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Title: Intra-Acting Food Citizenship in Community-Supported Agriculture in Finland

Year: 2023

Version: Published version

Please cite the original version:

Turunen, A., Aro, R., & Huttunen, S. (2023). Intra-Acting Food Citizenship in Community-Supported Agriculture in Finland. Journal of Agricultural and Environmental Ethics, 36, Article 15. https://doi.org/10.1007/s10806-023-09910-0

Journal of Agricultural and Environmental Ethics (2023) 36:15
https://doi.org/10.1007/s10806-023-09910-0

ARTICLES

Intra-Acting Food Citizenship in Community-Supported Agriculture in Finland

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Accepted: 13 June 2023

Abstract
Citizens are called upon to become active participants in creating a more sustainable food system. As food citizens, people participate in defining and constructing their food systems according to their needs and values. In food policies, the concept of food citizenship is often left undefined or with reference only to individual activities. In the food citizenship literature, the role of nonhuman agency in constituting food citizenship needs more examination. Here we investigate food citizenship activities in a citizen-led community-supported agriculture group and explore the role of materiality in constituting food citizenship. We ask (1) what is the role of material-discursive arrangements in community-supported agriculture activities, and (2) how does materiality constitute food citizenship? We analyze semi-structured interviews, as well as observation and visual material, using qualitative content analysis. Our findings indicate that materialities, such as the field, time, and body, play a central role in community-supported agriculture activities. With materialities, food citizenship is understood as collective and active doing, aiming to change the food system. Instead of endorsing food citizenship as a human trait or status, we claim that it is more productive to regard it as a phenomenon, produced in intra-action with(in) material-discursive arrangements. Acknowledging nonhuman agency emphasizes the political, collective, and responsible nature of citizenship as well as the power relations behind the constitution of citizenship. We conclude that in food policies more attention should be paid to collective ways of civic participation and to the materiality of becoming a food citizen.

Keywords Citizenship · Community-supported agriculture · Food citizenship · Intra-action · Nonhuman agency

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Published online: 24 June 2023

Introduction

European and Finnish policies recommend a shift from food productivism and consumerism to active food citizenship, for example, through community-supported agriculture (CSA), in the transition to sustainable food systems (EECS, 2017; MAF, 2017; Finnish Government, 2019). In spite of an obvious aspiration to involve citizens, exactly who ought to "become active food citizens" or how the "shift to food citizenship" should happen remains unclear (see EECS, 2017). In food policies, the concept of food citizenship is often undefined or refers to improving individuals' knowledge or changing consumer choices (see MAF, 2017, 4). Yet this does not constitute food citizenship. This article is motivated by the need for a better conception of food citizenship and how this can be achieved.

Historically and legally citizenship has primarily centered on human agency, with few exceptions. The Western understanding of citizenship typically encompasses specific political rights, responsibilities, and a connection to a particular human community[1]. However, many indigenous philosophies have a longstanding tradition of recognizing nonhuman agency, resulting in the granting of legal rights to nonhumans (Celermajer et al., 2021). For instance, New Zealand has acknowledged the Whanganui River as a legal person since 2014 (Hutchison, 2014). Certain research traditions, such as critical eco-feminism, attribute the ecological crisis to Western human-nature dualism (Plumwood, 2004). Consequently, avoiding anthropocentric narratives becomes crucial in seeking solutions to this crisis. In the context of environmental citizenship, scholars have engaged in debates about the contributions of nonhuman entities to the concept of citizenship, as discussed by Huttunen et al. (2020). However, the role of materiality and nonhumans in constituting food citizenship requires more attention (Gómez-Benito & Lozano, 2014; Huttunen et al., 2020).

To avoid positioning humans above the rest of the natural world and seeing citizenship as an exclusively human prerogative, the post-human standpoint could serve as a useful ontological tool (Fox & Alldred, 2020a, b). The importance of materiality in the food system is obvious. In farming, for instance, material aspects (e.g., soil) operate with social, cultural, and psychological aspects (e.g., food traditions) and collectively form more-than-human entanglements with shared agency (Herman, 2016). While conceding the natural limits and that farming is in many ways a relational process, it is customary to perceive a farm as a passive object shaped at will by an active farmer (Darnhofer, 2020). This anthropocentric view may blur the dynamic relations and exchanges occurring when inanimate and animate entities intra-act, meaning the inseparable and entangled exchange, influence, and co-constitution of things (Barad, 2007). Simultaneously, the anthropocentric view may obscure the ways agency in farming is constituted, thus making it hard to find solutions to change it (Huttunen & Oosterveer, 2017). In relation to food citizenship, a better understanding of the

[1] Modern liberal understanding of citizenship as legal membership in a state can lead to various inequalities and exclusions affecting, for example, underaged individuals and those with irregular migration status. However, this article is not concerned with these specific issues, as we do not equate citizenship with belonging to a particular country in the context of this article.

intra-action in which citizenship is constituted could expedite the change needed for a more sustainable food system.

