

Pragmatic Prosumption: Searching for Food Prosumers in the Netherlands

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Abstract

This paper explores the concept of prosumption in the world of food. Prosumption is a combination of production and consumption: food prosumers are people who actively produce food for self-consumption. Besides reflecting on sociological conceptualisations of prosumption, this exploratory study uses an online survey (N = 835) and semi-structured interviews (N = 12) to examine prosumption empirically. Respondents, living in Almere, the Netherlands, have mostly personal and pragmatic reasons, such as the enjoyment of gardening and the pleasure of producing food, to engage in some form of prosumption. Respondents are hardly motivated by profound concerns about sustainability or a wish to create a 'radical' alternative food system. We argue, therefore, that a more pragmatic approach to the concept of prosumption in the field of food is more appropriate than sociological interpretations linking prosumption to such grand themes as power, capitalism and activism.

Key words

allotment gardening, alternative food systems, backyard gardening, community gardening, self-consumption, sustainability, urban foraging

Introduction

‘We need to produce as well as consume – to be active rather than passive’, writes Steel in her book *Sitopia* (2020, p. 310). Although she doesn’t use the term, Steel is calling for ‘prosumption’, a junction of production and consumption. By producing food, prosumers try to bridge the gap between production and consumption, a salient characteristic of the current post-industrial era. They belong to a growing group of citizens who are not only interested in high convenience and low pricing. Increasingly, passive and dependent consumers make room for more active and self-supportive ones: people who purchase organic foods, buy from local farmers, follow seasonal diets – or engage in prosumption. However, while food studies give ample attention to several different ways in which citizens demand changes in the food system, such as community gardening, Alternative Food Networks,

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and political consumerism, there is a lack of attention to more mundane everyday prosumption or the people who are making such changes in daily practice by producing their own food. The aim of this article is to investigate the value of the concept of prosumption as a tool to reflect on how to overcome the troubling distance between what we eat and the ways in which our food is produced.

In this article we explore activities and motivations of food prosumers in the Dutch city of Almere. Our findings illustrate that the impact of prosumption on current consumption practices is relatively modest, but also overtly present. Our respondents are mainly motivated by personal and pragmatic motivations, rather than by a wish to create an alternative food system. This implies that 'the food movement' is not only inhabited by food activists. Nevertheless, without positioning their activities as alternatives to the mainstream food system, prosumers still aim to connect with and value food. A pragmatic perspective on prosumption reveals that today's food consumers can be active consumers, not solely or merely for 'grand' motives regarding the transition of the current food system into more sustainable and healthy directions, but 'simply' as a result of mundane reasons of personal satisfaction provided by manual work, enjoying the outdoors, or having social interaction with like-minded souls.

The remainder of this article is organised as follows. The next section briefly discusses the origin and recent history of the concept of prosumer – particularly in sociological literature – and its neglect in food studies. We demonstrate that the concept has gained momentum and aligns with the practices modern people engage in and the possibilities they have due to technological progress, and we link it to recent thinking on the sharing and circular economy in which boundaries between production, provisioning and consumption are blurring. The following sections Methods and Findings present the empirical research we conducted in the middle-sized Dutch city of Almere: the methods section depicts our operationalisation of the prosumption concept and our methods, the findings section presents the main research outcomes. We reflect upon people's motivations to prosume, the prosumption activities as such and the extent to which prosumption relates to discourses around 'looking for alternatives'. The discussion and conclusion sections wrap up the potential of food prosumption activities for the current field of food studies. We relate our findings to the prosumption literature more broadly and argue that a pragmatic perspective is meaningful to the broader issue of consumer engagement with food, and for its emphasis on the joy of producing food rather than buying it. We also elaborate on what our findings imply for the field of policymaking. We conclude with a call for a pragmatic approach to prosumption.

Prosumption: The concept in sociology and its neglect in the field of food

In *The Third Wave* (1980, p. 53ff, 282ff), futurist Toffler introduced the term prosumer. After the first and the second wave of, respectively, the pre-industrial and the industrial era, the third wave concerns the post-industrial period. Whereas prosumption was common in pre-industrial times because self-sufficiency was the norm, industrialisation resulted in a division of labour, mass production, and a split between production and consumption:

'The two halves of human life that the Second Wave split apart were production and consumption. We are accustomed, for example, to think of ourselves as producers or consumers. This wasn't always true. Until the industrial revolution, the vast bulk of all the food, the goods, and services produced by the human race was consumed by the producers themselves, their families, or a tiny elite who managed to scrape off the surplus for their own use'. (Toffler 1980, p. 55)

The post-industrial era is characterised by new, especially digital, technological possibilities to reunite production and consumption: prosumption. Toffler's examples are the 'direct-dial' in the 1950s, when consumers started taking over the role of operators, and pregnancy tests that women can take at home. Toffler did not foresee a renaissance of pre-industrial forms of mutual connections between making and using, but predicted a modern phenomenon that gives a new perspective to the position of consumers.

It took a few decades before the notion received renewed academic attention. Sociologist Ritzer should be credited for rediscovering and reviving prosumption. After a first article on prosumption in 2010, co-authored with Jurgenson, Ritzer published several other articles on the concept (Ritzer and Jurgenson 2010; see e.g., Ritzer 2015a; 2015b; 2017b; 2019; Ritzer and Miles 2019). Ritzer not only revived prosumption, he also developed a reworked version of the concept, as Dusi calls it (see further Dusi 2018). One of the differences between Ritzer's view on prosumption and that of Toffler's, is that Toffler considers prosumption as a separate and third category next to production and consumption where Ritzer sees the two as sub-types of prosumption. To Ritzer production and consumption constitute two ends of the 'prosumption continuum' (Ritzer 2015a, pp. 2–3; 2015b, pp. 414–415; 2019, p. 77). Hence, for Ritzer all activity is prosumption, sometimes more production oriented (termed 'prosumption-as-production'), other times more consumption oriented (framed as 'prosumption-as-consumption'): *'when we mention production and consumption, we are dealing with them as extreme types, phases, or moments in the overarching process of prosumption'* (Ritzer 2015b, p. 414; also see Dusi 2018, pp. 666–669).

