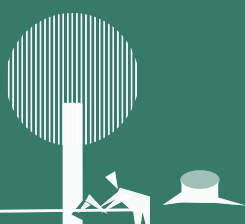
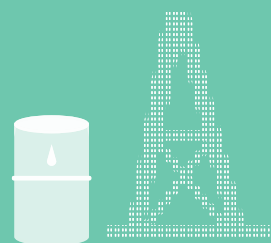


FOOD FUTURES

ETHICS, SCIENCE & CULTURE

edited by:

**I. Anna S. Olsson
Sofia M. Araújo
M. Fátima Vieira**



Food futures: ethics, science and culture

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I. Anna S. Olsson

Sofia M. Araújo

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Preface

Food is at the centre of human existence. We eat every day, not only to satisfy our physical needs but also as part of cultural and social interaction. Food choices and markets shape the agricultural landscape and the cities we live in. Whereas what we choose to eat and feed our family is part of who we are, a growing number of actors compete to influence our food habits, through marketing strategies and nutritional advice. And ethical considerations are coupled with every choice over food – whether related to production, distribution, consumption, food waste, policy in general, marketing or advice. EurSAFE – European Society for Agricultural and Food Ethics provides a context for analysis and discussion of these topics among academic scholars as well as other practitioners in the field.

Given the variety of implications the ‘food problem’ entails, the construction of an inclusive society must redirect the concerns about food in the present to the imagination of future alternatives. 2016 marks the 500th anniversary of perhaps the most emblematic European literary work on such imaginations: Thomas More’s Utopia. Celebrating this anniversary in the context of the conference is timely since utopian thinking will be instrumental in the search for innovative solutions to the food challenges. Utopian thinking forces us, first of all, to reflect on what we would consider to be an ideal society and to set goals – even knowing that they will never be totally reached. Second, utopian thinking is informed by the awareness that societies work as systems, and that if we change one aspect, all the other aspects will have to be changed as well. Third, utopian thinking forces us to reflect on alternative forms of organization, either by recycling solutions of the past and putting them into a new context, or by devising new ones. Thinking about food through holistic and prospective utopian thinking, aiming at the construction of an inclusive society where a variety of aspects are considered – the nature of families and communities; gender and class relations; rural/urban relations; the health and well-being of humans, other animals and ecosystems; the political system; decision-making, amongst others – was the challenge we set for the 2016 EurSAFE conference. The book you now have in your hand presents the responses of more than 80 authors to this challenge.

47. Plants in food ethics: a critical approach

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Abstract

Recently, plants have received new attention in ethics. Differently from earlier approaches to the life of plants in philosophy, authors now claim moral respect for the life of plants. Arguments for this approach are derived from various sources: from new insights in the complexity of the life of plant, from approaches to the good life of plants, from virtue ethics and from a reassessment of biotechnological applications. This contribution presents some core arguments in each area and discusses consequences from plant ethics for food ethics.

Keywords: plants, plant ethics, ethics of plant cultivation

Introduction

In ethics, plants were usually regarded as items that do not deserve a moral status. Exemptions of this general observation are reserved to some biocentric positions in ethics (Attfield, 1991; Taylor, 1986). One key argument for not regarding plants as moral patients is the lack of capacities that support a view according to which plants should not be harmed. Plants lack sentience and they lack conscience. From this, philosophers have concluded that there are no interests of plants in either reduction of suffering or in a good life that need to be considered.

Recently, the assessment of plant life has changed. Even though authors do not revise basic empirical classifications of the life of plant, they argue that plants deserve moral respect (Kallhoff, 2014; Pouteau, 2013). This contribution discusses these recent turns in plant ethics and scrutinizes the arguments. It then discusses the consequences for food ethics.

Arguments from complexity

Plants constitute a biological kingdom whose boundaries are not particularly clear-cut. Within this kingdom, there is a rich diversity of life-forms. In this contribution, I shall focus on ‘higher plants’ – they form a group with distinct qualities and are particularly important as a source for human food. Higher plants, including trees, have recently been discussed as particularly complex beings. They are regarded as entities whose capacities are comparable to the capacities of animals. In particular, plants are able to communicate (Baluška and Volkmann, 2010). Plants also have senses that – even though exclusively working on a biochemical level of exchange – are highly differentiated (Mancuso and Viola, 2015: 45). Even though plants are completely different from animals regarding their organization and their functional units, the assessment of their complexity contributes to rethinking the value of plants. Mancuso and Viola (2015) go so far as to claim respect for a type of living organization that is particularly intelligent, even though in a specified way.