CSA represents a local farming movement with direct relationships between producers as food growers and consumers as end-users in the food system, an effort towards environmentally sustainable farming methods, risk-sharing among farmers and consumers, and transparency of operation as its core principles (Henderson & Van En, 2007; European CSA Research Group, 2016). CSA emphasizes the role of citizens in food systems by reorganizing relationships between producers and consumers, championing democratic decision-making processes and capacity building. Despite the connection between CSA and food citizenship, the citizen perspective and the related nonhuman agency have received little attention in the context of CSA.

In this article, we contribute to the emerging post-human theorization of citizenship. To outline food citizenship in the context of CSA and to explore the role of materiality in constituting food citizenship, we ask:

1) What is the role of material-discursive arrangements in CSA activities?
2) How does materiality constitute food citizenship?

Our study serves to initiate a discussion on how CSA practices and the materiality involved can produce food citizenship. Yet CSA is not the only platform for producing food citizenship nor are the materialities we address the only constituents involved in becoming food citizens. Empirically, we draw on a case study of a small, volunteer-based CSA group, called JuurikasJKL, which is particularly well suited for examining the material-discursive practices and relationality of food citizenship because the members are actively and physically involved in all farming processes and the surrounding environment.

Food Citizenship and Intra-Action

Food Citizenship: Only Human Agency?

We see food citizenship as participation in food-related practices (Welsh & MacRae, 1998; Booth & Coveney, 2015). In food system studies, food citizenship has been used to describe the need to move beyond the consumer to a more active participant in the food system. With varying emphasis on social, ecological, economic, and political considerations, different definitions of food citizenship include an aspiration to *change the current agrifood system* to become more ecologically, economically, and socially just (e.g., Hassanein, 2003; Baker, 2004; Wilkins, 2005). All these definitions also emphasize *participation* as a means to achieve change (e.g., Welsh and MacRae, 1998; Renting et al., 2012), but the modes and objects of participation vary from consumption (e.g., Migliorini et al., 2020) to participation in food governance and decision-making (e.g., Hatanaka, 2020). At the core of food citizenship is increasing people's awareness of food-related issues and increasing participation at different levels of the food system, which is seen as a catalyst for broader transformative changes within the food system (Hassanein, 2003, 2008; Gómez-Benito & Lozano,

2014; O'Kane, 2016). Participation as a food citizen includes *active and practical, often mundane actions*, such as gardening, mindful buying, cooking, and communicating (e.g., Welsh and MacRae, 1998; O'Kane, 2016; Hatanaka, 2020). While these actions may be performed individually, food citizenship is equally expressed through *collective and public actions*, shared goals, and championing the common good, community wellbeing, and solidarity (Renting et al., 2012; Lozano-Cabedo & Gómez-Benito, 2017; Kaika & Racelis, 2021). These aspects emphasize the collective nature of food citizenship and are apparent in empirical civic agriculture studies. Furthermore, food has *diverse meanings* not only as a commodity (Welsh & MacRae, 1998) or source of nutrition, but also as a mixture of environmental and social interactions (Kaika & Racelis, 2021).

Food citizen(ship) usually refers exclusively to humans. Yet practices around food are inextricably linked to ecological processes. Animal welfare and the wellbeing of the environment are focal in many investigations of food citizenship, and in a democratic food system, nonhuman interests should count, as they, too, are affected parties (Thompson et al., 2020). However, only few studies point out the need to widen the conception of citizenship in a post-human direction and include details of the human-nonhuman relations and intra-action constituting citizenship (Turner, 2011; Roe & Buser, 2016; Eli et al., 2016; see also Sonnino et al., 2016). These authors show how material interaction influences and shapes humans and citizenship in food production and consumption. For Carolan (2017), food democracy is based on the citizens who feel affected by the common issue and food citizenship is realized in practices generating commitments to others. In practice, if food were considered a co-participant and capable of action, instead of being only a resource or frame for human action, such a view could lead to rethinking what to eat and produce and how, for example regarding the eating of animals (Bennett, 2010). Thus, widening the perspective of agency could provide useful tools and insights that can help us address the ecological crisis food systems currently face. However, more research is needed on the various human-nonhuman entanglements and their mechanisms.

