Growing with Care

Building care relationships to plan for food security

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Growing with Care

How can metadesign be used to form food communities with care relationships to plan for food security?

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Abstract

This project “Growing with Care” deals with the complex issues of food security, climate change, and building communities. Food is one of the most important aspects of life, it sustains us, it can bring us together and tears us apart.

This project is addressing the problem of the industrialisation of the agriculture system and the impact it’s had on our environment and society. It’s resulted in a society that’s almost completely disconnected from the food being eaten.

Metadesign will be used throughout the process of this project. Metadesign methods will be used to provide guidance, tools and support for participants to create their own change in the way they interact with their local food systems. It will be used to help participants form food communities in different cities.

The solution suggested in this project, is to rebuild care relationships to soil and the natural elements in our food systems. For participants to grow more food in their local areas with embedded care methods and a conscious understanding that we are living in an interconnected world.

The outcome in this project is a toolkit in the form of a blog and booklet. It uses metadesign methods to provide participants with tools to deal with the problems that arose from the industrialisation of agriculture. It encourages the participants to create local change as a community, for a more secure food future.

Keywords

Care
Metadesign
Food communities
Climate change
Food security
Toolkit
# Context

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1 Introduction
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This paper will first begin with an introduction into the topic of food, which can be viewed as a linear process starting with the perspective of ‘me’ in explaining the viewpoint of agriculture’s effect on the individuals involved. This continues to a ‘we’ perspective of the importance food has on society and culture. Leading into a ‘global’ perspective, the impacts of the agriculture system on the planet are explained. The next part is on the theories used in this paper: Manifesto for living in the Anthropocene (Gibson, Bird Rose & Fincher, 2015) and Matters of Care (Puig de la Bellacasa, 2017).

The design process is then explained, leading to the final outcome with an analysis and evaluation of contributions to design as a change agent, ending with a summary and reflection on the design project.

1.1 Brief project description and overview of end results

This project was done in Växjö and Gothenburg, Sweden and therefore, this project is in relation to Nordic countries, particularly Sweden where the research has been conducted. When the paper discusses ‘we’ and ‘humans’ it particularly references people living in Sweden and countries with a similar food security context. Sweden is reliant on food imports, meaning that climate change will have a larger impact on their food security than other countries that are less reliant on food imports.

This project aims to provide people with tools to deal with complex issues such as food security. The end result is a toolkit in the form of a blog and booklet, giving tools that can be used in different cities to bring people interested in growing together, to form food communities and to create a brighter food future for themselves. By forming food communities with an emphasis on care methods, the project is addressing issues of environmental sustainability, by addressing the negative impacts the industry has had on the environment.

This project was done in collaboration with a company called The Foodprint lab under a project Grow Gothenburg. Their aim is to match up potential farmers with available land, to have a platform in the form of a map of all the farms, land, and activities happening in the city. My collaboration was to design workshops to encourage people to start growing more food in the local areas along with finding out the different growing interests in the area through the workshops and design research.

1.2 Aims and purpose

This project aims to answer the question: How can metadesign be used to form food communities with care relationships to plan for food security?
It aims to use metadesign to give people the opportunity to practice more sustainable food habits. To provide the opportunity for people to create a more sustainable food system in their local area, and to grow food and eat a more sustainable diet that is local and organic. To promote care relationship
with people in their community and to the soil that allows their food to grow. To get people who usually go to the store to buy food, to put their hands in the soil. For them to touch the soil that will grow their food and understand that the food we eat, the soil beneath our feet have a life, they are living and deserve care, respect and thoughtfulness.

The metadesign method of ‘languaging’ will be used in this essay. The word ‘farmer’ has heavy connotations to the agriculture industry and for that reason, the word ‘farmer/s’ will only be used in the background and motivation section and not anywhere else. The aim is to end this narrowed view of how our food needs to be obtained. In this project, the newly sustainable farmer will now be a ‘Grower’. By changing the language, the hope is that the connotations of agriculture can be forgotten but also the sense of dependency and reliance on the industry can be left behind. This project hopes to inspire determination and hope for a brighter food future, full of sustainable growers.

1.3 Examples of food communities

This section will explain the importance of food communities for this project and use examples of other projects, of how food has been used as a material to bring people together and form bonds.

To begin, food communities in this project can be described as a collective of people who have an interest in growing local food for themselves and the people in their community. They grow locally and are less dependent on industrially produced food, instead they have a system within the community to provide enough food for everyone.

The formation of a community is an important aspect for this project, to create sustainable change, more than one person needs to be involved. A collective is needed to create meaningful change with a lasting effect. Food has been proven to be a driving force in bringing people together and a project worth mentioning is “FoodCycle” (2016) a British group that use rescued food to create healthy and nutritious meals for people in the community. It gives people the chance to meet and mingle, have a warm meal while surrounded by people, giving the people in the community a time and place to interact and become united rather than just neighbours. Food has the ability to bring people together in a way that creates value and meaning to the people involved.

Another example is “The Green Belt Movement” which is a movement started in Kenya for women, to start growing trees to better their situation. Their mission is to “empower communities, particularly women, to conserve the environment and improve livelihoods” (The Greenbelt Movement, 2018). This example shows the value in people coming together for a common cause. The movement dealt with a lot more than just growing trees for food, it dealt with political issues, effects of colonisation and many more problems. But the important part to point out is how the women in the movement stood up for their rights, they created a better situation for themselves and were able to create a more sustainable future as a united front, this project hopes to do similar work by forming food communities.
1.4 Background and motivation

The background described in this project is focused towards the damage the agriculture industry has caused to our environment and the participants involved. Particularly referencing countries with more individualistic practices in agriculture, countries growing mainly wheat and food that need less work to grow. These countries are in focus because it has been studied that countries growing wheat, which requires fewer people to grow the food have less holistic thinking than those that need a community effort to grow the food (Hsieh, 2014). There are many other opinions and views towards the industrialisation of agriculture as well as an ongoing development of understandings and research being done. This view is to emphasise the disconnect between humans and non-humans as well as how it has become embedded in this particular society over time.

