



Article

Neither Poor nor Cool: Practising Food Self-Provisioning in Allotment Gardens in the Netherlands and Czechia

Lucie Sovová 1,2,* and Esther J. Veen 30

- Department of Environmental Studies, Faculty of Social Studies, Masaryk University, 602 00 Brno, Czechia
- Department of Geography, Faculty of Science, Masaryk University, 602 00 Brno, Czechia
- Rural Sociology Group, Wageningen University, 6706 KN Wageningen, The Netherlands; esther.veen@wur.nl
- * Correspondence: sovova@mail.muni.cz

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Abstract: While urban gardening and food provisioning have become well-established subjects of academic inquiry, these practices are given different meanings depending on where they are performed. In this paper, we scrutinise different framings used in the literature on food self-provisioning in Eastern and Western Europe. In the Western context, food self-provisioning is often mentioned alongside other alternative food networks and implicitly framed as an activist practice. In comparison, food self-provisioning in Central and Eastern Europe has until recently been portrayed as a coping strategy motivated by economic needs and underdeveloped markets. Our research used two case studies of allotment gardening from both Western and Eastern Europe to investigate the legitimacy of the diverse framings these practices have received in the literature. Drawing on social practice theory, we examined the meanings of food self-provisioning for allotment gardeners in Czechia and the Netherlands, as well as the material manifestations of this practice. We conclude that, despite minor differences, allotment gardeners in both countries are essentially 'doing the same thing.' We thus argue that assuming differences based on different contexts is too simplistic, as are the binary categories of 'activist alternative' versus 'economic need.'

Keywords: food self-provisioning; allotment gardens; urban food; practice theory; alternative food networks; coping strategy; quiet sustainability

1. Introduction

Sowing seeds, growing plants and eating their fruits is an ancient, mundane and seemingly universal practice. However, food self-provisioning—as we term this activity—is given different, contextually shaped meanings depending on where it is being performed. In this paper, we critique this tendency, looking at food self-provisioning in both the Western and Eastern European context. Comparing urban allotment gardens in the Netherlands and Czechia, we investigated the legitimacy of the diverse framings of this practice in the literature.

Urban gardening, which we simply consider to be food self-provisioning in an urban setting (i.e., in allotments, community gardens, backyards or public spaces), has attracted increased attention from both researchers and practitioners over the last two decades [1–3]. However, this attention has developed along different lines in diverse geopolitical contexts: whereas the literature describes urban gardening in Western European countries as a multifunctional activity that can create valuable alternatives and as a trendy and 'cool' thing to do, in the Eastern European context it is often framed as a remnant of the socialist era and a coping strategy for the urban poor. Kosnik's summary of the diverse framings of food self-provisioning is anecdotal, yet poignant:

Sustainability 2020, 12, 5134 2 of 18

Mainstream society conventionally associates self-provisioning with poverty, loss of comfort, or bare survival (Murton, Bavington, and Dokis 2016), with hippies returning to the land where they live in communes and try to revive a preindustrial lifestyle, and more currently with lifestyle trends of rooftop gardens and the like [4] (p. 124).

The literature on urban gardening in Western Europe, and in the Global North in general, paints a diffuse but mostly positive and progressive picture of food self-provisioning. First, some literature relates urban gardens to localised and more sustainable food [1,4–6] by mentioning these gardens alongside farmers' markets, community-supported agriculture initiatives and other alternative food networks. Second, urban gardens are presented as emerging spaces of resistance that combine the issue of the right to the city with the notions of food and health (in)equality and social (in)justice [7–9]. In both these framings, urban gardens in the Global North are implicitly seen as activist spaces. Citizens are believed to engage in gardening because they want to create an alternative—either an alternative food system or an alternative urban space (although the extent to which urban gardens create such alternative spaces or whether they are in fact enabling neoliberalist forms of governance and/or greenwashing larger projects is still being discussed [1,10]). Third, urban gardens are also presumed to have both environmental and social benefits for the urban environment. Timpe et al. [11] mention their role in groundwater recharge, storm water retention, the maintenance of agrobiodiversity, the reduction of soil erosion and the improvement of soil fertility, amongst other ecosystem services. Gardens' social effects are found in community building [2], place-making [12] and fostering social cohesion [13]. In sum, the literature presents urban gardens as multifunctional spaces, emphasising that they offer more than just food production [14,15].

While scholars assume that urban gardeners do grow some food, which potentially contributes to their diets [2] as well as to food sovereignty and food security [16,17], such claims are only rarely substantiated by empirical evidence (although exceptions can be found in reports by gardening initiatives [18–20] and in academic literature [21–24]). Knowledge about gardening's actual contribution to the food supply is scarce because the proclaimed goals of gardening projects and their actual results are often conflated [1]. The economic aspects of food self-provisioning are rarely mentioned either, neither with respect to gardeners' motivations for growing food, nor considering food-growing's impacts on household budgets. In sum, urban gardening in the Global North is mostly portrayed as a trendy hobby with social and environmental benefits and potential political meanings (related to food sovereignty and food justice, typical for the North American context, and environmental and food activism, as often mentioned in the European context). While urban gardens are at times framed as alternative food networks, we know little about their actual food production. The lack of systematic attention to gardens' productive function is reflected by the rare use of the term food self-provisioning in this context: the literature mostly uses the terms urban gardening or urban agriculture. Furthermore, scholars have paid disproportionally more attention to community gardens, while more traditional (and possibly more production-oriented) home gardens and allotments have only been studied to a limited extent [5,6,25].

The literature on the Global South provides a nearly inverse picture. The main benefits attributed to urban gardening are poverty and hunger mitigation, food security, self-sufficiency and even potential income opportunities [26,27]. The terms used in this context—food self-provisioning, household food production, subsistence agriculture—signify an economically motivated activity with food production as a main goal. While practitioners might gain empowerment, independence or agency [27], they are presumably not politically motivated. Notably, although the literature on urban gardening in the Global North partially overlaps with that on alternative food networks, growing food in the Global South is seldom portrayed as an alternative—contrarily, it is referred to as a 'common practice' [1,5].

