digitally inflected experiments. In this journal I documented everything, from my perceptions while drifting, guided from Dérive app (which gives instructions but it is just an excuse to discover other situations), to what I saw and my final vision: an Utopic overlapping of layers and situations from different Realities.

Nowadays we are overwhelmed by apathy that technology is producing. Digital is conquering the world, creating a Second Virtual Life where we can go everywhere sitting in front of a screen. The space to re-claim is the space of experience and memories. Memories are linked to places.

Today we are loosing a degree of exploration, experience. But can the virtual be explored in a situationist way or the digital used to do that?

As psychogeographical dream was an "endless drifting" we can say that nowadays that can be simulated by digital media. Just as Guy Debord and the situationists radicalized concepts of space and place by questioning the division between art and life(fantasy/reality), now we should question the division between physical and virtual.

Digital media reveal the subjectivity of urban "physicality", as augmented reality smart phone GPS maps and pictures merge map and territory. An Utopia of instantly mapped desires: a teleportative database . Are we talking about cyber-urbanization?

Within Google Street View landscapes change as the Situationists imagined: not even "from one hour to the next" but from second to second; a simple click can teleport one's View from London to Tokyo.

But Anyone with online access can use GSV and occupy the identical perspective of the Google eye.

So where are the individual emotions and behaviours?

Map and territory now mime each other from both sides. How long before geographical architects incorporate other sensory dimensions into their maps?

From whose desires will our own derive? In a world where every where could present itself as presentable as any other where, one must find ways to desire and derive other ways, in this public space.
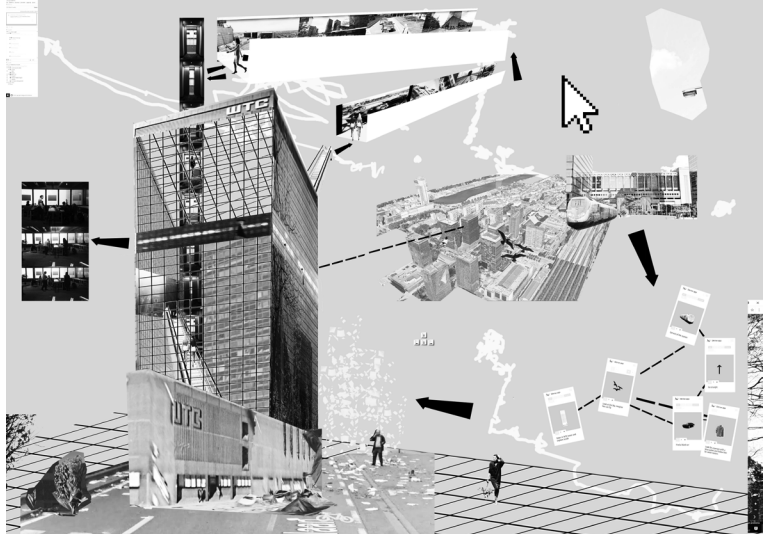


A city is a live form.

*„Midway upon the journey of our live*
*I found myself within a forest dark,*
*For the straightforward pathway had been lost.*
*Ah me! How hard a thing it is to say*
*What was this forest savage, rough, and stern,*
*Which in the very thought renews the fear."*

Dante Alghieri, „Divine Comedy: Inferno"

## SACRUM - JANUSZ ZIOBROWSKI

The project presents new sacrum of the anthroposcene embodying the cult of temporality in adominant form. Set in a not-too-distant future, it presents new sacral typology in the digital age,translating pseudo-scientific and cultic methods of the anthroposcene into architecture and, as such,embodies and formalize unconscious powers filling the spiritual void in the times of shift. The exemplary building itself stands as a symbol of the holacratic, binding the earthly and the digital in a fragmentarized „house of the Technological Spirit". Unlike the cathedral in the medieval times, it emphasizes cycle, presence, and „now", and blurs identity of those within the cult, forming aperfect consumer, who willingly gets lost within a networks of the Cloud. A place for inwards perfection, and an epitome of individualism, yet, with the innerworkings of the cultic machinemystified. Perfection, then, or a ruthless exploitation?