It can be said that the agricultural revolution started with growing crops for food, leaving the act of foraging behind. This lead to people settling down in one area for longer periods of time, this abundance of food allowing people to have larger families. Everything seemed great, right? But with the growing number of babies, the farmers had to grow more food and this ‘easy life’ of farming didn’t seem to be meeting it's expectations. The farmers had to work much harder than the original foragers had to. Along with this, people settling down in villages were eating mainly grains, which lead to a malnourished diet. But we were unable to go back to a diet of foraging, as we wouldn’t have been able to survive off it with the larger amount of people to feed. Thus the agricultural revolution was in fact: “history’s biggest fraud” (Noah Harari, 2014, p.73).

As these adaptations happened over a long period of time, it’s understandable why no one said, “Hey, this could be a bad idea”, each new farmer learnt from the generation before, making small changes in the hope of a better life but in reality were contributing to the industrialised world of agriculture, that we now live in, contributing to a now overpopulated world. Each small decision, disconnecting more and more people from the food they eat, the way food is now produced is a ‘second-nature’ to how we, humans should be obtaining it. “we seek with our human hands to create second nature in the natural world” (Giblett, 2011, p.23). We use our hands to alter the soil, to grow our crops; ‘we’ use the land for our benefit and not for the benefit of nature. There is a lack of connection to the soil our food is grown in; to the land it was grown on, and to the process of growing food.

“When we study the narrative of plants such as wheat and maize, maybe the purely evolutionary perspective makes sense. Yet in the case of animals such as cattle, sheep and Sapiens, each with a complex world of sensations and emotions, we have to consider how evolutionary success translates into individual experience.” (Noah Harari, 2014, p.87).

As a historian and philosopher, Noah Harari explains in his book *Sapiens: A brief history of humankind*, the agriculture industry at the beginning, made sense for grains. From evolution, they started to spread and humans started to realise the benefits that came along with farming grains. They were cared for, given healthy land to live off, free land to expand on, protection and were looked after. This is not the same experience grain and other plants have today. Now they are covered with pesticides and aren’t treated in a way that shows care or understanding but are rather
grown for mass production, where physical looks and economic value are more important than taste or nutritional value. It’s not a great experience for animals and humans either, taking part in today’s agricultural industry. Farmers today produce food for people they don’t know, all so they can have food on their own table. Others who aren’t farmers, are given food they have no relation to, they have no information on the nutritional value or any say on how the food should be cared for. But humans don’t have it so bad compared to the animals in the system.“They pass their entire lives as cogs in a giant production line, and the length and quality of their existence is determined by the profits and losses of business corporations.”(Noah Harari, 2014, p.291).

Furthermore, the plant-based food that is grown and the animals farmed are treated in very similar ways (with lack of care and empathy), industrially farmed for someone else’s gain. Raised in environments that are not in line with their natural instinct. This short introduction to the industrial agriculture system shows the problem of how the system is unsustainable and doesn’t accommodate to the individuals involved, with aspects of it lacking ethics and care.
2 Context
2 Context

The context of this project gives a better understanding of the importance of food in our daily lives as humans and why it is vital for us to care for food. The context is expanded to show the inequalities in the food system that 'we' experience today on our shared earth. It goes on to explain that the future of food is unsure, giving a better understanding of why now is the time to start caring about our soil and food.

2.1 The effect food has on society and culture

Food is one of the most important and vital aspects of sustaining life; a daily part of every human’s life and our biggest dependency. Along with this, food enriches our lives. This is why food is chosen as the main aspect of this project. Food is embedded in culture and tradition, it plays to all our senses. There are huge food movements and food trends, food has become a pop culture around the world.

As a society we crave food and everything that comes with it, “it prompts nostalgia and inspires utopian dreams” (West, 2017). Food has the power to make us feel at home when we are thousands of miles away, by preparing a meal that reminds us of the people we love, the act of cooking and preparing the meal can make you feel closer to those people; to a time previously experienced. “Coming together and sharing a meal is the most communal and binding thing in almost every place in the world” (Sánchez, 2017).

Even if we don’t spend time and put effort into every meal, food is something that is on our minds every day. It’s a constant in all our lives that deserves and demands our attention. The decisions we make on what type of food to eat has the power to evoke emotion and sense of belonging. Food is a powerful source, having the ability to fuel our bodies, to give us energy to think, move, do anything we want and everything we need to do. It has the power to bind relationships, break relationships, and make people feel ashamed or proud. A meal is more than just feeding a hungry tummy; the act of cooking and eating is an embodied part of all of our lives.
2.2 Global unsustainability in our food systems

When observing the world that we live in today, it can be said that we are living with an uncertain food future. We are living in times of climate change; bringing floods, droughts and many more natural changes to the environment, leaving humans with less usable land to farm on. The World Food Plan (2018) has done thorough research into the topic of food futures and the impact of climate change, it’s said that flooding will bring unusable, and undrinkable water, thus affecting how much food can be grown. “Climate change will act as a risk multiplier to food security by 2030, particularly around issues of water security” (World food program, 2018).

In Sweden, most of the food eaten comes from many other parts of the world, leaving us vulnerable to climate changes and the future it will bring. Along with this predicted lack of food, it’s also thought that there will be an influx of migrants throughout the world. Along with the lack of available land to farm on, there will be a lack of land to accommodate the number of people on the planet. This influx of migration will lead to informal urban settlements, poverty and hunger, along with cultural tensions.