Admittedly, the North–South divide described here is somewhat of a simplification. Even in the context of the Global North, urban gardening has been documented to serve economic needs in times of scarcity—the victory gardens that contributed to the food supply in Western Europe and the USA during the Second World War comprise a commonly cited case [28]. Moreover, in the

Sustainability **2020**, *12*, 5134 3 of 18

USA, community gardening is linked to issues of food (in)justice and community food security [17], and scholars—while remaining critical of the neoliberal rolling back of the state—see community gardens as a way to empower marginalised communities and mitigate food deserts [29]. The renewed interest in food self-provisioning in Southern Europe after the 2008 financial crisis was also theorised from the perspective of economic scarcity [30]. This discourse has now reappeared with the COVID-19 crisis [31]. It is thus more precise to say that the productive function of urban gardens receives greater emphasis in studies of marginalised groups and peripheral spaces (be they global or local) or situations of economic distress (be they temporary or long term). Nevertheless, these readings seem geopolitically conditioned to some extent, and urban gardens in the Global North and Global South are interpreted in diverging ways.

In addition, some geopolitical spaces seem almost excluded from the debate. As comparative research [32] has shown, food self-provisioning as well as other informal food economies (e.g., foraging [33]) are much more common in Central and Eastern Europe (CEE) than in Western Europe. Given the recent interest in these topics, CEE's long tradition of informal food economies could provide rich learning opportunities for food system scholars [34]. These opportunities to learn, however, have not yet been seized: although there is a considerable body of literature on food self-provisioning in CEE [32,35–37], these writings are rarely related to the current debates on multifunctional urban agriculture, spaces of resistance or environmentally sustainable food systems. Instead, examples of food self-provisioning in CEE are accompanied by a specific framing which distinguishes them from their Western European counterparts. Food self-provisioning is largely seen as a coping strategy, inherited from the socialist era during which it supposedly served as a source of food compensating for underdeveloped markets [32,35].

Despite the massive economic transformation of CEE since the 1990s, these readings of food self-provisioning persist in some recent scholarship [38,39]. The focus on the economic benefits of household food production resembles the aforementioned framing of urban gardening in the Global South. However, instead of being theorised through concepts of empowerment such as food sovereignty [16], local economic development [26] or community food security [17], food self-provisioning in CEE is often described with negative undertones as a sign of underdevelopment, soon to be replaced by market mechanisms. Such path-dependent depictions have been challenged in a growing body of research that shows that purely economic motivations are rare amongst gardeners in CEE [40–42].

In this paper, we aim to contribute to bridging the East–West divide in the literature on urban food self-provisioning by comparing allotment gardeners in the Netherlands and Czechia. Using an approach inspired by social practice theory, we investigated the extent to which these gardeners engage in different practices. Comparing their motivations for gardening as well as the actual importance of home-grown food in their diets, we explored whether the different interpretations of urban gardening in Western Europe and CEE are justified, or whether gardeners in both regions essentially do the same thing.

While the term we use—*food self-provisioning*—is more common in literature on CEE, we aim to reclaim it, employing it to refer not to scarcity-driven subsistence, but to efforts to grow food and eat from one's garden [41,42]. By comparing how urban gardens serve as sources of food in both Western Europe and CEE, we seek to move beyond stereotypical accounts of urban gardening as either a trendy hobby practised by urban food activists or a traditional subsistence practice driven by economic need. Furthermore, by focusing on allotment gardens, we wish to underline the relevance of these traditional spaces of urban food self-provisioning. Lastly, the quantitative data presented in this paper fill the knowledge gap about the actual contribution of urban gardens in the Global North to the (alternative) food supply.

In what follows, we first discuss our theoretical approach, inspired by practice theory, after which we introduce our methods. In our results section, we present the practices of Dutch and Czech allotment gardeners, looking at both meanings and material outcomes. In the subsequent analysis, we discuss

Sustainability 2020, 12, 5134 4 of 18

the framings described in this introduction, attempting to recognise whether the assumptions made in these framings manifest themselves in daily reality. We conclude that Dutch and Czech allotment gardeners do indeed perform the same practice, arguing that the dichotomy between economic need and activist endeavour is too simplistic. People have diverse motivations, many of which are quite mundane, for engaging in allotment gardening: researchers must resist the temptation to apply stereotypical categories.

2. Theoretical Approach

The theoretical approach adopted in this paper was inspired by practice theory. Practice theory contends that practices are the sites where understanding is structured and intelligibility articulated, and that both social order and individuality result from practices [43]. A practice is defined as a concrete human activity, 'a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, "things" and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge' [44] (p. 249). Gardening, cooking and eating can all be considered practices. Dobernig et al. [45] conceptualise urban food growing as a distinct social practice, although they acknowledge that this practice combines diverse practices, both established and new, under one heading. The question we aim to answer in this paper is whether food self-provisioning in allotments—one of the sub-practices of urban food growing—can be seen as the same practice when performed in the Netherlands or in Czechia, or, in other words, whether Dutch and Czech allotment gardeners are 'doing the same thing.'

The answer to this question depends on what we consider a practice to be: when do we argue that food self-provisioning in one context is in fact the same practice as food self-provisioning in another context? Practice theorists have not provided a clear answer to this question. Shove et al. [46] argue that a practice is constituted by the people involved in it and by outsiders who recognise it as such. A practice thus becomes a practice through people's participation, when they (and others) consider themselves to be engaging in that practice. Schatzki [43,47] argues that a practice is a nexus of 'doings' and 'sayings,' linked by the understanding of the practice—knowing how to do it, knowing how to identify and attribute it, knowing how to prompt and respond to it. Therefore, while the dynamics of a practice contain and co-constitute the capabilities and preferences of the people involved [48], people also perform practices in accordance with what they consider appropriate behaviour [49]. In other words, practices articulate how people understand things and shape what makes sense to them, and how things make sense is in turn articulated in practices [50]. This means that we can speak of a practice when people know how a practice is appropriately performed and when that idea is shared amongst practitioners: if they have different ideas about how a practice is to be performed, we may in fact be seeing different practices. People's ideas about how a practice is to be performed are expressed in both their doings—bodily movements, things, practical knowledge and routines [44]—and their sayings—how they articulate what they do and why this is appropriate.