The scenario presented feeds on the plausibility that one is willing to accept any given reality,exposing the crisis of identity, as a result of an extreme secularization of our times. It presents a journey through different manifestations of sacrality within a project and forms the microcosm and macrocosm of their own, on the likelihood of Christian cathedrals, scattered through Europe. The values it presents and cosmos it stands for, however, are largely different, as is the way of life-enhanced through technological lens. In place of the pilgrimage – it puts stagnation, and in a place of journey to an occasional mystery – a constant resort. Layout of the new cathedral is fluid and indirectional, emphasizing uncertainty.
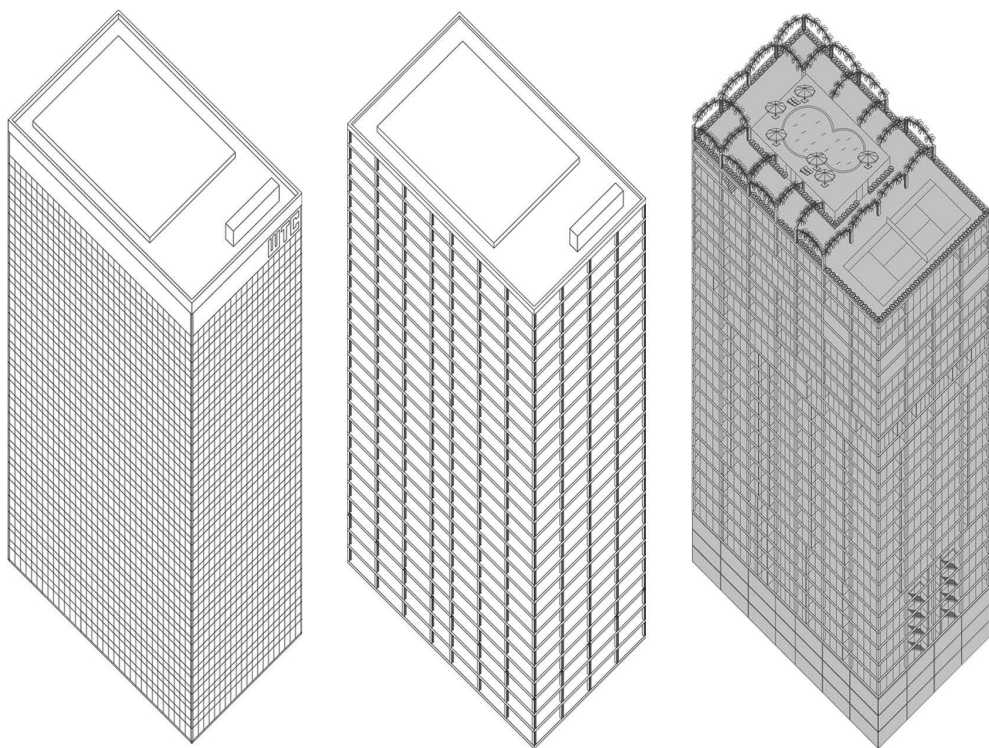
## TIDAL TOWER - JEHAN GOETHALS

One of the most rapid shifting fields that has strongly influenced architecture over the last centuries is the field of density, or more precise, the fluctuation of density. This constantly shifting field has translated itself into the rapid growth and shrinkage of cities who are struggling to accommodate this shifting border, resulting in ever expanding cities who are crippled by vacancy.

Is there a way to ensure that cities like Brussels can accommodate this rapid fluctuation in the future without drastically changing the identity and infrastructure of the already existing city?

