

Ronald J. Herring, *The Oxford Handbook of Food, Politics, and Society*, Oxford: Oxford University Press, 2015, 904 pp.

The Oxford Handbook of Food, Politics, and Society, edited by Ronald J. Herring, is the selection of texts in which authors approach the given topic from various perspectives. The handbook consists of five parts: Production: technology, knowledge and politics (I); Normative knowledge: ethics, right, and distributive justice (II); Nature: food, agriculture, and the environment (III); Food values: ideas, interests, and culture (IV); Global meets local: contestation, movements, and expertise (V). In this rich variety of texts that give justice to the complexity of topic, I tried to choose the texts directly addressing the food/epistemology or ethics intersection.

On the topic of food, as the editor himself says, there are three main questions—*what* is to be produced; *how* is to be produced, and how is to be *distributed* (7)? Answers to these complex questions are going to be even harder to give if we take into consideration the fact that food is becoming the burning issue of our time because as a humanity, we are facing the problems of global warming, climate change, population growth, pollution of the environment, and the specific demands on the question of food quality and information, coming from the consumers itself. Let me pass directly to issues of ethics.

Michiel Korthals in his text “Ethics of Food Production and Consumption” nicely shows the role of ethics in contemporary system of food production and consummation. He sets out seven domains in which food and ethics intersect. First domain focuses on the problem of global hunger and malnutrition and Korthals points out that questions concerning those issues are ethical questions (Korthals 2015: 234). Furthermore, who is responsible for the malnutrition (lack of necessary micronutrients) as a result of the current food system; problem present also in the wealthier parts of the world, asks Korthals (*ibid.*). Thirdly, he raises the question of consumption of animals as food. Namely, hand in hand with animal husbandry, questions of sustainability, soil and water pollution coming from the use of chemicals, deforestation and abuse of antibiotics in animal factories, occur as ethical questions (Korthals 2015: 235). An old ethical question is still present—in intensive, industrial production, voiceless animals experience pain and suffering in the terrible treatment in which they are treated as mere objects (Korthals 2015: 235). In addition to the questions of animals, there are huge questions concerning agro-corporations that globally standardize the production, decrease biodiversity and risk the outbreaks of diseases and pests (Korthals 2015: 235). In this domain there is also an issue of food commodification, food price and distribution—these economic issues have ethical implications (*ibid.*). Maybe the most controversial question is the question of biotechnology and genetic modification which brings the issue of distrust of the public towards the governments (Korthals 2015: 236). The last ethical question refers to the consumers who have vast number of ethical dilemmas concerning food and who are perceived, by politicians and scientists, as irrational end emotional and condescendingly and are not seriously taken into consideration (Korthals 2015: 237). On all these questions ethics is trying to answer by its various approaches and concepts.

As I stated above, maybe the most controversial issue within the food/ethic discourse is one concerning biotechnology and genetic engineering. Therefore, there are a number of texts in the handbook concerning those issues. John Harris and Drew Stewart in the text “Science, Politics, and the Framing of Modern Agricultural Technologies” discuss two major developments within the agricultural technology which have opened the Pandora’s Box. The first moment was the “Green Revolution” which refers to the development of the “modern” varieties of major cereals, a process seriously started in the 1960s (30). This “modern variations” involve genetic modification but they are not genetically “engineered”. The second important moment refers to genetic engineering in agriculture, starting in the 1980s (30). In “genetic engineering”, desirable genes are transferred in a laboratory between organisms in order to create desirable traits that are impossible to occur in nature through conventional breeding (47). This recombinant DNA technology produces cultivars called the “transgenics” (47).

In their text, authors are demonstrating the ways these two major developments are articulated and offer us an evaluation of arguments as well as the analysis of emerging controversial issues. “Green Revolution” encompasses the seed selection and selective breeding, mostly of wheat and rice, in order to get higher yields and varieties tolerant of hostile conditions such as drought (46). This kind of “modern varieties (MV)” are cultivated in monocultures¹ and farmers are forced to invest every year money into seeds and more and more money into chemicals due to the fact that chemicals are less and less effective (47). This raises the question of environment destruction, and also, intensive cultivation calls upon excessive use of water (47).

