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Land Acquisitions for Food and Fuel

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Synonyms

Agrofuel; Bioenergy; Biofuel; Foreign investment in agriculture; Land grabbing; Land grabs; Land rush; Large-scale land acquisitions; Off-shore agricultural production

Introduction

Large-scale land acquisitions (LSLAs) for the production of food, animal feed, and, especially, biofuel have become a controversial issue in global affairs, which are laden with massive ethical challenges. LSLAs, commonly referred to as "land grabbing," are a worldwide phenomena, the incidence of which has risen sharply since the 2008 global food crisis and has been estimated to have surpassed the acquisition of over 150 million hectares of land worldwide. The contemporary global rush by investors and states to acquire high-quality agricultural land is linked to ethical concerns, for example, when land deals lead to the forced displacement of local populations that previously had customarily worked and subsisted on such lands previously or when domestic food production is displaced by biofuel production for export for foreign markets. Given how recent LSLAs are, the scholarly literature on the ethics of LSLAs is at incipient stage. As such, this entry offers a preliminary discussion of the ethics of LSLAs informed by a global ethics perspective. The first section provides an overview of key characteristics, and trends of definitions. LSLAs. The second section explores the idea of a global ethics as it relates to the study of food and agriculture. The third section applies global ethics to the case of LSLAs by posing and discussing two questions: Is acquiring large quantities of land ethical? And when can LSLAs be considered ethical/unethical?

Large-Scale Land Acquisitions: Definitions, Characteristics, and Trends

LSLAs is only one of several terms scholars have used to describe the proliferation of land deals. Other commonly used terms in the literature and public discourse include cropland expansion, land grabs, land grabbing, and the global land rush, to name a few. For the purposes of the analysis here, LSLAs is used because this term has become the most widely used in contemporary policy discourse. However, it is important to acknowledge that this term is not a neutral one and some commentators have argued the term acquisition is a legitimating discourse to justify the practice of LSLAs. The word "acquire," it has been argued, makes reference only to the actions of those acquiring land and evokes market-based transaction between willing buyers and sellers. This particular semantic frame can render invisible the existence of, and consequences for, land users, who may not be the party selling land. By comparison, the term land grab evokes something very different. A grab, like a "power grab," suggests an unfair appropriation of something and this is a cogent reminder of the normative power of discourse and framing.

Scholars and policymakers have developed several definitions of LSLAs to distinguish it from other forms of land purchases and/or appropriation of natural resources. Some definitions seek to establish criteria in order to distinguish land acquisitions from other forms of appropriation and to provide a basis for an empirical methodology, while others seek to identify and understand the asymmetrical power relationships implicit in land acquisitions. These are considered below.

Geographer Annelies Zoomers (2010) defines LSLAs as recent large-scale, cross-border land acquisitions that involve leases of over 30 years or direct purchases of a size greater than 5,000 ha carried out by private firms or initiated by foreign governments. Although here definition can be applied beyond food and agriculture, this definition is useful because it brings into focus several important features such as acquisitions' transnational/transborder quality, the modalities of acquiring of land, criteria for distinguishing "large" from "small", and incorporates the key actors involved into analysis. A recent, influential global study of LSLAs (Anseeuw et al. 2012, p. 18) employed a similar definition based on the following features: transfer of rights to use, control, or own land through sale, lease, or concession; implies a conversion from land used by smallholders, or for important environmental functions, to large-scale commercial use; deals 200 ha or larger; and not concluded before the year 2000.

In a recent article, Borras et al. (2013) argue that there are severe limits to defining LSLAs according to size and type because doing so can obscure what is unique to contemporary land deals, most notably, their potential long-term implications for the global agri-food system as a whole and trajectories of agrarian change. Franco et al. (2013) build on more recent scholarship to suggest that definitions of LSLAs should incorporate three key dynamics of social relations: the *assumption of control* over resources by one party over another and how benefits are accrued, the *modalities of acquisitions* and the *source(s) of capital*, and consideration of how the contemporary global political economy context that is *reconfiguring power relations across and between the north and global south* is altering the political dynamics to legitimate/challenge land deals (Franco et al. 2013).

