Values and relationships in the diverse economy of De Ommuurde Tuin: an illustrated ethnography

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**Introduction**

What is an economy? What is value? Are economic values always based on a market of supply and demand? Or can an economy be understood through its different relationships? In this booklet an economy based on relationships is presented. Showing how daily practices exhibit a variety of economic values that are highly connected to our environment. This not only includes a human environment but also non-human environment that together make our practices happen. Looking at relationships between human and non-human environments can give an insight what economies are.

By visualizing an economy as based on relationships, this booklet presents an overview of economic values in De Ommuurde Tuin. De Ommuurde Tuin, ‘The Walled Garden’, is a historical organic horticulture business located in a forest between Wageningen and Renkum in the Netherlands. Well-known economic values in the garden are among others food packages, renting
out the space of the garden, lunchroom, educational activities and care-work facilities. Next to this, there exists a large variety of daily labour practices where also a diversity of other non-well known economic values are produced. As not all of these values simply fit in a conventional understanding of the economy, though, these types of practices are essential for the existence of De Ommuurde Tuin. Their economic practices are intentionally done to create worlds that are environmentally and socially just (Gibson-Graham et al., 2013) where a diverse, interdependent, rich and prolific disarray of a ‘good life’ are central for its economy.

This booklet centralizes a visual representation of the different labour practices that are daily being done by every-body, human and non-human, in De Ommuurde Tuin. The pictures in this book serve to “enliven” the different daily

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practices in the garden where the connections between humans and non-humans are central. Moreover, the visualizations emphasize a diversity of values as of importance for the existence of economies such as in De Ommuurde Tuin.

This illustrated form of describing a diverse economy puts forward senses, visuals and emotions within this horticulture business, making it one that is lived and experienced. Through showing De Ommuurde Tuin's vitality, I hope to expose other types of economic values that serve the business’ economy and may lead to a further emergence of likewise initiatives that serve an economy for a good life.

De Ommuurde Tuin: an illustrated ethnography

In the Ommuurde Tuin, daily labour practices are focused on cultivating of plants and creating a wide variety of vegetables, fruits and herbs from historical, modern and wild species to “grow and cook with vegetables full of flavors, scents and colors” (De Ommuurde Tuin, 2019).
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Also important in the garden is attention to a 
healthy soil, by for example using compost and 
ample crop rotation. Next to these, the garden 
emphasizes the importance of a space that 
provides tranquility, openness and care. The 
diversity of values attract a large group of 
volunteers and other interested people to work and 
learn in the garden. However, as the financial 
revenues are limited, this free labour is of great 
importance for the economy of the garden. 
Nevertheless, the garden generates a financial 
inecome through providing food packages, renting 
out the space of the garden, lunchroom, 
educational activities and care-work facilities.

The combination of a financial income, 
voluntary labour, and biodiversity and soil focus 
create a diverse economic structure. To describe 
the daily practices in the garden, I follow an 
understanding of a diverse economy by using 

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² Gibson-Graham, J. K. (Julie, Katherine) (2008). Diverse economies: 
performative practices for other worlds'. Progress in Human 
Geography, 32(5), 613-632.
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This framework understands an economy beyond a capitalist understanding of “wage labor, market exchange of commodities, and capitalist enterprise” (2006: 70) and, instead, puts forward the yet (unrecognized) multiplicit sites and actors in an economy. This means that financial aspects of the economy are equal to alternative and non-capitalist transactions, e.g. alternative currencies and gift giving, labour, e.g. cooperatives and volunteering, and enterprises, e.g. social responsibility firms and communal ownerships.

This booklet is based on my research where I examined a diversity of economic values and relationships in the garden’s economy, in specific, I focused on labour. From a diverse economic standpoint (Gibson-Graham, 2006), I understand labour, as a central factor for an economy to function, not to be only as a factor of production that is made available through wages, but as a part of the economy that is exceeded through a variety of values and relationships. Especially in the case

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of De Ommuurde Tuin, labour is of interest because a great share of this is done without a financial transaction. Therefore, in this booklet, a variety of labour transactions are central.

Labour in De Ommuurde Tuin is done by both employed and voluntarily people. The workforce differs each and during the day from 2 to 10 people. A constantly changing workforce can create insecurity for the input of labour in the production process, nevertheless, because there are constant changes a greater diverse set of economic values than only financial ones are also being produced. These different types of values can be understood as existing of relationships between humans - humans, humans - non-humans. Capturing different types of relationships and its values, I perceive the total of what makes the economy in de Ommuurde Tuin ‘work’ and looks like.

In this ethnography I will describe and show values in the diverse economy, in specific regarding to labour, of De Ommuurde Tuin. I will highlight how values are being shaped through examining
relationships between humans and non-humans. To do this, I will examine human-sided relationships by looking at working, breaks, learning, and personal values in the first part. Next to this, in the second part I explore non-human-sided relationships, focusing on cultivating practices including planting, weeding, harvesting, and waste/yield. Thirdly, I specifically describe the values and relationships of De Ommuurd as an economic business.

Humans

In this first part I examine the human-sided relationships that make an economy. In the daily labour practices, De Ommuurde Tuin applies a limited use of machinery and priority to physical human labour.

The human workforce can be described as diverse and is constantly varying and changing. There are three employed while the other group, about 10 different workers, are volunteers. In general, the variation of the workers in the garden can be bluntly described as follows: The all three
employed workers are female, Dutch and live in Wageningen for a longer period. For the other group, I met, during my fieldwork, a variety of volunteers. Roughly, this group can be separated in two groups. The first group is aged above 40 years, has a Dutch nationality, and consists of an equal amount of men and women that are employed, unemployed and retired. The other group were Wageningen University female and male students, both Dutch and non-Dutch, and below the age of 30 years.

Nonetheless the high diversity within the group of workers, there exists a coherent community that is based on other (non-capitalist) types of relationships. One example of this is symbolized by the clothing the workers wear. The workers are free to choose what they like, and although there is no clothing code for the workers in De Ommuurde Tuin, many workers wear a likewise style of clothing.
Among the female workers a very similar set of clothing is worn. One day when I mention the similarities in their outfits, they mention that the checkered shirt with jeans they are wearing it not on purpose but because of practical reasons: “its airy, easy to change when the weather changes, strong fabric” and Femke mentions it is “not ‘tuttig’” (prissy)
Humans Working

The work in De Ommuurde Tuin is not applied to a specific work schedule but based on a planning for the week. This planning is loosely based on a weekly tour observational around the garden by one or more employees. The required garden tasks are written in a note book that is collectively owned by the garden.

Moreover, no job is imposed or obligatory for the (voluntary) workers, as there is always a myriad of possible jobs given and asked what one would like to do. This means that if one feels like not ‘working’ that is appreciated as well.
In general, the work in the garden is done in four time slots, roughly the morning 8:00-10:30, before lunch 10:45-13:00, early afternoon 14:00-15:30, and late afternoon 15:45-17:00. The labour and tasks differ every time slot and day and range from weeding around beans to cutting camille flowers. Not only the work itself differs, also the place of the jobs changes with the time slot and day.

Because of this, working in the garden is highly diverse are not just an experience of producing and/or earning a wage, but creates other economic values too. For example, a value that is important in the garden are deeper conversations that come with doing jobs that are more monotonous and done in silent place like a small green house and kitchen where there is less noise and the jobs are more repetitious. Nevertheless, many of the workers mention to enjoy these kinds of jobs as it can create a sense of community through having deeper conversations. These conversations are important as, one of the volunteers said, monotonous jobs and working in
general can get a different meaning. De Ommuurde Tuin characterizes itself by expressing their calming and relaxing atmosphere which they describe on their website as “Because the garden is enclosed by a wall, it offers a safe place for people who are at a distance from the labor market (including PGBs). Nature and useful work give people a positive feeling and that is why De Ommuurde Tuin is also a care farm.”.
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Monotonous jobs in the garden include cutting camille flowers and the sorting of verbena leaves to put in tea bags. One of the volunteers says she cannot work inside and therefore like to come to De Ommuurde Tuin once a week where, in next to being outside, she enjoys “that things can be done with attention here”.

Attention is an important value that many workers enjoy in the garden. Sorting the verbena is not only a manually a delicate job, also for the senses get a bigger stimulation through, in this example, a smell of verbena in the room and hands.
The atmosphere in the garden makes certain aspects of working more important than usually, for example as there are little ‘distractions’ from other things than the, often monotonous, work itself, other senses are being lived more intensively such as daily and natural sounds.