Nonhumans in Agrifood Studies

Agrifood research emerging from the Science and Technology Studies and related perspectives commonly scrutinize human-nonhuman relations. These studies point out the human-nonhuman interconnectedness and interdependency in agricultural practices and demonstrate how the world is co-produced in relations between and within networks of entities (e.g., Herman, 2016; Darnhofer, 2020). Cases of human-nonhuman relationships illustrate how nonhumans reshape, enable, and constrain food production (Gorman, 2018). Simultaneously, different modes of agency and subjectivity are produced (Holloway & Bear, 2017) as nonhumans also co-shape these in everyday practices (Legun & Henry, 2017). For example, Finstad et al. (2021) show how milking robots shape the agency and routines of farmers and cows by determining the "right" cow body in that they do not function if the cow's anatomy or movements do not reach the standards of the machine. This can even lead to the culling of "unsuitable" cows. Following the human-nonhuman entanglements operating in farming practices we should not see farmers as mere rational and consciously

deliberative minds. Instead, farming could be better studied in terms of biological, material, social, and discursive relations and as open-ended and evolving processes – as a collaborative effort by the local agroecology and the farmer.

When looking at farming as an assemblage of the social and the material, attention is focused on the quality and extent of the human-nonhuman relationships: Which entities and human-nonhuman relationships humans care for, which lives are 'killable' (Haraway, 2008; Pitt, 2018), and how inclusive the social world is regarding nonhumans (Herman, 2016). It is easier to consider as active agents worthy of care only those entities which are spatially and emotionally near us, such as pets (Herman, 2016; Pitt, 2018). Such a relationship may remain individualistic or prioritize human needs as humans often have the power to determine how multispecies relationships unfold. For example, when weeding out non-productive plants, the farmer exercises power. Regarding food citizenship, it is also important to pay attention to less evident and less noticeable nonhumans (Pitt, 2018).

A focus on material-discursive entities and practices may also reveal power relations in other terms. It can show alternative imaginaries about food system change, what is desired and what is avoided or hidden (Blecha & Leitner, 2014; Legun & Henry, 2017). For example, human-nonhuman relationships among chicken-keeping urban residents shed light on people's dissatisfaction with the industrial agrifood system, revealing the actions undertaken to implement alternative imaginaries of food system. By employing nonhuman theories, researchers can look at practices of power in unconventional places and examine how they foster the understanding of food politics and its alternatives. Nonhumans shape politics by influencing what is deemed possible and by inspiring humans to act around specific materials (Legun & Henry, 2017). Thus, nonhumans participate in the constitution of citizenship.

We are interested in who and what contributes to food citizenship emerging in CSA practices. To help conceptualize these entangled practices, and how materiality constitutes food citizenship, we draw especially on Barad's (2007) intra-action. According to Barad (2007, 89), things "do not pre-exist as such but emerge through intra-actions". The more familiar concept of interaction refers to a situation where previously separated individual agents react to each other. As for intra-action, there are no independent or isolated entities but phenomena, in which 'things' mutually constitute one another. Although the things (components of a phenomena) are inseparable, not distinct, agencies in an absolute sense, through intra-action they become relationally determinate. Intra-actions may or may not involve humans, while human bodies themselves only emerge through intra-actions (for example with bacteria). Extending agency to include nonhumans does not mean diminishing human accountability. Since every intra-action entails the possibility to reconfigure the world, humans, being capable of deliberation, have an ethical obligation to intra-act responsibly (Barad, 2007). We all are responsible, but not equally so, and differences, for example, between species matter (Haraway, 2016).

Materials and Methods

Case: JuurikasJKL

JuurikasJKL (Juurikas) is a small-scale, voluntary-based CSA located in Central Finland and organized as a citizens' collective. It was founded in 2013 by activists wanting to experiment with the opportunities for CSA to produce food together, with their own hands, and without synthetic fertilizers or pesticides. The project got off to a positive start by securing good farming land 18 km from the local city center. The field proved to be rich arable land and in a location of great natural beauty with a brook nearby. The first growing season was in the charge of two hired people responsible for farming work receiving collectively agreed payment for their participation. Every member was also expected to take part in the work parties. During the early years of operation, the number of members was around 20 people and the harvest was shared equally between members.

Soon after the first growing season, the hired farmers realized that their reimbursement was insufficient to compensate for their work and opted out of the group. After this, the project continued on a voluntary basis with each member responsible for the farming for one week each season. Because of its characteristics, Juurikas could also be called a volunteer-run community farm, but the members position themselves in the CSA movement.

