# Caring with the Non-Human: Reciprocity in market gardening

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### **Abstract**

The Anthropocene draws our attention to damaging relations we have with other planet beings. Taking that as a starting point, this article combines the cycle of care and an immersion at a market garden. Complementing theory and practices, two researchers from Wageningen University dialogue about how in soil care, there is complementarity and tension between caring for/with/about plants, livelihoods, people, and biodiversity. From a number of conversations this dialogue developed into a work of creative writing with critical reflections on the data gathered through participant observation. We shed light on questions about the relationality of caring with soil in practice, reciprocity between humans, non-humans and entanglement of care practices. The dialogue format allows us to discuss a broader range of facets around soil care. It is clear from the empirical material that soil care is never only about gardening practices. So, in line with our relational approach we let ourselves discuss various topics. Moreover, the dialogue format allows us to express ourselves in our own words, again staying closer to the empirical reality. This article contributes to the existing literature by (i) providing an example of a productive market garden that allows for the flourishing of all nonhuman beings; (ii) further developing the cycle of care theory by applying it to a real case; and finally, (iii) exploring various considerations around reciprocity in caring with soil.

#### **Keywords**:

cycle of care; market gardening; soil care; relationality; reciprocity

#### Introduction

This article is a dialogue between Michiel van de Pavert and Adriana Ressiore. We are both PhD candidates at Wageningen University. We meet regularly in the GEOS research project<sup>i</sup>, in which we bring together philosophical and empirical research on global negotiations of knowledge and social-environmental challenges. Michiel just came back from six months of fieldwork at a market garden and Adriana has delved deeply into theories of care. In this conversation we look at the empirical material through a lens of care and we explore the care theories with the freshly obtained data. In this dialogue we illustrate the wider web of connections around soil care practices. Soil care is not just about soil, but also plants, livelihoods, people, and biodiversity. This article is part of a special issue on the Anthropocene. Our contribution to discussions on the Anthropocene is to describe how human practices are always interrelated with the world. It feels encouraging to realise how soil care practices can have a positive impact on not just the soil, but on so many more objects of care.

Michiel spent six months working at TERRA<sup>ii</sup>, a flourishing market garden in Luxembourg. We produced fruit and vegetables for 230 families on only 1.5 hectares. The vegetables were grown in between the fruit trees and the garden was surrounded by a forest, which gave such a natural vibe to it. We often got visitors such as deer, rabbits, foxes, crows, bees, and so much more. TERRA is a CSA, which stands for community-supported agriculture. That essentially means that 230 members pay a subscription upfront and pick up their basket with fruit and vegetables every week. As a participant observer Michiel spent five days a week working in the garden, learning about the practices they used and how they cared for their soil. Market gardening is typically small-scale farming where manual tools are used to plant, weed, and harvest. Michiel's project paid special attention to the affective dimension of soil care.

Adriana has been working a lot on theories of care. Drawing inspiration from Joan Tronto (2013), Maria Puig de la Bellacasa (2015; 2017), Marian Barnes (2012), Angela Moriggi and colleagues (2020a; 2020b; 2021), Annemarie Mol (2008, 2010), among others. She works with a concept of more-than-human care (Ressiore, 2022) in her PhD, which is about care relations between humans and non-humans. To reach this concept, she was highly interested and influenced by the cycle of care. This framework was created by Moriggi and colleagues (2020a) and took inspiration from Tronto's five stages in the process of care - present on *Caring Democracies* (2013: 22-23).

The cycle is a reiterative process that includes five stages: *caring about* relates to attentiveness; *caring for* is about responsibility; *care giving* 

connects to competence; *care receiving* is responsiveness; and *caring with* about reciprocity. A framework that is very rich to reflect with practices. It helps to think about different affective dimensions, and it includes the non-humans.

#### **Discussions**

**Adriana Ressiore**: Hello Michiel, how are you? I hear you are just back from your first fieldwork. How incredible. How was it?

**Michiel van de Pavert**: Hey Adriana, I really enjoyed working in the field and learning about soil care. And what have you been up to?

**Adriana**: I've been working with the cycle of care, have you read about it? The cycle has five stages as you can see in this image (**Figure 1**).