As a participatory researcher, I was weeding alone for a couple of hours. During this time, I focused my attention to the cars passing by on the other side of the wall, a sound of a bird of prey in the forest, airplanes flying over, being aware of not hearing music and voices, and how the wind blows through the trees.
A volunteer described her experience while working in the garden as being ‘close to nature’. Moreover, while working, and being in relation to for example nature, she mentions that she feels that a value of healing is being ‘produced’ while working. Thus, for the volunteer who is suffering from a burnout, being in relation to nature while working makes her feel as being able to both heal from a burnout while at the same time doing labour.

For Suzie, who is volunteering in the garden for five years now, the social relationship between the employers and volunteers is an important reason why she is enjoying her work here so much. Suzie came to De Ommuurde Tuin as she was advised by her ‘mentor’ to do voluntary work as she was suffering from depression. Before she worked for another farmer in Ede, but, she says: “the farmer was good and kind, but never said ‘thank you’ or showed other forms of gratitude to my [voluntary] work”. Because of the unsatisfying social contact, she had with the farmer in Ede, she
looked further and found De Ommuurde Tuin. Suzie mentions that she really enjoys working here and feels that there is a sense of real gratitude from the employers to the volunteers here as one of the payed employees always thanks her for being here. Even though Suzie lives in Ede and the garden is quite far, she gives high value to the social contacts in the garden and is happy to help once a week.

**Collective working**

The loose working schedule and structure gives the option to the workers to do their work in a communal setting or by themselves. Harvesting potatoes is an example of a communal activity where. The potato, which is under the soil, can be taken out of the ground by a spit fork and put in a black crate. Before taking out the potato from the soil, the ground must be made free from weeds that have been growing on the same plot as the potatoes.
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Even though it could be done with machinery, Femke, one of the employees, says “working communally and weeding and harvesting at same time is the best way to do it now.” In this sense, communal work experience becomes as another form of valuing labour that emphasizes collectivity over technical efficient labour.
Another collective labour act is planting of strawberry plants. Like all plants, strawberry plants need to be planted in a specific way. For strawberries, the planting happens in a variety of tasks. These tasks start with flattening and smoothening the soil for planting the strawberries. To make the harvest easier, the plants are planted in a straight, which a rope marks the line of planting. Thirdly, along the line, holes for the plants are being made with a spate and filled with fertilizer. Finally, the small strawberry plants are put in the hole. This round of tasks could be by machinery or in solitude. Nevertheless, working as a collective for planting strawberry plants, the monotonous and machine-like job becomes a shared and rhythmic experience.

A volunteer: “We work a bit, but doing it together, makes it go so much faster. We create a rhythm.”
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Break time

To break the daily work rhythm, the work in the garden is paused by three breaks. In general, the breaks take place on the same time, which are 10:30, 13:00 and 15:30. During all the breaks tea, coffee and water is provided by the garden. While during the two shorter breaks a cake is provided, during the lunch break all workers bring their own lunch with them. However, most workers in the garden have origins in The Netherlands, this does
not mean the lunches of the workers can be characterized by one type of food. There is a high variety of types of food people bring for lunch reflecting both their nationality as other factors such as class or occupation.
The diversity of food, for example ranging from Japanese food boxes to bread with apple syrup, shows the variety of workers in the garden. During the breaks, the diversity of workers is often topic of conversations that creates mutual insights in different national and non-national cultures.

One of the employers emphasizes that the variety of workers contributes to the work atmosphere in the garden: “There are about 10 volunteers working every week and about 3 a day but depends on the period of the year. It is so beautiful to see that so many people like to help. It also creates a ‘gezellige’ [cozy] atmosphere.”
Learning

Apart from the insights in the cultures of the workers in the garden, the workers also obtain a lot of insights in plant breeding and working. The employees obtained their horticulture knowledge over the years and actively share this with the (voluntary) workers and other interested people of De Ommuurde Tuin.

This makes labour in the garden not only a matter of productivity but also as a form of learning about plants in general. Moreover, because there is a greater understanding of the garden and its plants, a greater sense of attachment is nurtured that increases involvement with De Ommuurde Tuin.
Before starting a specific task in the garden, the employees explain, guide the volunteers through the work, and share knowledge about the plants and practices. Such as knowledge about harvesting courgetti flowers and learning about its diseases.
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These learning moments are not restricted to involvement of employers as the knowledge is passed on by the employers to the ‘students’ of who themselves become ‘teachers’ and pass on their knowledge to other ‘students’. Through this transmission the knowledge enlarges the feeling to understand and be ‘part of’ the garden.

One of the employees explains to a ‘student’ how to support the tomatoes plants with growing. This knowledge is directly passed on by her to another worker.
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**Personal values**

Next to learning, De Ommuurde Tuin facilitates a recognition of workers' personal and political values. For example, some of the workers in the garden value the garden for its small, organic, multicrop and agroecology based labour. Often these aspects are associated with a transformative form of agriculture and are integrated with in the garden and plants. For some of the workers, this makes De Ommuurde Tuin’s labour experience not only a productive one but also an activist one.

Femke is one of the workers who experiences her labour as an employee of the garden as an activist practice by being a farmer in The Netherlands.
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Before working in the garden, Femke studied biology. Nevertheless, she did not fancy do this her whole life. At some point Femke understood that western states can have a devastating effect on agricultural practices and farmers worldwide. Instead, she emphasized that through strengthening local agriculture in western states, more sustainable food and living practices worldwide can be created. This made Femke realize that she did not want to continue in academic world and/or other types of jobs. Instead, she felt that she can give right to change for a more equal world food through agriculture. Not only she sees agriculture to change worldwide inequalities, she understands working in the garden as an activist form of labour in our current society. Femke mentions that, in our current society, burnouts because of unhealthy labour seem to be extremely prevalent: “Society is sick and makes people sick”. One of the reasons she sees for this is that there is a loss of connection with nature and soils. “Especially in cities”, she says, “people are far away from their essentials, which are nature and growing food.”. Moreover, as “some people never touch sand, only pavement and the asphalt, they can even not be in connection to the ground” she is surprised that some “people and bodies are so strong that many seem to survive these types of circumstances and not all getting burn-outs”. Nevertheless, Femke sees labour in the garden as a healthy way to do labour that prevents and overcomes burnouts. A couple of years ago, Femke experience a burnout herself and felt strongly that she had to make a ‘downwards’ movement to overcome this, “I felt I needed to feel soil and the ground”. Thus, working in the garden and being active with agriculture is something that Femke sees to ‘cure’ herself and our society. This understanding made Femke strongly realize that working with plants and soils is something that is good for herself and the bigger world.
Like Femke, many volunteers mention that they can fulfill their needs in De Ommuurde Tuin. This makes the values of doing labour not just a productive one but creates a more diverse set of values.

For Ferdinand, working in the garden is not to contribute to a productive form of agriculture, instead he values his/the physical labour it requires. Since a couple of years Ferdinand is a volunteer in the garden for once a week for half a day. He is especially interested in working with the compost heap.
“When I first came here I asked for the most physical job, which was moving the compost heap once a week. I am retired and do this for physical exercise.” Ferdinand understands that there are different reasons and values people obtain from working in the garden: “Some here work here for ‘relaxation’ (ontspanning) while others, like me, do it for ‘intensification’ (inspanning).” and mentions this is a perfect example of a diverse economy “there are so many ways people profit here [in the garden]. Moreover, what is done here is both environmental as social sustainability. Karin is offering here a place for people for all their needs and is listened to - whatever their needs are. Some are not doing anything the whole day while other work hard, it all does not matter”. In general, Ferdinand enjoys working in the garden for his own reasons “it is me [Ferdinand] who profits, not the garden ha-ha. While my brother and brother-in law are both farmers, those who work with machines and so. They say I am exploiting myself, I do not agree as I gain a lot in the garden here, which may not be financially expressed but in other ways.”.
In this second part, I will focus on labour and non-human relationships. In De Ommuurde Tuin, non-human elements, such as plants, diseases, compost and working tools are essential for the existence of the horticulture business. However, all these elements can be understood as a resource that can generate an income, such as selling the harvest. Nevertheless, it also serves as a ‘resource’ that can generate other values than financial ones, for example cultivating plants that includes planting, weeding, harvesting, waste/yield, and non-plant related such as alternative living and varieties.

**Planting**

To grow plants, these must be planted. The act of planting is a start of a new plant that has potential to become a crop. A crop then is a product that can be grown and harvested extensively for profit or subsistence. When many
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Plants are planted in the same field, with the intention to become a crop, a plot of land acquires a certain value as a financial resource. Nevertheless, different plots of land and plants as such can have a diversity of values.

