

**Bachelor Thesis &  
Werkschau**

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**University of Applied Sciences Potsdam  
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# Fluid Living

## Bachelor Thesis

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# Abstract

“In the coming decades a range of new technologies will improve our mobility tremendously. Autonomous vehicles will decrease transportation times and costs. People will have better access to services and goods, which in turn will propel the sharing economy. More self-sufficient and modular housing structures will be able to adapt efficiently to the changing needs of its inhabitants and environment. At the same time, better communication tools will increasingly allow us to work from anywhere, making us less dependent on our proximity to a central workplace. With this increased mobility and autonomy we will form new organic living structures in previously uninhabited regions. These structures will adapt to the weather and needs of the people, communities and environment. With this unprecedented mobility new governmental structures will emerge. We will no longer have to decide between the city or the countryside, we can have the best of both worlds. Rigid and overpopulated metropolises will become less desirable as flexibility and autonomy become our new priorities.”

Rather than explain the ultimate solution in detail, ready to build and scale tomorrow, I want to inspire. I want people to question, rethink and explore new directions that could be interesting to think about and discuss — an optimists scenario of how we might be living someday.

# Personal motivation

When I was a child, I was annoyed at having to travel an hour to visit my best friend in the same city. Why couldn't we live closer together? Why couldn't all my friends just live in the same building? Ideally the supermarket and cinema, saxophone and drawing lessons wouldn't be that far away either. At that age I had no idea and never really questioned how a city grows into this vast cluster of concrete, steel, cars and means and methods of transportation. At some point, highly efficient autonomous cars seemed like a possible solution. With time, these autonomous vehicles will become more comfortable and allow us to commute more efficiently, using our commute time to work, eat and sleep. But what if they could replace our houses altogether? My friend's house, my house and our school could simply move closer together. The distances would be so small, all of us could just walk to school. No need for autonomous cars. What if the whole city could adapt this way? Couldn't we just rearrange the whole city to make all our daily commutes so much shorter and more enjoyable? As I've been giving much thought to this idea for so many years, the bachelor thesis seemed like the ideal chance to examine it in greater depth.

# Status Quo

»A developed country is not a place where the poor have cars. It's where the rich use public transportation.«

— Enrique Peñalosa<sup>1</sup>

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<sup>1</sup> Colombian politician. Mayor of Bogotá from 1998–2001 and 2016–2019

## Rise of the urban area

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People are attracted to urban areas for the opportunities they provide: jobs, entertainment, education, culture and health services. Although urban life has many benefits, problems also abound: crime, poverty, gentrification and pollution.

With the domestication of plants and animals, small and mobile groups of hunters and gatherers transformed into sedentary societies. These then started to radically transform their environment to their advantage. Food surplus helped people survive harsher times and supported a denser population which led to even larger communities and thus to sophisticated governmental structures. Living in one location permitted the accumulation of personal possessions and created an emotional attachment to people's surroundings and immovable property.

The industrial revolution brought a series of technological advances that helped to increase agricultural productivity and, as labourers didn't have to work the land anymore, they migrated towards the big cities, where increased commerce and consequent industry offered more and more jobs. With the introduction of the motorcar and the development of mass-transport systems, cities expanded and allowed for longer commutes, so that the working class could live farther away and still work in the city centre.

Economic growth in western societies, leading to modified employment and family structures also led to increased migration into cities and, thanks to the care industry, younger people can provide financial support for dependent relatives such as parents without having to live close by, concern themselves on a daily basis with those relatives' health and other care issues and without losing sight of their own life goals.

The urban population has grown rapidly from 746 million in 1950 to 3.9 billion in 2014. According to a report by the UN, the share of people living in metropolises is set to increase from 54% in 2014 to approximately 70% by 2050<sup>2</sup>. This trend shows no sign of slowing over the next 20 years, with continuing significant migration for economic reasons or to escape situations such as war, political persecution and climate change.

These pressures can give rise to overpopulation, with consequent significant social and economic barriers to integration, with people being forced to live in makeshift accommodation, with inhumane, unhealthy living conditions, or, as is the case with the so-called "ant people" in China, even in underground colonies, living capsules or 2m<sup>2</sup> cages in cities where house prices are skyrocketing.

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<sup>2</sup> <http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html>

## How the car influenced the urban design

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With the rising affordability of cars and fuel came greater flexibility for workers. They no longer had to live next to the polluting and loud industrial areas. The car, together with other technologies like electricity, steel and concrete allowed for the golden era of building. Unfortunately, the world adopted the US model, building and developing cities around the needs of the car and the ways in which it shaped urban and suburban life. Cars were seen as the future; mass-transit was seen as second. The car offered comfort and flexibility, and as the power and lobbying of the automotive industry grew, they incentivised the use of cars. Prominent figures such as Robert Moses, the so-called “Master Builder”, pushed forward a vision of the future in which cars were portrayed not only as the preferred way of the wholesome American family but also as the way of the future<sup>3</sup>. This vision of the future forced upon the citizens a new way of life that created a need for cars in everyday life, which in turn created the need for the required infrastructure<sup>4</sup>.