Scholars and policymakers have found it difficult to obtain a precise picture of the scope and depth of LSLAs. The details of most land deals are not made public and there is a general lack of transparency about the nature of these contracts and the actors involved. Because of this lack of information, analysts have responded by developing multiple methodologies to assess the extent of land acquisitions based on the information available. Lorenzo Cotula (2012) summarizes the findings of recent studies noting the total quantity of land acquired is 51-67 million hectares and that this occurred in the period between 2001 and 2010. To put this in perspective, this land total is roughly the size of Ukraine. A much higher figure has been reported by the international nongovernmental organization, Oxfam; its most recent report on land acquisitions estimated that up to as much as 227 million hectares have been acquired globally (Oxfam 2011). The key point relevant for this analysis is that regardless of which figure is closest to the true amount, all these figures laude massive volumes of land being acquired.

Existing data confirms that the proliferation of LSLAs is a *recent* phenomenon. The vast majority of land deals had taken place since 2005 and reached record levels in 2008–2009 (Deininger et al. 2011), which was at the peak of the 2008 global food crisis. Because the proliferation of LSLAs spiked in 2008, most analysts consider the global food crisis a major driver of LSLAs.

LSLAs are also a *global* phenomenon. Whereas media attention has focused disproportionately on sub-Saharan Africa, where rural poverty is significant and which is a major site of land deals, LSLAs are occurring in all regions of the world, including Southeast Asia, Eastern Europe, the Americas, and Australia. The expert consensus is that land acquisitions are expected to increase in the medium term due to high and rising prices of, and growing global demand for, agricultural goods. This suggests that LSLAs are becoming a "normal" feature of the global agrifood system.

There is also considerable heterogeneity that occurs across LSLAs. For the purpose of this article, two key dimensions of heterogeneity are particularly important. The first dimension is the intended production outcomes of LSLAs. In other words, LSLAs for what? The vast majority of land deals are for the production of biofuels and bioenergy (Anseeuw et al. 2012; Deininger et al. 2011). Key feedstocks for the biofuel production process include sugarcane, corn/maize, palm oil, and soybeans. This trend is consistent across all regions of the world although the selection of crops varies by region according to their suitability to local conditions. The increasing shift toward renewable fuels and "green energy" is a major driver of land acquisitions. For example, the European Union's renewable fuels mandate requires that 10 % of transport fuels be supplied by renewables by 2020 which is estimated to require substantial imports of biodiesel inputs, mainly from palm oil produced in South America and Southeast Asia (see Anseeuw et al. 2012, p. 26).

The second dimension of heterogeneity is the range of actors engaged in the acquiring land. On the acquiring side of the equation, research has shown that transnational corporations (TNCs), including those that specialize in food and agriculture, such as trading houses, supermarket chains, and renewable energy producers, are acquiring land to ensure the supply of agricultural inputs and expand vertical integration strategies right down to the control of the farm. Financial actors are increasingly prominent, ranging from investment banks, equity funds, and pension funds that engage in acquiring land directly or as partners in new agricultural ventures. The motives of financial actors vary, but in general they are influenced by widely held view that the global agricultural sector will be a major source of future profits as commodity prices continue to rise. Because of these trends land is now a highly desirable asset class. States are also engaged in acquiring land abroad. For example, China, South Korea, and the Gulf states are directly and indirectly involved in LSLAs through the operations of state-owned enterprises and sovereign wealth funds. In addition, these states are providing other forms of inducement, including subsidies, special loans and financing, and tax breaks to domestic firms seeking to acquire land overseas. Similarly, subsidies, loans, and tax breaks to companies engaged in renewable energy in the North also act as a direct driver of land grabbing (Cotula 2012). Local elites and domestic firms are also engaged in acquiring land; however, this is occurring for deals at much smaller scales than international ones (Cotula 2012).

Global Ethics and Land Acquisitions

Global ethics (also known as world ethics or cosmopolitan ethics) is an ethical perspective that is useful to unpack the many ethical challenges posed by LSLAs. This is not to suggest that global ethics is the only, most appropriate or exhaustive ethical approach to the study of LSLAs. Rather because global ethics as an approach considers how globalizing processes and the deepening interconnections among individuals, states, and organizations across space and time can produce socially desirable or undesirable outcomes, and given that LSLA are global-scale phenomena makes global ethics a logical point of departure.