Aesthetics is a value that can be regarded as an important part of doing labour. One of the volunteers points out that the beauty of plants and garden as such makes the work more pleasurable for him. For Arjan, who works for four days a week in an (inside) office, the garden is important as it keeps the time working inside and outside in balance.
Arjan emphasizes the beauty of the small salad plants and understands for farming it is “essential” to have a relation to aesthetics. In De Ommuurde Tuin Arjan sees that there is a lot of value put in designing the garden to look beautiful, which makes doing labour here a more valued experience.
Weeding

When plants are planted, also other types of plants can come up. These so-called weeds, undesirable plants in a place, are in conventional organic farming often understood as one of the most serious threats to crop production. Therefore, weeding, the act of removing undesirable plants in a particular place, is seen as needed to sustain a high yield of crop production. Therefore, weeding is often regarded as one of the most important practices done in (organic) agriculture.

Nevertheless, the act of weeding not only provides financial values, weeding and weeds themselves can also give value in other ways. For example, as mentioned, weeding can act as a way of healing that supports rest and attention as a therapeutic treatment. Instead of weeding being only an act of financial profit, it can provide a healthy ‘profit’ to the weeder that gives value.
Aminah, one of the internship workers, says “everything I do here is meaningful. Even though I find weeding not nice, without the weeds it would be boring in the garden. Here [in De Ommuurde Tuin] weeding has a meaning to it. Because of this, weeding does not get boring”. In the large scale non-organic monocultural farms of her family in Indonesia she gets bored easily, however it’s different in De Ommuurde Tuin where the diversity of crops and practices creates a lot of value to her.
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While the plants could be more (easily) prevented from growing weeds by installing black plastic foil under the veggies to stop the growth of weeds, this is not done for various reasons and values. One reason is that when the foil gets warm by the sun, it loses microfibers that will go in the ground and pollute the soil. Another reason is that, aesthetically the black foil is not so much appreciated by the employees as they think the garden should have a more ‘natural’ and ‘green’ look without the black foil under the plants. Moreover, as mentioned before, weeding is seen as having an important role for contributing for rest, care and attention in the garden.
Weeds are also valued in culinary practices. Thus, the plants that are usually seen as undesirable, are regarded as nutritional and tasteful food. While working in the garden Karin, one of the employees, often mentions that many that weeds can be eaten, for example ‘knopkruid’ or ‘galinsoga’. One of the volunteers, Michiel, shared in the garden’s volunteer WhatsApp group, how he had prepared a meal with this weed and really enjoyed it. Sharing knowledge about the plants and possible nutritious values is important for the workers in the garden, which increases a connection and familiarity with plants in general. Nevertheless, weeds do not (yet) provide a lot of financial value.
Karin: “customers do not know about this [eating of weeds] and do want this in their bag because it is something they can also get from their own garden”.
Harvesting

When the plants have grown big enough, crops can be harvested. How a harvest is done is in relation to the specifics of the plant. To get the most resources from the plant, it seems often obvious how to do this – by taking most of the financial valuable part(s) of the plant at the right time. Nevertheless, there are other values that can influence a harvest, for example a financial one where, unlike weeding and planting, harvesting is highly depending on an ‘imagined’ picky customer and market. Because of this, (food) aesthetics for the consumer crops are of importance. In De Ommuurde Tuin it is frequently mentioned that the courgetti vegetable should not get too many scratches from the spiky parts of the plant, as many customers would complain about the not ‘right’ looking vegetable. Next to aesthetics of the vegetables, the time of harvest should align with the consumption pattern of the customers. This means that the plant should be harvested when most people want to buy or eat the crop. For
example, most types of rye plants are needed to be harvested in early August, still as many people are on holidays then, De Ommuurde Tuin decided to grow a rye variety that can be harvested later in the season to content more costumers.

Next to financial values in harvesting, there exist other, non-financial values that are part of a harvest as well. As an example, some types of harvests can incite a historical element in the harvest. In De Ommuurde Tuin this occurs through growing, and harvesting, old variety St. Jansrogge. Rye. This rye can be used for compost for soil and fodder for animals. In the garden, Karin says that the rye in the garden is processed for customers to “experience what the quality of taste of this pure rye is that also can serve as a more local replacement to rice”.

Not only the tops of the rye plant are used, also the leftover stems are being used in the garden by the beekeeper to make natural (historical) bee hives from. Where in winter a (payed) course by the beekeeper is offered to learn
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how to make bee hives from rye, thus, growing and harvesting old variety St. Jansrogge can be understood as a way for the garden to earn money. At same time, the rye serves to maintain traditional practices by for example bee hive knitting and the act of the harvest.

Kaya, one of the volunteers, says she really enjoys harvesting the rye as “it gives me a feeling of doing something “ancient”. Karin adds to this: “it is something that so many people do and have done in the past”.

With a hand scythe, the bottoms of the plant are cut of which the top parts, the so called ‘ears, are cut of and put in a box to be further cultivated.
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Waste/yield

The process of cultivating plants to crops – from weeding a field, to planting plants, and harvesting the crop – creates a lot of organic waste. Often, organic waste is considered a “by-product of farming” instead of yield. However, by ‘doing’ something with the (organic) waste, I call this ‘wasting’ here, one can get a higher economic value from the total crop cultivation - including planting, weeding, harvesting, and wasting. Thus, what is waste and when is waste(ing) part of ‘crop cultivation’ accordingly can acquire a yield, is a thin line.

In De Ommuurde Tuin, waste and yield often overlap as waste is not left ‘to waste’ but can be regarded as (non-financial) profit for humans and non-humans. This profit is being accumulated in six different stages.
In the first stage of waste/yield when harvesting the grown crops, whatever organic matter is being produced and good for the vegetable boxes will go there. Second, what is left from the harvest will go to local shops and restaurants. The third part of the processed, non-sellable but edible yield will be used to cater the terrace. The, fourth, and last option for edible yield, is to use it as a gift to the volunteers. In the fifth stage of the waste/yield process, when the food is not edible by humans anymore but is contributing to the needs of non-humans. The now ‘waste’ is brought to pigs owned by a college farmer. When also the pigs cannot eat the organic matter anymore, the sixth and final stage, it will be brought to one of the two compost piles in the garden. Also, these compost heaps contribute to human and non-human values. One compost pile is for the creation of manure for the next planting season, while the other pile is the so called ‘snake compost’. This heap is kept warm by the organic matter for snakes to live in, and which crawl around to serve as a natural pesticide to mice to prevent these from nibbling on the vegetables in the garden.
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The business

De Ommuurde Tuin is officially a business that functions along the needs of the market based on a model of supply and demand. However, the garden provides more than financial values. Beyond the workers’ labour, the garden also assists an ‘alternative’ way of living/doing for both workers, visitors and customers. A distinct and tangible example of these in the garden are the compost toilet and opening of the cake that is usually being eaten in breaks.
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The toilet in the garden is not connected to a septic system, unlike conventional toilets, it has a hole above which a bucket is placed to catch the excrement of the toilet’s user. “It is quite a different thing, a compost toilet, it may be discouraging for some”.

Inez: “How delicate should I open this [the break cake]?” Femke: “Not, we are not delicate here. We do things in farmer style”.
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Also distinct for the Ommuurde Tuin is its small land but great variety of plants. While the more than 400 varieties boost yields and prevent diseases or a failed harvest, the great variety and rarity of plants is also a reason for many customers to visit the garden. Although my focus in this research was not the customers, the following captions portrays the preference for varieties by customers:

While I am planting salads, a person comes up to me and asks if she can get a salad as she does not like the ones that are being sold in the shop now. Unfortunately, this is not possible as these salads are reserved for the veggies bag. The woman says she prefers this type of salad a lot and will not buy the other salads then as these are not tasty enough.
A unique variety that is grown in the garden is the ‘electric daisy’. This is a small flower that is mostly used to flavor dishes because of its strong tingling sensation. Femke tells me a story that once a Brazilian woman came along, she was so happy to see the daisy. She took a big bunch of the flowers with her and said she has been looking all over Netherlands but never found it until now in De Ommuurde Tuin.
In the garden at least 5 different types of beans are being grown. For example, a 1960’s variety the so called “cobra”. Karin explains that this variety is not grown anymore for commercial purposes as it is a climbing plant, which is not easy to pick in mechanized agriculture. Nevertheless, these types are of great rarity and are of interest for customers and historical purposes.
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The large variety of different sorts not only attracts individual households that are interested in special and local sorts. Also specialized shops and restaurants value varieties in the garden. At least once a week the chef of “De Nieuwe Winkel” from Nijmegen visits the garden to get his order and see what is growing and happening in the garden at that moment. Based on these visits, the restaurant takes specific requests for herbs and plants, and adapts its seasonal menu. The beer brewery “Nevel” from Nijmegen is another customer that is specifically interested in the garden’s local and special herbs. At their request, De Ommuurde Tuin grows absintalsem (herb that is used to make absinthe) for the brewery.
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Not only is there a great plant variety, other types of biodiversity are important next to a well-functioning ecosystem, it influences the work experience in the garden.