As for the normative side of the argument for plant respect, the approaches that highlight the complex capacities of plants resonate with former approaches to biocentrism that have been particularly fruitful in plant ethics (Attfield, 1981, 1991; Sterba, 2011; Taylor, 1986; Varner, 1998). In addition to claiming respect for life, authors now claim respect for an underrated life-form. Even though plants differ from humans and from animals, they deserve appreciation and respect not only because of fine-grained

interactions with the environment. It appears as if plants – even though not self-conscious in any way comparable to people or animals – possess a rich diversity of strategies for developing a broad range of interactions with other living entities.

Arguments from the good life of plants

Stronger arguments for addressing anew the life of plants in ethics result from an interpretation of the life of plants as ‘flourishing’. This neo-Aristotelian concept has received some prominence in the debate of the good life of people and of animals (Nussbaum, 2006). It is now extended so that it encompasses the good life of plants too. Actually, it appears to fit much better to the life of plants than to that of other living beings. ‘Flourishing’ emphasizes that an entity has the capacity to unfold its specific characteristics in environments that do not hinder them from unfolding. In particular, ‘flourishing’ stresses the capacity of an entity to run through a life-cycle. In particular, this concept does not support a rather anthropomorphic interpretation of plants in terms of ‘interests’ or even ‘consciousness’. Instead, it highlights the capacity of plants to actively support self-evolution in terms of occurring typical characteristics of a species while reacting to stressful environments and while assuring reproduction at least once. As a consequence, this concept helps to individuate incidents of severe stress and of harmful effects on plants. It does not in and of itself include a reason for why harm on plants should be reduced – yet, it provides a first step in reasoning direct moral respect for plants (Kallhoff, 2002, 2014). Once the ‘flourishing’ of plants has been addressed as an inherent goal of plant activities, it is also possible to support moral claims that claim respect for the well-being of non-human entities including plants.

The arguments include the following steps: firstly, within a framework that defends the claim not harming the well-being of entities arbitrarily, plants need to be included. Following an interpretation of the good life of plants as an actively pursued goal of the functional unit of a plant, an objective notion of ‘harming’ that relates to ‘flourishing’ can be established. Secondly, the argument addresses the values of flourishing from various perspectives. In addition to arguments on respect regarding well-being, respect for flourishing gets additional support from an aesthetic, a resource-oriented and an ecological approach to nature. Thirdly, arguments need to be provided in order to explore conflicts between respect for plant life and respect for human interests. They include an approach to limited rights of people once areas of conservation have been declared. They also include approaches to respect in cultivating plants (Kallhoff, 2002, 2014).

Arguments from the ethics of plant cultivation

Differently from re-addressing moral concern in terms of a moral status of plants or in terms of respect for their capacity to flourish, authors who have been interested in plant ethics have focused on values in cultivating plants. Following virtue ethics, good habits in cultivating plants have been addressed as ‘virtues’. In particular, the sources of virtue ethics have been diversified in recent approaches. Starting with a re-appraisal of Aristotelian ethics, recent contributions include virtues that resonate with claims in environmental ethics (Walker, 2007). Moreover, respect for the environment now figures as an important part of virtue ethics (Cafaro and Sandler, 2010; Hursthouse, 2007). Different from an approach to the moral status of plants and different from an approach to the ethics of the good life, virtue ethics aims at reasoning attitudes to nature that pay tribute to the needs of natural beings. In particular, recent approaches to virtue ethics depart from a framework that relates virtues to human flourishing. Instead, it argues that virtues are an important ingredient in a new relation to nature. They are necessary in order to overcome a situation of dominion that threatens the life of non-living beings by exploiting practices of civilization (Treanor, 2014).

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This line of thought has particular implications for respect of plant life. The ethics of gardening illustrates the application regarding plant life particularly well. The ethics of gardening works on a relational level in that it considers the activities of gardeners in the garden as a paradigmatic case of ‘caring for nature’ (Brook, 2010; Hall and O’Brien, 2010). In particular, the practice of gardening is a type of cultivated activity that presupposes a virtuous gardener. Being capable of enduring volatility of natural developments and prudence are part of the set of virtues that gardeners should have in order to succeed in gardening.

Plants in applied ethics

Finally, ethics has engaged in debating technical modifications of plants including genetic engineering, the creation and sustenance of so-called ‘Biofakte’, an assemblage of botanic and technical structures, manipulation of seed and more recently approaches to synthetic biology on plant cells. Authors in applied plant ethics have provided critical approaches in order to justify respect for the integrity of plant life (Heaf and Wirz, 200; Rehmann-Sutter, 2001). This critical investigation of technological applications to plant life cannot be portrayed in full length here (For a thorough interpretation of plants in applied ethics, see Attfield, 1981; Kallhoff, 2002). Yet, some important issues shall be recalled. A reassessment of technical modifications of plant life includes a debate about the meaning of ‘naturalness’ regarding the life of plants; it also includes a focus on risks both for the environment and for human health and a debate of the meaning of interference with nature in diverse scenarios.