Whereas Toffler is in general positive about prosumption, arguing that it will strengthen the position of consumers when they regain control over what they use, a position that was supported by his optimistic view on technology, Ritzer disqualifies this view as 'very romantic' (Ritzer 2015a, p. 15) and considers his own perspective 'highly pessimistic' (Ritzer 2015b, p. 413; 2019, p. 90). He is critical of prosumption, arguing that it weakens consumers by exploiting them. This gloomy view relates to Ritzer's idea about the process of McDonaldisation, the term he coined (1993) and which became his most famous brainchild, of which he was not very fond. One of the characteristics of McDonaldisation is putting the customer to work: clients order and pick up their own food, and discard their waste themselves. To Ritzer this means that consumers perform unpaid labour. This process can be seen everywhere: self-service at petrol stations, ATM machines, check-in terminals at airports, and the supermarket (which increasingly offers self-scanning options) (also see Ritzer 2015b, p. 417). Digitalisation boosts this trend towards self-service (see Ritzer 2019; Ritzer and Miles 2019 for a recent update on McDonaldisation and prosumption in the digital era). Ritzer does not consider it progress when consumers' energy, time, intelligence and

skills are freely and productively used. Rather, he deems it exploitative, only beneficial for the companies that use consumers in this way: *'Prosumers (...) increase the profits of the capitalists'* (Ritzer 2015b, p. 434). Hence, in the eyes of Ritzer prosumption does not lead to freedom for and a strengthened position of the consumer. Rather, people as prosumers devalue to *'smart prosuming machines'*, fuelling *'prosumer capitalism'* (Ritzer 2015a, 2015b). All in all, Ritzer represents a way of thinking about prosumption in which the concept is studied from a perspective of relations of power and exploitation, as a phenomenon enhancing the capitalist system and accelerating the level of (hyper)consumption.

Although Ritzer argues that *'we cannot ignore the gains for individuals as reason for the rise of prosumption'* (Ritzer and Jurgenson 2010, p. 25), he does not offer a way to see prosumption in a more positive light. He overlooks the fact that consumers may take pleasure in writing digital content, that they may learn from doing so, and that engaging in activities that create the products and services people consume may be inspiring: prosumption can be an option to improve and enrich the consumption experience – as Toffler envisioned. Moreover, we should not forget that self-service does in fact pay off as products become cheaper (Ritzer seriously doubts such arguments – see for instance Ritzer 2015b, p. 425ff; 2019, p. 83ff). Furthermore, seeing prosumption merely as an intensification of capitalism (Ritzer and Miles 2019) hides from view the fact that it often actually challenges capitalist logics, as when people share or barter, and that it can contribute to alternative, less materialistic forms of sustainable consumption and the normalisation of *'using, not owning'* (more generally, Ritzer hardly believes there is much space for alternatives to the mainstream in the world of food, see Ritzer 2017a). Hence, we tend to agree with Dusi (2018, pp. 675–676; also see Dusi 2017) when he asserts that:

'besides focusing on the disadvantages of engaging in prosumption (e.g., exploitation), it seems desirable to strive for a deeper understanding of how individuals try to improve their life and their community through prosumption'.

Numerous people today will undoubtedly believe and feel that the possibilities of presumptive practices are improving and liberating their everyday lives. Consider the availability of products and services of a *'presumptive'* nature like Wikipedia or Linux, or the multiple opportunities on offer nowadays to customise sneakers, car or apparel – examples of people partly producing for own consumption, generating a blurring of boundaries between producer and consumer. Another example that gains much popularity recently concerns citizen initiatives in energy production for household consumption (see also Rifkin 2014, p. 135ff). The concepts sharing economy and collaborative consumption also exemplify the need for a *'hybrid'* term between consumer and producer, as consumers produce consumption opportunities for their peers (see e.g., Edbring *et al.* 2016). New forms of consumption ranging from eBay to repair cafes and *'freecycling'* (see e.g., Eden 2017), as well as the popularity of notions such as co-creation, co-production and co-innovation (see e.g., Roberts *et al.* 2014) suggest that the differences between producer and user are not immediately obvious.

Prosumption and food studies

Scholars in the domain of food studies hardly use the concept of prosumption as such. In studies by Dagevos and Van Ophem (2013) and by Van Dijk *et al.* (2016) the notion is explicitly referred to but not further elaborated upon. Kosnik (2018), however, draws heavily on Toffler's ideas about prosumption. The prosumer is central in her analysis of what she calls 'lifestyle subsistence farmers' (Kosnik 2018, pp. 123, 127, 129, 132), striving for a self-sufficient lifestyle by voluntarily and deliberately retreating from the economy and mainstream food industry and developing a rural lifestyle of self-provisioning. Other research with a focus on food self-provisioning is close to what prosumption is about – even though it does not use the concept. A recent example to illustrate this is provided by Palmioli *et al.* (2020) who observed that for small farmers in northern Tuscany securing fresh food for their families is an important objective of their farming activities. As a result, part of their land and work is dedicated to the self-provisioning of fruits and vegetables. As production for self-use defines prosumption, this finding can be interpreted as such. Also Renting and colleagues (2012, p. 304) are aware of the potential meaningfulness of the concept in the context of food provisioning:

'The rich variety of forms of citizens engagement in food provisioning (...) make clear that the traditional distinction between "producers" and "consumers" is becoming increasingly obsolete'.