While I am weeding at the Swiss chard I am getting ‘distracted’ by the number of butterflies and dragon flies that are flying around the garden. I stop the weeding and walk around the garden to make pictures. By the sound of my camera, Judith, one of the volunteers, who is weeding around the beetroots notices my picture making and says, “When you are working like this you almost forget to take pictures as it so beautiful”.

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an illustrated ethnography

While all living things - humans and non-humans - are important for the economy of the garden, also non-living things play a valuable role in the economy of De Ommuurde Tuin. Non-living things such as a roofed working spaces, tools and other instruments are in connection to the functioning of the economy and provides practical possibilities in the garden.

One such a possibility is the barn where all the tools, machines and other instruments are being stored. Before the barn was built two years ago, most of the tools were kept in the small kitchen/shed and under a small roof. Marijke, one of the employees, found it very difficult to handle as all the time people with dirty hands/shoes came in a place where she had to cook. She is very happy the barn is there now. The barn gives her the possibility to feel freer to work and cook in the shed. Because of this, the terrace is much bigger than before, through which the garden can welcome more people that would like to visit the small cafe.
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While there are many different types of values produced in the garden as outlined above, many of the values go beyond the walls. Although the garden is a capitalist business, nevertheless, the intention is to create an alternative form of food production and distribution. De Ommuurde Tuin’s main philosophy seeks to move from large scale agrobusiness and instead create a small agricultural business that can feed a small community with organic and local products. To do this, the central way the garden cultivates and distributes their yield is through vegetable boxes to which people can subscribe to in the form of Community Supported Agriculture (CSA). In a CSA the customers subscribe to the harvest that allows the producer and consumer to share the risks of farming. Now, 90 people can be fed by the garden. The bags, provided in sizes s/m/l/xl, work as follows: people pay per whole season in advance, which creates the possibility for the farmer to cultivate the crops and purchase tools. In that way, they share the responsibility for a good harvest – which makes this transaction based on trust. Thus,
core principle of the garden is to create a small community where the garden serves as a place that can feed this group. Next to this, the farmer has most power in the gardens’ food chain as they decide what is going in the bags and thus what will be consumed. Still, as clients are quite critical, the aesthetics of the crops (still) matter, for example the courgetti may not have too many ‘mis’ looks or preferably there are not too many ‘unfamiliar’ vegetables like a yellow beet in the bag. Nevertheless, the bags are popular and now there is even a waiting list for them, even though the amount of subscription bags has increased over the years - two years ago 70 people could join, last year 80 and now 90 people are able to subscribe to the bags.

For many workers, both employees and volunteers, another way of doing agriculture and supply chains is supported. Working through a system of CSA makes it possible for them to envision to this and contribute to a transforming agricultural system.
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Conclusion

The visualizations and descriptions of the daily practices showed how an economy exists of many different relationships, that together make De Ommuurde Tuin. Next to this, however the garden is a business, not only financial values are being created. Values such as care, community, silence, sounds, diversity, and learning seem to be as essential for the existence of the garden’s economy. Important here is that this variety of values add to the provision of labour for the garden’s economy. Moreover, this booklet has centralized how relationships among humans and non-humans are central for an economy.

As there exists a wide variety of daily economic practices and values in the garden, the Ommuurde Tuin’s economy fits in the diverse economy framework of Gibson-Graham (2006). In this booklet I highlighted the total of what makes the economy in de Ommuurde Tuin ‘work’ and looks like, in specific regarding to labour.

The pictures in this booklet form an
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ethnography of an economy that emphasizes the recognition of already existing alternative ways of economy and living within a capitalist system. At the same time, this illustrated ethnography offers an imagination for supporting a diverse economic framework, that possible lead to a further emergence of likewise initiatives that serve an economy for a good life.

Thus, I have illustrated how daily economic practices in De Ommuurde Tuin inhabit a myriad of values in labour. This case study showed that it is important to not only to consider financial values when these are valorized, but that there are many values – including humans and non-humans - that are equally important for the existence of an economy.
Research report

“Values and relationships in the diverse economy of De Ommuurde Tuin: an illustrated ethnography”

Inez Dekker

December 2019

MSc minor thesis Sociology of Development

Wageningen University & Research

Oona Morrow (Rural Sociology)
This image made in August 2019 by a volunteer of the garden shows me working on my ethnography while being in the rye field in De Ommuurde Tuin. This image is a visual representation of the relationships and values that constitute the diverse economy of the Ommuurde Tuin. The image shows a moment just after rye harvest where a variety of human and non-human elements that contributed to this are present. These elements include for example bundles of rye, harvesting tools, a labourer (that is me), and an outside environment. The relationships between these, and other, elements will be examined in this research report. I will highlight how diverse values are embodied and shape De Ommuurde Tuin's economy.
Values and relationships in the diverse economy of De Ommuurde Tuin: an illustrated ethnography

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December 19, 2019

MSc minor thesis sociology of development

Dr. Oona Morrow (Rural Sociology)
Summary

In the last decades a growing number of alternative food and care initiatives emerged in North-America and Europe. Due to uncertain situations within current neoliberal economic systems such as the recent recession, ongoing outsourcing and environmental depletion, and alienation from production (Morgan and Kuch, 2015), these initiatives offer an alternative to an existing neoliberal model. Moreover, they inspire to create a more diverse pallet of economies alongside dominant economic and social systems. Important to mark here is that their decisions and actions are not merely led by dominant economic models, but intentionally done to create worlds that are environmentally and socially just (Gibson-Graham et al., 2013). Often these initiatives fit in an alternative economic framework where a diverse, interdependent, rich and prolific disarray of ‘good life’ are central for their economies. One of such frameworks is the diverse economic research framework based on the work of Gibson-Graham (2008) where the economy is one based on a myriad of human and non-human social relationships that go beyond capitalist economic models.

While there seems to be an emerging interest for practices within alternative economic frameworks, such as in community supported agriculture (CSA) or care farms, there is an absence of how human and non-human relationships create values that form an (diverse) economy. Moreover, in conventional economic thinking, practices occurring outside current economic system remain often unrecognized and unseen, though, these are essential for an economy to exist. Therefore, I aim to strengthen a network of diverse economic initiatives focus on initiatives located in the Dutch province Gelderland. To do this, I created a visual illustration that highlights the diverse practices and human and non-human relationships in the organic horticulture business located in Gelderland called ‘De Ommuurde Tuin’.

I add to the scholarship of diverse economies by describing and showing the processes that produce a diversity of values in De Ommuurde Tuin’s daily economic practices. These processes are not only led by relationships among humans but include human and non-human relationships as well. To do this, I not only use a written form, but foremost I used visual and sensory research methods that highlights relationships between humans-humans and humans-nonhumans. By putting forward the senses, the visual and emotional, this research concerns the processes in daily economic practices through a study of an economy that is lived and experienced. Moreover, I make alternative and diverse frameworks of economy/is more visible for a wider public through presenting my outcomes in a visual manner in booklet form. This approach tries to display and recognize economic alternatives, which helps to connect and build a coherent and powerful social movement for another economy (Miller, 2008; Gibson-Graham, 2008; Gibson-Graham and Miller, 2015).
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Bibliography
Chapter 1. Introduction

In the last decades a growing number of alternative food and care initiatives emerged in North-America and Europe. Due to uncertain situations within current neoliberal economic systems such as the recent recession, ongoing outsourcing and environmental depletion, and alienation from production (Morgan and Kuch, 2015) they offer an alternative to an existing neoliberal model. Moreover, these initiatives inspire to create a more diverse pallet of economies alongside dominant economic and social systems. Important to mark here is that the initiatives’ decisions and actions are not merely lead by dominant economic models, but intentionally done to create worlds that are environmentally and socially just (Gibson-Graham et al., 2013). Often these initiatives fit in an alternative economic framework where a diverse, interdependent, rich and prolific disarray of ‘good life’ are central for its economy. One of such frameworks is the diverse economic research framework based on the work of Gibson-Graham (2008). This framework understands the economy as one that is based on a myriad of human and non-human social relationships that go beyond a capitalist understanding of “wage labour, market exchange of commodities, and capitalist enterprise” (Gibson-Graham, 2006:70). Gibson-Graham argue that in conventional economic thinking only a small part – a top of the iceberg - is represented to what the economy is. Yet, the multiplicity of an economy that includes a variety of sites and actors such as alternative and non-capitalist transactions, e.g. alternative currencies and gift giving, labour, e.g. cooperatives and volunteering, and enterprises, e.g. social responsibility firms and communal ownerships, remain often unspecified economic assets of local economies.