As the older urban areas were confronted with an ever-growing number of cars and the subsequent traffic with which they were not equipped to deal, the reaction was to build more and wider roads. New highways ended up slicing up neighbourhoods resulting in the relocation of tens or hundreds of thousands of people and businesses.

Out of necessity, most of today’s metropolises developed in the following decades a mass-transport system alongside the roads and highways. Most European cities are much older, their development preceded the commercialisation of the automobile and the railway system remained the most common means of transportation. However, the influence of the automotive industry on the development and urban design worldwide was still enormous, and the car remains a sign of socioeconomic status in most places. It’s only in recent decades that urban designers and governments have started to not just offer alternative modes of transit, but to actively make the use of cars less attractive by banning them from city centres, levying entry tolls and parking charges and generally dismantling the assumed benefits that had been built over the years.

As the negative impact of the automotive industry on the environment became more evident, the perception of cars and other modes of transport has changed, and the search for not only other means of transport, but for new and innovative ways of structuring everyday life within the cities has grown as well.

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<sup>3</sup> General Motors’ Futurama, designed by Naorman Bel Geddes; and Democracy, the main exhibit in the fair Perisphere

<sup>4</sup> Owen D. Gutfreund, *Rebuilding New York in the Auto Age*

# Trends

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In the following three pages, I want to briefly present and explain current trends which are the basis for the concept of Fluid Living.

## Decreasing mobility costs

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The accessibility, security and comfort of mobility is constantly increasing. Deregulation has led to more competition and falling prices, with transportation infrastructure such as airports, highways and transit constantly expanding and vehicle sharing providing adequate affordable transport opportunities, including daily commutes. Demand Responsive Transport can adapt to the changing needs of its customers as it does not have fixed stops, routes or schedules. Instead DRT will only drive when necessary and quickly adapt its itinerary in order to transport as many people as possible and at a better cost and time efficiency. This mode of transportation especially counteracts the mobility deficits in rural areas.

## Decreasing need for mobility

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With available communications infrastructure and tools becoming increasingly faster, cheaper and more potent, more and more people are provided opportunity to work remotely from many types of employment and location. Video chat and virtual reality will make many of today's commute obsolete and the number of so called digital nomads is expected to reach a billion by 2035<sup>5</sup>. Fulfilment centres and vehicles that are almost completely autonomous will reduce tremendously processing and delivery costs - why go to the supermarket if it's easier, faster and cheaper to get them delivered directly from the producer?; why personally bring your clothes to the cleaning facility if they can be picked up for only a few cents more?

## Climate migration

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In recent years we have witnessed a growing number of climate migrants. Generally, poor people in countries in warmer regions are the most vulnerable to climate change. "Climate change is expected to result in more and stronger droughts, floods, heat waves, storms and rising sea levels..."<sup>6</sup> acting as an accelerant to instability. Hundreds of millions of people in the most vulnerable locations will be forced to move away from coastal areas, often leading to conflict and war with devastating consequences.

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<sup>5</sup> <https://levels.io/future-of-digital-nomads/>

<sup>6</sup> <https://www.theguardian.com/environment/2017/dec/21/devastating-climate-change-could-see-one-million-migrants-a-year-entering-eu-by-2100>

## **Tiny house movement**

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The “Tiny House Movement” is primarily driven by rising rents and economical troubles like the housing bubble in the United States in 2007. Instead of making rent or mortgage payments for a house, people live in remodelled vans or trailers. They are usually around 2.5 x 5 square meters in size, making them easy to move, many are solar-powered and have rainwater catchment tanks which make them more self-sufficient and they usually have a bathroom, bedroom and a main living area with an open-plan kitchen. Less space forces people to own less and to use the existing space more efficiently, giving rise an overall smaller footprint. This revolutionises home ownership as people no longer need to own the land on which their home is located.

## **Co-living in the 21<sup>st</sup> century**

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Co-living refers to the sharing of space, services, attention and household goods between people of different ages and backgrounds. There is to be found an increasing number of co-living spaces in urban areas which addresses the needs of a specific target group. They offer furnished rooms including a private bathroom, communal areas with a kitchen, cleaning and shopping facilities. They aim at bringing together like-minded people and encourage social mingling by organizing events and creating more joyfully shared areas. Its biggest defect is its exclusiveness. As the demand in urban areas is high, only selected persons are allowed in. These co-living spaces are generally built by private entities which don't offer discounts for people with low income leading to small gated communities.

## **Collaborative economy**

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On average, a drill is used a total of 12 minutes<sup>7</sup> over its lifetime, cars are parked 95% of the time<sup>8</sup> and the global number of empty homes is increasing: more than 11 million homes are not being used across Europe, according to the Guardian<sup>9</sup> — enough to house all of the continent's homeless twice.