The basic argument for a global ethics is put forward by the philosopher Nigel Dower in the book, *World Ethics: The New Agenda*. Dower (1998, p. 2) defines global ethics as "an ethical theory or approach which puts forward a set of norms and values to guide our relations with the rest of the world." A basic premise of global ethics is that an individual's ethical obligations are not limited to their immediate/local community, be it their family or country. Instead, ethical obligations are posed as extending to the global scale. Thus, the intellectual goal of global ethics is to arrive at theoretical and practical positions of how to behave ethically given individuals are interconnected at the global level. For Dower and many other global ethicists, a few simple principles can be said to form the core of a global ethical perspective: solidarity, pluralism, and peace. As such, global ethics are not a precise, strict ethical code but rather a different way of approaching rights and obligations at the global level that is not trapped by conventions such as the territorial authority of the state. Despite the skepticism that many have regarding the idea of global ethics, there are many examples of actually existing global ethics operating in the conduct of global affairs. Global ethics are visible in the creation and implementation of international human rights, international development assistance, and transnational social justice movements such as the fair trade movement (Dower 1998).

Global ethics can be applied to many areas of social life, including food and agriculture. However, it is important to distinguish global ethics, which are general in scope, from applied food and agricultural ethics, which are designed to guide the conduct of food and agriculture professionals. Today, global ethics are visible in several areas of food and agriculture. To illustrate this point, take, for example, fair trade coffee. Unlike a decade ago, fair trade coffee today has near ubiquitous status. Fair trade coffee is sold at high-end coffee shops in major metropolitan centers but also increasingly in far-flung places, such as gas stations in isolated, rural communities. The relevant point here is not whether people choose to consume fair trade coffee or not, or the extent to which such products are available, but rather that today fair trade coffee (similar to sweatshop labor-free consumer goods and organic foods) reflects greater global awareness of the global-scale social and ecological effects of our consumption choices. This awareness translates

into significant changes in the practices of individuals and groups at the level of consumption and production.

Some Ethical Questions Raised by Land Acquisitions

A global ethics perspective is well suited to the study of LSLAs because so many land deals are transborder transactions consisting of relations between individuals and groups. These relations can result in positive or negative outcomes, broadly defined, in reference to the key principles of global ethics: solidarity, pluralism, and peace. What does global ethics have to say about LSLAs? This ethical discussion is developed below through the consideration of two questions.

Is Acquiring Large Quantities of Land an Ethical Act?

Any discussion of land acquisitions today should be clear that these refer to very specific types of transactions involving significant quantities of land. Thus, it is important not to conflate LSLAs with other types of general, smaller-scale exchanges of land, which present their own unique set of ethical dilemmas (e.g., land inheritance within the family, illegal squatting, etc.).

A useful way to begin to situate the ethics of acquiring large quantities of land is to examine the recent past for a comparable situation. LSLAs were a central feature of colonialism and imperialism. The colonization of the Americas and much of the non-European world, by Spain, Portugal, Holland, France, and England, is an example that should be familiar to most readers. During that period, colonial and imperial powers justified land acquisitions, including the use of violence against indigenous peoples, by invoking their moral and religious beliefs. This included the belief that European peoples were superior to indigenous populations, even believing such peoples to be subhuman. This lead to a general situation of massive physical and cultural violence against indigenous populations who were forcibly displaced, sometimes murdered en masse,

from their traditional territories to secure territory and resources. The effects of colonialism and imperialism continue into the present. The legacies of cultural destruction and racism remain a salient policy issue in many former colonies such as Canada and Australia. Today's political geography is the direct result of past land acquisitions; most nation states in existence today were previously former colonial territories. Although certain colonial-like situations continue to exist in the modern world, it is no longer a defining feature of modern life.

Today's LSLAs bear some resemblance to colonial and imperialism in so much as it appears that vast tracts of land are being appropriated in developing countries by powerful actors at the expense of poor, vulnerable groups. Since the practice of acquiring large quantities of land first began attracting media headlines in 2008, land deals have been labeled widely as neocolonialism and imperialism. LSLAs have set off a wave of global concerns about the negative impacts of land deals on poor farmers in the global South; this has resulted in significant transnational advocacy seeking to curb and/or to stop land deals from taking place. The direct comparability between LSLAs today and colonialism/ imperialism practices of the past is an important intellectual question (Robertson and Pinstrup-Andersen 2010; Alden Wily 2012).