In the following years, the members developed the project to reflect the group's values and objectives: environmental responsibility, including organic cultivation methods, producing and eating clean food, freedom to experiment, and learning opportunities. Even though the members found the activities rewarding, many challenges appeared: irrigation, the remote location and a variable farming skillset among the members, which led to a growing workload and a small crop. Partly because of these difficulties, the number of members declined. At the beginning of our research collaboration in 2020, only eight active members, of whom three were newcomers, participated in Juurikas activities. The area under cultivation was approximately 0.24 acres and the crops cultivated included various root and leaf vegetables, berries, herbs, and flowers.

Data and Methods

We interviewed both current and former members of Juurikas in 2020 and 2021 to study the role of material-discursive arrangements in CSA activities and how materiality constructs food citizenship. By interviewing participants with differing experiences and a contemporary relation to CSA, we wanted to capture citizenship as a fluctuating process, as a becoming, rather than as an existing status or state. We obtained written informed consent from all participants. Additionally, participants signed informed consent forms regarding publishing their interview data and photographs. In the interviews, we asked about CSA activities, the meanings of these, and members' thoughts about the current food system. We interviewed 27 people, eight current and 18 former members. We also interviewed the landowner. The interviewees were mostly 31–40 years old, had been active in Juurikas for between one and

two years and lived 16–20 km from the field. The interviews lasted 47–139 min. The recordings were transcribed and pseudonymized. A more detailed description of the interviews and data variables is presented in Table 1.

We enriched the data with participant observation and visual material. As Sarmiento (2017) states, approaches highlighting embodiment have much to offer more-than-human research as they can bring out political struggles that are often bypassed in nonhuman research. Preceding the actual research work, we met with active members of Juurikas three times in spring 2020 to elicit the aims and hopes of the collaboration. We also visited the field twice during the summer and took part in internal online group discussions throughout the research process. After the growing season, in spring 2021, we organized a meeting where we presented research findings and summarized the past season. We kept field notes and held debriefing meetings among researchers during the research period. Further, we asked the group members to photograph challenges and solutions they considered relevant to the operation of the collective. Altogether we received 49 photos and related brief descriptions. Photos can capture and reveal more clearly those sensory and affective relations and issues which are not easy to express verbally (Power, 2003, see also Green and Duhn, 2015). The methods we used are in line with the research techniques of walking, talking, doing, and picturing that Pitt (2014) demonstrates for taking more notice of nonhumans.

We analyzed the data using qualitative content analysis. Our main research material was the interview data and thus narrated material, and the emphasis of the analy-

Table 1 Summary of interview participants

Variable	Count
Implementation of interviews	
Face-to-face	5
Via online meeting platforms due to Covid-19 restrictions	22
Membership status	
Current member	8
Former member	18
Landowner	1
Gender	
Male	14
Female	13
Highest educational qualification	
Upper secondary school or equivalent	9
Bachelor's degree or equivalent	8
Master's degree or equivalent	9
Not known	1
Employment	
Employed or entrepreneur	17
Retired, on parental leave, student, or unemployed	10
Ethnicity	
The interview data consisted entirely of White participants.	
Participant pseudonyms used in quotations	
Aaron, Alisa, Hanna, Iris, Mikael, Olivia, Samuel, Sofia, and Viktor	

Fig. 1 Juurikas field in the early summer of 2020. Photo by a Juurikas member

sis was on materiality. In accordance with Smith and Monforte (2020), we maintain that studying materiality is possible through examining the discursive and narrative realm. Using Barad's (2007, 141, 177) notions of agency being "ongoing reconfigurings of the world", "not aligned with human intentionality or subjectivity", and materialized in certain phenomena, we sought to observe the intra-actions that produce food citizenship. We began by recognizing key material-discursive arrangements in food citizenship action in CSA. We coded the data utilizing Atlas.ti qualitative research software. First, we searched texts and pictures inductively for materialities and material-discursive functions (e.g., crop or emotions). We then focused on citizenship and coded the interviews paying particular attention to the core features of food citizenship as presented in the literature. Due to its iterative nature, the analysis process could be called abductive (Timmermans & Tavory, 2012). The human-non-human relations and intra-actions were most markedly apparent in relation to three material themes of the field, time, and body.

Becoming a Food Citizen in Material-Discursive CSA Activities

We first introduce the three cross-sectional material phenomena, the field, time, and body, to illustrate the role of materiality in Juurikas' activities. Thereafter, we scrutinize what kind of food citizenship is produced in the CSA activities and how materiality constitutes this.