The answer might lie in the problem caused by this fluctuation of density, the vacant architecture of the city. Abandoned structures like the WTC I tower can provide a buffer that can accommodate this fluctuation without
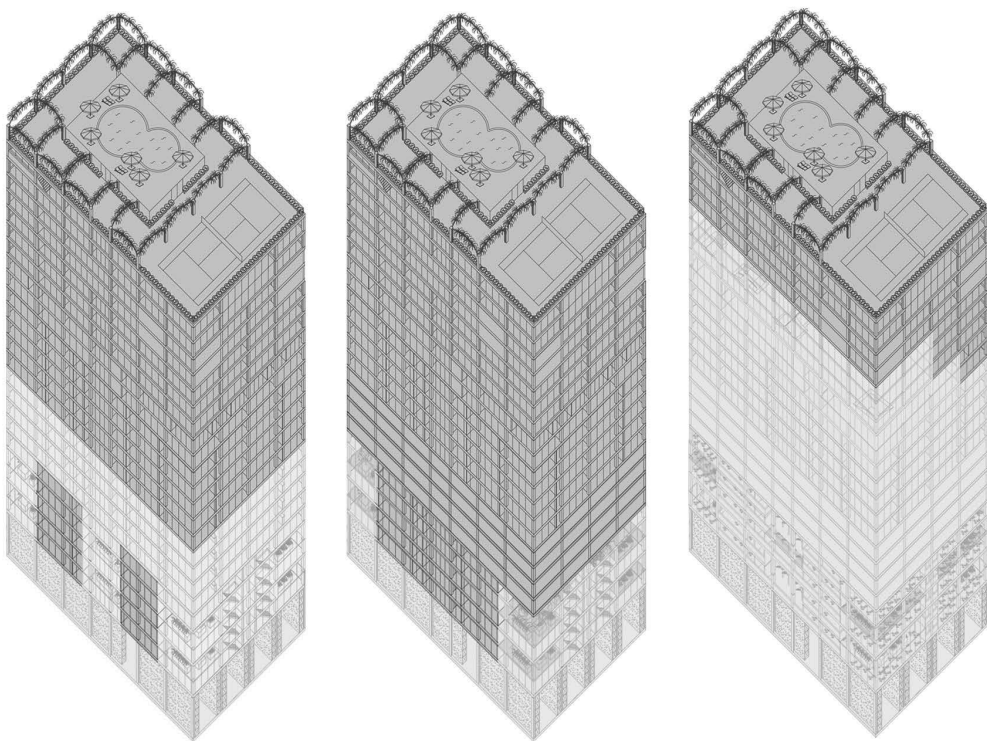
drastically changing the existing city. Vacancy as an ever changing and fluctuating identity/architecture within the city, which now in turn has the breathing room to be a stable and balanced entity.

However, this proposal only shifts the symptoms of this fluctuation from a city scale to a building scale. How does the building react to its own constantly changing levels of vacancy?

This design proposes a tower that uses the architecture that was left behind by previous inhabitants of this buffer to activate its vacancy as a extension of the public space in the city. A tower with a memory that expands and shrinks from top to bottom on the rhythm of the ever fluctuating density, leaving behind it's traces to be claimed by the public space in this ever self refreshing process of ebb and flow.
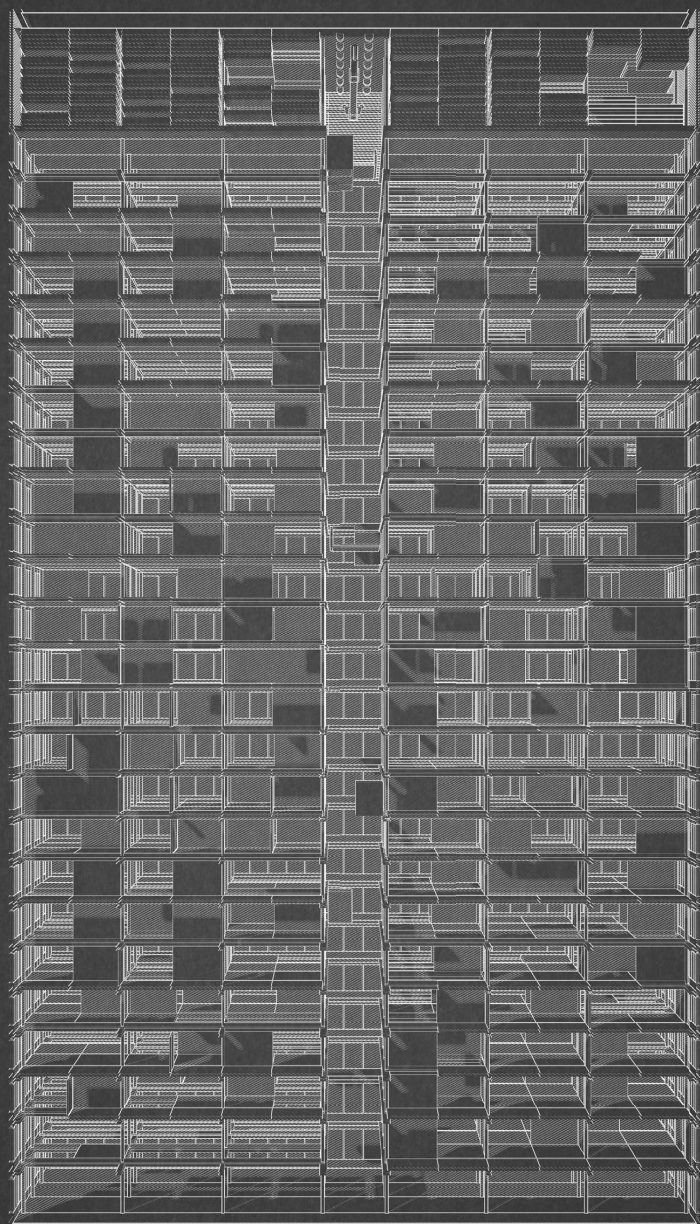
## SHIFTING DENSITY: WTC GENERATOR - SVEN DE SMET