There are major and important difference between land acquisitions today and past practices. First, land acquisitions today are taking place in the context of a globalized economy. Second, the vast majority of deals occur through market-based transactions such as purchases and leases, instead of appropriation by physical force or other forms of bilateral territorial treaties (i.e., such as the practice of territorial treaties among imperial nations and indigenous peoples that created the reserve system in North America). It can be said that current LSLAs signal the creation of a global land market. Such a development immediately raises difficult questions about whether land should be further subject to enclosure and commodification given that, historically, such processes have tended to increase inequality and privatize public resources, which may

produce social conflict. Furthermore, many of the actors engaged in land acquisitions, such as agri-food corporations and institutional investors, are very powerful actors in today's economy, and because farmland in developing countries is relatively inexpensive and poorly governed in many cases, this leads to situation of asymmetries between buyers and sellers. Many have argued that these types of scenarios likely increase the inequality of land ownership within and across countries. The past has repeatedly shown that situations of highly unequal patterns of land ownership and access to resources lead to social and political conflict. From a global ethics standpoint, the proposition that acquiring large quantities of land may be regarded as unethical in light of historical practices is to be expected.

When Are Large-Scale Land Acquisitions Ethical? When Are They Unethical?

This section considers the question of LSLAs slightly different than the preceding section by drawing on global ethics to establish some general guideposts to determine when acquisitions can be said to be ethical or unethical. Thus, what is offered below is an intellectual exercise of thinking through idealized types.

LSALs are most likely to be consistent with global ethics when communities who may be potentially affected by a land deal have some form of meaningful input into the decisionmaking process over land deals (this can be direct and indirect), there are net and significant economic and social benefits for the communities, and these deals operate in ways that support sustainable development. Importantly, land deals must support pluralism; that is, that it permits individuals and communities the option to continue living in a manner consistent with their preferred sociocultural norms and mores. In contrast, LSLAs are most likely to be unethical from a world ethics perspective when communities cannot participate in decisions that will affect them, when they lose control and access to the productive resources vital to their livelihoods, and when land deals result in social breakdown and ecological damage.

The term community is employed here instead of other units of social organization, such as the individual or the state, because this concept best contextualizes the on-the-ground realities of LSLAs. Most acquisitions occur in rural areas where agriculture is the primary, or at least a significant, source of livelihood for the community, and also because land plays an important social and cultural function for the community such as when cultural practices are deeply intertwined with working the land. Bringing the community into focus is all the more vital because most of the actors engaged in land acquisitions often think of only the land as commodity and not the social context/meaning of land.

The autonomy of communities and pluralism are linked concepts that are given considerable weight in a global ethics perspective. Autonomy is used here to refer to the capacity of individuals and communities to make decisions over how they will live their lives. Autonomy means different things to different societies across space and time. For example, in Western society, there is a strong association of autonomy with individual liberty and democratic political systems. In other societies, autonomy may be defined vis-à-vis religious beliefs and traditional cultural practices. Global ethics takes autonomy seriously but recognizes that autonomy is fluid and always constrained by sociopolitical structures.

Pluralism is used here to refer to ethical position that accepts and respects that values, morals, and norms differ among communities/societies/ nations. Pluralism requires that we acknowledge other, alien ways of living as equally valid as our own. Consider, for example, the case of a LSLA that prevents pastoralists from accessing traditional grazing lands. If this situation results in the outcome that pastoralists must abandon raising cattle and find alternative livelihoods, than this is a case that goes beyond a conflict over access to resources but the unmaking of one groups' way of being. The point here is not whether pastoralists might be better off economically if they pursue alternative forms of employment, this may be one possible outcome, but rather that these individuals are forced by the actions of others to seek alternative livelihoods that may not be the particular group in question preferred choice.

From a global ethics perspective, it could be argued that net economic and social benefits suggest something much more than the flow of capital into a country and the adequate "compensation" for the purchase or lease of land. Of course, in the best of possible worlds, communities would receive not just a fair price for land but also related employment, new infrastructure, and additional resources to provide vital social services (e.g., health, education, etc.) for the communities. A major benefit would be if LSLA acquisitions could enhance domestic food security, for example, by increasing the production, quality, and availability of basic foodstuffs. The data thus far has been a major cause for alarm for analysis because it suggests the opposite is occurring.

A recent World Bank report found very few deals were resulting in significant employment and services for local communities (Deininger et al. 2011). Instead, many LSLAs are imposing significant costs on communities by reducing the access to communal lands and to water supplies. There is also evidence to suggest that many communities are receiving less-than-fair compensation – that is, if they receive any compensation at all – as there are many cases reported of nonpayment or delayed payment (Anseeuw et al. 2012).