Hence, to understand whether food self-provisioning in allotments in Czechia and the Netherlands can indeed be considered the same practice, we investigate gardeners' actual *performances* of food self-provisioning, as well as their *understandings* of the practice. This dual view on what food self-provisioning means enables us to study what is actually happening on the ground: both in practical, pragmatic terms (e.g., how much people grow) and in terms of people's own views on their practice (e.g., how people themselves talk about what is happening and why they engage in food self-provisioning). As a result, we will be able to look beyond more theoretical views on urban gardening which may, for instance, link it to rather abstract phenomena such as the global food system, urban environmental issues, economic struggles or social capital.

Studying performances and understandings (doings and sayings) thus enables us to comprehend whether food self-provisioning in allotments in the Netherlands and in Czechia should be seen as one or two distinct practices. These two constitutive elements facilitate our operationalisation of the

Sustainability **2020**, *12*, 5134 5 of 18

practice, as we detail in the next section. This approach also usefully addresses existing knowledge gaps in two ways. First, an investigation of actual food growing (doings) provides data about urban gardens as sources of food, which are rare, especially in the context of the Global North. Second, understanding people's motivations for gardening and the meanings they give to this activity (sayings) enables us to confirm or contest assumptions about people's motivations for gardening (e.g., whether or not it is an economically motivated practice, and whether or not it is guided by activist endeavours to create a different food system).

Finally, we should define the practice of food self-provisioning: by self-provisioning we mean growing food and eating (part of) what is harvested as a result of that activity. It consists of both gardening and food provisioning, and we see it as an intersection of these two practices. Food self-provisioning also relates to and influences other practices we touch upon, most notably shopping (the more one eats from the garden, the less one has to buy), but also preserving or distributing the harvest.

3. Materials and Methods

To understand to what extent food self-provisioning in Czech and Dutch allotments can be seen as the same practice, we investigated both its practical reality (performances, or doings) and the way people perceive and understand that practical reality (understandings, or sayings). We used food logs to study practical reality and semi-structured interviews to understand motivations and reasonings. While our research design introduces quantitative data to the debate on the productive function of urban gardens, our work is qualitative in nature. We aim for an in-depth understanding of the practice of allotment gardening rather than an extensive overview of gardening in both countries. In line with this position, our research sample is relatively small, comprising eleven Dutch and eleven Czech allotment gardeners. The Dutch data were gathered by master's student Kylie Totté, whose thesis was supervised by both authors of this paper. She also recruited the Dutch participants. The Czech data were gathered by the first author.

3.1. Food Logs

We used food logs to study how much gardeners eat from their gardens and how that relates to the total amount of fruits, vegetables and potatoes they eat. Eleven Dutch and eleven Czech gardeners kept a food log for four weeks during summer. Every time the participants harvested produce, went grocery shopping, or obtained fruits, vegetables and potatoes in another way, they noted in the food log what it was, the quantity, where it came from and how it was used (own consumption, preserved or given away). Respondents received instructions about how to do this, including an example of a filled-out page (see Table 1).

| Date | Food | Source | Amount | Usage |
|------|----------|----------------------|--------|--------------------|
| 1/8 | Potatoes | Supermarket | 2 kg | Own consumption |
| 8/8 | Plums | Garden | 200 g | Gift for neighbour |
| 20/8 | Zucchini | Gift from sister | 1 kg | Pickled |
| 30/8 | Apples | Bought from a farmer | 20 kg | Stored |
| | ••• | ••• | • • • | ••• |

Table 1. An example of a food log, as presented to respondents.

Food logs are suitable for a research design with a small respondent sample, as they demand an above-average level of commitment from research participants. The main benefit of this method is that it allows researchers to obtain very accurate data on households' food provisioning practices and is presumably more precise than respondents' self-reporting, which is commonly used in research on food production in urban gardens (exceptions include the Farming Concrete initiative in New York City [20], Capital Growth in London [18] and the recent British project MYHarvest [19], which devised

Sustainability **2020**, *12*, 5134 6 of 18

their own tools to measure harvests; food logs similar to ours were employed by Pourias et al. [24]). We used food logs to observe the material outcomes, the performance or the 'doings' of the practice of food self-provisioning. In other words, we aimed to grasp how urban allotments contribute to gardeners' food supplies, beyond the verbal accounts of research participants.

Czech respondents kept logs in August 2014, and Dutch respondents, from mid-August to mid-September 2017 (depending on their summer holidays, some respondents started in the second week of August, others in the third). We consider four weeks to be enough to understand eating practices related to gardens and their links to harvesting and shopping practices. While climatic conditions differ slightly in the two countries—Czechia has warmer summers, but its colder winters mean that Dutch gardeners have a longer growing season—the period selected for data collection marks the peak of the garden season in both locations. The timing of the data collection therefore allows rich insights into the productive function of allotment gardens. It also implies, however, that our findings about harvest amounts should be interpreted in the light of the seasonality of the practice: the data cannot be easily extrapolated to the rest of the year or different climatic conditions.

3.2. Semi-Structured Interviews

To understand the motivations for food self-provisioning and allotment gardening, decision-making about cultivating and buying food, the usage of the harvest and shopping practices, semi-structured interviews were conducted with all respondents. Interviews took place in the same months the food logs were kept and were conducted in either Dutch or Czech. Participants were visited either at their home or in their allotment, depending on their preferences. Interviews took thirty minutes to one hour and were recorded and transcribed. Respondents filled out informed consent forms and allowed the authors of this paper to read the interview transcripts for this study.

Interview questions focused on participants' motivations for gardening and food self-provisioning, and we inquired about their history with this practice. We asked about the practicalities of food self-provisioning: how much of the garden area is dedicated to food production, which crops respondents grow and why, how they use their harvest and to what extent it covers their households' consumption of fruits, vegetables and potatoes.