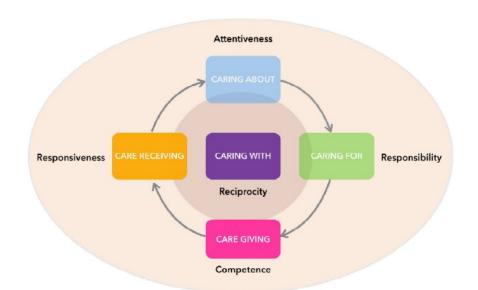


Figure 1: Stages of care inspired by Tronto (2013) in Moriggi (2021: 85)

Adriana: The cycle of care has inspired my theoretical framework and helped me reflect on my relationship with my research and the actors involved on it. Although it has been very rich for my reflections, I wonder how these phases play on daily-life. I also wonder how each of these stages would be enacted and in different 'real-life' practices... Were you able to identify care-full relations and practices at TERRA?

**Michiel**: Yes, we took great care of the soil. I went to TERRA to see how they can have such a productive system and at the same time build soil health. In the business plan written just before starting the farm, they put as the first goal to increase fertility and carbon content in the soil. So, building soil health has been a primary objective for TERRA since day one.

**Adriana**: Ah, do you think that could then fit into the *caring for* stages of the framework? Caring for is about designing and planning care. It is about making your intentions explicit. Who and what will you *care for*?

**Michiel**: Yes. Ideally, the intentions are not to disturb the soil, feed it, protect it, and to let it recover.

**Adriana**: Caring for can be understood as a response-ability and not necessarily an obligation. Which is the ability to respond and take responsibility for the needs identified in everyday practices. It is about revising your intentions also when care is being given.

**Michiel**: Then, what's the difference between caring for and caring about?

Adriana: Caring about is a stage in which we are attentive, or we notice possible 'unmet needs around us'. This does not necessarily need to be with someone or something in our proximity, it can happen between distant others (Moriggi, 2021: 84). It can often be sparked by a sense of mutuality (or, possibly, empathy). What do you think the core team at TERRA is attentive to?

**Michiel**: I suppose the core team must have noticed the unmet needs of soils around the world. I'm sure they had a concern for soil degradation, although they didn't talk so much about the problems in this world. They're more interested in realising solutions.

**Adriana**: So, this attentiveness to soil degradation, that sparked their interest to have non-degrading practices would be one of the things they care about. What about *caring for*, was it only focused on soil?

**Michiel**: Soil care was, and still is, a primary intention, but early into the fieldwork I realised that soil care cannot be the only objective at a viable market garden. The core team at TERRA told me that soon after starting the farm they realised that there is a need to create a productive system.

**Adriana**: Hmm... And did you see tensions between productivity and time pressure vs. aiming to be care-full about the soil practices?

**Michiel**: Yes. In the middle of the growing season the next crop needed to go in as quickly as possible. After harvesting one crop we had to remove the remaining stalks of the plants as well as the weeds, including their root systems. In my opinion, pulling out the root systems disturbed the top layer of the soil too much. It broke up fungal networks and sped up the decomposition of the organic matter in the soil. So, the need to produce plentiful baskets meant disturbing the soil (in my opinion) too much. As one person at TERRA put it: 'the need to produce is kind of limiting the time that we can extend to caring for the systems more broadly'.

Adriana: I find this super interesting. It brings us to the *care giving* stage, which is about how practices are implemented. Exactly like the ones you just mentioned about pulling out the plants... *Care giving* relates to both the competence, in other words, the skills and readiness to perform the care work, as well as a set of moral and ethical principles that guides the care work (Moriggi et al., 2020; Tronto, 2013). But I think it would be interesting if we focus on the tensions that are created when we have good intentions (*caring for*), but when trying to put them in practice, we encounter difficulties (*care giving*).

Michiel: But there isn't always a tension between soil care and productivity. This is what makes TERRA such an interesting case. They manage to optimise care in a highly productive system. The way we used compost is a great example of this. After having cleared a field of weeds, we left compost on top of the soil. We let the soil life incorporate the organic matter and convert the nutrients into plant-available form. Leaving the compost on top also protected the soil against intense sunshine and heavy rain. Moreover, as we didn't incorporate the compost into the soil, we didn't cause any disturbance. Distributing compost was a quick job. It was only a matter of walking up and down with a wheelbarrow four times. It would take ten minutes, plus maybe five minutes to spread the compost equally over the beds.

Adriana: Okay, so it's ideal for the soil and it doesn't take too much time, but you say 'optimise' care... that sounds odd to me. Wouldn't that somehow also transform care into a buzzword and/or subordinate it to the neoliberal imperative of increasing efficiency? Or wouldn't it legitimize certain degrading activities? We have seen such processes in many neoliberal food production and global soil erosion cases.