Fig. 2 Members tilling the soil, pulling up couch grass, and spreading hemp mulch over the onions in 2020. Photo by a Juurikas member

The Role of Material-Discursive Arrangements in Juurikas

The Field

Juurikas' field is in the countryside with no regular public transportation (Fig. 1). Members both present and past reported that the location was challenging, especially for those without a car. The location impeded access and was the reason for some members opting out of the group. The necessity to use a car created inconsistency between members' values and actions due to traffic emissions, but it also put members in unequal positions: *"you really couldn't say that this day doesn't suit me, but you went when the day was suitable for the member who had the car"* (Hanna). Throughout the history of Juurikas, transportation has caused conflicts, which at worst undermined the sense of community. The remote location excluded some members and put people in unequal positions regarding opportunities to act, which further created uneven power relations among members. Because participation in Juurikas was mainly practical action, it was essential to be in the field.

Other characteristics of the field also affected the functioning of the CSA. Many of the members considered the cultivated area too extensive. The area had been scaled down a couple of times and some parts had been left for green manure cropping. Nonetheless, the large area together with a small workforce caused undesir-

Fig. 3 Weed tea fertilizer made using Grandmother's recipe. Photo by a Juurikas member

able effects, such as extensive weed growth: "*We always got problems, because we didn't do enough work during the growing season so weeds could take over the field"* (Viktor).

The soil caused and guided members to act in certain ways as it must, for instance, be weeded and watered. Over time, physical work and sensory interpretation produce embodied knowledge (DeLind, 2006). A farmer "*gets to know the soil*", as Mikael reported. For Juurikas members, the field, the soil, and the plants were not just a utility but also gave rise to feelings and emotions. These embodied relationships and encounters with nonhumans reshape CSA practices (Gorman, 2018) and co-produce identity and belonging by forming spatially defined human-nonhuman communities (Herman, 2016). The sense of powerlessness caused by the workload and fascination with the idea of not disturbing soil life led the members to experiment with no-dig gardening. The practice of no-dig meant that instead of working against weeds the members started living with them. Thus, reimagining the human-nonhuman power relations can also support community wellbeing both for nonhumans (soil health) and humans (workload). The intra-action with plants and one's own feelings can also have other benefits: "*it rewards you when you learn to understand [the plants]. I suppose it has an impact on one's self-esteem"* (Iris). Further, the practice of no-dig demonstrates caring for nonhumans by exercising less power (Pitt, 2018).

A field becomes a place that enables and requires people to decide where and how they intra-act with all the material world around them (Green & Duhn, 2015). Juurikas members co-created the field as a particular CSA field together with the material agents as they performed the cultivation activities. This is in accordance with Gorman (2018, 182); through the nonhuman involvement CSAs are "as much about producing an 'alternative place' as about producing 'alternative food'".

Time

According to Barad (2007), time comes into existence and is reconfigured through intra-action. In cultivation, the marking of time is a material-discursive process in which the seasons, plants, and plant growth are in focus. The biological cycle divided the members' sense of time into periods. These different periods, and especially the stages of plant growth, guided members' actions. For example, weed seeds, members' farming goals, and the notion of 'good' cultivation intra-acted and caused members to weed at a certain moment, or to feel guilty about neglected tasks: "*it felt just terrible that [perennial sowthistles] were allowed to spread their seeds like that. I was quite hopeless because I was thinking that the amount of weed will never diminish if we don't do something"* (Olivia).

Growing food is time-consuming and the availability of time impacts participation. Sometimes members, for one reason or another, could not take part in fieldwork for a while and that was usually well understood by others. However, if a member became inactive in practical work for an extended period, it would eventually become challenging for them to reintegrate. Temporality is always present and co-constructs the activity. Because CSA is much about community, it appears relevant to contemplate the community's lifespan and continuity. As Olivia described, members "*have rolled in and flowed out. People have been involved in maybe a few seasons and then disappeared"*. While the people involved usually had common goals, Juurikas, like other CSA's, was an open-ended process and its unfolding was influenced by many unexpected events and material and social factors. For example, people, their life situations, and the biophysical environment of the CSA operation changed over time and the practices and activities unfolded along with these. This corroborates both Herman (2016) and Darnhofer (2021) who have stressed the role of nonhumans and the constraints and the opportunities they offer for establishing resilient agricultural practices. Various unexpected events ranging from people getting sick to fungus damage in the yield, altered the course of the project.

Body

Juurikas was essentially about physical and sensory participation in food production while doing concrete farming work in the field. It was about getting one's hands dirty. It was also about becoming a CSA farmer through intra-actions with the agencies around but also with one's own body: "*to be tangibly taken up with the earth, to get your fingers into the soil, to do manual labor and see the result of hard work"* (Sofia).