3.3. Respondents

Respondents were recruited in Utrecht, the Netherlands, and Brno, Czechia. These cities are comparable in terms of population (Brno, with 380,000 inhabitants, is slightly larger than Utrecht, with 353,000). Both are major cities in their countries, but neither is the capital or the largest city (Brno is the second-largest Czech city in terms of population; Utrecht is the fourth-largest Dutch city). Respondents were recruited in cooperation with allotment officials (e.g., using allotment mailing lists and through their contacts) and by using snowball sampling. Dutch respondents garden in four different allotment sites. It is worth noting that these allotment sites have rules that promote environmentally friendly gardening techniques: the names of two of these complexes even include the word *ecological*, and another has obtained the highest qualification from the Dutch Label Natural Gardening (Nationaal Keurmerk Natuurlijk Tuinieren). The fourth encourages using natural gardening techniques on its website. While we did not specifically look for complexes with such rules, this reflects the general trend in Dutch allotment complexes to promote environmentally friendly gardening methods. In Czechia, the research was carried out in three allotment sites. These sites do not set rules about gardening techniques.

Only gardeners who grow fruit or vegetables were selected for the study. Both Dutch and Czech respondents received a small reward (a €20 gift voucher or 500 CZK, which is approximately the same amount) as a token of our appreciation for their participation in the study. The respondent sample is introduced in Table 2. The age of Dutch respondents ranged from 55 to 69 years old; the average was 63. Six were women; five were men. Most respondents lived alone or with a spouse; only two lived in larger households (three or four people). Plot sizes ranged from 100 m² to 500 m²; the average was

Sustainability **2020**, *12*, 5134 7 of 18

 251 m^2 . Two respondents tended two plots. The Czech sample included nine women and two men. Ages ranged from 28 to 70; the average was 54. Most respondents lived in two-person households. Plot sizes were between 200 m^2 and 240 m^2 . To preserve respondents' anonymity, we refer to them by numbers in the results section, as CZ1–11 and NL1–11. While our sample is small and does not aspire to represent the gardening populations in both countries, we believe that it provides valuable insights into how allotment gardening is practiced in Czechia and the Netherlands.

| Dutch Gardeners | | | | Czech Gardeners | | | | | |
|-----------------|-----|--------|-------------------|-------------------------|------|-----|--------|-------------------|--------------------|
| | Age | Gender | Household Size | Allotment Size | | Age | Gender | Household Size | Allotment Size |
| NL1 | 57 | F | 1 | 170 m ² | CZ1 | 32 | F | 2 | 225 m ² |
| NL2 | 66 | F | 1 | 400 m^2 | CZ2 | 52 | F | 2 | 200 m^2 |
| NL3 | 68 | M | 2+ | $80 + 250 \text{ m}^2$ | CZ3 | 70 | F | 2 | 200 m^2 |
| NL4 | 69 | M | 2 | $250 + 250 \text{ m}^2$ | CZ4 | 51 | F | 2 | 200 m^2 |
| NL5 | 68 | F | 2 | 225 m^2 | CZ5 | 28 | F | 3 | 200 m^2 |
| NL6 | 55 | M | 3/4 | 100 m^2 | CZ6 | 63 | F | 1 | 200 m^2 |
| NL7 | 65 | M | 1 | 250 m^2 | CZ7 | 64 | F | 2 | 240 m^2 |
| NL8 | 56 | F | 3/4 | 161 m^2 | CZ8 | 54 | F | 2 | 200 m^2 |
| NL9 | 69 | M | 2 | 270 m^2 | CZ9 | 67 | M | 3 | 225m^2 |
| NL10 | 56 | F | 2 | 200 m^2 | CZ10 | 44 | F | 2 | 225 m^2 |
| NL11 | 63 | F | 1/2 | 160 m^2 | CZ11 | 68 | M | 2 | 225 m^2 |

Table 2. Respondents' characteristics.

3.4. Analysis

Most gardeners used paper notebooks as their food logs. We entered the data into Excel spreadsheets and categorised them to facilitate analysis. We developed several categories: ones for types of food (fruits, vegetables, exotic crops, potatoes), food sources (supermarkets, organic shops, outdoor markets, etc.), and ways of using food (own consumption, preserves and stocks, gifting and sharing, selling). In the process, we corrected imprecisions in the data, related mostly to the weight of the food: while we instructed respondents to record quantities of foods in units of weight, even if only estimated, some records also included units such as pieces. We constructed a list of average weights of different types of fruits and vegetables (using several online sources as well as our own measurements) to estimate the weights of these foods.

Interview transcripts were manually coded in an iterative process. While we sought to associate gardeners' practices with one of two narratives on urban gardening—one focused on economic motivation, the other on conscious activism—we did not introduce these framings in the interviews to avoid influencing respondents' own understandings. Instead, we charted the economic aspects of respondents' gardening practices in the questions regarding their motivations for food self-provisioning and their use of the harvest (food log data also contributed to understanding the latter). We assumed that economic motivations or the ambition to grow as much food as possible for subsistence would appear amongst gardeners' reasons for food provisioning. Furthermore, we expected that economically motivated gardeners would produce more food for household consumption, possibly sell some of their produce, and limit gifting and nonreciprocal sharing.

Similarly, we analysed several indicators to establish whether the food self-provisioning of our respondents can be seen as an activist endeavour aimed at creating an alternative to the dominant food system. First, we analysed respondents' motivations expressed in interviews, identifying topics related to the environmental impacts of food provisioning. We investigated gardeners' reported growing methods and the use of agrochemicals in particular as a proxy for environmentally friendly behaviour. Furthermore, we explored participants' shopping habits to assess the extent to which they engage in conscious consumption. Food logs allowed us to evaluate respondents' use of 'alternative' food sources such as buying food directly from farmers or shopping in organic shops. Shopping habits and their rationale also came up in some of the interviews.