Hence, while the concept of prosumption is hardly used in food studies, scrutiny reveals that it is recognised that production and consumption are not as clearly separable as often assumed. In fact, looking back in time, neglecting the prosumption phenomenon in the field of food studies is remarkable because it was only relatively recently that many people were accustomed to growing a substantial amount of food themselves: they grew vegetables in the backyard or raised a pig in the barn (see e.g., Lawson 2005; Steel 2008). They were, so to speak, prosuming food. Looking forward it is remarkable too, because there is reason enough to bring agricultural production closer to consumers. For the last two decades scholars have been writing about the distance between consumers and the way in which their food is being produced, and how to overcome that gap, investigating new roles for and responsibilities of consumers (see e.g., Brom 2000; Millstone and Lang 2003; Korthals 2004; Jaffe and Gertler 2006). There is ample scientific attention for alternatives to the current global food system (see e.g., Lang and Heasman 2004; Seyfang 2008; Renting *et al.* 2012; Marsden 2014). An important research direction in this respect concerns Alternative Food Networks (AFNs) such as farmers' markets, box schemes and Community Supported Agriculture. AFNs offer consumers opportunities for engagement, co-production, and influence on production processes (see e.g., Dubuisson-Quellier *et al.* 2011). This interest in the connection between consumers and the production system implicitly refers to prosumption, or more specifically to 'prosumption-as-consumption'. Scholars have also written about consumers' motivations to be differently and more directly engaged with their food, with discussions focusing on the accessibility of these AFNs (examples are Guthman 2008; Paddock 2014; Wheterill and

Gray 2015), and the extent to which AFN consumers are guided by ethical motivations (see e.g., DeLind 1999; Tregear 2011). Less attention has been given to the possibly more mundane motivations of prosumers, and for the potential merits of prosumption. Another body of research focuses on urban food growing, usually in community gardens, in which consumers are more actively part of their own production. While these growers often produce for their own consumption, the term prosumer is largely absent in this discourse. Scholars do discuss the extent to which urban gardens can be seen as political initiatives to take back the city (see for instance a special issue on political gardening in *Local Environment*, Certomà and Tornaghi 2015), but little is known about the use growers make of their produce (Tornaghi 2014). Moreover, especially in literature on the Global North, research on urban gardens and urban agriculture more broadly often focuses on its many potential non-food benefits, such as social cohesion. Research interest in actual food production in community gardens, as well as in allotments or home food gardens in the Global North is largely absent (Taylor and Taylor Lovell 2014; see also Exner and Schützenberger 2018).¹

All in all, while it is recognised that production and consumption are not always easily distinguishable, and while the scientific community reports on alternative ways in which consumers can access food – for instance by participating in AFNs or by producing it themselves – the literature rarely engages with the term prosumer or prosumption. Moreover, there is often a focus on ethical motivations (Tregear 2011) and studies conducted in the Global North hardly discuss how much people eat from prosumption activities (a notable exception is Kortright and Wakefield 2011). The paper by Kosnik (2018) that we referred to above, serving as an exception, focuses on a very specific, committed group of prosumers – arguably not the everyday producer we may find around the corner. We contend that the more everyday food prosumer is largely lacking from the scientific literature: we do not know what prosumption activities entail in daily practice, what their outputs are, and why people engage in these activities. These issues are central to the empirical research we conducted.

Methods

This article understands a food prosumer as someone who actively produces (part of) his or her food him/herself. We deliberately introduced a broad definition, stretching the boundaries by including activities as small-scale as a basil plant in the windowsill (see our operationalisation below). This choice was guided by our wish to be as open as possible to what is happening in reality, rather than excluding activities beforehand, as this was an explorative study. Our study is situated at the latter end of Ritzer's prosumption continuum ranging from 'prosumption-as-production' to 'prosumption-as-consumption'. The latter type of prosumption is also applicable to small farmers (Palmioli *et al.* 2020) or non-commercial farmers (Sutherland *et al.* 2019) who consume part of their produce, while 'prosumption-as-production', referring to the consumption of resources or goods in the production process, applies better to industrial and commercial agriculture. However, in all these cases it is about farmers, not about the non-professional citizen-consumers we are dealing with in our empirical research. The protagonist's main identity – producer or consumer – determines which end of the prosumption continuum is emphasised. Our focus is on consumers

who produce part of their food themselves rather than on producers who consume part of their produce.

In order to systematically study prosumption activities, we further operationalised the concept by breaking it down into five categories, representing different ways in which people can be involved in their own food production. These categories are not exclusive: one may participate in one or more. The categories defined are:

1. 'The windowsill': growing food inside the house, such as a basil plant in the windowsill, tomatoes on the balcony, or oyster mushrooms on coffee grounds;
2. 'The backyard': growing food in the garden around the house, such as fruit trees, grapes, or a kitchen garden;
3. 'The allotment': individually growing food on another location than the private backyard. This is usually, but not necessarily, an allotment;
4. 'The community garden': communally growing food on another location than the private backyard. This is usually, but not necessarily, a community garden or food forest;
5. 'Wild foraging': collecting food from natural areas that one does not maintain. Examples are picking mushrooms or berries, collecting fruits or nuts from wild trees, or picking herbs. We also include beekeeping and fishing in this category.

Within these categories, we only studied the *production* of food, and excluded other food-related activities such as processing (unless home-produced foods themselves are being processed). Moreover, while we included fishing and beekeeping activities, we excluded all other animal products (e.g., milk, eggs, meat). We acknowledge that keeping chickens is adaptable to small-scale production and consumption, but chose to focus on plant-based produce only. This was dictated by reasons of feasibility, but furthermore we assumed that most people who keep chickens would also be involved in plant-based prosumption and, therefore, already qualify as prosumers according to our definition.

The city of Almere

This research was carried out in Almere, a medium-sized city accommodating about 200,000 residents 30 km east of Amsterdam. The development of the city of Almere started in the 1970s. Its layout is poly nuclear, echoing the garden city model of Ebenezer Howard, resulting in a relatively green city. Almere has a high percentage of owner-occupied homes, predominantly with a private garden (Jansma and Wertheim-Heck, under review). Two thirds of these are paved: this is higher than the Dutch average. Around a quarter of Almere's inhabitants moved there from Amsterdam, as did a large share of Almere's first residents. A third of the population was born outside the Netherlands, predominantly coming from Surinam or the Antilles. Almere is considered a typically middle-class city: the socio-economic status of its inhabitants is comparable to the average of the Netherlands.² Income per capita is €24,700 (2017), close to the Dutch figure of €25,700.³

To uncover its level of food prosumption we used a questionnaire in combination with semi-structured interviews. Both research instruments were structured according

to our operationalisation of prosumption (i.e., the five categories): we avoided using the term ‘prosumption’, as it is not much used in daily language. Rather, we explained that our research was about people growing or gathering some of their own food, and discussed respondents’ participation in this activity.