In a collaborative economy, smartphones and the internet allow people to efficiently offer and ask for desired goods. Formerly complex, time consuming and annoying transactions become hassle-free. People are not just sharing their houses, cars and tools but also their money, attention and skills with each other. Sharing these goods is taking control and value away from big centralized companies.

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<sup>7</sup> <https://tedxinnovations.ted.com/2015/04/16/spotlight-tedx-talk-how-much-do-you-use-that-power-drill-why-were-sharing-tools-with-everyone-in-our-city/>

<sup>8</sup> <https://www.reinventingparking.org/2013/02/cars-are-parked-95-of-time-lets-check.html>

<sup>9</sup> <https://www.theguardian.com/society/2014/feb/23/europe-11m-empty-properties-enough-house-homeless-continent-twice>

## Smart city

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Like most “smart” things, they can’t be reduced to a single meaning, which certainly helped the rapid adoption of this buzzword. Smart is often used as a synonym for flexible, intelligent, autonomous and self-adjusting. A smart city is supposed to make better use of its resources by collecting and processing data from sensors, citizens and devices. Critics<sup>10</sup> question the utopian visions for the lack of connection to real world problems and the technocratic quest to control our urban everyday life.

## Autonomous vehicles

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With the development of autonomous vehicles in recent years, the idea of the car being the ultimate solution gained momentum again. Once we reach the autonomy level 5, in which the vehicle will need no human involvement, supporters expect a renaissance of the car. The autonomous system will be equal or even better at monitoring its environment and react to unique driving conditions to avoid accidents. As the driver becomes obsolete, the operational cost will plummet. But no matter how much technology improves and becomes more affordable and accessible, it won’t change the fundamental problem — they take up too much space. Critics<sup>11</sup> say we will end up with even more cars, more traffic jams and less space for people. Critics therefore advocate to invest more into walking, biking and transit infrastructure to give people more choices and distribute the traffic.

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<sup>10</sup> [http://www.rosalux-nyc.org/wp-content/files\\_mf/1516647132\\_magicfields\\_publication-archive-german\\_1\\_1.pdf](http://www.rosalux-nyc.org/wp-content/files_mf/1516647132_magicfields_publication-archive-german_1_1.pdf)

<sup>11</sup> <https://twitter.com/BrentToderian/status/1000572935336325120>

# Fluid Living

»Fluid Living will be able to better meet our human needs. Man-made housing structures can continually adapt to the needs of the organisms living within them.«

— José Ernesto Rodríguez

# Fluid Living

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On the following pages I will describe the concept of Fluid Living.

## Fluid

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Wikipedia describes fluid as follows: “In physics, a fluid is a substance that continually deforms under an applied shear stress. [...] The distinction between solids and fluids is not entirely obvious. The distinction is made by evaluating the viscosity of the substance.”<sup>12</sup> In the context of my work, “fluid” describes a constant dynamic movement. Compared to the word liquid, fluid does not just follow the basic physics of gravity but also reacts to external influences. A fluid seems to have a life of its own. A fluid is more organic, has its own rules, its own rejections and attractions.

## Living

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Living in Fluid Living refers to how all organisms and lifeless structures cohabitate from a human perspective, from our daily routines to how we organize ourselves in communities, from a single human being to the 7.5 billion humans living on planet earth, from the individual humans to their environment, from a connection between two individuals to the whole earth as an ecosystem.

## Fluid Living

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According to Abraham Maslow’s hierarchy of needs, humans have a variety of needs which can be put into these five categories: physiological, safety, belonging and love, esteem and self-actualization. Until now the vast bulk of our housing structures is more or less rigid, but offers a high level of security and comfort. It protects us against harsher weather conditions and potential intruders. Other tools and infrastructure allow us to store and prepare food, sleep comfortably, clean ourselves, store personal belongings. Transportation tools like bikes, cars, trains and airplanes allow us to move between the different housing structures. In my vision, Fluid Living we will be able to better meet our human needs, man-made housing structures can continually adapt to the needs of the organisms living within them. These structures offer such a high level of adaptability, that it is more efficient for them to adapt to the organisms, than organisms to the structures. In this vision we will have to make less compromises, these structures will take into consideration and prioritize the needs of the individual organism, the needs of the collective as well as the needs of the whole ecosystem.

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<sup>12</sup> <https://en.wikipedia.org/wiki/Fluid>

## Example

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To get a better idea of how the life of a person within this vision might look like, I will paint you a picture. Let's call her Alex. She currently lives by the sea and grows her own vegetables in a garden she shares with her neighbours. All the other food is being delivered in an automated way from the producer straight to her house. Her parents, brother and best friends live around the corner, and all spend lots of time together. She cycles to her co-working space and back home through a beautiful forest for about fifteen minutes, which helps her to relax before and after work. During break, she and her co-workers have a meal at her favourite Latin American fusion restaurant, but of course they can choose from a wide variety of restaurant and bars. After work she cycles to the beach and goes for a swim. Every once in a while, when she wants to go to a concert or visit friends living further away she happily uses public transport as it's fast, affordable, secure, social and comfortable. She only uses private transport in exceptional cases like when she visits people in remote areas or in case she is late to an event.