Shifting density: WTC Generator is a conceptual project that tried to look for a solutions on the fluctuating density of a building. The fact that a building becomes useless in the night or after a few years is something that is difficult to understand and could possibly be solved due to a technological interventions.

Thanks to the ever expanding technological field, we could argue that in the near future there will be a building that could be driven by an artificial intelligence. A building that interacts with it's environment, that reacts to the function people give it. A building that learns from the past and adapts itself to the future.

The WTC building has been taken over by this intelligence. The floors have been stripped down to the basic structure. New floor slabs are placed on top of the building, off-the-shelf components are organised downstairs, enabling it to accommodate different programs. The function of the new central core is to shift these floors and components in a vertical way. The horizontal movement is limited to the structural part only. The movement is in fragments…

Thanks to these interferences an artificial building was born. The building could act on it's own. We gave it the tools it needed to do that. However the WTC Generator is not a single project, the design process is based on the systematic search for order within the possibilities of it's transformation. It's a system, that has the possibility to move, change and develop. There is not a single solution but rather a sequence of solutions.

Over time the building will develop to it's maximum and minimum potential. Housing a lot of people or no one at all.

## SPECULATIVE FUTURE OF THE WTC I - ANNA ECKES

(...)

Now the Tower.

From the inside (it's absurd) it seems even larger. The once empty skeleton is now filled with a chaotic proliferation of emerging technologies: twisted wire intestines, ragged metal lungs, a network of digital veins, dense in one place and sparse in another, all spreading from floor-skeleton to floor-skeleton.

Structure adapting to the flux before your eyes.

It seems as if the designers didn't provide even specifications for the architecture and only the most basic input data went into the core of the structure and networks of the stairs and elevators: the range of the boundary conditions and a few initial steps for the transformations. It was as if the Tower, driven by the technological fluctuations, algorithmized itself conjuring the interactions with the city of Brussels into form.

You find yourself submerging deeper and deeper into an autonomic sphere of the building, following unknown tectonics, learning the morphology of this alien space. Travelling down towards the very foundations between ever changing atmospheres of physical and digital landscape you observe the disparate fragments of the structure, shifting from one to another. Tower's mass and installations constantly crossing paths and wires, coping, adapting and glitching out as their relationships are continually re-networked and auto-updated.

(...)

Maybe it's the Tower's final form emerging, structural density multiplying to infinity or maybe, you are in fact looking at the dying architecture of the building, and that before long – in a day or two – it will cave in upon itself, subside and decay.