We designed and distributed the questionnaire in collaboration with Almere municipality’s Bureau of Statistics and Research (*Dienst Statistiek en Onderzoek*). The questionnaire was sent to all members of the so-called Almere online panel (1803 participants) in February 2019. Members of this panel are residents who volunteer to receive online questionnaires on Almere issues – they are not obliged to fill them out. Respondents were asked about the five categories of prosumption defined (e.g., whether they garden in an allotment): there was a total of 38 questions but respondents only encountered those relating to the categories they indicated to participate in. Questions related to how often people engage in those activities, for what reason, how much they eat from these activities, how the harvest is being processed and respondents’ shopping behaviour (organic, local, seasonal, etc.). 835 people filled out the questionnaire (response rate: 46 per cent). While respondents filled out the questionnaire anonymously, the background of each respondent is known by the Bureau of Statistics and Research. The researchers only had access to the combined background criteria (see Table 1). Comparing these with those of Almere as a whole shows that our respondents are higher educated and older than the average Almere resident. The Bureau of Statistics and Research provided an excel file containing the questionnaire data (used in calculations and for open answers) and a number of pivot tables upon request.

During winter and early spring 2019, we conducted 12 semi-structured interviews with Almere residents active in one or more of the prosumption categories defined. We used purposive sampling to find these respondents, as we were actively looking to represent all the categories. In reality, however, most respondents fitted more than one category (see Table 2, also for respondents’ characteristics). Most respondents were found through personal contacts in Almere (without being known personally by the first author, who conducted the interviews). One respondent reacted to a call for respondents on Facebook. Hence, the group of interviewees should not be considered a representative group of prosumers. The goal of the interviews was to understand prosumer practices and reasoning. Interview questions concerned our five prosumption categories, motivations, time investments, and the processing and sharing of the harvest. Interviews generally lasted half an hour to 45 minutes and occasionally an hour, with one interview taking 15 minutes. The interviews took place at a location of the respondent’s choice, usually the home. Interviews were recorded and transcribed. All interviewees signed an informed consent form. We manually coded the interview transcripts in an iterative process, starting with main codes based on interview topics, which were then coded in more detail.

Findings and analysis: Prosumption as both marginal and omnipresent

This section describes respondents’ involvement in prosumption, looks into motivations to prosume, and devotes attention to the effects of prosumption activities on respondents’ diets and shopping practices.

Table 1: *Questionnaire respondents' background criteria*

Gender	
Male	57%
Female	43%
Age	
15–24 years old	0.1%
25–34 years old	2%
35–44 years old	10%
45–54 years old	20%
55–64 years old	29%
65 or older	39%
Household composition	
Alone	13%
Couple, no children	36%
Couple with children	44%
Single-parent family	4%
Living with parents or caretakers	1%
Other	2%
Education	
Lower educated	10%
Medium educated	36%
Higher educated	51%
Other	3%
Housing	
Rental house	14%
Owner-occupied	86%
Employment	
Employed	62%
Self-employed	9%
Self-employed and employed	2%
Student	1%
Housewife/man	4%
Unemployed	4%
Unable to work	3%
Pensioned	17%
Other	1%

Two thirds of the questionnaire respondents are involved in one or more of the prosumption categories we defined. The most common categories are the backyard (84 per cent of respondents live in a house with a garden) and the windowsill, followed by wild foraging (Figure 1). More than half of the respondents who are involved in prosumption do so in more than one category, often in combination with the backyard. Growing food in the backyard can take several forms, but a smaller scale prevails

Table 2: Interview respondents' background criteria (dark blue: prosumption category represented by the respondent, light blue: other prosumption categories respondent engages in)

#	Age	Gender	Household composition: lives with ...	Profession	Education	Windowsill	Backyard	Allotment	Community garden	The wild
R1	47	F	Partner + adult children	Nurse	MSc					
R3	67	M	Partner	Pensioned scientist	MSc					
R4	67	F	Alone	Pensioned welfare worker	BSc					
R5	60	F	Partner + adult children	Lawyer and manager	MSc					
R6	70	M	Partner	Plumber	BSc					
R7	50	F	Adult child	Life (food and health) coach	Unknown					
R8	40	M	Partner + children	Laboratory technician	BSc					
R9	59	M	Alone	Musician	Vocational					
R10	66	M	Partner	Pensioned high-school teacher	BSc					
R11	51	F	Partner	Manager	Unknown					
R12	57	M	Partner	Therapist and drugstore owner	BSc					
R15	54	F	Partner + child	Government officer	MSc					