While there seems to be an emerging interest for practices within alternative economic frameworks, such as in community supported agriculture (CSA) or care farms, there is an absence of how human and non-human relationships create values that form an (diverse) economy. Moreover, in conventional economic thinking, practices occurring outside current economic system remain often unrecognized and unseen, though, these are essential for an economy to exist. Therefore, I aim to strengthen a network of diverse economic initiatives focus on initiatives located in the Dutch province Gelderland. To do this, I created a visual illustration that highlights the diverse practices and human and non-human relationships in the organic horticulture initiative located in Gelderland called ‘De Ommuurde Tuin’.

Gibson-Graham’s diverse economic framework calls for an extensive change and understanding for different types of doing and living. Following Gibson-Graham (2006), such a politics of change can be supported by bringing “into visibility the great variety of noncapitalist practices that languish on the margins of economic representation” (xxxii). This stance starts from the understanding that change is not something that is being invented but is already being
practiced in diverse economic initiatives such as De Ommuurde Tuin. Over the years, the work of Gibson-Graham has inspired a growing number of scholars focusing on a diverse economic framework and incorporation of diverse economic elements in economies. While being legally a horticultural business, De Ommuurde Tuin’s not only produces capitalist values, but also values - such as care, community, and traditions - that are not governed by dominant economic systems. While there is quite some research on how diverse economies look like, there is little research on how a diversity of values are cultivated and done in practice. Moreover, diverse economies are not often presented or researched through a visual approach. Nevertheless, such a method can contribute to an understanding of a diverse economies in diverse ways and can add to a greater visibility of such practices.

I add to the scholarship of diverse economies by describing and showing the processes that produce a diversity of values in De Ommuurde Tuin’s daily economic practices. To do this, I focus on the intangible economic, personal and social values that emerge in the processes in daily economic practices. These processes are not only based on relationships among humans but include human and non-human relationships as well. This research contributes to a further emergence of economies that include a diversity of values through showing De Ommuurde Tuin’s vitality that may lead to a further emergence of likewise initiatives.

To do this I not only use a written form, but foremost I used visual and sensory research methods that highlights relationships between humans-humans and humans-nonhumans. By putting forward the senses, the visual and emotional, this research concerns the processes in daily economic practices through a study of an economy that is lived and experienced. Such a methodology helps to create a better understanding of a diverse economy and the economic values that cultivate its practices. Accepting all views to be partial and irrational (Haraway, 1988), I am open to describe a world of difference (Deleuze and Guattri, 1987) that goes beyond thinking in (economic) models through embracing unclarity and disarray. Moreover, I make alternative and diverse frameworks of economy/ies more visible for a wider public through presenting my outcomes in a visual manner in booklet form. This approach tries to display and recognize economic alternatives, which helps to connect and build a coherent and powerful social movement for another economy (Miller, 2008; Gibson-Graham, 2008; Gibson-Graham and Miller, 2015).

The results of my research are represented in a different form from this report, which you can find in the attached illustrative booklet. In this report I will first present my literature review examining more in depth a diverse economic framework and the role of values and relationships in an economy. After that I describe my analytic framework where I elaborate on process philosophy as a main approach to understand an economy beyond capitalistic values.
Thirdly, I will introduce the methodologic approach and research methods. As a final part of this report a general analysis and conclusion, based on my results in the booklet, of my research is given.
Chapter 2. Literature review

Central in this research are the diverse values in daily economic practices that are being produced alongside dominant economic and social systems in De Ommuurde Tuin. There exists a variety of understandings what these diverse values in daily economic practices are consisting of. In literature on alternative economies, one claim is that daily economic practices are based on values such as reciprocity, cooperation, care and nature experience (Laville, 2010; Dash, 2016). Other scholars name economic justice, sustainability, and democratic processes as markers for diverse economic practices (Van den Berk-Clark and Pyles, 2012). Moreover, in some of the literature the alternative economic initiatives are understood as movements towards cooperation, participation and practices of inclusion as a political response (Healy et al., 2018). Nevertheless, this literature leaves out what the so called ‘basics’ of the economy are. This ‘basics’ of the economy are generally understood as how we can share a good life with each other and what a good life is for one another (Bezemer, 2016), which highlights the relational aspect of economic foundations. To get a better understanding how relational processes in daily economic practices are and create values in an economy, the relationships that create these values in daily economic practices should be understood (Dash, 2016; Miller, 2009; Barad, 2003).

2.1. Diverse economies framework

In diverse economic theory, the dominant representation of all economic practices as always interlinked to capitalism, as the same as, the opposite to, a complement of, or contained within capitalism, which Gibson-Graham (1996) is called capitalocentrism. For Gibson-Graham (1996), such thinking is strongly prevalent in classic Marxist thinking, which they critique on the non-relational understanding of the economy. In Gibson-Graham’s further work they use their critical analysis to discuss possibilities for reframing an understanding of the economy beyond a “capitalocentric” one. Instead, they emphasize the recognition of an economy that is already diverse. Through reframing the economy as we know it beyond a capitalistic viewpoint, Gibson-Graham (2006) explain this in a more ‘tangible’ or visual way they use the iceberg as a metaphor. The iceberg represents a diverse economies viewpoint where the economy is more than what is visual in a capitalocentric such as the composition of “wage labor, market exchange of commodities, and capitalist enterprise” (2006: 70). Instead, as put forward by Gibson-Graham (2006), the economy exists of yet (unrecognized) multiplicit sites and actors where there both exists alternative and non-capitalist transactions, e.g. alternative currencies and gift giving, labour, e.g. cooperatives and volunteering, and enterprises, e.g. social responsibility firms and communal ownerships.
Apart from these anthropocentric ways to emphasize a diverse economy framework, Gibson-Graham and Miller (2016) and Gibson et al. (2015) put their attention to the inclusion of non-anthropocentric elements to rethink what economy is and to find alternative ways for lived relationships between economies, ecologies and built environments. Gibson-Graham and Miller (2016) and Gibson et al. (2015) advocate for reframing the economy as one that is imbedded in its (natural) environment. Moreover, they argue that focusing on the shaping and intra-actions between humans and non-humans “will provide living laboratories for further experimentation and model development” (Gibson et al., 2015: 713) for a diverse economic understanding. This approach focuses on the “embracement [of] an openness to surprise” (Gibson et al., 2015: 714) in an alternative economy and “to light [these diverse economies] to make them more real and more credible as objects of policy and activism” (Gibson-Graham, 2008). Following, it is essential to consider all the practices that exist in diverse economies, that exposes their differences (Sharp, Friesen & Lewis, 2015) and highlights the subjective experiences of economic practices.

2.2 Values and relationships

Most schools of economic thought contain a theory of value at the heart of their framework. In classic economic thinking, the study of economy is one that focuses on how people use resources to provide goods and services in the face of variable supply and demand. Here values' meaning is based on economic exchange as a 'measure' of the good or service’s benefits for an economic agent. Still, there exists a wide variety of how classical economics

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Table 1: The Diverse Economies Framework (Gibson-Graham et al., 2013)
understands ways how value is being 'measured', for example, for Marx (1867) economic practices consist of a sum of value in use, value and exchange value. Then, in classical liberal thought, values are the outcome of a costs and benefits analysis of production. While these ways of understanding economic practices, production and consumption, may be true, these only focus on the capitalistic outcomes of economic practices. Moreover, these leave out the values that are being created in and between the economic practices and relationships.

In the Dutch magazine Groene Amsterdammer of May 8, 2019 the economist Dirk Bezemer discusses the dominant presence of neoclassical economic theories and argues this results in a limited general understanding of the economy and values. Moreover, in "de economie draait niet om geld" [the economy is not about money] Bezemer et al. (2015), like other economic sociologists (e.g. Granovetter, 1985; Polanyi, 1944), emphasizes the economy is not solely represented through measuring money flows or other calculable values. Instead, Bezemer et al. (2015) and others understand that the economy can be understood grasped by looking at relationships in which the economy is embedded in. Thus, to understand an economy and the values there are being created, be it diverse, one should focus on the intrinsic relationships in natural and social environment and materials that exist within the economy. This means that not only I understand value production as the product of any particular location, but as socially determined (Federici, 2004) and as an outcome of their entanglements with (non-human) matter and meaning.

While most economic thinking is still a capitalist one, it remains a challenge, following Harvey (1982), to find out "how value is put upon things [such as], processes, and even human beings". Thus, a capitalocentric understanding of economy makes it not easily observable what process making of the values, beyond capitalist ones, are. Nevertheless, Ruivenkamp (2019) is trying to understand economic values in diverse economies through emphasizing the socio-spatiality of these values. He argues that economic relations and practices are always intra-active and intra-dynamic in a space without pre-defined boundaries. In more practical sense, this means that for example food does not 'happen' in one place, but is distributed and practiced along social, economic relations and in (em)bodiments. When analyzing values this means that these relations should be considered when one wants to understand how values come into play.