Last month, her brother became a father and he and his family now obviously need a more family friendly environment. As she wants to help him out, especially during this phase, she makes proximity to her brother a top priority. Tomorrow, the housing structures will rearrange, as needs have changed. As she will have less time for her friends, the distance to them will slightly increase. She will have new neighbours and a new route to her co-working space, but the commuting time to work will stay the same.

## Factors that influence the level of adaptability

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The level of adaptability of the organisms and inanimate structures depends on various factors:

- **Physical**
  - Geographical: weather and terrain
  - Technological: housing and infrastructure such as streets, water system, bikes, transit, cars
- **Human**
  - Metrics: core values and corresponding goals
  - Decision making: how several organisms come to an agreement
- **Costs**
  - Environmental: level of respect towards the needs of flora & fauna
  - Financial: willingness to invest money
  - Time: willingness to invest time

# Opportunities and challenges

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In the following section I want to briefly explore the most prominent opportunities and challenges this vision involves along:

## Business model

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I am worried about the option that more profitable business models will have a significant influence on how these fluid structures will work. Therefore, we need the involvement of non-private companies as well as Government, since their primary function is to serve their citizens. This should lead to a more human-oriented rather than profit-oriented business model and infrastructure.

## Autonomy

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In this vision, we will be able to recycle our water, create our own electricity and food. Only from time to time will we need professional help to fix our tools or receive medical attention. This increased level of independence will make most existing infrastructures either less relevant or completely obsolete. We will be able to break away (in a positive way) and create our own little societies with our own rules. This is the greatest opportunity I see in Fluid Living. We will no longer have to wait for the next legislative period to change the rules by which we live. We will be able to easily form our own test group, see if it meets our goals and continuously reconfigure until we reach the desired outcome. I am full of hope ... we will reach a better way of living together and very much faster.

## Communities

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Fluid Living will rearrange our housing structures based solely on our interests, activities we prefer such as sports and arts and people with whom we like to spend time. It will not be possible to create collectives based on a belief to prevent social polarization. Furthermore, it will also not be possible to manually create collectives. Communities will evolve from the short- and medium-term interest of their members. This will prevent homogenous collectives and should, in the long-term, result in less conflicts. Otherwise, as we depend less on others, we might create more egoistic and exclusive communities.

## **Spatial privilege**

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Some regions have always been more attractive than others. Some have a more fertile soil, others have better terrain to defend against attackers, while others have a more pleasant climate and scenery. Self-sufficient structures will allow us to live in the most remote areas and make urban areas less dense. However, the issue of space privilege will persist. We will come up with a system that allows a fair access to these popular areas for everybody. In this vision, private property poses an unfair advantage and therefore will be abolished. Otherwise, I fear that the popular areas of earth will continue only be accessible by a wealthy minority.

## **Flora & fauna**

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Animals, plants and ecosystem will receive more legal rights and consequently enjoy a more direct protection. A combination of sensors and observers will not just inform us about their needs but also enforce their needs and rights. Nature conservation efforts will, for example, restrict the access to certain areas or force people to move. We will come up with basic international guidelines everybody has to follow. Local precepts will cover the needs of specific species and smaller ecosystems. Humans, flora and fauna will inhabit the earth having (more) equal rights.

## **Serendipity**

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The system will gradually become more efficient in meeting the needs we define. The risk is that we might end up in a highly polarized environment. We would hardly ever meet somebody with different interests or background. There would be less coincidences and less surprises. Therefore the system will also incorporate a certain degree of randomness to allow for more unforeseen encounters.

## **Convenience vs. privacy**

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The more someone knows about you, the better they can serve you. This also applies to the vision of Fluid Living. However, data collection, storage and processing will be as minimal, decentralized and anonymous as possible. We will be in control over how much personal data we are willing to trade for convenience. Otherwise we risk other entities spying, influencing and profiting from our data.

## **Homogeneity vs. diversity**

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With the increased mobility we will be moving across many of today's geographical borders. People will be born in one country but continually move with their fluid housing structure across many countries. The nations of today will adapt and develop more fluid forms of governing. National borders will be less relevant. Our traditions, languages, and culture will merge, remix, and some will disappear. It will be a challenge to preserve most of these cultural particularities. On the other hand, conflicts will decrease as we become more homogenous. Geographical location and national allocation will lose its relevance, and we will claim to form part of a certain group referring to mere interests, hobbies, ideas and if so to kinship. People will find new and more peaceful ways of creating a sense of belonging.

## **Services and goods**

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As the costs of mobility and transport will decrease, the accessibility to services and goods we need like health and food will increase. If the current location no longer meets our priorities we can simply move to a new location which does. Or, once the demand for the service becomes strong enough the service providers will easily move to their potential customers. I am optimistic that we will have far more options and will have to make less compromises than today.