“A profound change of the global food and agriculture system is needed if we are to nourish today’s 815 million hungry and the additional 2 billion people expected by 2050” (The United Nations, 2015). An exploration of theories in the next section provides an example of how we can create change for a more sustainable agriculture system.
3 Theory
3 Theory

This project focuses on two theories; *Manifesto for living in the Anthropocene* (Gibson et al. 2015), how our activities as humans has lead to drastic climate change leaving us with an unpredictable and lean food future. The second theory is *Matters of Care* (Puig de la Bellacasa, 2017) and the importance of building care relationships with human and non-human actors in our world. It’s to emphasise that we are all living in an interconnected world and the actions we choose have a larger effect on everything else.

3.1 Escaping the Anthropocene: calling soil for help

The Anthropocene is the period of time where human activity has been the main cause of climate change. Our daily lives as humans, our apparent disconnect from the natural world around us, the idea that humans are above or at the centre of the world we live on (Oxford Dictionaries, 2018). But rather we are living in connection with the natural world, it’s not around us but instead, it’s a part of us. We are in connection with the plants that provide us food and the soil beneath our feet because we are dependent on them for survival.

If we talk more about the natural elements involved in the agriculture industry, this project will focus on the material of soil as an example of how humans interference in the natural cycle of growing food has led to climate changes. Soil microorganisms are comparable to those in our bodies. If we think of healthy soil, we can think of healthy bodies. We are a compilation of ‘trillions of bacteria, viruses, fungi, and other tiny organisms’ (Kumar and Chordia, 2017). These microbiomes, which are the communities of bacteria, fungi and other microbes, help keep our bodies healthy. They fight off harmful bacteria, disease and help us digest our food along with many other benefits for our health, the same can be said for soil.

Furthermore, if we discuss ‘living’ soil, it means that it consists of the right microbes; the soil is healthy and can protect the plants growing within it. The soil is the ‘stomach’ for the plants that grow our food, in a way, it digests the nutrients and water for the plant and presents it in a way that they can absorb or take in. Without healthy soil, we’re not getting fully nutritious food. When the soil is living, communities of “fungus roots” will form, these communities allow the plants to communicate with each other through the roots to warn about harmful microbes and disease. This community is a vital aspect for the survival of the plant and for our source of food (Allyn and Amaranthus, 2013). This community is a useful metaphor when talking about “food communities” in this project, just like the soil needs a community to survive, so do we. The soil is an important example for this project to explain that we are living in a connected world, with humans and non-humans. For humans, to have a conscious understanding that the soil is a living entity, it has a life and that it can end. To know that it has ended by the “overuse of certain chemical fertilisers, fungicides, herbicides, pesticides, failure to add sufficient organic matter (upon which they feed), and heavy tillage” all these activities introduced through the industrialisation of agriculture, introduced by humans demanding more food to feed an overpopulated planet.
“Climate change, spectacular in its scale and force, is the cumulative result of intertwined human and non-human agencies. It is perhaps the most profound expression of the earth’s agency—the capacity of this world to act, to show its power in all our lives.” (Gibson, et al. 2015, p.17).

As humans, we need to realise we have a responsibility to care and protect the living world around us. To acknowledge that the world is bigger than simply ‘us’ and the daily activities we actively choose to take part in, for example, the food we choose to eat, or how we take care of the different components in our food systems. (Gibson, et al. 2015, p.3).

As stated in the book Manifesto for living in the Anthropocene:
“We live within networks, webs, and relationships with non-human (or more-than-human) others, including plants, animals, rivers, and soils. We rely on each other for food and fresh water. We are co-participants in what is happening and what will happen next.” (Gibson, et al. 2015, p.17).

So, how can we create the change that is needed? When the soil is ‘living’ it becomes a carbon sequencing agent, meaning it captures carbon and acts as a climate regulator (Eckley Selin, 2018.), helping to reduce global warming and the natural disasters such as droughts and floods that come with it. But when the soil is being neglected, it won’t capture the carbon in the air but rather release the carbon that was once stored within it, contributing to a warming planet. This one example shows so clearly the impact humans lack of care has contributed towards climate change. That through building a caring relationship with soil, we can actually create a more sustainable environment by giving soil an opportunity to thrive and capture the carbon, to help regulate the temperature of the planet. Care and how it can be implemented is discussed more in detail in the section that follows.
3.2 Care relations: building human and non-human care relationships

To care is more than just routine check-up but it requires a different way of thinking about the other. It requires a conscious understanding and awareness of the one in thought. It requires your attention but there also needs to be a true feeling of empathy and desire to contribute to the well-being of another. Care needs to have “a vital affective state, an ethical obligation and a practical labour” (Puig de la Bellacasa, 2012). An Australian environmental philosopher and anthropologist, Thom van Dooren’s interpretation of author Maria Puig’s work on care will be the guide on how to build a caring relationship with soil.

To relate it back to this project, humans have an emotional stake in soil (Van Dooren, 2014). We are dependent on soil for survival, for a more sustainable and predictable future in regards to food and the climate.

When it comes to our ethical obligation to soil, humans need to recognise (Van Dooren, 2014) that through industrial agriculture, in times of the Anthropocene trying to feed an overpopulated world, we have created ‘dead’ soil. With little or none of the healthy microorganisms that are needed to keep it healthy. Through our neglect and carelessness, we have taken life away from soil and it’s a human obligation to restore the soil to its natural state and to care for it in a way that it can thrive.

Practical labour of care means that as humans we need to get involved (Van Dooren, 2014) and take action to re-introduce the correct microorganisms into the soil. We need to use our hands and actively take charge in restoring the soil. Taking part in care relations, allows one to “think-with” more than just themselves but to think of a populated world (Puig de la Bellacasa, 2017, p.71).

“As feminist ethics of care argue that to value care is to recognise the inevitable interdependency essential to the existence of reliant and vulnerable beings” (Puig de la Bellacasa, 2017 p.70) This shows us, that to care means there is an understanding that as humans, we live in a world dependent on one another. Humans and our agriculture system are in a symbiotic relationship that rely on each other for continued survival.
4 Methods
4 Methods

The design field of metadesign was used to give people in different cities tools and methods to develop growing initiatives and allow them to create their own change.