Sustainability 2020, 12, 5134 8 of 18

4. Results

4.1. The Practices of Dutch and Czech Allotment Gardeners

In this section, we present the main findings of both case studies, showing what the practice of food self-provisioning entails for research participants. We see food self-provisioning as consisting of both gardening and food provisioning. In the analysis below (in this and the following section), we discuss both activities. In this section, we first explore gardeners' 'sayings' in terms of what motivates them to garden and to grow food, and how they make sense of this practice. After that, we discuss how the practice of food self-provisioning is performed (i.e., 'doings'), based on the data from food logs.

4.1.1. Motivations for Gardening

The most important motivation for both Czech and Dutch respondents is that they enjoy gardening as a hobby. Some of our respondents in both countries stated that they grew up with a garden and saw gardening as a way of life.

'For me it is almost a condition to live well. I just need to have my hands in the soil very regularly. And I really enjoy gardening.' NL8

'It really became a hobby. And now it is a passion; I can't imagine my life without it anymore.' NL2

'I inherited the garden from my parents. It's my life. I feel very good here.' CZ7

'I grew up in the countryside, and I was used to keeping busy. I missed nature. I enjoy working with the soil; it gives me energy.' CZ2

Moreover, several respondents mentioned the physical and mental benefits gardening gives them. The physical activity of gardening is appreciated as a way of staying fit. Several respondents argued that their engagement in the gardening practice reduces stress and 'empties the head.' Respondents perceive gardening as a way of being outside and interacting with nature, which brings them a sense of relaxation. Gardeners in both countries mentioned 'having their hands in the soil' as being particularly enjoyable.

Furthermore, for several respondents the social element of gardening in an allotment complex is an important motivation. Gardening is a way to meet others and sometimes a social event in itself.

'Sometimes I spend an hour just talking. I enjoy that too. I am not that fanatic that I just do my garden. It is also a social event.' NL9

'The social contacts at the garden are also important to me.' NL5

'We have a group of friends here, which is great. Every morning we drink coffee together. We celebrate birthdays here, we have a drink together.' CZ3

4.1.2. Eating from the Garden

The aforementioned benefits of gardening show that our participants understand gardening as a multifunctional practice. Food self-provisioning is an important part of this practice. Respondents expressed strong feelings about growing food, for several reasons. First, growing their own food gives them a clear sense of joy. This relates to feelings of pride and accomplishment, expressed as 'feeling blessed' or as the 'sport' of providing for oneself.

'I really enjoy having dinner and actually only eating things from my own garden. That gives me some sort of pride, like, I didn't buy anything.' NL5

Sustainability **2020**, *12*, 5134 9 of 18

'It is great richness that you can put something in the soil and that it allows you to eat from it.' NL8

'I have a "farmer personality". It's a joy to grow something. Not out of greediness—it just makes me happy to see it prosper.' CZ7

'I come here because I get to do something, things grow, I get to see the results.' CZ4

Second, gardeners argued that home-grown produce tastes better than food available in shops. Moreover, they appreciate knowing how their food was grown and that it is safe.

'Simply that the food tastes extra good when it's fresh. And also that you know that it's organic.' NL11

'More and more also that I know what I eat and that I can be sure that it hasn't been tampered with.' NL8

'The taste is entirely different than what you find in the food shop. There it's kind of tasteless.' CZ10

'When you have something from the garden, it's much better than from the supermarkets. There you don't know what you eat.' CZ2

The importance of growing food was confirmed by the food logs. In both the Dutch and Czech cases, gardens provided a relatively large part of respondents' fruit, vegetable and potato intake. For most respondents, at least half of what they ate during the month of data collection was grown in their gardens (see Table 3). During the observed period, the Dutch gardeners produced 41 kg of crops on average; quantities ranged from 16 to 85 kg. This covered between 21 and 90 percent of their consumption. The average self-sufficiency rate was 70 percent. Some Dutch gardeners, however, also ate produce from communal allotment plots: we included this food in the calculations as it originated from the same allotment complex and we presumed that respondents also tended to these communal plots to some extent. Czech gardeners produced on average 57 kg of crops. There were significant differences within the sample: the least productive gardener recorded only 2 kg of crops, whereas the most productive harvested 162 kg. On average, this amount covered 52 percent of gardeners' own consumption of fruits, vegetables and potatoes, although the self-sufficiency rate varied from 6 to 100 percent.

Table 3. Respondents' harvests and self-sufficiency rates. **Dutch Gardeners Czech Gardeners** Harvest (kg) Self-sufficiency (%) Harvest (kg) Self-sufficiency (%) NL1 52 88 CZ1 36 38 75 CZ2 162 26 NL₂ NL3 58 73 CZ3 67 76 46 CZ4 50 51 NL4 21 NL5 28 90 C752 6 NL₆ 18 CZ6 137 68 44 CZ7 87 NL7 16 69 67 NL8 41 68 CZ8 26 100 51 77 32 79 NI.9 C79NL10 41 82 CZ10 16 21

Hence, while in the Netherlands the average harvest was smaller by weight, the self-sufficiency rate was higher. This is because the Dutch gardeners used most of their produce for their own

CZ11

44

57

43

52

86

70

NL11

Average

85

41

consumption, whereas some of the Czech gardeners gifted a significant part of their harvest or preserved it. Furthermore, the total consumption of fruits, vegetables and potatoes was higher in the Czech sample (58 kg per household, compared to 50 kg in the Dutch sample).

4.2. Scrutinising Existing Framings

4.2.1. Urban Gardening as an Economic Activity

As we discussed in the introduction, the existing literature tends to frame gardening in the CEE context as a matter of subsistence. To test the validity of this framing, we explored the economic motivations of the gardeners in our sample. The results from both countries were remarkably similar: while gardening is not motivated by the need to save money on food, it involves pragmatic considerations that suggest that gardeners are aware of the economic dimension of this activity.

Economic reasons were never mentioned as a motivation for food self-provisioning during the interviews. In fact, several respondents—both Czech and Dutch—reflected on the fact that this way of obtaining food is not economically efficient.