# Challenge

»It is hard to say what today's dreams are; it seems they have been downgraded to hopes—hope that we will not allow ourselves to become extinct, hope that we can feed the starving, hope that there will be room for us all on this tiny planet. There are no more visions. We don't know how to fix the planet and ensure our survival. We are just hopeful.

As Fredric Jameson famously remarked, it is now easier for us to imagine the end of the world than an alternative to capitalism. Yet alternatives are exactly what we need. We need to dream new dreams for the twenty-first century as those of the twentieth century rapidly fade. But what role can design play?«

— Anthony Dunne & Fiona Raby in *Speculative Everything*<sup>13</sup>

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<sup>13</sup> ISBN: 9780262019842  
<https://mitpress.mit.edu/books/speculative-everything>

## Challenge

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Anthony Dunne & Fiona Raby in *Speculative Everything*<sup>14</sup> get right to the point: “There are no more visions. We don’t know how to fix the planet and ensure our survival. We are just hopeful.”

When I was growing up, it felt like everybody had this positive attitude towards our future. We were shaping our future. Nowadays people are either pessimistic or super pessimistic about our future as a human species on earth. We are not building our future anymore but instead just trying to prevent the apocalypse. Our visions started to shift from futuristic tv series like the Flintstones to a multitude of apocalyptic blockbusters. Obviously, these apocalyptic scenarios make for a better story than a world in which everything is perfect.

Designer, artist and researcher Caroline Sinderson<sup>15</sup> perfectly summarized my current mood in one of her interviews<sup>16</sup>: “I think if you’re a technologist and a critical thinker, it’s one thing to just criticize — why not go the extra step and then hypothesize? Why not imagine what a solution could be? I also think it’s important to try to imagine what the problems with any solution might be. If you throw something on the wall, people are going to say what they do and don’t like about it. But it’s hard to do that if you don’t put anything on the wall. So, I think it’s really important to not just to say, “This is a problem,” but to say, “This is a problem, what do we do about it?” I feel incredibly beholden to this approach, especially if I’m publishing something publicly. Why not try to create solutions? Or, at least point people in the right direction, even if you don’t know what a solution could be.”

I set myself the goal of making the hypothesis of Fluid Living as tangible as possible. The final outcome will play in an optimistic alternative future. Ideally it will inspire and/or pressure decision makers. It should be easy to understand, and hopefully people find it interesting and attractive enough to broadcast it and to have entertaining discussions about the topic.

It should be easy to digest as well as anyone should find it entertaining to encourage the spread of the idea. It will be a challenge to find the right degree of detail. It should be concrete enough to be taken seriously. But it should also be loose enough so that people don’t question every detail and instead start to build upon it.

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<sup>14</sup> ISBN: 9780262019842

<https://mitpress.mit.edu/books/speculative-everything>

<sup>15</sup> <https://carolinesinders.com>

<sup>16</sup> <https://thecreativeindependent.com/people/caroline-sinders-on-how-talking-to-people-improves-your-work/>

## Reference projects

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### Black Mirror

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Black Mirror<sup>17</sup> is a British television series created by Charlie Brooker which examines the possible implications of new technologies. In each episode Brooker uses a new story, setting and characters to highlight the dependency of humanity on a specific technology. The stories are set in a slightly different reality in the present or near future and have a rather dark tone. The possible negative implications are exaggerated to make the storyline more captivating in order to engage the audience and provoke a discussion. This series can clearly be categorized as critical design.



Still from the episode *White Christmas*

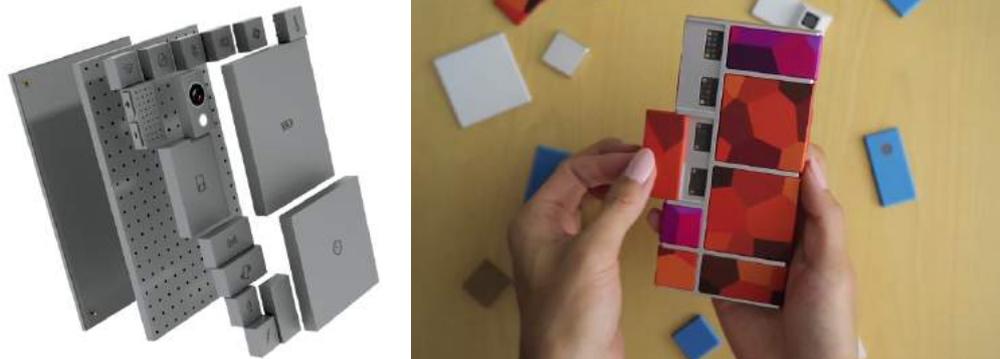
My favourite thought experiment appears in the episode *White Christmas*. In this alternate future it is technologically possible to create a digital copy of a person's consciousness by temporarily implanting a chip into the brain. This chip is then removed and used to act as your personal assistant. It can control all aspects of your home like the lights, temperature and other household appliances. As it is an exact copy of your consciousness it perfectly knows your desires and needs. But as it is an exact replica it also believes it is the one and only real version. So why would it spend its time serving somebody else? In order to break the will of this digital copy, its perception of time is altered. Months and years of boredom and isolation can be digitally simulated in a matter of seconds. The copy eventually surrenders and ends up serving the original version of itself. Black Mirror has been a great conversation starter. The series is well produced, entertaining and at the same time provocative. What I am personally missing in Black Mirror, though, are possible solutions.