4.1 Metadesign

Metadesign has the ability to place power into the hands of the people who need it, for designers to step back and allow the participants to be in charge of their futures. It allows designers to guide them through the design process with methods and tools to utilize their creativity and ideas. We act as observers and guides through the process of a project (Giaccardi, 2005). This shift of power makes the systems more resilient to future change. Metadesign methods encourage participatory work, for the designers and the participants to work together for a common goal. This project uses metadesign to deal with complex and wicked problems such as food security for people in cities with an unsure food future due to climate changes. “Bringing together individuals with different knowledge, abilities and motivations is critical to generating more creative and sustainable solutions.” (Giaccardi and Fischer, 2008, p.20). The workshops using metadesign aspects, allow people in different cities to form food communities, each one taking steps to create a more secure food future for communities. As stated by metadesign principles, one individual or one community cannot change the food industrial system but the collection of communities can create change to the system or paradigm.

One method of metadesign is re-languaging, this is used to change the way in which we view certain topics or keywords, “this would be a way to change attitudes, relationships and habits of behaviour” (Metadesigners, 2013). Re-languaging in this project allows the group to have a mutual understanding of specific keywords, allowing a shift in thought to occur. This shift of thinking can bring new ideas and let old prejudices melt away.

“By promoting collaborative and transformational practices of design that can support new modes of human interaction and sustain an expansion of the creative process, metadesign is developing toward new ways of understanding and planning with the goal of producing more open and evolving systems of interaction” (Giaccardi, 2005, p.15).

A seed of change will be in the form of a toolkit for this project. “The creative process defines a “seed” able to generate endless variations recognizable as belonging to the same idea but open to change” (Giaccardi, 2005, p.8). The toolkit is a guide on how to form communities around food in different cities. It is an open toolkit allowing for new ideas, knowledge, projects and more to emerge.
4.2 Research

The research in this project was done through surveys, stories, and in the workshops.

4.2.1 Survey

(See attached appendix “Surveys”)
Three surveys were used in this project, relating to people’s interest in local food in Växjö. Whether they were already growing or were interested in starting to grow food, along with whether they prefer local and organic food. These surveys showed that there is a large interest in Växjö for growing local and organic food.

4.2.2 Stories

(See attached appendix “Stories”)
Throughout the process of this project, people were asked to send in stories. The first stories asked for were “What is the future of food?” these stories were asked through online platforms. The second stories that were asked for were about care, where participants received a seedling and were asked for a story of how they would care for the plant. These stories were used as inspiration for the development of this project.

Invitation asking for stories on the future of food.

4.2.3 Workshops

(See attached appendix “Workshops”) Qualitative research was gathered during the workshops in relation to growing food in Växjö and Gothenburg.
5 Design process
5 Design process

This section will discuss the design process and how it leads to the final design outcome which is a ‘seed of change’ which provides opportunities for people to create their own change through the tools given.

5.1 Planting seeds

Planting seeds was a way for me to engage with the topic of growing food, as I had never grown my own food and believe I needed to try it to get a better understanding of it myself. In the beginning, I struggled to start because I wanted to have a lot of vegetables, but didn’t have anywhere to grow them, as I don’t own any land. I live in a small apartment, and to set up any sort of permanent structure to grow on, is not allowed without permission, in the area I live. Through a discussion with a friend, we decided to build a moving farm. For me this was to start experimenting with growing food from the very ‘beginning’. By making the farm structure; to touching the soil and placing it into the farm, to carefully inspecting every seed out of curiosity and placing them into the farm, to watering the farm every day. At the beginning I was very excited to check on it, to make sure it wasn’t too dry or too wet. To see if any seedlings had appeared, but after a while, this excitement faded and watering my farm just became a routine rather than something that had once brought me joy. This led me to the topic of care and how to get a deeper relationship with my plants, to understand them, to give them each an identity and a life.

Images of the plants I grew.
5.2 Moving farm

This was a collaboration with a classmate. At first, this was designed for me to start growing food but also as an opportunity to draw attention to the topic growing food. The design is a pallet and wooden frame on wheels, allowing you to move the farm inside for winter and outside for spring and summer. It provides a solution to the problem of lack of available land to grow on in the area we are living. We came together to solve a problem and also made it into something that can be valued by the act of moving the farm and that discussions were started around the topic of growing. It was turned into something to look at and to talk about, to encourage others to be innovative when it comes to growing food.

5.3 Two Workshops

The first two workshops were a combination of quantitative and qualitative research, the first workshop being in Gothenburg, the second in Växjö. The workshops were tested in two different cities to know if the same workshop could be done in two different places. The first workshop invited people in the area to the library for a growing event, with a lecture and workshop. Few people showed up but there were people interested in growing.
The activity of the workshop was to:
- Place an icon of ‘who you are in the growing community’ onto the map where you live.
- Place a second icon of ‘what do you want from the growing community’ on the map where you would like the activity or land to be.
- Place a string between the icons, to know which icons are connected.

There was a second activity, an empty table with blank paper, questions were written for people to draw and write on the paper to answer the questions. This activity aimed to bring people together to discuss the topic of growing and potentially start up new growing projects.

Through the workshop, it was learnt that the icons and the map were too small and underwhelming. It didn’t gain much attention from the participants; they were interested because they were already interested in the topic. It was also learnt that having the two activities didn’t work well as they both required too much attention from the participants and didn’t flow into each other but rather they felt disconnected. These findings lead to building two separate workshops for quantitative and qualitative research.
While holding the workshop, guests were having many discussions with each other and had many ideas to start new growing projects together, one group of people started discussing a bee garden that they wanted to start up. This showed that by having space and an activity that sparked creativity and encouraged discussion, it provided an opportunity for collaboration.