Therefore, to understand how values are cultivated in daily economic practices, one should look at how these practices are being processed throughout places and bodies, instead of only studying where it is being 'produced' or 'consumed'. Nevertheless, if one can 'measure' these non-calculable values, for example by sensory ethnographic methods, it remains the question if these values can be quantifiable to use these for support for other initiatives without 'capitalizing' these.
3. Theoretical framework

My literature review has shown how there is an upcoming interest for understanding the economy in a different way than only from a capitalist viewpoint, both for recreating or finding alternative to it. The diverse economic framework as proposed by Gibson-Graham (2006) reveals that there is no need to ‘develop’ an alternative economy. Instead, they describe that an other-than capitalist economy already exists in the yet (unrecognized) multiplicit sites and actors in alternative and non-capitalist relationships. Moreover, these so called ‘diverse economies’ work beyond capitalist notions of value based on calculability. The literature has shown that there exists a general understanding of the economy as one that is not just based on the valorization or optimization of means of production but based on the relationships that are intrinsic to economic values. Nevertheless, because of the non-calculability of many daily economic practices, it seems extremely complex to create a general typology of these practices. Yet, to overcome this research gap in the diverse economy framework, I emphasize the economy as one that exists of diverse calculable and incalculable economic practices that are essential for a socially and environmentally just economy. Therefore, my research examines what processes constitute economic values in the daily economic practices in De Ommuurde Tuin through looking at processes between humans, non-humans and everything in between. This will support a reframing of an economy beyond a classic capitalocentric one and increases the visibility of a diverse economic practice that empowers likewise initiatives politically and emotionally.

To do this, I will build on the diverse economic framework by using process philosophy (Manning, 2013) to highlight what processes constitute economic values in daily economic practices in De Ommuurde Tuin. Understanding economic practices not as one-dimensional but as processes that consist of human and non-human relationships, the starting point of my research is that there is “always more than one” (Manning, 2013). Including diverse economic framework in my theoretical approach, I examine what values constitute a diverse economy and its economic practices adding a process philosophical account. Examining economic practices not as static or calculable, I include its values as central to understand the processes in diverse economies. Thus, I will not begin by looking at the beginning or ends, for example by looking at what the quantifiable production and consumption are, instead, my research focus on the coming-together of values through its relationships.

3.1 Process philosophy and diverse economy

Understanding economic values as a web of different relationships that come-together, I focus on what these relations consist of. Following the non-binary, materialist, and process-
oriented thoughts from process philosophy and new materialism (Manning, 2013; Barad, 2003), I examine the Ommuurde Tuin’s economy as a process based on an infinity of relationships that create a certain value. In the work of Manning, processes emerge through different relationships coming together, that result in so called ‘collectivities’. Manning emphasizes how, apart from the most common language in words, the world is one of co-emergences where relations make the world the world that we experience. Thus, following Manning, a practice or its value does not stand on itself, but consists of multiplicit relationships that are the manifestation of the value or practice itself (Whitehead, 1929).

Adding this approach to a diverse economic framework creates a broader and new perspectives on economic practices and its values through which a more inclusive and diverse understanding of an economy can be examined. To see values in economic practices as actively ‘embodied’ in their economic practices, I try to overcome (bodily) dichotomies and stress overlaps between the physical and experiences, irrationality, and the personal (Braidotti, 2003). Therefore, my research relates to Haraway's” (1990, 220) question “Why should our bodies end at the skin?”, to come to an understanding how values of economic practices come into being. Studying the every-day practices and its values, definitions important for life and living can be grasped. Brian Massumi (Massumi, 2013: xvi) does not sees these daily economic practices as happening “in the subject [of study]” or as “just personal” but as in processes that are “in and of the world”. Thus, understanding diverse economies as processes “in and of the world”, I examine daily economic practices and its values as embodied and diverse.

As process philosophy is not specifically talking about the importance of non-human beings in the coming-togethers of processes such as in economies. Nevertheless, as was written above, to rethink what economy is this one should be imbedded in its (natural) environment (Gibson-Graham and Miller, 2016; Gibson et al., 2015). Therefore, I argue for a more-than-human focus to understand values as “an interspecies relationship” (Tsing, 2016) where non-humans are put forward as agential actors in economic processes. Thus, by including a more-than-human approach to process philosophy, I emphasize processes in daily economic practices as containing human and non-human relationships.
4. Research questions

To politically and emotionally empower alternative economic initiatives that foster a transformation towards a more social and environmental inclusive society and economy, in my research I build on the work of Gibson-Graham's framework of diverse economies (2006; 2016). By examining the processes between humans, non-humans and everything in between I use process philosophy (Manning, 2013) to strengthen economic thinking beyond a classic capitalist and binary one.

In specific, I have examined values that shape the economic practices in De Ommuurde Tuin, therefore, my question is:

*What values shape the economic practices in De Ommuurde Tuin?*

The sub-questions that should help me to find an answer to this question are:

*What diverse economies are taking place at De Ommuurde Tuin?*

This sub-research question puts forward the diverse economies in De Ommuurde Tuin. In the empirical part of my thesis I examine how there exist a myriad of values exist that form the alternative and non-capitalist processes of the De Ommuurde Tuin’s economy.

*What relationships shape values in the diverse economies in De Ommuurde Tuin?*

My second sub-research question focus specifically on the relationships that shape values. De Ommuurde Tuin serves as an example of how a myriad of processes involving relationships between humans-humans and humans - non-humans create values beyond financial ones.
5. Methodology and methods

This thesis starts from an understanding that values in the economy are intrinsically diverse and rooted in relationships where there are no ‘fixed’ indicators in these relationships. Thus, it is very difficult, if not impossible, to model values and economies without thinking in binaries. Instead, for the methodology of this thesis, I go beyond binary thinking by embracing unclarity within economic relationships through an examination of processes. This means that I will not offer an outcome that is generalizable or calculable, instead, from a process philosophical viewpoint (Manning, 2013; Massumi, 2013; Barad, 2003), I emphasize the uniqueness and differences in values and economic relationships.

To do this, next to ethnographies through text and conversations, photography is a central method to examine the economic relationships where I apply visual based methods to read for differences to see the world (Haraway, 1991; Rose, 2007). While this method is used for many different types of social research (e.g. Emmison, 2000; Sweet and Ortiz Escalante, 2015; Houts et al., 2006), it is not often used to understand economic relationships. Nevertheless, I state that photography can support an understanding of the economy as based on multiple relationships that “blur divisions of social–material, near–far and structure–agency” (Anderson and McFarlane, 2011: p.124). As will be described below, photography will be used to “enliven” diverse economic relationships that offers “possibilities of encounter rather than construct representative ideal types” (Vaninni, 2015: 15).

Adding photography to my ethnographic research helps to create description of diverse economies that does not seek to understand past experiences - but can guide future ones. Thus, in my ethnographic work I do not ‘simply’ gather data but try to create new perceptions and attention about the relationships that shape diverse economies (Ingold, 2013). Specifically, I try to engage with “the directness of the sensory and affective elements of emplaced experience” (Pink, 2009) by considering desires, feelings and meanings as a substantial to understand the relationships for production of values within a diverse economy.

Emphasizing my fieldwork in De Ommuurde Tuin as a ‘thought in the act’ (Manning and Massumi, 2014), I deliberately frame my research as one that starts reasoning from its case and where my outcomes are intra-linked to actors’ sense, perspectives and embodiments. This understanding draws upon new ideas of an intra-subjectivity of practices (Barad, 2003) between humans and non-humans, which Appadurai calls (1986:2): “the intercalibration of the biographies of persons and things”. By using visual research methods, I utilize the practices in De Ommuurde Tuin through deliberately analyze its economic values in the form of images and descriptions in an illustrated ethnography.
In the next passage, I will elaborate on this specific method in my research. Fundamental for this method is the involvement of nonhumans and analyses of practices to describe the values and relationships that shape the diverse economies in De Ommuurde Tuin.

5.2 Illustrated ethnography

In my research I draw upon process philosophy’s notions that sees non-binary and difference relationships as crucial to understand how (economic) values are being shaped. To methodological entangle the non ‘fixed' indicators in these relationships and the diverse economies in De Ommuurde Tuin I approached this through an illustrated ethnographic recording.