The critique of this kind of agricultural production has united the environmentalists and political Left. Critics say that this kind of food production is based on conquest of nature rather than cooperation and furthermore, the farmers’ unique knowledge is extruded by capitalist and centralist control—farmers are becoming dependent upon this technology and they have to buy the seeds and supporting agro-chemicals every year. Due to this centralized and uniformed way of food production, decrease of biodiversity stands as a big issue, as well as poverty and environmental pollution (45).

Furthermore, political Left through the concept of “food sovereignty” claims the “people’s right to define their own food and agriculture policy, and to protect and regulate domestic agricultural production and trade, outside the control of big capital and without fear of the dumping of cheap food by third countries” (45). Next big point of critique is “biopiracy”—for thousands of years people are cultivating, breeding and selecting plants and this universal human activity now is in the hands of several corporations which are making profit from it (45). Furthermore, the GMO’s are legally patentable which means that they are a subject of intellectual property rights and a profit from them can be protected which means that the whole industry of seed and food is concentrated in the hands of several multi-national companies (53). Looking through the broader socio-political frame, this method

¹ Monoculture is a deeply problematic way of food production. Think of the vast fields of wheat plantation. To plant just a single type of plant brings danger of large scale pest and disease expansion, soil destruction, water pollution and the degradation of biodiversity.

of food production Left sees as “technical fix” for much deeper socio-political problems of poor countries such as land and water access which, despite the “green revolution”, are not being addressed at all (50). On the other side, some claim that is morally wrong for small numbers of activists to try to deny potential benefits of this method based on genetically cultivated food crops (45).

As authors claim, there is still an open question wheatear real changes resulted from the cultivation of “modern varieties” due to the fact that we are facing an epistemic and methodological obstacle. Namely, evidences from the studies depend on different framings which are more a cultural and political thing then reliant on scientific understanding, and transgenic varieties are subjected mostly to negative framing and consequently. Taken all this into consideration, it is hard to conclude what are the implications of this kind of agricultural model (52). This example brings forth the problem of “epistemic brokers”—individuals who successfully popularize their own reading and framing of a particular issue; they represent a kind of a bridge between scientific facts and the public. But aren’t we always dependent on “epistemic brokers” who take the scientific material and frame it, articulate it and translate it to the public, in any field?

The strongest critique of this model of food production is in the risk. Namely, science cannot guaranty that cultivation and/or consummation of GMO want have any negative consequences. “There will always be insufficient scientific evidence to prove the absolute safety of any product (GMO or not)” (54). It seems that uncertainty and open ending characterize these two important moments in conventional agriculture. Uncertainty and open ending stand as most fair “conclusion” due to the fact that there is an individualized moment of framing particular concepts, as well as the problem of risk which whiteness how experimental this model really is, with uncertain and irreversible consequences.

It is impossible not to note the stands of biotechnology experts whose answer to global food problem lies exclusively in biotechnology. One of them is Martina Newell-McGloughlin. In her text “Genetically Improved Crops” she advocates that “green biotechnology” is the key for climate change through greenhouse gas reduction, crop adaptation and protections, as well as yield increase in disadvantageous soils (69). Genetically modified food, according to her, would supply its consumers with desirable macro- and micronutrients which are lacking in different diets across the globe (73). To her, biotechnology offers a new dimension of innovation which is crucial for maintaining and enhancement of food production (89).

Likewise, Alan McHughen in his text “Fighting Mother Nature with Biotechnology” sees biotechnology as the answer to global need for food. He is radical in his idea that there are solely two options—path of technology and “development” or “return to Mother Nature”. This “return” stands for extreme idea which McHughen caricatures and where human is portrays purely as biological specie without *ratio* who basically acts like an animal and has one progeny. McHughen neglects whole domain of culture which is one important characteristic of humans—the possibility to create culture. According to him, in this “return to Mother Nature”, humans should live in tropical and temperate subtropical parts, without any technology which

implies the return to pre-industrial way of agriculture and life in general (435–436). His claim that “food produced using modern technologies is the safest and most nutritious ever” (444) I find disturbing taken into consideration that modern, conventional industrial agrotechnology is built on “modern varieties”, GMO, and chemical industry and is a method which is, thanks to the amount of chemicals and risks, unsustainable and deeply problematic. It is a big mystery why there are just two radical options for McHughen in his text, as well why did he radically caricatured the possible alternative to biotechnology.