A concrete relationship between nature, plants, food, and the body is present in all stages of CSA practices. It starts from tillage with the hard physical and manual work

to prepare for the upcoming summer and ends, temporarily, in food preparation, eating, and digestion. One member, Hugo, talked about the recirculation of excrement: the whole cycle of food production and consumption, of which the human body is part, should be closed. Juurikas pursued pure and healthy food by avoiding some material agents such as synthetic fertilizers or low-nutrient plants because they were considered bad or useless to one's body and health. These choices were made together in discussions, based on embodied knowledge, experiences, and worldviews.

The sense of happiness caused by admiring the surrounding nature and growing plants was for most a crucial motivation for participation. The feeling was amplified when the members shared these sensations and the practical work. Participants needed esthetic experiences to counterbalance tiring practical farming work and considered them almost as important a reward for the work as the harvest. Since the CSA practices in Juurikas demanded physical involvement, it is important to acknowledge that it was not feasible for all. Even though, in principle, Juurikas welcomed everyone and anyone to join, they noted that participating necessitates certain abilities: "*if one has impaired sight, other physical limitations, or such, it can be tricky"* (Samuel). Thus, due to physical disabilities, some people were excluded from Juurikas. Farmers do not act solely on the basis of deliberative minds. They have bodies, and the effects of bodily functions, senses, and physical abilities should also be acknowledged when conceptualizing farming (see also Darnhofer, 2020).

Food Citizenship and its Material-Discursive Constitution

Active Doing

The becoming of food citizenship is a fluctuating process shaped by materiality and taking place through active doing. When asked to explain what they did in Juurikas, members usually described diverse practical activities in detail. Via the manual fieldwork and decision-making, power was taken into people's own hands and the roles of producer and consumer merged. *The field* offers a scene for performing food citizenship, but it also shapes the agency and actions of a food citizen. Figure 2 shows the phenomenon of tilling, in which members, forks, the rootstock of couch grass, and hemp mulch intra-act. If the field had been closer to the city, not next door to a hemp farm, or if the chemical composition of the soil had been different, the actions of citizenship would have been of another kind and food citizenship would have unfolded differently.

Active participation in CSA is more time-consuming than buying one's food, and the *time* available is an unevenly distributed resource. If people have difficulties in finding time to do other than necessary chores in their daily lives, active participation may be impossible. What a citizen's active participation (emphasized by e.g. Welsh and MacRae, 1998; Hassanein, 2003) precisely entails is quite another issue. In Juurikas, some members were willing and able to use more time than others. However, active participation may become excessively intensive and tiresome, as Sofia explained the decline in her motivation: "*you took too much responsibility and noticed that you overexerted yourself*".

To avoid participation becoming too burdensome, responsibility should be understood collectively. As the interviewees explained, in a collective like CSA the whole is greater than the sum of its parts. If one does not have time to water the plants, there is usually someone else who does. It is still important to recognize who ought to be or is able to use time and for what kind of activities. Overly intensive participation may lead to disengagement, particularly if social and material aspects constitute an impediment such as, in the case of Juurikas, a dry summer or feeling bodily pain. *Bodies* and minds have different capacities and a variety of embodied factors constrain individuals. Citizenship activities should be adapted accordingly and this should also be recognized when theorizing citizenship (Fenney Salkeld, 2017). It is important to allow different degrees of participation in order for everyone willing to be able to participate in a fair manner (MacGregor, 2021).

Collective

The collective nature of food citizenship and the material relations co-creating it are essential in CSA. CSA is about a community supporting and working together with fellow humans and nature. Hence, we argue that food citizenship cannot be produced or performed individually. CSA is a practical example of how the responsibility rests with many and how the action could not be implemented without others. Collective citizenship is doing, learning, caring, and taking responsibility together as Alisa described "*[we] are collectively responsible for the food we want to produce"*. CSA action builds solidarity and respectful relationships between people and the environment. Due to the intra-actions, citizenship inevitably becomes collective. Collectiveness emerges together with people but also together with the human-nonhuman relations and processes within and around us. Neither humans nor nonhumans can themselves be understood as food citizens; citizenship is inherently a collective subject if conceptualized according to post-human theories and Baradian thinking.

The field brings human and nonhuman agents together. Through the intra-active relations in farming, nonhumans otherwise unnoticeable (e.g., nitrogen-fixing bacteria in the roots of broad beans) take shape and become materialized and meaningful to human members. As some members reported, they learned to know the needs of plants and plants could raise positive emotions in them. Such a reciprocal relationship may increase the appreciation of food, and respect for the related environment, humans, and nonhumans. Our study demonstrates that participation in alternative food practices can indeed reinforce and change values and understanding for community engagement and give rise to collective subjectivities replacing individual ones (Levkoe, 2011; Sage, 2014). Furthermore, becoming a food citizen is a *bodily* experience occurring together with others. For example, participation in work parties is mostly corporeal repetition and series of movements that have to be integrated with the functioning of one's own body, other humans, and nonhumans. The (human and nonhuman) composition of the Juurikas community changed with the passage of *time*. As the activities were shaped by the community, the essence of citizenship likewise changed over time. For instance, the competencies and skills of the group accumulated over time when people contributed their know-how and experiences. At its best, knowledge may become shared capital of the group. This knowledge can be

utilized and directed towards influencing food system change beyond the scope of CSA (Renting et al., 2012; van Gameren et al., 2015).