The project is an exploration of the WTC Tower and its possible futures. With the contemporary conditions and trends changing so fast that we can no longer make any valid predictions, so will the Tower's structure and the infrastructure transform, reform and adapt.
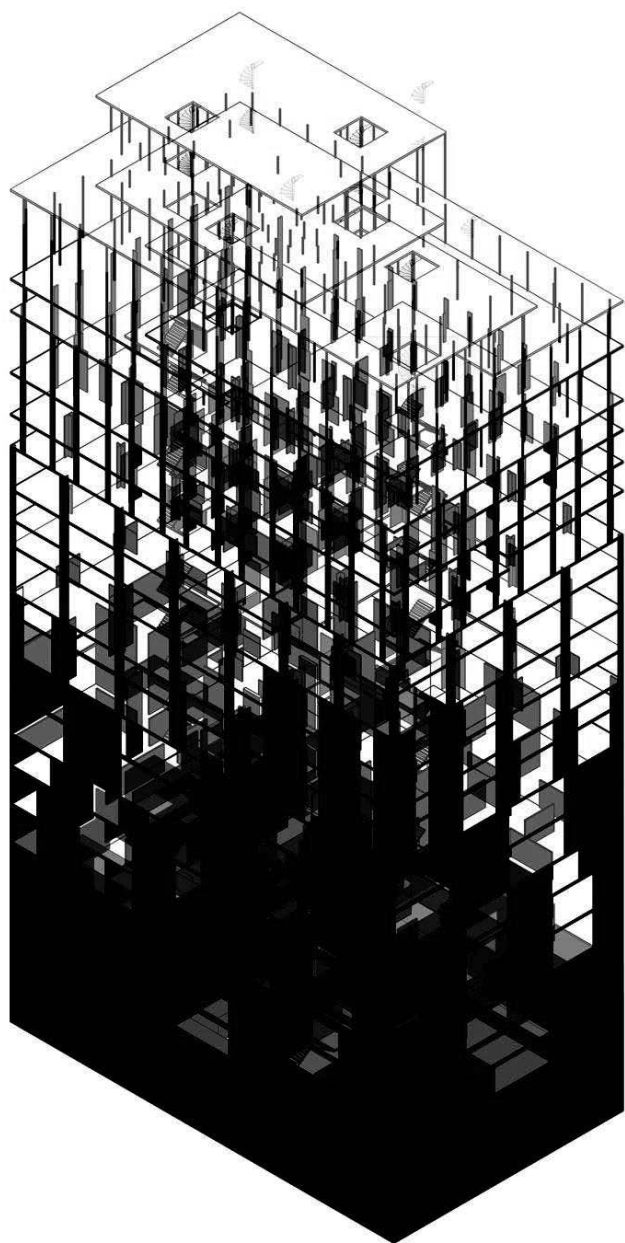
## FLUXFRAME - FONS GALLE

The current state of the WTC Tower as an object which has lost its purpose, is a reflection of an urgency in the bigger picture of Brussels. The trend of ever expanding the built and dismissing the re-use of what was once built has left a considerable amount of vacancy scattered around the city. Whereas now these unused spaces are regarded as a cancer growing in the city, we could use its potential as intercommunicating vessels to accommodate the fluctuations of density.

Density fluxes are mostly defined by their speed and quantity. The vessels should be able to allow different types of fluctuations. Rather than creating a specific design for a specific flow, the intent is creating a framework focused on the relation between its structural elements and the circulation and the flow of densities within.

Using the WTC Tower as a case study of a vessel for density fluctuations resulted in a variety of structural typologies to explore the effects on the possible flows. There is a gradient in these typologies. While the most dense elements are located at the base, the tower gradually dematerialises as we move towards the top. Within each system a gradient of density is integrated.

The vertical circulation follows the conceptual essence of the structure, dematerialising from I big closed off staircase core to multiple smaller, transparent stairs. Both structural elements and circulation typologies allow the variations in fluctuations from controlled, predictable flows to an extreme freedom of possible flows.

Rather than a specific, detailed design, the final representation is a dynamic, situational study of the fluxes within a fixed framework.