By saying buzzword, I am thinking that many words often seem very powerful in politics and in a mainstream audience. However, when used a lot, and having a capacity to embrace a multitude of possible meanings, and they can become vague (**Cornwall and Eade, 2010**). When I say to legitimize degrading activities, it becomes the classic development example. In the name of 'progress' and 'development' so much harm has been done, especially in the Global South (**Escobar, 1995**).

**Michiel**: I see... Perhaps we can say that the objective of having a productive market garden is also a form of care. It is about making sure that these gardeners receive a decent income. The way I see productivity it is also about producing healthy food for the members. So, these are two forms of caring for humans that are important for the core team at TERRA. Still, I see the issue with saying productivity, and I suppose that optimization also connotes with the neoliberal discourse. What word would you suggest is better suited?

**Adriana**: I am not sure yet... TERRA takes many care aspects into account, is it really that harmonious?

**Michiel**: Not really. As I mentioned before during the growing season, we ended up disturbing the soil as we had to pull out weeds. I asked the core team what we could do to reduce the weed pressure. They all said that the problem is with the weed seeds that fly in from the surroundings. For example, in the photo (**Figure 2**) you can see how the carrots are enclosed by tall standing weeds that are about to spread their seeds.



Figure 2: Weeds surrounding a field of carrots. Photograph from author's personal collection

If it was my garden, I would have eliminated all those weeds, but for the core team at TERRA that is not a desirable option. For them, the wild growth is a valuable source of nectar and habitat for many insects. Over the course of my fieldwork, I noticed that I started to say wild growth, rather than weeds. The term weeds has a negative connotation. What is implied is that what is growing is undesirable. More and more I started talking about wild growth, recognizing its added value for the natural world. It took me a while to believe that insects are truly valued, but the team kept bringing up the argument consistently. Now I see TERRA as a productive space where they try to improve soil health and give space for wildlife.

**Adriana**: Oh, I see. Wildlife and biodiversity also receive attention and are cared for... How do you see these forms of care relating to each other?

**Michiel**: So far, we have identified three domains that receive care. Firstly, soil care. Secondly, *care for* humans by producing healthy vegetables for the members and by making decent livelihoods for the gardeners. Thirdly, biodiversity care, because they allow for a rich assemblage of species. They're attentive to the insects providing them with food and habitat. By creating a plural environment, they answer to the problem of biodiversity loss. We can identify more domains that receive care. For example, plants receive plenty of care. This overlaps with soil care, because as they told me: a healthy soil results in nutritious crops. Plant care also overlaps with livelihood care because a healthy crop results in an abundant harvest.

Adriana: Wow, it seems to me then that a better word might be entanglement. In livelihood-soil-plant-people-biodiversity care there is complementarity and tension. For example, soil care is not always opposed to livelihood care. They can come together, for example in economic activities of market gardening... It seems that so far the cycle of care helped us to identify the concerns and intentions. With *care giving* we found that different domains of care can overlap or conflict. The following two stages of the cycle of care framework draw our attention to the relational character of care.... Particularly, these two stages of *care receiving* and *caring with* that includes an aspect of feedback and reciprocity.

Michiel: Are they the ones closing the cycle?

Adriana: Well, the cycle is a reiterative process, I am not sure if it ever ends. The way Moriggi et al. (2020a) see it is that *care receiving* is linked to responsiveness. The subject of care responds to the care that is being received. Thus, this is when the quality and effectiveness of the care received is expressed. In this process, new needs could be identified, and the cycle can restart or continue (Moriggi et al., 2020a: 4-5).

**Michiel**: Right, so when the gardeners observe improvements in crop growth, they know their soil care is having beneficial effects.

Adriana: I guess it is interesting to go beyond the beneficial effects to humans (avoiding an anthropocentric perspective). So, it is interesting to think from the perspective of the soil and the living beings on it. By identifying soil and wildlife needs, they seem to be aiming to do that. That is when, in my opinion, the most interesting part of the cycle comes in: caring with. In taking the perspective of the non-humans it helps to realize that we are always part of that entanglement. So far, you've talked about how humans care for the soil and wildlife, but for me it makes no sense to think of care as a human-only activity. In that sense, I share Tronto's (2013) definition of care as a life sustaining web of activities. In care practices the non-humans are always somehow present. If you think of healthcare, to

function, it needs machinery, energy, raw material, food, medicines, all of them come from non-human sources to allow the care process to happen.