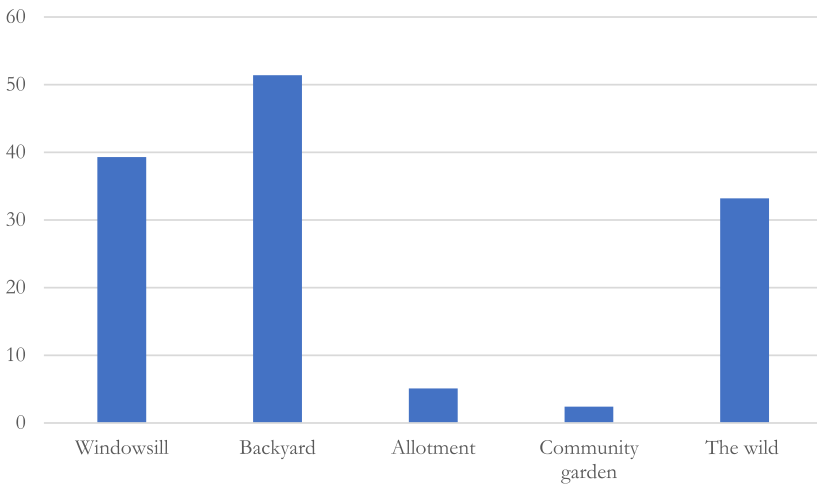


Figure 1: *Questionnaire respondents presuming in one or more categories (in percentages) (N = 835)*

in our sample: whereas 11 per cent of our respondents uses more than 10 square meters to garden, 80 per cent uses six square meters or less. Growing produce in community gardens and especially in allotments is usually done on a larger scale: more than half of the respondents with an allotment grows food on hundred square meters or more. However, these categories are much less used by our respondents. This suggests that questionnaire respondents are mostly involved in prosumption activities that are relatively small-scale (and by implication, not very time-consuming).

Interview respondents sketch a different picture. Except for the one respondent who only grows in the windowsill, all are heavily involved in at least three forms of prosumption: most of them grow herbs in the windowsill and seedlings in the house; others use their backyards of up to 500 square metres largely for growing vegetables; one respondent gardens on an allotment of 300 square metres while growing vegetables and herbs in the backyard; another produces on an allotment and in a greenhouse (32 square metres) while also catching and smoking fish; two respondents use private plots in community gardens; one respondent started a communal food forest and grows fruit in her backyard; another uses a large allotment, initiated a community garden, and grows in the backyard; one respondent keeps bees and heirloom fruit trees; -yet another respondent harvests from the wild, gardens in an allotment and uses her backyard.

Harvests and diets

A third of the questionnaire respondents process the harvest: all but one of the interview respondents do so. Interviewees process in various ways. They make wines from dandelions, rhubarb, or gooseberries, and teas from lime blossom, lemon balm, rose

petals or nettle tops. They make membrillo, pesto, fruit sweets, sauerkraut, chutney, smoked fish, and almond marzipan. In order to make the harvest last longer, respondents use techniques such as freezing, drying, and cold storage. These activities show creativity – several of the home-made products are uncommon – and a willingness to spend time and effort, as recipes may need various attempts before having the expected outcome.

Questionnaire respondents stated that their diets are only limitedly influenced by their prosumption activities: almost nothing, or less than a quarter of what they eat is home-grown or wild foraged (home-grown herbs generally play a larger role in the total amount of herbs consumed). This is in line with our finding that these respondents are mostly engaged in activities that require limited time investments and have limited outputs. For most interview respondents the harvest forms a larger part of their diets, although this differs per product group (e.g., vegetables, fruits, potatoes, nuts), and differences between respondents are substantial. Hence, where one respondent claimed to grow 10 per cent of his diet and another only harvests some herbs from the food forest she participates in, others estimated to be self-sufficient with respect to fruit and vegetables for 30 per cent (winter) to 60/70 per cent (summer) or even 80/90 per cent. Some respondents grow winter vegetables or preserve vegetables for winter, so that they may also eat from their gardens outside the summer season.

‘During the season almost everything I eat comes from the garden and now in winter I still have potatoes, beets, carrots and kale. (...) Now [Winter] it is of course very limited, so you want to eat something else for a change.’ R9

Interview respondents discussed to what extent their prosumption activities dictate what they eat, rather than first deciding what to cook and seeing whether this is available in the garden. Three respondents indeed contended that the garden determines their diets, but most respondents experience an interplay between garden and kitchen. Fruit and vegetables need to be harvested at a given time: some of that harvest is then eaten, but sometimes respondents feel like eating something else or look for variation when a particular crop is too abundant.

‘It depends on what is available. You can influence that a little by freezing or drying it.’ R10

‘If you make a salad you’re like, I need some tomatoes, I need some herbs, I need some spring onions, I get it from the garden. But it is also definitely the case that it is just available and needs to be cooked, that’s it. Fortunately we have a freezer, so that we do not have to eat zucchinis six weeks in a row.’ R1

Most respondents share at least part of their harvest with others. While growing for commercial purposes is uncommon, two respondents occasionally sell harvest: the beekeeper sells some of his honey (30 jars of 450 grams) through the local urban farm, another respondent uses some of her harvest for her catering business. For her this is a good way to use her harvest to the fullest and process large quantities of vegetables. The beekeeper only sells the honey that remains after personal consumption. Hence, selling the harvest is mostly a way to deal with excess produce.