Collectiveness is not free from asymmetrical power relations (Herman, 2016; Pitt, 2018). Juurikas members welcomed some entities such as butterflies and bees, as they brought along biodiversity benefits and joy but excluded, for example, plant lice because they felt these disturbed the tending of plants. The unwanted nonhumans still impacted on the collective and its operation making members develop novel practices such as experimenting with using ash for pest control. This type of problem-solving might also enhance somebody's position or authority in the group. While the community was "*open to everyone*", in practice both intentional and unintentional inclusion and exclusion occurred with respect, for instance to knowledge distribution or the uniformity of development goals. Members with a longer history in the community represented an unofficial authority despite the proclaimed equality of all views. Further, those with a stronger vision and an active approach gained power, particularly in the absence of official democratic decision-making practices.

Aim to Change the Food System

Collective actions around food do not yet constitute food citizenship, ambition for change is also needed. Juurikas pursued sustainable food production practices such as permaculture and organic farming. Permaculture can be an example of a gardening practice that deposes humans from the role of caregiver and encourages engagement in mutual care with nonhumans (Pitt, 2018), for instance, by letting the soil maintain its rich nutritional state. Members criticized the prevailing food system and saw CSA as a means to act according to their values and feel coherent in what one thinks and does: "*the less people feed the unsustainable market economy, the more they draw their own energy away from it and move it to the local and sharing economy as well as to self- and local cultivation, the better"* (Aaron).

The food they gain from *the field* was rejoiced in and, instead of pure the economic value of the harvest, the intra-action and relations within the field were meaningful for many (see also Gorman, 2018). The field bound members to the food system and served as a space where people had decision-making power over their food. As Schlosberg and Coles (2016, 175) put it, "the point is to literally embody that change". The field was a political space to implement food system change and the political struggles (Sarmiento, 2017) it entailed e.g., through sustainable cultivation practices, vegan or vegetarian diet, and short distribution chains. Juurikas members assumed that CSA operations have the potential to change the food system to become more just and sustainable, although they recognized that to achieve this CSA would need to be more widely practiced and better known. In this, the location of the field was crucial. If the field had been in the town center, the CSA could have been more visible and accessible, possibly encouraging more people to join. Material agents have the power to resist human efforts, but also to create effects (Bennett, 2007) and they thus are an integral part of citizenship. The field and the stimulations it offered spurred on members' experiments in cultivation, communication, and collaboration. Although these experiments did not always succeed as planned, they gave rise to skills, values, and interests. The diverse natural environment also encouraged

members to widen their interpretation of food and inspired them to use, for example, weeds as fertilizer or as nourishment. Working in this way with the typically unwanted nonhumans, Juurikas members implemented their alternative imaginaries of food and food practices (see Blecha and Leitner, 2014; Legun and Henry, 2017).

When aiming at more sustainable food production, Juurikas avoided some of the material entities within the field, such as petrol or animal by-products, because they were seen as unsustainable or unethical. Some, such as biogas or weed tea fertilizer (Fig. 3) were, on the other hand, sought after. When members of Juurikas chose to opt for weed tea instead of animal-based fertilizers, they were engaging in boundary-drawing negotiations (Hyvärinen, 2017). Through these negotiations 'good' and 'bad' agricultural practices, as well as good and bad ways of becoming food citizens, are materialized. Gorman (2018) notes that nonhumans do have an important role in how CSA construes its personal food system and imaginations of alternative food systems. The members' choices were guided by their commitment to a more sustainable food system or climate change mitigation. Material entities, hopes and aims for the future as well as experiences from the past reconfigure the change in the food system through intra-active practices: the world in its becoming (Barad, 2007). For example, when using weed tea, members refrained from animal production. But implementing the change they wished to see in the food system would not have been possible without traditional knowledge (Fig. 3). Place, the field, and its soil can link past, present, and future, thereby strengthening the people-place connection (DeLind, 2006; Herman, 2016). Lastly, when food citizens are corporeally involved with collective farming and material-discursive arrangements, they decommodify food and give it meanings and relational properties beyond economic value.