'We pay for the plot. It doesn't pay back what we grow here. But we take it more as recreation and having something to do. But money-wise, it doesn't pay off.' CZ11

'I don't really know whether home-grown vegetables are cheaper than vegetables from the shop. The fertilisers, the labour, and you have to pay the rent. Sometimes you need to replace tools, the seeds. And then it's eaten, and you have to sow again.' NL10

Accounts such as these led us to identifying two patterns. First, as discussed in the previous section, gardening is mostly motivated by noneconomic values. Second, however, gardeners are aware of the economic dimension of this practice, seeing the garden in relation to other available food sources. This results in a number of pragmatic deliberations. Particularly during crop selection, gardeners consider whether producing a certain crop 'pays off.' Research participants weighed factors such as availability and market price, but also the growing conditions at the garden (in terms of space available, soil quality and sunlight, for instance), together with the demands of particular crops (e.g., watering, protection against pests). Generally speaking, gardeners from both countries prefer to grow crops which are not readily available from other sources (e.g., regional varieties), which are (too) expensive to buy, and which are suitable for growing under the local conditions.

'I grow things that are easy to grow. For instance, tomatoes are not demanding. And I enjoy the varieties that you don't usually find. For example, this year I bought a black tomato; it's called Black Prince. [. . .] So I grow things that I can't get [in the shop]. Or things that are expensive in the shop, like garlic. [...] For instance, with beetroot I know I can get it cheaply, and I can get Czech beetroot. Carrots are difficult in this soil, and I also know I can get Czech carrots.' CZ1

'It is not cheaper, but you eat differently, for example, eating lots of raspberries whereas they are too expensive to buy lots of in the shop.' NL10

'That kale, that washing, that cutting, and then I think, "My god, for those fifty cents."' NL7

Another way of studying the economic dimension of gardening is looking at the use of garden produce. As we demonstrated in Section 4.1.2, quantities of produce—while varying amongst respondents—were comparable in both countries. The Czech gardeners produced more food on average, which might suggest more economic, 'output-oriented' gardening. However, the Dutch respondents were more self-sufficient, which disproves this hypothesis. Presumably, if gardening in Czechia were driven by economic needs, gardeners would strive to be more self-sufficient, for instance, by adjusting their diets to what they produced in their gardens or by not sharing it with others.

In both countries, gardeners used most of their produce for their own consumption. In addition, the majority (nine in the Netherlands and seven in Czechia) also shared some of their harvest with others. In total, 23 percent of the harvest in Brno and 13 percent of the harvest in Utrecht was given away. In the Czech case, five respondents preserved a relatively large amount of their produce. In the Netherlands, several respondents mentioned preserving or storing their harvest, but only two recorded these practices in their food logs during the observed period. None of the gardeners in the Czech sample sold their harvest. Four Dutch gardeners talked about occasionally selling some of their produce, but only one of them recorded this in the food log, and the quantities were small. One respondent mentioned that he used to grow flowers for his sister, a florist. The other three people who occasionally sold their produce mostly did so to deal with garden surpluses rather than to make a profit. For instance, respondent NL11 explained how she could not get rid of all the jam she had made by giving it to family and neighbours and eventually resorted to selling it at a local market. Respondent NL6 gave his neighbour, who owns a restaurant, specialty fruits, such as plums, medlars, figs and quinces, in return for a discount on eating in that restaurant. He also mentioned selling his figs in a shop:

'There is a Turkish greengrocer here, and I bring him some stuff too. Last year I had lots of figs (...). I gave him some kilos, and then I could take some produce from his shop. He writes on a sign 'figs from the neighbourhood', and then people buy them for 50 cents apiece. So, a restaurant and a shop, but most of it I eat myself.' NL6

In sum, gardening in both countries is not motivated by economic needs. Instead, gardeners recognise that this activity does not 'pay off' financially and appreciate its other benefits: they see it as an enjoyable hobby and a source of good quality food. Moreover, although some decisions about which crops to grow can be viewed in economic terms, as gardeners pragmatically consider how to use their garden space and their time, the overall logic of food self-provisioning is not utilitarian. This is confirmed by the ways gardeners use their produce. Surplus harvest is most commonly used to make preserves; gardeners also share a significant portion of their produce as gifts. Surprisingly, Dutch gardeners engage in selling more often than their Czech counterparts. However, this activity is still not economically motivated, and we consider it to be another form of sharing. We therefore conclude that there are no significant differences in the economic meanings of the practice between the two countries. This disproves the assumption that while Western European gardeners engage in food self-provisioning as a hobby, the same activity is driven by economic needs in CEE.

4.2.2. Gardening as an Activist Endeavour

Particularly in the context of Western Europe, urban gardening is often framed as part of the search for more sustainable food systems. This viewpoint creates implicit assumptions about the environmental consciousness and activist motivations of urban gardeners. To engage with these assumptions, we explored the extent to which both groups of gardeners are environmentally conscious and motivated by sustainability in their gardening and food provisioning. Specifically, we focused on gardening techniques, consumer behaviour and narratives about food self-provisioning as an environmentally conscious or activist practice.

For most of our respondents, creating a more sustainable food system, or simply eating more sustainable food, is not a main reason to garden. With the exception of one Dutch gardener, who specifically mentioned that reducing his ecological footprint is one reason he grows his own food, the impact of food growing on sustainability was not explicitly addressed by the interviewees. As we have shown, Dutch and Czech gardeners reflected on their motivations to grow food in similar ways: both groups mostly mentioned their enjoyment of gardening, being outside and having access to fresh home-grown produce. Particularly in the Czech case, respondents often understood their gardens as 'nature,' and several of them described their allotments in relation to biodiversity and as refuges for animals in the city.

While respondents did not engage in gardening as a way to create an alternative to the conventional food system, their understandings of food self-provisioning echo some topics associated with food activism. Most notably, gardeners in both countries appreciate knowing how their food is produced. Transparency of the production process is one of the reasons home-grown food is seen as better than shop-bought goods, as is apparent from respondents' statements presented in Section 4.1.2. However, this appreciation is mostly related to taste and quality, and less to environmental impacts.