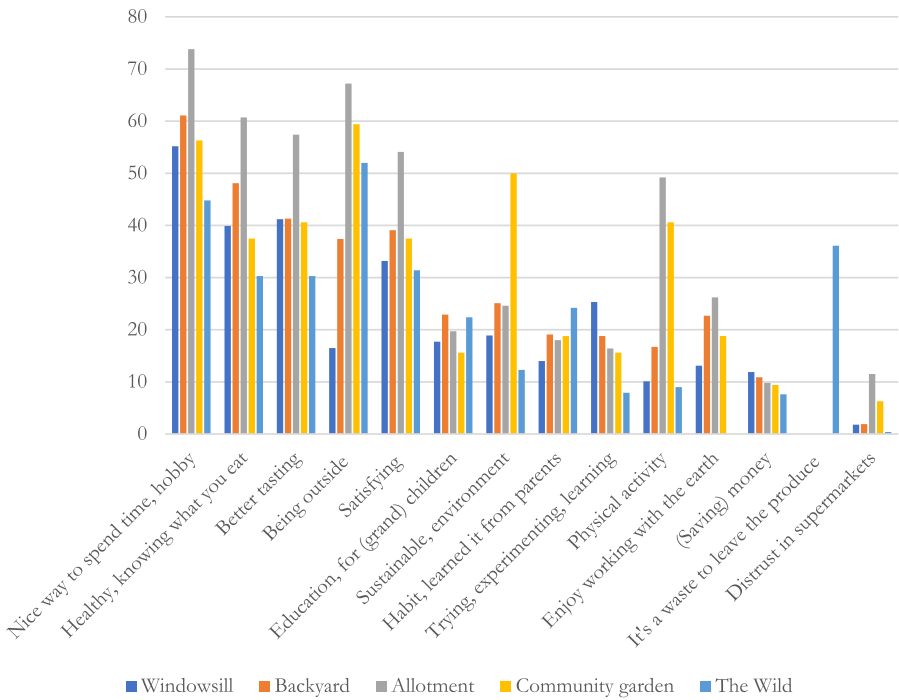


Figure 2: Questionnaire respondents' motivations for prosumption (in percentages), ordered by combined frequency (in absolute numbers) (Please note that respondents were asked to give motivations for each of the prosumption activities they engage in. This means that one respondent may feature more than once in a combined frequency.) (N: windowsill: 328; backyard: 414; allotment: 61; community garden: 32; wild foraging: 277)

In sum, the extent to which the respondents eat from their prosumption activities varies widely. Both questionnaire respondents and some interview respondents have small harvests, others eat from their gardens to a greater extent. Respondents with relatively large harvests generally take a pragmatic stance: while they may eat from their gardens substantially, they are not 'slaves to the harvest' and find alternative ways to deal with excess produce, such as storing, sharing or selling. This shows that while the produce is highly appreciated, people do not depend on it for their livelihood. We come back to this later.

The time spent on food prosumption differs between respondents as well: some spend two, others 20 hours a week. Processing the harvest takes a large amount of time. Estimating how much time they devote to their prosumption activities was difficult for respondents, however. This is due to the difference in time invested over the seasons (with peak time for growing in spring and for processing in summer and autumn), but also because several activities are performed in between other tasks or only a few times a year (wine making, for instance, consists of a number of relatively

short activities, with long times of no activity in between). Understanding both the degree to which people eat from their gardens and the time people spend on these activities clarifies the importance of prosumption activities for our respondents: both variables show a large variety, suggesting that prosumption activities are more important for some than for others.

To conclude, we found a relatively large group of prosumers in Almere, and in that sense prosumption seems omnipresent. Simultaneously, the phenomenon can be considered marginal: questionnaire respondents mostly have small plots and eat from their activities only limitedly. For a particular group, however, the situation is different. Interview respondents prosume in various different ways (e.g., they grow in the backyard, forage and are involved in a community garden), process the harvest into various products, and some spend a large amount of time on these activities.

Motivations

Despite these differences in engagement, interviewees and questionnaire respondents showed rather similar motivations for engaging in prosumption. They enjoy the social element of gardening. Another important reason is that they take pleasure in the activity of gardening. Figure 2 summarises the motivations of questionnaire respondents, showing that practising a hobby and being outside are the main motivations for this group. Allotment and community gardeners also appreciate the physical activity gardening requires. Also the produce itself (knowing what you eat, and the good taste) is an important motivation. Although interview respondents had difficulty pinpointing why they engage in prosumption and often mentioned a range of reasons to do so, their motivations are similar to those of the questionnaire respondents: they specifically mentioned the joy of gardening as a physical outdoor activity (and its associated mental and physical benefits) and the pleasure and satisfaction of producing something.

Interview respondents enjoy gardening as a physical outdoor activity because they specifically like gardening, spending time outdoors, and working in and with nature. The activity gives energy and is considered both mentally and physically healthy. To some respondents it is meditative:

‘In my head I was preoccupied with getting back to work and then it is really nice to work in the garden in the soil. Almost a kind of meditation really.’ R9

‘It is very good therapy. (...) You can feel the earth, you can do anything and you get so much from it.’ R7

What ‘the joy of producing something’ means varies: some interviewees appreciate experimenting, others get satisfaction from having made their own produce, enjoy the fact that an activity has output, or are keen on bypassing ‘the system’. In general, however, respondents take pleasure in making something themselves:

‘It is nice to get honey from it so my target is in that sense to produce something. (...) It is satisfying. (...) You have a good product.’ R8

'It gives a sense of freedom, some sense of autonomy. You can just walk to the park and there is your food. And you can make something from it and then you do not have to buy it. You have overcome the supermarket.' R1

Respondents thus enjoy producing something tangible and creating output by participating in their hobbies. Growing and foraging fruit and vegetables allows one to know what one eats, gives access to special produce and varieties, and enables the processing of fruit and vegetables. Respondents enjoy being creative in how they process the harvest, making products that are not available in the supermarket. The harvest is thus inseparable from prosumption activities. Nevertheless, the harvest *as such* is for most interview respondents not an important motivation, especially not in an economic sense. Respondents do enjoy the fact that prosumption enables them to eat 'for free', but they did not express economic motivations for growing. None of the respondents mentioned growing produce out of necessity or because they had no other ways to obtain food. For most questionnaire respondents (saving) money is not a motivation either. Again, our respondents engage in prosumption activities mainly because they enjoy both the activity as such, and the fruits of their work.

Spill-over effects

Our data does not paint a clear picture about more indirect ways in which the harvest may influence people's diets, that is, by changing shopping behaviour. We did find that questionnaire respondents who engage in prosumption more often shop in alternatives for the supermarket, like an organic farmers' market or an organic store.⁴ However, we should be cautious with jumping to conclusions regarding spill-over effects of food prosumption at this stage. First, respondents were asked whether they 'sometimes' shop in these alternatives, but we do not know how often 'sometimes' is. Second, we do not know whether the link between shopping behaviour and prosumption is causal, and if so, in what direction. Third, the majority of questionnaire respondents stated that they specifically look for low prices when shopping for food. Only a minority gives high priority to ethical issues expressed in purchasing organic, local and Fairtrade food. Seasonality plays a somewhat larger role.