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<sup>17</sup> <https://www.imdb.com/title/tt2085059/>  
<https://www.netflix.com/title/70264888>  
<http://www.channel4.com/programmes/black-mirror/>

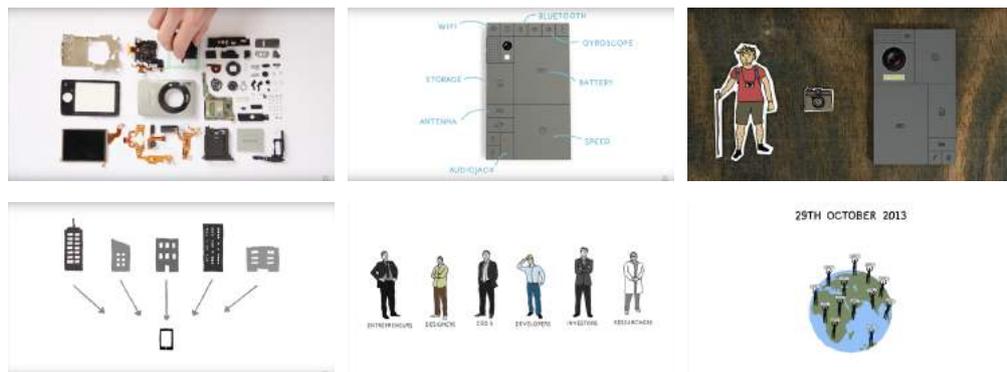
## Phonebloks

In this concept video its creator Dave Hakkens envisions a modular phone called Phonebloks<sup>18</sup>. This phone can be repaired or upgraded by simply swapping its modules. Each module is responsible for a specific function in the phone like the screen, battery, processor or camera. His concept video has been watched more than 22 million times on YouTube<sup>19</sup> and continues to spread all over the world. He eventually started collaborating with Motorola who had been working internally on a similar concept called Project Ara. Google shelved the project in 2016.



Rendering of the Phoneblok concept (left) and a Project Ara prototype (right)

In the initial scene of his concept video he explains the problem via a voice-over. He explains the advantages of a modular phone and elaborates on how the phone can be customized to meet all kinds of needs. He continues to explain what would be necessary to actually make this concept a reality. The video ends with a call to share his idea.



Screenshots of his concept video

Even though the modular phone was never brought to market, this concept video is a great example of how a rather simple video can inspire so many people. It addressed a current need and precisely visualized a solution while using colloquial language. This made it easy for the audience to make it their own and explain it to others.