Overall, in this context of research, plants are also not regarded as entities whose moral status needs to be rejected due to a lack of significant capacities – capacities that render an entity closer to human beings. Instead, they are at the centre of concern in environmental ethics. In addition to the arguments that have been recalled there are new emerging contexts of plant ethics, including the debate on eco-centrism and forest ethics more specifically, and a debate on the role of plants and vegetation as the debate on climate justice sinks in.

Consequences for food ethics

What does this reconsideration of plant life in ethics mean for food ethics? One consequence is not far-fetched: against the background of plant ethics, it must be emphasized that plants are more than food. Even though plants are needed for animals as well as for people as a necessary ingredient in the food chain, plant ethics reminds us of the many facets of plant life. In particular, it addresses values of plants that cannot be reduced to the value of food.

Yet, plant ethics does not only argue in favour of respect for plant life. It also helps to spell out some of the normative principles that should guide agriculture and techniques of food supply by means of cultivating plants. Stemming from the insight that plants are capable of a good life, philosophers have explored categories that are important in protecting plants from harm and that are also important in supporting good plant life. Plants differ from other life-forms in that they are immediately tied to a place where they live. Moreover, they interact with other plants and organisms in a multi-faceted and intense way. They build communities; some argue that some plant species are even capable of organizing themselves in a quasi-prosocial way. I shall not discuss this claim here.

Following a proposal by Paul Taylor (1986), the relation between human civilization and vegetative areas of life can be split into various types. This interpretation of nature can be applied to plant ethics (Kallhoff, 2002). Overall, three different types of relationship can be distinguished: firstly, plants belong to ‘wild nature’ in that they live in spaces that are to a high degree free from being designed to serve human interests. When plants have an interest in their good life that is expressed by ways of flourishing,

the claim for sparing some places for a free evolution of flourishing is a starting-point for rethinking moral claims regarding plants; secondly, plants are cultivated. Yet, when respect for the flourishing of entities that differ from human life is justified, cultivation should also be adjusted to respect for flourishing. Even though it is not a moral duty to respect the conditions for flourishing, it can be argued that – overall – plant cultivation should be exempt from doing arbitrary harm to plants (this has been argued in length in Kallhoff, 2002). Fortunately, conditions of flourishing exemplars and the flourishing itself do not themselves clash with interests in cultivation; thirdly, plants are used for human interests. When it is to some degree justified that plant life is instrumentalised for human interests, people and civilizations are also free to use plants in this way.

Overall, in order to respect plant life, it is necessary to reserve areas and land for plant life and to protect areas from direct impact of plant cultivation. As for areas of wild plant life, non-interference is a leading principle (Taylor, 1986). Another is the restoration of conditions that contribute to areas in which plants have a chance to flourish. This does not say that plants are not highly adaptable. It has been demonstrated that areas such as old military areas or cities are particularly rich in terms of diversity. I simply wish to highlight that if plants deserve respect and if diversity is a matter of concern, it is important to protect areas of ‘wild’ nature too. This is also a place where food chains among living organisms are not interrupted or interfered with by human beings.

Even though plants cannot be hurt by cultivation in greenhouses, respect for plants includes practices of cultivation that resonate with the integrity and the striving for flourishing of plants. The study of stress behaviour of plants reveals that plants have an inherent impetus for realizing their full set of characteristics, both as a plant and as a species-member. Exploring their behaviour in terms of ‘stress-averse strategies’ contributes to interpreting plants’ behaviour as an active process of protecting life-processes from harm and of supporting the vital functions and the process of development of the typical characteristics of a life-form (Kallhoff, 2002: 37-69). Even though stress is a permanent phenomenon in plant life, both qualities and quantities of stress can be divided into stimulating factors of plant life and in destructive forces. Respect for plant life includes respect for the limits of adaptation and for ‘good’ environments according to the parameters that ecological studies claim as essential for the development of plants. This does not mean that cultivation needs to provide ‘natural’ circumstances for plants. Yet, its practices should be oriented along the lines of stimulating and healthy environments for plants.

As for food ethics, this critical approach to plant life has severe implications. Instead of taking it for granted that plants can be used as ‘food’ for people, plant life needs to be accepted firstly as a type of life that also deserves respect. As a consequence, the space for agriculture needs to be limited. It has to be respected that plants need space to unfold their capacities in order to flourish. An approach to the flourishing of plants as in itself valuable also forestalls practices of cultivation that do not pay respect to the needs of plants in order to flourish. The argument for paying tribute to good living conditions of plants does not result from claims of human healthiness or an overall better way to integrate civilization into the natural world. In particular, the value of the practices of cultivation is not the core argument against the background of plant ethics. Instead, it is important to take into account that the flourishing of plants can be harmed. Moreover, respect for plant life includes the claim to leave enough space to plants so that they can unfold freely.

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