Interviews confirm this versatile view. In general respondents expressed concern about the industrialised global food chain, but the extent to which they adjust their diet and shopping behaviour accordingly, varies. Most respondents hold a pragmatic attitude:

'It is not the case that we do not sin. I do not feel guilty when I eat a frikandel [traditional Dutch meat snack]. But just in general I think, it is just better to buy organic produce. Not necessarily because I think it is more healthy, but because of the environment.' R8

All interview respondents buy fruit and vegetables in the supermarket at times, but where some do this as little as possible, for others the supermarket is the main shopping venue. Most respondents also visit the organic farmers' market at the local urban farm: some of them do that as often as they can, others occasionally, again others less often than they would want.

'We live close to the supermarket, that is where we go. Both of us tend to be busy in the weekend, but every Saturday there is a farmers' market at the local urban farm.' R10

'The farmers' market too, but it is a little further away. It is really nice that it exists, but it is really an investment to go there.' R6

Two respondents showed strong aversion towards the globalised food system and accepted retail customs. One of them, respondent 4, for instance, stated:

'It disgusts me. (...) The system. (...) A farmer in the local polder started making apple juice. The supermarket copies it exactly, in the same bottles, ten cents cheaper. I don't buy it, even though now I pay more. It really pisses me off'.

Clearly, respondents inhabit a continuum between more and less conscious shopping behaviour. It was not possible, however, to divide respondents in groups of more or less 'ethical' shoppers, because their statements are too 'scattered' – respondents engage in certain elements of ethical shopping, but not in others. Moreover, ethical shopping is not always engaged in for ethical reasons (for instance when respondents avoid eating strawberries in winter not for environmental reasons, but for taste), and those who most strongly criticise the industrial system are not necessarily the ones with the most ethical behaviour in practice. For instance, respondent six, who has a very strong opinion about 'the system', argued that he does not hold strong values on sustainability. Also, the extent to which respondents stated to care about sustainability did not appear to depend on the type of prosumption they engage in or the extent to which they do so. Hence, respondent four, who grows herbs in the windowsill and produces a small amount in her backyard, is very concerned about the sustainability of the food system, whereas respondent 11, who grows vegetables in her backyard on a relatively large scale, is not worried about that as much as perhaps expected, as she acknowledges herself:

R11: 'My husband always goes grocery shopping. I think my values are probably a bit firmer than his'. Interviewer: 'So he does not, for instance, buy organic produce by default?' R11: 'No. It would probably make a lot of sense, seeing what we do at home, that you would buy that in the supermarket as well'.

In sum, while our questionnaire hints at a relation between prosumption and more ethical grocery shopping, interviews show that this relation is far from straightforward. In fact, except for community gardeners, questionnaire respondents did not consider sustainability one of their main motivations. Interview respondents paint a similar picture: two of them do not trust supermarkets, three others engage in prosumption as it enables them to know what they eat, but none of them link this to sustainability. Interviewees did not specifically mention sustainability as a motivation, although it sometimes came up as a secondary motivation or as a general principle, for example, gardening organically or feeling satisfied that gardening results in the use of less plastic. In other words, while for some respondents sustainability is an important *element* of prosumption, it does not come forward as a main *intrinsic motivation*. In fact, some respondents clearly stated that it is not:

'I really would miss a part of myself if I wouldn't do this. It is not like, I want to contribute to a sustainable world and that is why I produce my food. I don't think about that at all. I just really enjoy doing something outside. It gives me energy'. R11

In the next section we discuss the results of the questionnaire and interviews in relation to the concept of prosumption and how this is often interpreted and used.

Discussion: Pragmatic prosumption

To date, food studies tend to ignore the role of prosumption in food provisioning. In this article we have demonstrated that food prosumption exists within today's Dutch society, notwithstanding the fact that food supply in the Netherlands belongs to the best and cheapest of the world, and access to food is – for most of its inhabitants, that is – not an imminent issue in this wealthy country. More specifically, respondents in our study did not articulate concerns about food and nutrition security, and they do not have compelling economic reasons to reduce grocery expenses.

Two thirds of our respondents are engaged in prosumption in some way, implying that it is a common activity, although it is often practiced at a limited scale. This number compares to the research of Kortright and Wakefield (2011), who found that 54 per cent of people in Toronto, Canada, grow fruit, nuts and herbs in the backyard, and to that of Smith and Jehlička (2013), who showed that 43 per cent of Czech and 53 to 59 per cent of Polish people (depending on age) grow part of their food. We found that it is mostly personal and pragmatic reasons that motivate people to engage in prosumption activities: a prominent rationale is the enjoyment of gardening, of being active outside, and of producing one's own food. Hence, whereas Ritzer highlights the negative effects that prosumption may have for consumers (e.g., exploitation, unpaid labour), seeing it as an intensified form of capitalism, respondents' pragmatic motivations suggest that there are positive sides to prosumption (as well): growing food is seen as a pleasurable and satisfying activity. This then answers to the previous-mentioned call by Dusi (2018, p. 676) to better understand how prosumers try to '*improve their life*'.

Taylor and Taylor Lovell (2014) speculate that for home gardeners, gardening may be a form of resistance, for instance against the dominant food system. For most of our respondents, however, aiming for a more sustainable food system or distrusting supermarkets are subordinate motivations. These findings mirror those of Veen *et al.* (2012) and Kneafsey *et al.* (2017), who also found mundane rather than activist motivations for engagement in gardening. Moreover, spill-over effects into shopping habits were not evident: questionnaire results do suggest a relation between prosumption and more ethical shopping behaviour, but interviewees generally did not report such shopping performance.⁵ Again, food prosumption in our sample is mostly pragmatic and mundane rather than activist.