The second workshop, done in Växjö was at Earth week, which is a fair, held every year in Växjö. The moving farm was used as a way to grab people’s attention as they walked past but also as a map of Växjö. Each side of the moving farm represented a different area in Växjö. The participants were asked to use the same icons from the first workshop, and place them on the side of the moving farm that represented where they live. The icons were made bigger and stuck onto cardboard to make them tokens that people would want to pick up. The icons also drew attention but were too complicated and too many options were available. The people participating had to read the key for a few minutes to understand what each icon meant. From this, it was learnt that there should be fewer icons available in the first workshop for participants to choose from.

The icons that were chosen to be used again.
5.4 Workshop 3

This workshop was conducted as an exploration into how care relationships can be embedded within our relationships to food, plants and soil. The workshop was held with two people who are considered a part of my food community from this project. They began growing with me and exploring the topic along with me.

For the workshop, the moving farm was the centre of our attention for learning more caring methods for the moving farm. We brought in different materials to create a special fertilizer for the farm.

We discussed different aspects of the farm from factual to sensual, and then discussing how everything in the farm is connected and our dependence on the soil. While discussing, we were kneeling around the moving farm and touching the soil and plants as the conversation rolled out. We then created a fertiliser; each element that went into the fertiliser was discussed according to its benefits for the plants and soil. At the end of the workshop, we watered the farm with the new special fertiliser we experimented with.

It was learnt through this workshop that context is important for this third part. Each growing community will have a different growing situation and caring will be different for each one. Care can be done in many different ways, the aim is for the community to share their care experiences and stories and come up with creative and effective care method for the communities growing situation. The soil and particularly the microbes in soil were an important material in this workshop to be an example of how humans are connected to nature, and how we’re similar to nature. The soil was also used as an example to show how dependent we are on the soil to provide us fully nutritious food. By having this conversation, it allowed the participants to really understand why this workshop was being done and why we need to build care relationships towards the natural elements in the food cycle.

The outcome of this workshop was a special fertiliser for the moving farm which consisted of: seaweed, salt, black tea, boiled potato water and egg shells. A few days after the farm had been given this special fertiliser, it had grown greener, stronger and happier.

Images taken a few days after the fertiliser was used.
Images from the third workshop held in Växjö.
5.5 Toolkits

The toolkit was designed after all the workshops and interventions had been tested and prototyped in this project. Once the prototyping was done it was put together to allow people the opportunity to start food communities in their local area. The graphics were based on the collaborator Grow Gothenburg’s graphic profile. The aim was to keep it very simple and easy to use and understand the steps for each workshop. It’s designed to be given out at events Grow Gothenburg participate in.

![Images of the toolkit in booklet form.](image1)

5.6 Grow friends Växjö

A Facebook page called “Grow Friends Växjö” was started, which aims to generate an interest in growing food on social media, and to build a food community in Växjö. The group’s aim is to encourage one another to start growing, to share tips & tricks for growing food. Resources, events and land can also be advertised on the page. It is an easy form of communication for the people in the area, who are interested in growing their own food.

![Images of the Facebook page graphic style.](image2)

Join our Facebook group Grow Friends Växjö. This group is intended to build farming communities in Växjö, to have a place where we can learn from each other. You are welcome to share land, resources, tips&tricks, and food that you have grown, on this group! The hope is that we can inspire and encourage each other to start growing more food!

![Invitation to join the Facebook page.](image3)
6 Outcome
6 Outcome

The outcome is in the form of a toolkit, to allow people in different cities to start up their own grow initiatives through the methods and workshops provided.

6.1 Seed of Change

The Seed of Change is a toolkit in the form of a booklet and blog. The purpose is to provide people with the tools and knowledge to actively change the food system in their area by forming food communities. It’s a guide to gain research into what help the communities need to start growing more food, while also brainstorming and starting new growing initiatives in their area, along with creating care methods.

An example of designers using toolkits to enable change and give others the opportunity to be the designer is seen by the company IDEO (2009). They have many toolkits available for people to buy and use. One particular toolkit is in the form of a book and is used to guide people through human-centred design practices. The book is called Design Kit: The Human-Centered Design Toolkit. There are certain limitations that come with designing a toolkit, one of which is the distribution of the toolkit. If it’s not distributed well then it will not have the impact that is needed to create change. Another limitation could be whether or not people understand the toolkit and how to use it, as the designer is not present for the process and therefore cannot answer questions that might come up. Although these limitations exist, toolkits are still very useful when it comes to reaching a wider audience. They can be viewed as instructional guides for people to follow, learn from but also expand on.

The blog version will be placed on the Grow Gothenburg website for people to read and follow. The booklet version is for distribution at events and other activities. Within the toolkit, there are three workshops, which are to be used as a guide on how to start food communities in different cities. The workshops are based on the ones tested in the design process of this project but altered according to the findings in the process.

6.1.1 Workshop 1: research and raising interest

The first workshop in the toolkit, is aimed at gaining quantitative research, to know how many people in the area are growing and how many are interested in starting to grow food, along with how many people have land to share for growing. This is done to get a broad idea of how many people in the area are concerned about a food future. Along with knowing what size community can be formed and how much knowledge needs to be shared among the community to why growing food is important for food security in the area. It’s designed to give people an opportunity to be creative and gain interest in growing food while also learning how many people in their area are interested in joining them in growing food and building deeper care relationships to their food.
Activities: The people who will host the workshop will need to build a moving farm for themselves. This is because during the workshop, the moving farm will be brought to different areas in their city to ask people questions on growing. It is encouraged to walk around with the farm and ask people to take part in placing icons onto the farm. For this, it is encouraged to make the farm small and light enough to be moved around easily.

The activity that will be done by participants while walking around is: placing icons onto the sides of the farm to answer the question of "who are you in the food community" or "who do you want to be in the food community".