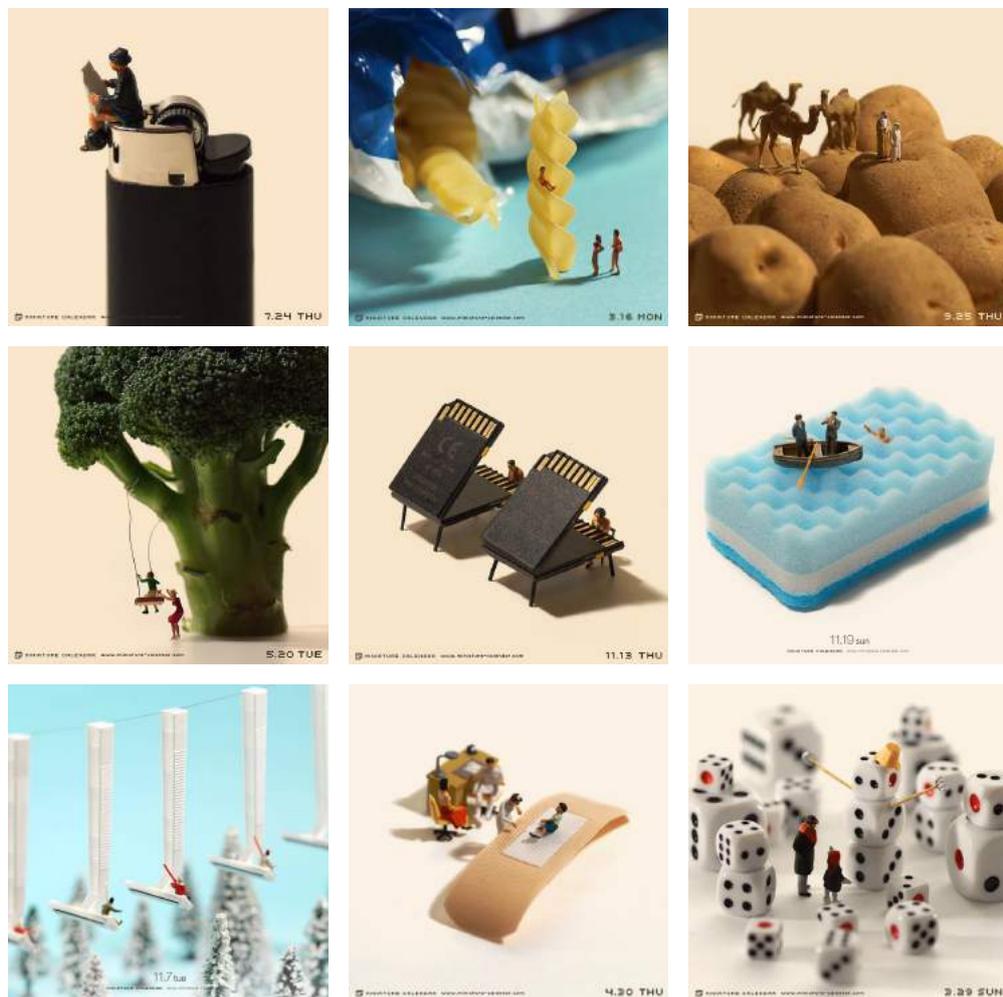
<sup>18</sup> <https://phonebloks.com>

<sup>19</sup> <https://www.youtube.com/watch?v=oDAw7vW7H0c>

## Miniature calendar

Since 2011, Tatsuya Tanaka has been taking photographs of diorama-style figures surrounded by food and everyday objects. Over the years he has created and published on his website more than 2000 scenes. He started building up these tiny scenarios to capture his collection of diorama dolls but found these pictures so fascinating to express 'likening one thing to another'.

The realistic miniature figures drive you to look for what the everyday objects are supposed to represent. It's this little challenge that makes these photographs so captivating. The combination and contrast make them fun and interesting to look at. A lighter turns into a toilet, a broccoli into a tree, a sponge into the sea, potatoes into a dessert and an SD card into a piano.



I adore the sense of playfulness these photographs radiate. The realism of the figures makes it easy to identify yourself with them. The figures are very effective in creating worlds with only a few resources.

## StoryCorps

StoryCorps<sup>20</sup> is an American non-profit organization. The mission statement from their website reads as follows: “StoryCorps’ mission is to preserve and share humanity’s stories in order to build connections between people and create a more just and compassionate world.” StoryCorps was born in 2003 with the opening of the first storybooth in New York. StoryCorps typically gives two people at a time the opportunity to record meaningful conversations and archives the recordings at the Library of Congress. People can invite a loved one or anyone else they choose to one of the recording sites to share a 40-minute conversation. So far StoryCorps has recorded more than 60.000 interviews, opened many more storybooths, launched a door-to-door service for people who can’t visit the storybooths and developed a free app that allows users to record their interviews on their smartphones.

Many of their stories are shared online. Some just include a photo of the two persons and the audio track. Others are video interviews while another selection has been animated.



Stills from the animated interviews



Screenshot of their website with an overview of their audio interviews (left) and a still from one of their video interviews (right)

What I like most about these interviews is their authenticity. Simply knowing that these stories are real, makes all the difference. Even the most mundane turn into the most exciting stories. The pace, the tone, the pauses, the slips makes it hard not to listen to the end.

<sup>20</sup> <https://storycorps.org>



## Abstract world

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At the beginning, I imagined building dioramas similar to the ones made by Tatsuya Tanaka. I discarded this style as everyday objects are distracting and might not get taken seriously. Building realistic and detailed dioramas wasn't an option either. They would require too much time and money. Therefore, I went for more an abstract direction. Trees for example will be abstracted into simple geometric forms like cylinders, spheres and cones. Surfaces like sand, grass, bike paths or snow will be made of felt. This will create a more harmonious visual style across all the dioramas. Reflective surfaces like water or glass will consist of acrylic.