Caring with is about thinking from the non-human or from the soil perspective because we know that the soil cannot respond verbally. Due to this lack of verbal communication, we are not always aware of the asymmetrical power relations.

**Michiel**: I suppose that in their day-to-day activities, the core team at TERRA has little time to pay attention to such asymmetries. They have to manage the volunteers and plan what to harvest and when to plant. They basically have to ensure that the business runs smoothly. So, the asymmetry can escape their attention.

Adriana: Thus, to deal with the issue of asymmetries between humans and non-humans, *caring with* is rooted in the principle of reciprocity (Moriggi et al., 2020a: 4). In the sense that there is a solidary exchange in the cycle that is not always symmetrical or proportional but is based on reciprocity.

**Michiel**: In a reciprocal relationship there is an exchange in which both parties have some gain. So, would you say that in a caring relationship there is always some mutual benefit?

Adriana: That would be a bit of an instrumental form of looking at care. As well as there are asymmetries on the power relations there are also unequal 'benefits', but we should aim for a relation in which you often try to put yourself in the shoes of the other. You will still be you, but trying to look at the question from another position. I believe that thinking with, living with (Turnhout et al., 2012), caring with allows us to listen, we pay attention, we build patience to develop care-full practices that aim to sustain lives, whether they're human or non-human, in the best way possible.

**Michiel**: So, in the end, reciprocity is about paying attention and having patience?

Adriana: I would say it is a big part of it. Caring with (reciprocity) brings up a few essential roles in the care practice: (a) it permeates and complements all stages; (b) it brings the non-human and opens the possibility for them to also 'sit at the table'; (c) it reminds us to pay attention; and, (d) it brings up the need for patience - essential when we think of the different timing that plants or soil need and the time pressure that we humans are often under.

Sometimes I think that the Anthropocene is a result of or the era of carelessness (**Puig de la Bellacasa, 2018**). It brought to us climate change, biodiversity loss, absurd inequalities, marginalization, poverty, and hunger. However, it also comes with many of us trying to hold hands and

doing all that is in our power to bring change. One great example of that is all the people engaged in care-full practices, which seems to me that is what TERRA has been doing as well. How would you say that reciprocity looks like at TERRA? How does it work in practice between humans and non-humans?

Michiel: At TERRA they encourage the flourishing of all beings. Considering the care cycle, I would say they practice with reciprocal gardener-soil relations, identifying the needs of the soil becomes part of a larger effort to take the perspective of the non-humans. They no longer see the nonhuman as a distant 'other'. The soil at TERRA is not a background on which they grow vegetables. Rather, it is full of living beings that can potentially help with the production of healthy food. Moreover, the people at TERRA learnt to have more patience. Having patience is important in soil care. When I asked, the people at TERRA explained that they have observed improvements over the last eight years. The soil is darker, which means that it contains more organic matter. The vegetable plants are bigger and stronger. Moreover, the weeds they have now are much easier to pull out. To them that suggests that the soil is healthier. Personally, I was also very impressed with the amount of creatures moving around on the soil surface. Mostly worms, small spiders, and ants. It gives the impression that a lot more is going on underneath the surface. When the gardeners decide to try a new practice, they are not immediately going to be able to observe improvements in soil health. This requires patience. Perhaps even more so, because the soil cannot provide feedback on the care received in the same way as humans can.

Adriana: This seems like a great note to finish on. The care cycle invites us to be aware of the other (these can be humans and non-humans), and by doing so, we can become another self. And, by becoming, and transforming, we enable new practices, thoughts and projects that shine light into the dark roads of the Anthropocene.

#### Conclusions

In this dialogue we discussed soil care at TERRA a market garden, using the cycle of care (**Tronto, 2013**; **Moriggi 2021**: **85**). Since before the founding of TERRA, the core team set the intention to *care for* the soil. Soon into the first year they realized that to continue caring for the soil, the business had to work financially. So, another important intention became to produce enough to be able to harvest plentiful baskets. The need to plant the next crop as soon as possible meant that in terms of *care giving* soil care was at times somewhat limited. However, there is not always a tension between care and productivity. The way we worked with compost is an example of soil care that can be achieved in a productive way. So, the fast pace of productivity is not necessarily at odds with soil care. An opportunity to

further reduce the workload would be to eliminate all the weeds surrounding the growing beds. That would mean less work and less soil disturbance from weeding. However, the core team values having habitat for insects. This shows the complementarity and tension in livelihood-soil-plant-people-biodiversity care. One of our contributions to the cycle of care is showing that care-receiving is never singular. In any care relation there are always multiple recipients that need to be taken into account.