Moreover, the understanding of home-grown food as better and more wholesome was not always in line with food production methods. Despite having strong opinions about shop-bought food being 'chemical,' eight of the Czech gardeners use industrial pesticides and fertilisers in their plots. Agrochemicals were recognised as a necessary evil that respondents use as a last resort to fight pests, though they also explore environmentally friendly growing techniques. Even gardeners who use industrial pesticides and fertilisers perceived their harvest as 'organic.' Such contradictions were not found in the Dutch case, as the allotments in which respondents garden all encourage or even require 'natural growing techniques' (i.e., not using pesticides or fertilisers). While some of the Dutch gardeners admitted that not using agrochemicals was challenging, they mostly adhered to the rules of the allotments. Thus, while gardeners in both countries expressed similar 'sayings,' that is, they see gardens as natural spaces and the harvest as free of chemicals, the Dutch were more consistent in their 'doings' in this respect.

Furthermore, we investigated the extent to which environmental concerns are important for gardeners when shopping. One of the ways in which we did that was by studying where people buy their groceries. Figure 1, based on the food logs, shows where our respondents acquire their food. For our Dutch respondents, supermarkets are the most important commercial sources. Five respondents also visited an organic or farmer shop, three others purchased groceries at a local Turkish or Moroccan shop, and one person bought from a wholesaler. The shopping habits of the Czech respondents are less diverse. Most of the fruits, vegetables and potatoes that were bought during the observed period came from supermarkets or traditional outdoor markets. This last category, used by seven respondents, features small-scale farmers alongside retailers. None of the Czech respondents bought food in an organic shop. Food log data also indicate that the Czech respondents are much more involved in gifting networks.

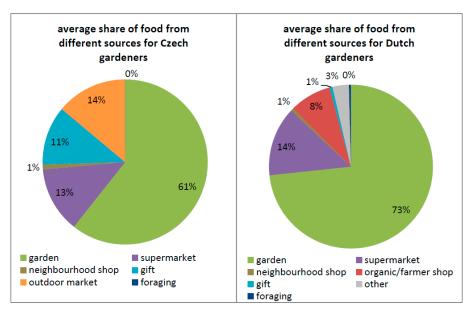


Figure 1. Sources from which Czech and Dutch gardeners acquired fruits, vegetables and potatoes during the observed period. Note that these figures cover all food acquired by the households, irrespective of its use, and therefore include food that was preserved or shared. In the Dutch figure, 'other' sources include wholesale and a grocery delivery system used by one respondent.

We also asked respondents how important it is for them to buy seasonal, organic or local food. Interviews suggest that both groups of gardeners take seasonality into account in their diets, which is the result—at least in some cases—of knowledge gained from gardening.

'In winter I really buy winter vegetables. We will never eat lettuce in winter, for example, because now that we have it in the garden, it is very unnatural to eat that in winter. Strawberries, I would never buy them, because I know that is not related to winter.' NL9

'I eat seasonally. In winter I can easily make do without these pale tomatoes. I prefer to eat beetroot, celery, carrots, potatoes, these root crops, beans and legumes, and that's it.' CZ1

Dutch respondents' views on the importance of eating organic food varied widely: for some of them it is very important, for others it is something to consider, and for yet another group it is not very important.

Interviewer: 'So you are only strict about organics?' NL8: 'Yes, let's say I am 98% strict with that.'

'Organic, yes it is important but it is difficult to... well, the price stops me sometimes.' NL1

Six Dutch respondents specifically mentioned taking the place of production into account when buying food. For some of them this is more important than consuming organic, and some respondents demonstrated extensive knowledge about the considerations one may need to make when trying to shop sustainably.

'Like, wait a minute, this is from Italy, or this is from Belgium. Ok, a little closer, less traffic. Or like this is from Belgium, but it is probably from a greenhouse, so better Italy because there it just grows on the field.' NL11

Organic certification was regarded with suspicion by several Czech respondents, while others perceived organic products as too expensive. Reflections on the environmental impacts of food production, while less frequent within the Czech sample, are clearly linked to the gardeners' own experiences with food self-provisioning.

'When you discover how much work it takes to grow something, and you see it on the market for a couple of crowns ... it's hard. And they can't compete with supermarkets; those have it even cheaper. And if you don't use fertilisers, it's small, and people don't like it. But nowadays people start caring about local food.' CZ1

'We mostly cover our own consumption. Of course, sometimes I see something we don't have, and I buy it, but that's rare. I don't even buy watermelons. I prefer to pick currants in the garden. They have plenty of vitamin C, and it's ecological, whereas when you buy it ... 'CZ7

All in all, the Dutch gardeners in our sample seem more environmentally conscious than the Czech respondents: they more often use natural gardening methods, and in interviews they more often expressed buying organic or local food. However, we should be careful not to overestimate the sustainability motivations of the Dutch gardeners either, as only one of them mentioned the environment as a reason for getting involved in gardening. Moreover, while overall the Dutch respondents showed more awareness about food-related environmental problems in the interviews, this did not necessarily translate into sustainable (shopping) practices for all of them.

We thus conclude that gardeners in both countries show pro-environmental behaviour, which is however not free of contradictions. While environmental concerns and issues related to the conventional food system are sometimes echoed in gardeners' understandings of food, they are not directly involved in their *motivations* for food self-provisioning. We thus disprove the starting assumption of this section, concluding that neither Dutch nor Czech gardeners are environmentally conscious food activists.

5. Discussion

The question we set out to answer in this paper is whether Dutch and Czech allotment gardeners perform the same practice. Our argument is that, if they do, gardeners in both countries would be 'doing the same thing', thus disproving the diverging framings of food growing in the two contexts. Although defining a practice can be difficult [46,51], we chose to focus on doings and sayings, contending that when both overlap we are talking about (variations of) the same practice, and that when they do not, food growing in these two different contexts are different practices: 'when distinct practices display many commonalities while the carriers do not recognise them as the same practice, for instance because they attach different meaning to their practices (...), these practices remain different ones' [50] (p. 109).

Our research shows that, on average, respondents in both countries are more than 50 percent self-sufficient in fruits, potatoes and vegetables during the summer harvest. Gardens thus contribute to these people's diets, and while the quantities differ between the two countries, in both cases the harvests are substantial. Moreover, practitioners in both countries preserve part of their harvest (although more in the Czech case), and they also share some of their produce with others. Hence, while the specific details of the materiality of the gardens may differ—what crops are grown, for instance—there are also great commonalities: what the gardeners do is similar.