For example, the following icons will be:
- I grow food
- I’m interested in events, markets, and courses
- I have land to share
- I’m looking for land to grow on
- I eat local and/or organic food

The icons will be placed on the outside of the moving farm, each side representing a different or a few different areas in their city, that the hosts are interested in knowing about.

6.1.2 Workshop 2: brainstorming future projects

The second workshop in the toolkit is designed to discuss the topic of growing food in communities, brainstorm new growing projects and to get to know the new community. This workshop is designed in this way to follow the thinking of metadesign. To allow the participants to have the opportunity to design their own change. To provide tools, methods, guidance and support to enable the participants to take the role of the designer. “Metadesign has the ability to place power into the hands of the people who need it, for designers to step back and allow the participants to be in charge of their futures” (Giaccardi, 2005).

To move from quantitative research into more qualitative and get a better understanding of the communities thoughts and ideas about growing food. To understand how people care for their food in different ways and to get a better idea of how people relate to their food as well as how the community can be managed and formed.

The aim is to invite the people that are met while walking around with the moving farm, or give out invitations through community online pages, or putting up invitations in your area. Gather interested people in a room; the setting should be quite informal and comfortable.

Activities: have a meet and greet time for people to mingle, each person will have a name tag and will also write what they can offer to the food community such as; land, time, knowledge or resources. This allows people to start conversations spontaneously.
There should be a big table covered with paper to draw and write on as well as materials such as markers, crayons and pens. On the paper, different questions will be written to inspire conversation and ideas to occur. The questions could be “what does the future of food looks like in our community?” or “what is your perfect growing project?”. Along with this, participants are encouraged to make moodboards from the materials, of their new growing projects. The moodboards can be placed up on the wall. At the end of the workshop, the group can discuss each moodboard along with its potentials and weaknesses. The aim is for the group to form as a food community, and hopefully, new growing projects will begin.

6.1.3 Workshop 3: care relationships

The aim of the third workshop is to bring together the food community formed from the previous two workshops. To learn about care relationships towards their food, the plants and soil. It’s for the participants to use their hands to touch the materials and actively engage in growing with a more conscious understanding. This workshop allows people to share different caring methods, for the community to learn from each other and inspire one another to be creative when caring for their food, soil and plants and the environment that it's in.

There are many alternative ways to care for plants and soil, the aim of this workshop is to bring the community together to have a collective knowledge and learn new methods of care from each other. For the community to find the most effective care methods for their context and growing situations.

Activities:
Participants will bring materials to use in the workshop; they can make compost, fertilizer or test out any new methods. The point is for the participants to take part in a joint activity that is in relation to caring. The participants need to take action and touch the materials. While touching and exploring the different materials the group will go through a metadesign method of 5 layers of storytelling, this will be done through a discussion.

The different layers are:
1 - Discuss as a group the senses experienced from the materials.
2 - Discuss the facts about the soil, and the other materials brought.
3 - Discussion on the connections, dependencies and inter-relations between soil, humans, food and everything else in connection. How do these connections affect one another?
4 - Discussion on how care relationships can be brought into growing project in the community. How can the community grow and implement caring techniques?
5 - Summary of the discussion, what have they learnt, enjoyed or not enjoyed.

This tool is used as a “bonding” activity for teams or in this case communities. The aim is for participants to share stories and “transition from ‘me-ness’ to ‘we-ness’” (Tham and Lockheart, 2008). Each participant tells their story from their experience and each person gets a turn to share their story.
7 Discussion of future results
7 Discussion of future results

The results of this project are viewed to be a growing collective of communities, having an impactful change in the agriculture industry. I view the toolkit to be used by many different people interested in growing food in many parts of the world. I view the project enabling more people to grow food and give the opportunity to learn from others in the local area. The toolkit will provide opportunities for growing projects and new relationships to be formed. I envision the toolkit to be adapted and developed by different communities to fit their context and situation, for social, sustainable and cultural aspects to be included into growing practices that will create more resilient growing futures. For the participants who have gone through the toolkit process as a community to come out more aware and knowledgeable about local food security. To have in place more sustainable growing projects within the community that stem from the implementation of care methods. To end off, the toolkit has not yet been implemented in more cities yet; an evaluation of this is done in the next section.
8 Analysis and Evaluation of Contribution
This project could have fit within metadesign or social innovation, the decision to contribute towards metadesign was on the base that metadesign is known as a newly emerging method that is continually developing and evolving. Within metadesign, there are specific ways of thinking and methods that can be used where social innovation is more broad and open to different design fields used to create social innovations. My hope is that my contribution will show how metadesign tools, methods and thinking can tackle wicked and complex problems such as food security, giving an example and exploration to how design can be used to build care relationships between human and non-human participants.

“Designers in the future will make the tools for non-designers to use to express themselves creatively.” (Elizabeth and Jan Strappers, 2008, p.15). This project is providing an example towards metadesign research, to how the emerging design field allows the designer to evoke creativity and bring people together to create new knowledge and face a problem from an insider’s perspective. The example is shown through a toolkit, which empowers people with an interest to create their own change, it gives them the opportunity to collaborate with people living in their area for a common goal of creating a more sustainable food future for the community.

As the toolkit will only be displayed on the Grow Gothenburg website it’s not reaching a wider audience yet. For the toolkit to work effectively and have a larger effect on the agriculture industry, it will need to be distributed to many websites and platforms to reach as many interested people as possible. Right now it’s only reaching two cities, Växjö and Gothenburg, it can move by word of mouth but not much more.