In this entanglement, we highlight the relational character of the process between the caregivers and the care receivers. In care receiving, the nonhuman should be able to give feedback on the quality of the care. However, non-human care receivers cannot verbally respond to the care given, which is one of the issues that caring with comes to address. Central for caring with is reciprocity, which does not exist without asymmetrical power relations as well as it brings up the patience required in human nonhuman relations. In taking the perspectives of the non-humans we realize that usually humans have more power and control in caring relations. A complexity of *caring with* is that it permeates the entire cycle of care. Through the process of writing the second half of this article we learnt that is can be difficult to pinpoint exactly what is reciprocal about caring relations. Rather than thinking about how the nonhuman responds to care, perhaps we should be thinking about what conditions we create for nonhuman beings to respond (Moriggi, 2021). We suggest to scholars working on care to think through what is reciprocal about the care relations that they study.

One of the tensions faced in the dialogue was also the fact that the cycle of care theory is often great, cohesive and tends to have many answers for many questions. However, when put in the real case, we were challenged to go beyond the theory, to question it. We learned and re-learned and sometimes transformed our perspectives and views. The process of working with theory and the 'real-life' case, involved constant change and adaptation (Cooper, 2014: 4). In the end, we agreed that reciprocity seemed essential to careful practices, however seeing, expressing and explaining it in daily activities is much more challenging than abstractly talking about it. Theorizing and academically discussing care interactions between humans and non-humans is messy, but essential. We learnt and concluded that care and reciprocity with the soil has the power to teach (Moriggi et al., 2020a; Moriggi, 2021), to question, and transform both practices and theories.

#### **Further Research**

The cycle of care enabled us to think through what is being cared for and how. Some important questions remain. One regards the issue of motivation. How do people stay motivated to continue caring over time?

The issue of motivation came up at TERRA and it is important that market gardeners continue their caring work. Another question that remains open is on the place that care receives in everyday discourse. Michiel will explore these questions in his dissertation. At various points in this dialogue, it is suggested that in order for us to care well we need to slow down. However, the case of TERRA shows that many forms of care can be achieved with only minimal ways of slowing down. So, when exactly is there a need for slowing down and when can care be part of a productive system?

For Adriana, questions around caring with the non-human are still lingering. For example, how to act when the soil perspective (on what itself would consider ideal) is not clear? How do we build fruitful reciprocal relations with nonhuman beings? Finally, what methods allow us to further understand the non-human perspective? These will be further explored in her future investigations.

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After a master's in International Development Studies at Wageningen University, Michiel is now conducting a PhD on soil care in market gardening. How does caring with soil work in practice? How can we think more holistically about the affective dimension of soil care? Based on prolonged ethnographic engagements for two seasons now I have been able to feel the life regenerating processes. I also zoom out to see soil care in the wider context of land (un)availability. With creative non-fiction I engage readers affectively in the soil-centred stories that hopefully inspire eco-positive mindset shifts for transformative change.



Adriana Ressiore Campodonio PhD research is based at Wageningen University. Currently she works on the conceptual and practical potentials of more-than-human care. She performs a multi-scale analysis - local, regional, and national cases in her home country, Brazil to understand how more-than-human care potentials can improve decision-making for local biodiversity. The research starts from the premise that it is essential to bring marginalized human and non-human perspectives to decision-making processes. To explore these potentials art-based methods, participatoryaction research and feminist approaches ground her research. Adriana is graduated in International Relations, has MA in Artic Studies and MA in International Development Studies.



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## **Endnotes**

<sup>&</sup>lt;sup>i</sup> GEOS stands for Global Epistemologies and Ontologies Research Project. See <a href="https://www.geos-project.org/">https://www.geos-project.org/</a>. The project is also active on Twitter as <a href="mailto:open-projectGeos">open-projectGeos</a>.

<sup>&</sup>lt;sup>ii</sup> TERRA stands for Transition and Education for Resilient and Regenerative Agriculture. See <a href="https://www.terra-coop.lu/">https://www.terra-coop.lu/</a>