Our results suggest that Dutch gardeners are a little more 'environmentally conscious' in their shopping behaviour and the environmental considerations they are able to express. Moreover, using natural gardening techniques (i.e., gardening without chemical fertilisers and pesticides) is considered 'appropriate conduct' in the food self-provisioning practices of our Dutch respondents, whereas for Czech respondents participating in this practice may involve using such chemicals. Nevertheless, for all gardeners the importance of gardening lies in the possibilities it provides to be outside, to be physically active, to find pride in growing fresh produce, to meet others—in other words, to enjoy a hobby. Understandings of the practice are thus largely similar as well. We argue, therefore, that allotment gardening, as performed by the Dutch and Czech gardeners in our sample, is the same practice. While our sample is too small to draw general conclusions, it suggests that variations on the practice are found between individuals rather than structurally between the two contexts.

As such, our research complements large-scale quantitative studies on gardening populations in different European countries [52,53] and invites future comparative studies. To our knowledge, comparisons of gardening practices in CEE and Western Europe are rare, as scholarship on both regions comprises largely separate literatures. However, existing studies of allotment gardens provide insights that support the findings of this paper, as the motivations for gardening and the values appreciated by gardeners remain similar across diverse contexts. Enjoying gardening as a social activity and a meaningful way of spending free time while obtaining fresh vegetables was mentioned by gardeners in Almere (the Netherlands) and Oslo [54]. Food provisioning, social life, health, the connection with nature and leisure were amongst the most appreciated garden functions in Paris and Montreal [55]. Studies from CEE provide a similar picture: having a meaningful hobby and producing fresh and healthy food motivate allotment gardeners in Prague [56]. The intertwined dimensions of self-fulfilment, social life, the connection to nature and tasty food with transparent origins are appreciated by gardeners in Estonia [42]. A systematic comparison of these and other studies from CEE and Western Europe is required to further explore the similarities and differences in the meanings of (allotment) gardening, and possibly also in its material performances. As a starting point for such a review, our research suggests that high quality food and the enjoyability of gardening play a more important role for allotment gardeners than both economic and activist motivations.

Our findings are relevant for research aiming to understand different urban food initiatives emerging across diverse contexts. Indeed, the diversity of urban food growing initiatives is large, 'ranging from small-scale window farming to allotment and community gardens to large-scale rooftop farms and hydroponic greenhouses' [45] (p. 153). Furthermore, research highlights that specific types of initiatives may play out differently in different contexts, leading to different understandings and performances of the practices involved. Taking examples from CEE and Western Europe,

the existing literature documents diverse adaptations of farmers' markets [57], collective farmer marketing initiatives [58] and consumer cooperatives [59] shaped by local contexts. While we value the finding that insights from a particular context are not necessarily applicable to other contexts, our study indicates that the opposite can also be true: a particular type of urban food initiative might take on similar forms in different places. In some cases, differences between contexts may be smaller than those between the various types of urban food initiatives. In other words, allotment gardening in different contexts may be more similar than, for instance, allotment gardening and community gardening or community-supported agriculture in the same context, as was shown by previous studies [25,54]. In that respect, our results do not necessarily apply to other types of urban food self-provisioning but only to allotment gardening. Further research could expand on the differences between allotment gardening and other types of urban agriculture, and the extent to which these other types show similarities across contexts.

Our finding that allotment gardening in different contexts can be considered the same practice is perhaps explained by the fact that it is a relatively old form of food self-provisioning. Dobernig et al. [45] argue that urban food growing is an emerging practice since the meaning of the practice is changing, the links between its constitutive elements are transforming and the relations with other practices are developing. However, they are referring to comparatively more recent urban food growing initiatives, that is, community gardening and rooftop gardening. Allotment gardening has existed for centuries, and therefore the meanings and performances of this practice, while changing over time, may have already 'settled.' In fact, the historical origins of allotments in Europe can be traced back to the same roots—the first allotments in both the Netherlands and Czechia were inspired by the same ethos of providing urban workers with a meaningful leisure activity that enhanced health and access to fresh food [28]. Hence, in contrast to community gardens, which are, especially in the North American context, more often established as grassroots initiatives by those reclaiming urban spaces and seeking food justice, allotments were typically started in a more top-down fashion as a form of philanthropy or 'people's betterment,' which may explain why they are still hardly associated with such activist discourses (see also [25]).

Despite the different contexts of both countries, we contend that allotment gardening in Czechia and in the Netherlands is a rather similar practice, and we disprove both of the diverging framings present in the literature: our Czech respondents are not involved in gardening practices mainly for economic reasons, and our Dutch respondents do not self-provision in order to consume food more sustainably. In terms of harvest quantities, the Czech gardeners did not differ from the Dutch respondents, and none of them expressed the wish or need to produce as much as possible for subsistence. As a matter of fact, the Dutch respondents were more self-sufficient and thus arguably used their gardens more economically. To our surprise, Dutch gardeners—and not Czech ones—sold part of their produce, although this practice was mostly described in terms of using the harvest well, instead of in terms of financial gain. Sharing food with others is a much more common practice in both countries, performed to deal with excess harvest or simply to strengthen bonds with friends and family. Environmental consciousness, that is, the awareness of one's ecological footprint, is arguably more normalised in the Netherlands, which is also illustrated by the allotments' guidelines on natural gardening. However, we have seen that awareness does not always translate into actions. That said, the practice of food self-provisioning can, in both cases, be framed as quiet sustainability: an everyday practice which is not performed with explicit environmental goals but nevertheless results in beneficial environmental outcomes [60]. We conclude, therefore, with an appeal: research on more sustainable food provisioning needs to learn from existing practices grounded in diverse traditions and geographical contexts. While more novel forms of urban food production can be more attractive for both scholars and policymakers, traditional food practices such as allotment gardening might hold equal relevance for local food systems and are thus worthy of attention and support.

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