The research that was done was only in Gothenburg and Växjö in Sweden, so the toolkit might need to be adapted for different cities and countries, as food security problems and issues will be different in other cities and that might need to be brought in mind when there is a wider distribution of the toolkit. This toolkit is considered a starting point for a larger impact on the food industry. To improve the toolkit further, it should be translated appropriately in which ver city it’s being used.
9 Conclusion
9 Conclusion

Industrialized agriculture has led us to a world where humans are disconnected from the natural elements in the food system. As humans we have very meaningful connotations towards food and are very dependent upon it for survival but we are living in times of very unsustainable food systems. Soil is used as an example to show that we are indeed similar and connected to the natural elements in our food systems.

The design toolkit is changing the way people interact with the way they obtain food, it’s used as a guide to help start food communities and enable people to create their own food futures. By having more local food communities it allows people to grow and eat a more sustainable diet consisting of local and organic food. By growing food locally for the communities, we become less dependent on industrial agriculture.

Through the metadesign workshops tested out in this project, we were able to build more care relationships between human and non-human participants. Using the design methods encouraged, to reconnect to the natural elements, soil as the example, through creating care methods, we can help towards altering global warming and regulate climate change.
10 References
10 References


11 Apendicicis
11.1 Appendix 1: Surveys

Food Food Food
51 responses

Is buying local food important for you?
51 responses

- Yes: 51%
- No: 47.1%
- Sometimes: 1.9%

Where would you prefer to buy your food:
51 responses

- A social food/farmers market: 33.3%
- A food store e.g. Wilko's: 9.8%
- A website that answers the food to your door: 5.9%

Please explain the reasoning for your previous answer
44 responses

- If there would be one close of course I would like it better. Right now though much easier with Ica. I don't trust the product of Willys
- It's nice to see food without plastic paketing and to buy seasonal food
- Cheaper, straight from the source. Human interaction.
- I often don't have time to go to local markets due to the opening hours. I would prefer ordering from a website that delivers if they have the basic staples that I normally buy. But for specialty items I would prefer to buy in a store.
- Super convient. Preferably also combined with a good offer of organic and local food.
Nice contact to farmers

I'd rather buy food in a farmers market than in a supermarket because I think that we need to support local economy in order to create equality in both work production and salary.

I would prefer to buy from a farmers market but since I'm a student I generally just go to Willys

The most appealing one is nummer one, because I think it is important so see who is growing your food and make it as a fun activity, not something "you must do." But in the end it's all about the place that is the closest and cheapest.

I want to be able to buy food using my own containers and bags from people who know where the food's from. I want to be able to ask questions.

Better scheduled time

Convenient for planning during the week, also you're less distracted by sales at a store so you can more easily control what you buy

It will be time-saving and efficient to have delivery service. However it really depends on the price. Local food is nice but without delivery, I won't choose it. For an example, I wouldn't choose Nybrukarna because it's quite far. I prefer a place or a platform that offers different types of food so that I don't need go to different shops.

Good to know the origin of the food

It feels more authentic, you can get an idea of where your food comes from and can talk to the farmers about their methods if you choose.

Convenience as they're usually very close.

Ahaha I think because it wouldn't be wrapped in plastic. If people would speak English I might have a chat with them. But I guess the packaging is killing me in stores.

Close and practical

Because of the atmosphere and the fact that you know where your food is coming from/a

To give money to the right persons

I don't really know the difference between organic food and non-organic food. So I just choose the cheaper one, and since Willeys is close to my apartment, I buy all food there.

That's where I usually buy all my food because it's fast and easy, and I trust the supermarket labels for organic and local. However, if I had the opportunity and time I'd rather buy food from a farmers market.

To support locals and reduce plastic waste (note: I would prefer but I most of the time shop in supermarkets due to location/time)

Because it's boring to go to supermarket all the time

I would like to buy local food if it's fresh and tasty. Good food markets are not often open in the centre of Vaxjo. Farmers markets are in inconvenient places to go, and organic food especially vegetables in big food stores don't look fresh sometimes, so in the end I buy cheap imported look fresh ones in big food...
Then I'll get a better picture on where my food comes from.

To nourish the local society

I hate grocery shopping. It's time consuming and it's annoying to carry things back home.

To support local farmers and small businesses

Safe and cheap

I would like to have home delivery, but live in the countryside, no one deliver everything there. Food markets are nice, but I prefer to buy everything in the same place, it's faster.

It's local, you see the people behind the products, the atmosphere is nice. I have the feeling that I can trust those products to be good, and if not, I can go there and talk with the farmers/delivers. (Why isn't there such a thing as weekly farmer markets in Vaxjö?)

Fresh, organic food and it gives you the chance to ask questions about the food you are buying.

That's what I'm used to and wouldn't imagine doing it differently

If there is one close by markets are very cozy and nice. Supermarket is how even the handy everyday place to go to.

It sounds very cozy and inviting. It is something different than doing your grocery's in a shop. Doing your groceries in a shop every time makes me less creative with food.

to see where the food is from

Convenient is an important factor for me.

I like to meet the producers and learn about the food and the farming

It's what I'm accustomed to

Suits me best

I like to buy things that are fresh

I think the personal, social aspect adds value to a sense of community and social inclusion. Meeting the people who grow the food also deepens the relationship to it.

Because I can pick exactly what I want and I'm going to be satisfied

Urban farming/ at home growing

36 responses

Do you grow vegetables at home?

26 responses

If no, why not?

27 responses

I only grow some herbs, because they are easy to take care of

I don't have time to grow vegetables and I am not good at it...

I live in an apartment and doesn't have access to any garden to grow food.