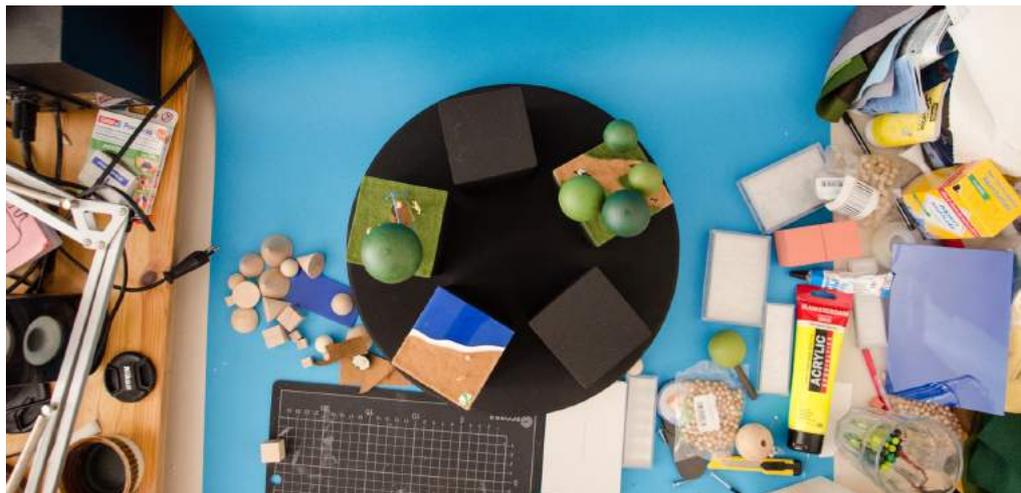


Work in progress

## Model A: rotary disk

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A series of scenes will cover the most prominent areas of life. These will come in focus when the protagonist talks about her daily life. The rotating disk will allow for a smooth cinematic transition between two scenes. Fitting music like the twittering of birds or the sound of the sea will make the scenes more immersive.

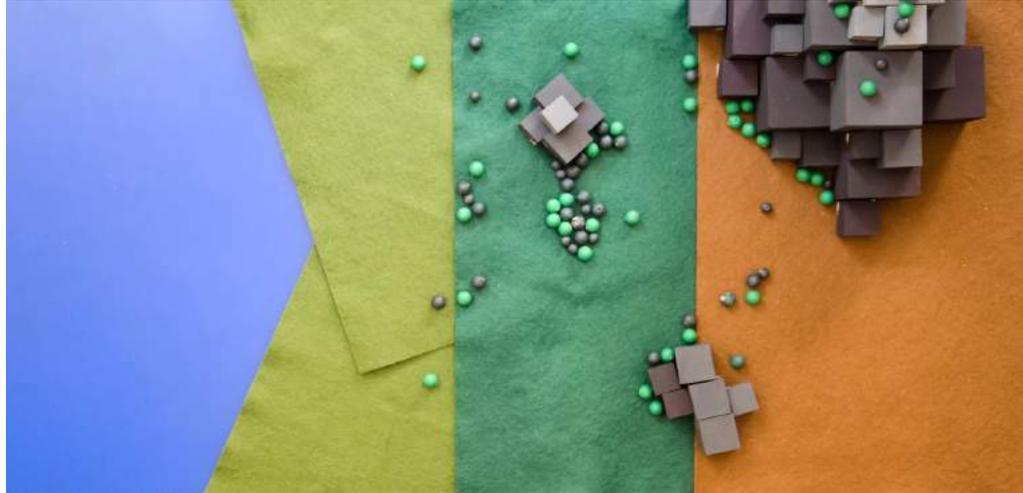


Work in progress

## Model B: aerial view

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To better understand how Fluid Living works in a bigger context, this model will help to visualize the movements of these fluid structures from above. Individual housing units and organisms will be merely small dots at this scale.



Work in progress

# Reflection

I've always been curious and I used to annoy the people around me by asking too many questions and by making constant suggestions for improvement. Thus it wasn't surprising I'd choose such a dynamic and broad topic. A year ago I began to watch videos and to read tweets, articles and even whole books.

At first I was fascinated by the vastness of this wide-ranging subject, but my enthusiasm slowly turned into disillusion to the extent that I'd realise it would be almost impossible to cover all aspects thoroughly. The people I'd talk to would generally recommend me to only focus on one specific aspect. But the more I got into it, the more I convinced myself that it was the variety what made the concept so interesting. It was not a single product or service but a vision with an impact on all spheres of life. Therefore, I decided to stick to it and to embrace it. And from then on Fluid Living began to pop up throughout my day. Every conversation was somehow related to it, which motivated me even more. Discussions about how annoying it is to commute to work, difficult to find an affordable room in Berlin, desirable to be closer to nature, create less waste, live in a more open-minded environment and so on.

Once I had a clear picture of how Fluid Living might work and after I had defined my target group, I could finally get my hands dirty and build stuff in order to visualize the concept. Now I'm curious to see the response. The main advantage of my patchwork setup for my video clip is its flexibility. It enables me to adjust the message by just recording a new voice-over without much amendment and effort.

The theoretical part was difficult though. I struggled operating alone and I missed teamwork which usually means an intense exchange of suggestions and ideas. However I appreciate the experience. It made me aware of how limited my writing potential still is and how much more I estimate my visual skills.

To delve into one topic in a serious, almost scientific way definitely broadened my horizon and changed my approach towards design and the role it can play. I am even more alert and conscious when it comes to how my generation can make a valuable contribution to improve conditions on our Earth and how I can somehow invest my time, skills and energy to better meet this vision.

## **Statutory declaration**

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I declare that I have authored this thesis independently, that I have not used other than the declared sources / resources, and that I have explicitly marked all material which has been quoted either literally or by content from the used sources.

Place, date

Signature

## **Expression of thanks**

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I want to particularly thank my two supervisors, Boris Müller and Klaus Dufke for their time and constructive feedback.

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