The illustrated ethnography as presented in this thesis is built on conventional anthropological visual methods based on the example of Kano and Segawa 1956’s book “Segawa’s Illustrated Ethnography of Indigenous Formosan People the Bunun”. In this book, pictures of the community of the Formosan, the indigenous peoples of Taiwan, are accompanied with written descriptions. The images in the book show how the Formosan live in their community, by a visual photographed portrayal of their houses, clothes, food, tools, and daily living practices. Likewise, to Kano and Segawa’s illustrated ethnography, I focus on the material and non-human aspects of the daily practices in De Ommuurde Tuin by photographing and describing these aspects. For example, I portray people weeding, having conversations, and interacting with garden tools. These visual portrayals show diverse practices in the garden and, moreover, show how these activities and relationships are integral to the garden's economy. However, this method runs the high risk to become a tool for exoticizing and objectifying the ‘other’ (Spivak, 1988; Said, 1978) as well as (re)producing hierarchies along for example class, race, gender, sexuality (Haraway, 1991). Nevertheless, as I am aware of this, I state that the research data I acquire should not be considered as an ‘object’ but emphasized as a ‘subject’ of the research participants, researcher, and reader.

To explore the economic values that shape a diverse economy in De Ommuurde Tuin, I approach my research field by starting to question 'show me your daily practices' both as explicit request for humans and non-humans and from an analytic perspective. Building on this, I looked at how my research participants, including human and non-humans, guided my attention following this question. Resulting from this, I was able to develop skills to explore the relationships and practices in De Ommuurde Tuin myself and exemplify the diverse economy of De Ommuurde Tuin in an illustrative ethnography.

To emphasize non-human relationships in my research, I include Pitt’s (2015) methodologic “diversity of modes”. This method allows the ethnographer to be engaged and guided by the research participants - being it humans and non-humans. Resulting, my research
becomes directly involved with humans and non-humans in their doings and encourages the guides – humans and nonhumans – to share their expertise. I used the three techniques by Pitt (2015) to come to the creation of an illustrated ethnography, which reveals a diversity of values in the Ommuurde Tuin's economic practices. The three techniques I applied are, in order of practice:

- **Learning**: I looked at how humans and non-humans guided my attention and through them developed skills to explore De Ommuurde Tuin in the way they do.
- **Experiencing**: Along the research participants I worked and be with them in the garden.
- **Visualizing**: Based on learning and experiencing I applied visual methods to, in association with the research participants, create a visual portrayal of the diverse economy through an illustrated ethnography.

Additionally, the use of visual images allows me to inspire other diverse economies initiatives to emerge or develop, which following Susan Sontag’s argument (1977), is fostered through photography as a tool for empowerment and visibility. Following Sontag (1977), the moment of shooting a picture the resulting photography actually “confirms” a certain reality and experience. This means that the “event” of making the picture, makes the moment of passing the claw not unforgotten but makes this event “a kind of immortal” (Sontag, 1977 p.11). Next to justifying, photographs can create connectedness whereby also the picture taking itself is an event in itself. Here the resulting picture of the event of shooting it, enlarges the consciousness of the portrayed practice. Thus, through deliberately portraying the practices in de Ommuurde Tuin as fitting in the diverse economy framework, this will strengthen the existence of the (diverse) economic values within the practices.

Thus, by making a portrayal of the alternative economies through visual illustration of the practices, I present an understanding of diverse economies values through emphasizing its relationships. Moreover, through the diversity of modes approach while ‘doing’ the illustrative ethnography, I demonstrated an embodied understanding of these economic values that are intra-dependent to materiality and practices (Pink, 2011: 602; Barad, 2003; Manning, 2013).

5.3 My Case: De Ommuurde Tuin

My research took place in De Ommuurde Tuin 'The Walled Garden', a historical horticulture business located in the forest between Wageningen and Renkum in the Netherlands. The garden provides among other CSA-based vegetable bags, renting out the space of the garden, lunchroom, educational activities and care-work facilities. Since 1999 the land of
the garden was leased Esther, who is still coordinating most of the activities and tasks in and around the garden. The land on which the garden is located is owned by the neighbouring Zinzia Zorggroep, Verpleeghuis Oranje Nassau’s Oord, a nursing home.

As pre-fieldwork I visited the Ommuurde Tuin on July 1st, 2019. I had a talk with Esther about her business. It became obvious that it is not easy to run the garden and we spoke about several issues. In the following passage I will outline these for the sake of creating a context of my research and a diverse economic framework before presenting the results of my research.

For the lease of the land, Esther experiences that the landowners, who remained unexplained until now, put quite some pressure and control on the land – she understands this as “they still own it of course”. Nevertheless, already for twenty years she has this kind of ‘ownership’ and she feels that a strong sense of insecurity about the future of her income and land comes with it – “I work so hard to make this land beautiful, but what will happen in the future with it?” Moreover, in the future she would like to hand over the land, so she knows it will be treated in a well way and continued. Esther does not get any subsidies or other form of monetary support for the Ommuurde Tuin. Esther sees that it is not just the municipality who decided over these subsidies or support for such initiatives, but it is bigger like for example the province of Gelderland and the national parliament.

The Ommuurde Tuin, next to Esther who owns the business, employs two people. Furthermore, there are about thirty volunteers working for the garden. Esther finds that she cannot pay her employees a very decent income right now. Soon this income will have to be raised, as the governments wants freelancers to earn at least 16 euros an hour. Esther says that she can only pay half and the other half these freelancers should try to get a declaration for as she has no possibility to pay this higher wage. She would really like to pay everybody a decent wage but is still not able to do this unfortunately. Other costs are for example the costs that come from the organic certification foundation Skal. Being able to certify another or new plan, this costs a lot of money – “If I want to plant some new asperges, then I have to pay so much for this”.

Payment seems to be a big concern for Esther and her business. Her business partners, like for example the landowners and the organic certification foundation SKAL say to Esther that she has to grow and expand in order to pay for all of this, for example to make a bigger restaurant, Esther responds to this by saying: “but this takes away the sphere and rest/peace of the place of course, it will change what is here at the moment”. Also, Esther argues that how people work here is different than on bigger farms, including organic ones. There the work is monotonous and often highly mechanized – Esther understands that they must do this to keep their heads above the water otherwise the investments will never be returned.

Nevertheless, Esther feels very strongly about the garden and wants to do things
differently here, through creating peace and aesthetics. Her drive to start this business started 20 years ago. She worked at the university but was so unhappy with the way how research was always put away when done “nothing was being done or applied”. She wanted to do something different through making direct impact for making the world good and beautiful: starting a farm herself. “This [de Ommuurd De Tuin] is an example of a beautiful piece of land.”
6. Conclusion

In this research I questioned what values shape the economic practices in De Ommuurde Tuin. I focused on diverse economies following Gibson-Graham (2006) and the relationships that shape the economic practices in this Dutch organic horticulture business. Starting from a process philosophic account, this research centralizes relationships between humans and non-humans as central to understand economic values and its practices. By emphasizing that there is “always more than one”, a diversity of economic practices has been presented in the ethnographic illustrative booklet.

My research supports a valorization of a diversity of economic practices and create a greater visibility of these among Dutch and in specific Gelderland located initiatives. As this thesis aims to strengthen a network of diverse economic initiatives, the presented illustrative ethnography highlights the diverse practices and human and non-human relationships in the organic horticulture initiative located in Gelderland called ‘De Ommuurde Tuin’. Thus, my research emphasizes a diversity of economic values such as care, diversity, and tradition. Next to this, my objective is to also emphasize the perceptibility of these for a wider public, where my fieldwork in De Ommuurde Tuin serves as an example of a diverse economic initiative.

In the literature on diverse economies, a focus on the so called ‘basics’ of the economy is proposed. This is generally understood as how to share a good life with each other and what a good life is for one another (Bezemer, 2016). One way to do this is through the diverse economic framework by Gibson-Graham (2008) that emphasizes an economy beyond a capitalist one. Next to this, economic researchers often point out the importance of including relationships and a diversity of economic values when examining daily economic practices. Nevertheless, research often seems ‘stuck’ with the non-calculability of such economic relationships and values (Ruivenkamp, 2019).

To overcome this knowledge gap, I examined what processes constitute values in De Ommuurde Tuin’s economic practices. Thus, instead of focusing on the relationships and values themselves, I combined process philosophy with a more-than-human approach to look at the processes between humans, non-humans and everything in between that creates a diverse economy. Such an approach highlights an understanding of the world as one based on relationships that constitute values beyond a binary and fixed experience of these.

In the result section I presented a photographic journey through the daily economic practices in De Ommuurde Tuin. Conforming the literature, I discovered a wide variety and diversity of values that contribute in important ways to the ‘basics’ of an economy. Next to this, the importance of relationships within a (diverse) economy, specifically the role of non-humans, shown that the economy is more than the composition of capitalist “wage labor, market
exchange of commodities, and enterprise" (2006: 70). My research added to the existing literature that an economy is "always more than one" (Manning, 2013) that emphasizes how a diversity of economic values and practices are integral and constantly becoming in an economy. Moreover, by using the method and presenting form of an illustrative ethnographic booklet, I have gone beyond written and scientific presentations of a diverse economy. Instead, my research, including an illustrative ethnography, has the potential to reach non-academic audiences where likewise initiatives politically and emotionally can be empowered and foster a greater transformation towards a more social and environmental inclusive society and economy.