I haven't had the resources or knowledge to do it.
Would you prefer buying food if it was more of a community activity?
50 responses

I grow herbs and sellads under UV light
Mainly lack of interest/space/knowledge
cause i don't have time or space for that
they need more care than I'm typically willing to give
Who has got time to take care of them? For God's sake?! I need someone to take care of me...
No space...
no interest in it.
Too small apartment, but I try to have some fresh herbs at home.
I don't have enough land space to use.
It's not my space
There's no space to do it here on campus. We grow vegetables back home, as we have a garden
No space at student dorms
No space
Ask the landlord
Trin tiny apartment =(
I don't have a plot
I have no green thumb
No room, I grow spices
It's difficult to take care of it
I don't know how to start.
don't have the space
They always die :(.
I don't in my student apartment, but my parents does
Do you have a small scale farm?
36 responses

- Yes: 77.8%
- No: 22.2%

Do you farm in a community garden?
36 responses

- Yes: 88.0%
- No: 11.1%

Would you like to start urban farming?
36 responses

- Yes: 44.7%
- No: 30.6%
- I already do: 19.4%
- Yes, if in a community: 5.3%

Would you like to grow vegetables at home?
36 responses

- Yes: 61.1%
- No: 11.1%
- I already do: 27.8%
I don't have the space or time for a farm. I am also travelling/moving a lot

Apartment

I would love to, but finding a spot in a community garden is super difficult. And having a small scale farm is impossible to have without a car because most of the areas where it's cheap or possible to have are a bit far from the city.

Never considered it

Lack of interest

cause i dont have time or motivation to do so

there are none near me

The same answer as previous one

Prioritize other things I guess

no interest in it.

I've never thought about it.

There is none nearby.

I don't have any acquaintances with any community

It looks like a big commitment (travelling back and forth)

too far away

No time

Ask if there is space available

No space

No time, no access, no possibility, no money

Expensive

No interest.

The community garden close to my place looks not open for anybody.

No access

Since family have two houses, we grow veggies in our gardens
Growing urban food communities:
This survey is in relation to a Design+Change bachelor thesis, focusing on the topic of food security and growing your food.

Total 15 people
Name:
What area do you live in?
Email:

Do you know about any gardens/urban farms in your neighbourhood or city?
   a) Yes 9
   b) No 6
   c) If yes, explain where it is:

Are you farming or growing food?
   a) Yes, I am a commercial farmer
   b) Yes, I grow food at home 7
   c) Yes, I grow food in a community garden 1
   d) No 7
   e) Other, define: 1

Other: live on a farm, have potatoes, carrots and tomatoes

3. What could help you to start growing or farming more food?
   a) I need more space/land 7
   b) I need to learn how to grow food 4
   c) I need to learn how to farm 1
   d) I need more time 8
   a) I need someone to farm with 1
   f) I need to get paid
   g) Other, explain: 1

Other: I need my own place, and will start small with tomatoes

4. How often do you eat organic or local produce?
   a) Never
   b) Sometimes 3
   c) Often 7
   d) Always choose when possible 7

5. What could support you in buying more local and organic food? (check multiple)
   - More money 2
   - Learn more about the benefits 1
   - Learn more about the farm 2
   - Closer access to the farms and produce 8
   - See the process of growing 3
   - Grow my self 3
   - Neither, I am not interested in buying more organic or local

6. What are your feeling towards urban farming?
a) Positive 14
b) Negative
c) In between 1
d) Motivate your answer:

7. What are your feelings about sharing land and tools?
   a) Positive 11
   b) Negative
   c) In between 3
   d) Motivate your answer: 1

Motivate: depends on the people
1 and = positive
11.2 Appendix 2: Stories

The Future of Food

There will be more urban farming, both in offices and residences but more for leisure and well-being. Not enough food would be grown to feed a whole community.

Meat consumption will decrease, ideally be replaced by artificial meat that uses less resources and replicates the taste and nutrients found in meat. It will also be cheaper for customers, so an easier choice.

Supermarkets will still be very dominant when it comes to food, as they provide in larger quantities. Hopefully all their “waste food” will not be thrown out, and people make sure it goes somewhere it will be eaten (ie food banks).

Also supermarkets give customers the options of international food which people have developed a taste for, and enjoy access to these foreign dishes.

Hi beautiful Plant-people,

Jag ska ta hänsyn om mina små tomatsväxlingar efter barta förstånd, formel och formåge. Skulle bjudas på en härligt varm och skön samt fuktig tillvaras att dessa livslängörliga gröna växten. De ska få plats på min franska balkong. Hur som helst, stort tack för detta!

KrammarLuca
I think my plants (3 of them) are tomato plant seedlings. If so (I will see when they grow up) I will put them in my greenhouse and take care of them with water and cow manure and talk to them with hope that they will give me some tomatoes in the end of the summer. Thank

For me, food is to feel seasons

Spring: Cherry blossoms and sweet bean cakes must have in Japan
Summer: Strawberries, blueberries, and raspberries in Sweden
Autumn: Mushrooms, figs everywhere
Winter: Walnuts, I would like to discover seasonal vegetables for winter in Sweden.
The Future of Food

The accessibility to food is becoming once, I feel, is taken for granted.

The future of our food supplies are so uncertain and yet nobody is talking about it, because... whether they aren't directly affected (yet), or they feel it is not their place...

The truth is - it's everybody's place! We need to be proactive!!

In my ideal world the future of food would entail the following:
- Educational courses on sustainable farming in schools
- Private vegetable gardens within homes
- Closerness with neighbours and within communities would enable harvesting for different produce
- More vegetables and veggies - our reliance on animals makes me feel ill. Practices are unnecessary, and cruel (a lot of the time)
- More microgreens included in our diets!
- These tiny green plants contain so many nutrients, require very little space to grow, are fairly easy to grow and don't require too much water
- We need to rebuild a sense of community with regards to food supplies so it will affect everyone when more is none left
11.3 Appendix 3: Workshops

Workshop 1: Gothenburg
14 Participants

Interests:

Participants:

Workshop 2: Gothenburg
Unknown number of participants because the workshop was held
at a fair for people to walk by and join if they were interested

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<th>Varnhoga/Sandbro</th>
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Surveys conducted online: 36 responses

Do you grow vegetables at home?

Do you farm in a community garden?

Would you like to grow vegetables at home?

Would you like to have a growing community in Vaxjo where you can learn about growing?