As Thomas Larson in his text “The Rise of Organic Foods Movement as a Transnational Phenomenon” shows, besides biotechnology and the “return to Mother Nature” there is also a third possibility—organic approach to food production. “Organic” stands as “a mobilizing frame for a social movement”. Namely, “organic” is a global phenomenon, an umbrella term which brings together number of different methods of food production which have in common the alternative approach to agriculture and are based on cultivation without the usage of chemicals. In the “organic” approach the focus is not on the final product itself (e.g. their nutritional value”) but on the production itself (741). As Larson states, “organic” in its beginning focused primarily on methods for cultivating the soil but it expanded on the broader aspects such as human’s health, sustainability of the production, as well as broader social-justice issues like justice and peace (741).

To conclude with this topic, the approach which swears in biotechnology I found dangerous because it is based on arrogant idea of superiority over nature. Above mention, factor of risk is enormous—science cannot guarantee for possible consequences which can be irreversible. Why risk when there are friendlier, sustainable alternatives? I think that the problem in “biotechnology-pro-GMO method” is in its atomistic, narrow approach. Furthermore, although science is most certain tool which enables us to get to knowledge that is truthful, the lack of scientific “biotechnology-pro-GMO” approach is in the lack of contextualization. Namely, humans are just a small part of a broader picture and every part is dependent on other parts. The problem with the atomistic perspective is that it is limited just on one segment. Human is just one part in the nature and to position itself in hierarchically dominant position, in the same time with unknown potential risks and consequences is arrogant and dangerous. What is necessary is more holistic approach where human is seen as a part of nature. That approach can obtain more sustainable and long-term solutions to problems of contemporary food production. Besides conventional method of food production, there are many alternative ways and methods which are safe and which take better care for the soil, give healthier food and independence for the farmers. At the same time, they do not make profit to particular centers of power and maybe that is the reason for marginalization.

One more interesting aspect of food/ethics intersection, as mentioned above, raises the question of consumers. People ask questions about food and they demand information, as Joseé Johnston and Norah MacKendrick in their text “The Politics of Grocery Shopping” demonstrate. They write about the political aspect of food. Namely, a person has a power to “vote with her/his dollar” and by doing that, he/she directly chooses who to sup-

port (644–645). There is a niche of people who consume food in a “conscious and deliberate” way and with their dollar they choose “to buy ‘green’, local, fair-trade, and sustainable products in the service of health, social justice, and sustainability” (647).

This leads us to the question of knowledge. How the knowledge is shaped in global context of agriculture, science, and technology, asks Ian Scoones in his text “Agricultural Futures”. He analyses the process of knowledge-formation within the panel of experts, farmer representatives, NGO-s, private sector, industry and different institutions. How the body of knowledge is formed, he asks (844)? How to articulate global and local processes; how to include different perspectives? What is the dynamic of power relations? Who gets to be included in the first place and whose voice is heard (844–846)? What is crucial, according Scoones, is to find ways in order to make processes of participation and engagement more “meaningful, democratic, and accountable” (855).

Due to the fact that we, as humanity, are facing number of problems such as growth of population, climate change, environmental pollution and non-sustainable food production, it is time to question all existing settings associated with food production and consummation. Food in its connection with ethics and epistemology is field which is becoming more and more actual due to those problems. “Sustainability” is not just abstract, theoretical concept but it is necessity postulate that has to come as a priority in order to survive as a specie. That is the reason why questions of food within the philosophy are urgent questions of present time and the future.

ANA SMOKROVIĆ

University of Rijeka, Rijeka, Croatia