Conclusions

The Juurikas case demonstrates that in CSA, material-discursive arrangements, such as the field, time, and body co-produce food citizenship within collective intra-action. This occurs in relation to active doing, collectivity, and the aim to change the food system. Drawing on Barad (2007), we argue that it is relevant to pay attention to the constitution of citizenship and how it becomes historically and culturally constituted and reconstituted within manifold material-discursive intra-actions.

Striving towards changing the current agrifood system is at the core of food citizenship. Citizens implement and embody political change by challenging the dominant ways of doing. Becoming a citizen involves negotiations between good and bad practices and identifying the desirable alternative imaginaries. It also calls for a capability to live with the difficult emotions aroused by the recognition of changes needed. The becoming food citizen is political as it requires a critical self-appraisal of the state of the food system and one's role therein, and then working together with others to change it. This becoming can happen in all sorts of food-related operations, for example, in food policy councils (e.g., Bornemann and Weiland, 2019). While the political aim for change can be placed at the individual level, citizenship is a collective subject and cannot be produced or executed individually. Negotiations for the change occurring in mundane practices intertwines human-nonhuman entities

and these inseparable and reciprocal connections can increase the appreciation for and care of others and redirect the desired change. Our findings demonstrate how a human-nonhuman collective involving active doing also generated power for political impact and for achieving the desired change.

Attention to the material constitution of citizenship makes visible the boundary-drawings underlying behind the collectives of citizens. This points out the need to consider inclusivity and the expectations of citizenship from an ethical standpoint and underlines the importance of ethical and reflexive awareness of interdependency. Important power relations and privileges lie within intra-actions and human-nonhuman relationships (Lawson, 2007; Pitt, 2018). These restrict the possibilities to become active food citizens or to contribute to that becoming. From the perspective of creating more sustainable food systems it is necessary also to encourage human engagement with those nonhumans that we do not directly encounter (e.g., soil microbes) or that do not directly benefit our purposes (e.g., weeds). These engagements can enable us to see the shortcomings of the dominant food system and realize novel routes for action.

If we are to fully acknowledge the planetary boundaries, it would be problematic to uphold the distinction between humans and nature in citizenship (Huttunen et al., 2020). We must recognize nonhumans as agents parallel to humans. From the perspective of post-human philosophy, humans or nonhumans alone cannot be citizens, instead becoming citizens happens due their material-discursive intra-action (Barad, 2007) both parties being involved, making citizenship "an emergent process-in-becoming" (Carolan, 2017, 199). Yet we must recognize that humans are those who must be responsible, cultivate empathy for others, and act on behalf of those most impacted in food systems (Carolan, 2017). Barad (2007, 90) uses the term "ethico-onto-epistem-ology", which emphasizes precisely this interconnected nature of knowledge production and the world and its actors, and where the ethico stands for ethics. Based on Baradian thinking, food citizenship would entail becoming aware of the power relations that shape the understanding of the world and lead to responsible intra-action with others (Barad, 2007; Haraway, 2016). In the becoming of citizenship, the role of the human counterparts of the collective subject is to be an advocate of non-human counterparts' interests and rights. Concretely this happens through political activity arising from the care and solidarity generated by the realization of human-nonhuman interconnectedness and dependency.

Based on our study, we recommend that in food policy, food citizenship should more often be understood as collective action and shared responsibility, still paying attention to the balance of power relations within the community. There should be spaces for diverse ways of participating in food practices corresponding to the diversity of people. It is not enough for food governance to pursue food citizenship or that food policies delegate the role of citizen to individuals (see e.g., MAF, 2017). Becoming food citizens does not occur in a vacuum and, therefore, it is also essential to ponder the role of materialities in enabling or discouraging the change towards more sustainable food systems. One simple example is that the municipality or housing company can promote civic agriculture in land use planning and create preconditions for the purpose. If a society wants active food citizens, it must support

and endorse the production of citizenship – which is to say collective citizenship, not merely steering consumer choice or concentrating on individual responsibilities.

Author Contributions All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Anni Turunen and Riikka Aro. The first draft of the manuscript was written by Anni Turunen and all authors participated on writing the previous versions of the manuscript. All authors read and approved the final manuscript.

Funding The study was supported by the Academy of Finland, Strategic Research Council (Grant Numbers 327369 and 335965).
Open access funding provided by Finnish Environment Institute (SYKE).

Data Availability Not applicable.

Code Availability Not applicable.

Declarations

Conflict of interest The authors have no conflicts of interest to declare that are relevant to the content of this article.

Ethics Approval This is non-invasive study with adult participants. The Finnish National Board on Research Integrity TENK guides that no ethical review is required for this study.

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