We showed that a small number of prosumers is heavily engaged in the activity. For others the activity is more marginal, but this group is larger. This means that the actual impact on the food system may still be significant. Indeed, Taylor and Taylor Lovell (2014) contend that home gardens' (and, we may argue, other prosumption activities') contribution to urban food systems may be substantial and in fact larger

than that of other forms of urban agriculture which receive more attention. A recent study by Nicholls *et al.* (2020) prudently suggests that urban food production contributes to several of the UN's Sustainable Development Goals. Smith and Jehlička (2013, p. 148) coined the term 'quiet sustainability' to explain that gardening practices are potentially beneficial for the environment – even if not consciously intended as such. Our finding that prosumption is a common activity also implies that for a large group of people prosumption is a legitimate addition to the current food system. They may not have drifted as far away from production as often assumed: food growing is seen as a worthwhile activity. In contrast to consumers turning to, for instance, CSAs to find alternatives to the globalized food system (Savarese *et al.* 2020), prosumers do not position their activities as an alternative. They are nonetheless re-valuing and re-connecting to food: as Steel (2020, p. 114) argues, food is something that grounds us and through which we can root ourselves in the world.

Prosumption and policymaking

A growing group of cities is creating local urban policies as a response to concerns about the sustainability, resilience and healthiness of the current global food system (Mansfield and Mendes 2013; Morgan 2015). However, although local food policy agendas do focus on empowering citizens to produce food, the existence of the 'pragmatic prosumer' is as of yet mostly overlooked by policymakers. We contend that policy should pay attention to this already-existing group of everyday prosumers who (partly) grow their own food within the urban realm – rather than exclusively focusing on 'food champions' as the alleged carriers of change (Moragues-Faus and Morgan 2015, p. 1561). Not only is the potential effect of their combined activities substantial, they are also intrinsically motivated by food growing itself. This implies that they do not need to be made aware of their responsibility towards sustainability and health, and their morality does not have to be called upon in order to make 'the right choice'. Nevertheless, supportive policies may be helpful, as our research in Almere suggests. In the 1970s Almere placed people and a healthy environment in the centre of its development policies (Jansma and Wertheim-Heck, under review). Planners integrated large amounts of green into the urban realm and planted fruit and nut trees (Visser *et al.* 2019), still available today. This explains the relatively high level of urban foraging as found in our questionnaire. In the last decade the city refocused on policymaking to integrate food production in urbanisation.

Beyond binary terms

Our perspective on prosumption, and its five distinguished categories, concurs with other current research searching for new typologies that describe the diversity of modern practices in more nuanced ways than simply in binary terms. Where we searched for heterogeneity in the nexus of production and consumption, Sutherland and colleagues (2019), for instance, identify six types of non-commercial farms to demonstrate heterogeneity in the nexus of commercial and non-commercial farming. These findings subscribe to Toffler's and Ritzer's shared point of view that the

relation between production and consumption is subtle and multiple. Our operationalisation of five prosumption activities covers far from all heterogeneity possible in the prosumption continuum. For example, it is possible to emphasize the 'prosumption-as-production' end more strongly than we have done by showing that prosumers must acquire and/or use, that is, consume, materials such as seeds and tools in order to produce. Another possibility is to reflect more on different (power) positions of particular prosumers and the consequences for 'differences in degrees and types of prosumption' (Ritzer 2015b, p. 415): our respondents engage in their prosumption activities voluntarily and independently, but in other situations food consumers are expected to perform self-service work for free in a fast-food outlet in order to purchase their food – as part of the consumption process. Ritzer interprets such a type of prosumption as companies controlling consumers, which contrasts deeply with the prosumption activities discussed in this study.

Conclusion

In this article we held a pragmatic approach to prosumption by paying attention to five on-the-ground prosumption activities. This pragmatic approach brought the concept, literally, back to the ground. Our pragmatism differs from the currently common sociological stance to critique prosumption based on 'grand themes' and political or philosophical arguments, such as how it relates to capitalism or how it impacts power relations. Our more down-to-earth perspective is on a par with the Almere prosumers of today who hardly link their everyday mundane prosumption activities to power, capitalism or activism. We contend, therefore, that it is important to continue studying and understanding prosumption from this perspective, rather than (only) in a Ritzerian way. It better connects to current food growing practices and more properly links to the attraction prosumption holds for a large group of people: instead of considering food prosumption as being based on unpaid labour and leading to constrained freedom, instead of seeing prosumption necessarily as a form of resistance to the food system, and instead of interpreting community gardening as a way to take back the city, our respondents experience prosumption as a pleasurable and satisfying activity that gives access to tasty, healthy, fresh, cheap and specifically home-made produce. This lack of 'higher morality' may be a blessing for the future of prosumption: it means that people are intrinsically motivated. Calls for responsibility for ethic or moral consumption do not have to be used to engage these citizens in an activity that may be quietly sustainable.

We believe that a pragmatic approach to prosumption offers opportunities to examine the concept's significance to ordinary people and everyday behavioural patterns. Put differently, even though today's food prosumption activities may be marginal in terms of the amount of food produced, the number of people dedicating it large shares of their time, and, consequently, their potential to influence food systems overall, the value of prosumption should not be belittled, in science nor in policymaking, because it strengthens the relation people have with their food and the food system at large. Perhaps history will repeat itself in the sense that we now cannot imagine that

the lack of a word for consumer has not been missed for centuries, and that in the near future the same holds for the term prosumer in the food domain.

Conflict of interest

The authors declare no conflict of interest.

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Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Notes

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Research on the Global South more often discusses the role of growing activities for food security and nutrition (Taylor and Taylor Lovell 2014; see for instance De Zeeuw *et al.* 2011).

² <http://waarstaatjegemeente.nl>. Accessed April 2020.

³CBS: <https://www.cbs.nl/nl-nl/maatwerk/2020/04/inkomen-per-gemeente-en-wijk-2017>. Accessed April 6, 2020.

⁴ We asked questionnaire respondents whether they make use of various alternatives to the supermarket, and compared the answers for respondents who do and who do not engage in a particular prosumption category. In most (but not all) cases there was a significant difference between the two, meaning that respondents who prosume more often visit these alternatives to the supermarket.

⁵Please note, however, that this lack of sustainability motivations does not mean that their practices may not have positive sustainability outcomes.

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