For the methodological approach of my research I have gone beyond thinking in model and embraced the unclarity within economic relationships. This means that I have not offered an outcome that is generalizable, but, from a process philosophical viewpoint (Manning, 2013; Massumi, 2013; Barad, 2003), I emphasized the uniqueness and differences in economic relationships. Using illustrative ethnography as an active way to show the diverse practices in the garden and, moreover, expose how the myriad of activities and relationships are integral to the garden’s economy. Thus, by making a portrayal of the alternative economies through visual illustration of the daily economic practices, I present an understanding of diverse economies values through emphasizing an embodied understanding of these economic values that are in process and intra-dependent to the existence of a diverse economy.

My results have been presented in the illustrated ethnography where I made a rough division and presentation based on relationships between humans, non-humans, and the business. I specifically showed how labour is both as a central factor for an economy. These choices of presentation and analyses makes my research emphasize how labour not only functions as a factor of production made available through wages. Instead, foremost, my research highlights how labour is exceeded through a variety of human and non-human values and relationships essential for a business’ economy. Especially in the case of De Ommuurde Tuin, labour can be seen to be of great interest as most of the labour is done without a financial transaction. Therefore, as shown, other and non-financial transactions of labour are central.

In the first part of my results where I examine the human relationships that displayed a diversity of economic values in De Ommuurde Tuin. I have reflected upon the daily economic practices that included humans’ relationships, clothing, working, breaks, learning, and personal values. For clothing, however the group of workers is of course diverse, the similarity of worn outfits while working showed an identity of homogeneity. The practical values of the clothes represent both a productive function, thus at the same time, represent a kind of (shared) culture of working and recognition as a value. Moreover, wearing certain clothes is a sign of
“embodying” certain symbolic meaning, which is always a communal production (Adam & Galinsky, 2012; Entwistle, 2000; Hansen, 2004). Thus, even though there seems to instability and changes in the (human) labour in the garden, there exists a diversity of relationships that can create an economy.

Nevertheless this ‘worn’ stability, the jobs and workplace are frequently changing with the time slot, day, and week. Because of this, working in the garden is highly diverse and can create a great diversity of relationships with humans and non-humans. The varied relationships that are constantly being made in the garden make laboring in the garden not just an experience of producing and/or earning a wage, but one that goes beyond capitalistic values. Of importance are the (positive) external elements that come with working in the garden. For example, an important value in the garden are deeper conversations that come with doing jobs that are more monotonous and done in a silent place. Nevertheless, many of the workers mentioned to enjoy these kinds of jobs as it can create a sense of community through having deeper conversations. Moreover, doing participatory research I experienced how working in the garden revealed a diversity values that added to the atmosphere in the garden. This increased the benefit or added to the non-monetary ‘wage’ I received by working there. As sounds can act to ‘pay’ labour, the social relationships between the employers and volunteers are mentioned to be of importance when working in the garden. Emphasizing the role of gratitude for the offered labour, shows how a capitalist understanding of labour transactions is limited. Also, for doing the labour, human relationships are an important element for a labour contribution. As was shown in the results, working as a collective for example planting strawberry plants or harvesting potatoes, the labour obtains an extra dimension where an interplay of the practices creates a rhythmic labour experience. Thus, in my research it is shown how doing collaborative work, underscores the value of labour practices not so much for its production but as a shared labour rhythm. As labour is done collaboratively, also the knowledge in the garden is held communally and spread by the employers and other workers where the workers also learn about for example the work itself and the plants they are working with. This makes labour not just for productivity for the garden, but also adds to the individual knowledge for the workers themselves thus emphasizing a diverse labour relation. Moreover, working in the garden not only strengthens ‘external’ knowledge but also adheres to the ‘internal’ knowledge and care for the workers themselves. As many workers experience or experienced other types of labour than the one in De Ommuurde Tuin, working in the garden offers is something different types of needs can be fulfilled or discovered in De Ommuurde Tuin. Thus, working in the garden not ‘only’ offers labour and all the different values that can be associated as described above, but can also complete other non-labour related needs such as relaxation and intensification.
In the second part of my illustrated ethnography I focused on non-human relationships within the diverse economy in De Ommuurde Tuin. Here I structured my analyses by examining the process of growing plants that include planting, weeding, harvesting, and waste/yield. As shown, I centralize a diversity of values that derive from labour relationships from non-human elements, such as plants, diseases, compost and working tools. Moreover, I understand these types of relationships as essential for the existence of the horticulture business and creation of an economy. For planting, my research has shown how doing labour is related to the aesthetics of non-humans, which makes visible how beauty and culture are values that are essential in a (diverse) economy. Of importance for labour is not so much if the act itself has a high (cultural) meaning, as has the example of weeding has shown. While weeding is often not regarded as a highly valued labour practice, it contains a diversity of values that are important for De Ommuurde Tuin’s business. For example, weeding can have a positive impact on (mental) health, feeling active, and culinary explorations. While harvesting usually contains a strong focus on the capitalist value it creates, my research has shown how there are a myriad of values attached to the labour of weeding. Not only from the consumer side there is are a diversity of values in the harvest practice, such as the 'looks' of the crop when buying, also the workers can comply values of the harvest. As was shown, each crop that is being harvested following its specific practice and some of them can evoke a sense of historical value. In the process of planting and harvesting a great bulk of waste is being produced. Nevertheless, as described, there is a thin line between waste and yield. Important here is that yield is not only yield for human and/or capitalist means but can also add to values that include for example non-humans or soil fertility. The six stages of waste/yield processes showed that there exists a large variety of economies and relationships in the cultivation of plants. As the first three stages have direct financial output through a capitalist market, the fourth stage in the process can be understood as a gift in a nonmarket exchange. The other two stages involve non-humans directly and humans indirectly whereby the most important value to emerge is the creation of a bigger biodiversity beyond market exchanges.

In general, as described in the final part of my results, the business De Ommuurde Tuin offers a place where ways of living beyond capitalist or alternative economic activities can be practiced. This encounter with ‘alternative living’ is part of a visit or working in the garden but does not include a capitalist ‘reward’ but through incalculable economic values such as gratitude, experience, or exploration. Whereas varieties of plants contain a diversity of values, for example aesthetics, taste, and remembrance/culture. Similar, for example building an extra shed and creating more (physical) space adds to values such as creation of (non-physical) possibilities and opportunities that lead to a feeling of more greater freedom. Lastly, the main source of income of the garden, are through vegetable boxes to which people can subscribe to in
the form of Community Supported Agriculture (CSA). While this socioeconomic system creates capitalist value for De Ommuurde Tuin, at the same time this system is a channel that support the philosophy of the garden through its connections with material and non-living elements that work together with the market.

To conclude, values that shape the economic practices in De Ommuurde Tuin are a diverse, interdependent, rich and prolific disarray of a ‘good life’. Moreover, I emphasized how the relationships between humans and non-humans constitute a diverse economy that is not static but is constant processes between these. Moreover, as these processes are both product of any location as socially determined (Federici, 2004), these values cannot be understood as but are part of ‘collectivities’ (Manning, 2013) that are embodied (Haraway, 1988; 1990). Moreover, the daily economic practices in De Ommuurde Tuin cover a wide variety of values that emphasize a non-binary understanding of economies. Thus, while the garden is a capitalist business in its core, values such as aesthetics, taste, history, or possibilities are essential for the existence of the economy of De Ommuurde Tuin. Next to this, as labour is highly important and precarious resource for this case/economy, my examination clearly showed that not only capitalist transactions such as wage add to labour contributions. Instead, I argue that a wide variety of non-binary economic values that overlap the physical and experiences, irrationality, and the personal (Braidotti, 2003) should be considered to understand what values shape economic practices.

Next to this, by creating an illustrative ethnography, my experiences as an ethnographer with humans and non-humans in De Ommuurde Tuin are visually exposed. Not only gave this rise to new and process-oriented understandings of an economy, it also stresses the indefinite appearance of what an economy is and, in this way, can foster a transformation towards a more social and environmental inclusive society and economy. Moreover, although my researcher has been a case specific exploration, it enabled to examine economic processes and values in more detail to reveal a bigger picture of a wider economic structures.
Bibliography


Bàrberi, P. (Paolo) (2002) "Weed management in organic agriculture: are we addressing the right issues?." Weed research 42.3: 177-193.


Gamfeldt, L. (Lars), Hillebrand, H. (Helmut) and Jonsson, P. (Per) (2008). "Multiple functions increase the importance of biodiversity for overall ecosystem functioning." Ecology 89.5: 1223-1231.


https://www.nwo.nl/onderzoek-en-resultaten/onderzoeksprojecten/i/21/28021.html