Sustainable development is implicit in, and coherent with, a global ethics perspective. Sustainable development is particularly salient to the discussion of LSLAs because these deals in many instances necessitate a shift toward energyintensive, industrial agricultural practices in areas where previously farming may have been practiced on a smaller scale and with a lesser ecological footprint. The logic driving many LSLAs is that investors can easily set up capital-intensive, export-oriented new agricultural production with a sufficient land base to ensure economies of scale. A related concern is that most land acquisitions are occurring in states with limited environmental protection toward agriculture. This raises concerns that LSLAs will diminish soil, air, and water quality and produce negative effects on the health of local communities. There is evidence this is already occurring (Anseeuw et al. 2012). Land acquisitions are creating situations that are "externalizing" the environmental costs and risks of agricultural production in a new way; the risk and costs are not borne by the consuming country but by the local communities where land has been acquired, or acquired from. Thus, from a global ethics perspective, land acquisitions are unethical to the extent that they endanger the ecological and social health of one community in order to meet the consumption demands of the populace of a distant country.

LSLAs for biofuels present a double-layered ethical dilemma. Gamborg et al. (2012) elsewhere identify that the ethical challenges associated with biofuel are (1) changing land use from food to energy production and the competition these creates with food production and (2) leading to deforestation and increasing greenhouse gas emissions. Initially, the ethical debates about biofuels centered around whether states should support the production of biofuels, such as the decision by the US government and European Union (EU) to require that automobile fuels be blended with a fixed percentage of biofuel and the implications of these policies for land use change, farm policy, and farmer income at the national level. LSLAs for biofuel are the result of policy decisions taken by distant governments to support alternative energy, and this is clearly a transnational dimension. Toft (2012) describes this situation as the "food versus fuel" debate and draws on cosmopolitan ethical theories to argue that land acquisitions for biofuels are dubious from a global justice perspective because the benefits are enjoyed by rich consumers (i.e., who own automobiles and purchase biofuelblended gasoline) whereas the burdens of biofuel production are borne by poor farmers in the global South, who have likely lost access to land and means of livelihood. From a global ethics perspective, the argument for supporting biofuel production because of its purported capacity to reduce greenhouse gases is not justified if it comes at the expense of one (poor, vulnerable) community for the benefit of the (wealthy consuming) other.

Conclusion

LSLAs for food and biofuel are recent global phenomenon that poses multiple and significant ethical challenges. Whereas many of the specific food and agricultural issues themselves are not entirely new, such as those related to sustainable development, biofuels, and industrial production methods, what is new is the way in which land acquisitions now place these issues squarely as ones of transnational significance instead of only local or national ones. Therefore, global ethics provides an appropriate starting point to consider the ethics of land acquisitions. Global ethics are already informing the development of new, global regulatory instruments, such as the United Nations-sponsored Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security and Group of 20-sponsored Principles for Responsible Investment in Agriculture, which seek to promote more socially and ecologically responsible practices by investors and governments involved in land deals. Going forward, a major challenge will be whether such new transnational instruments will have the sufficient moral and legal force to address and prevent the most negative effects of LSLAs.

Summary

The recent global proliferation of large-scale land acquisitions for food, and fuel is a new and significant issue in the study of food and agriculture ethics. This entry examines large-scale land acquisitions for food and fuel from a global ethics perspective. The first section provides an overview of key definitions, characteristics, and trends related to large-scale land acquisitions. The second section explores the idea of a global ethics and situates it within food and agriculture ethics. The third section poses and discuses two questions related to ethics of large-scale land acquisitions.

Cross-References

- ► Access to Land and the Right to Food
- Biofuels: Ethical Aspects
- ► Corporate Farms
- Corporate Social Responsibility and Food
- Extraterritorial Obligations of States and the Right to Food
- Private Food Governance
- Trade and Development in the Food and Agricultural Sectors

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Law and Regulatory Mechanisms for Food and Agriculture Research

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Synonyms

Law and regulatory mechanisms for food and agriculture research; Legal framework(s) for food and agriculture research; Regulatory regimes for agricultural and food research; Regulations and oversight mechanisms for food and agriculture research

Introduction

Nowadays, decisions concerning production, distribution, and consumption of food are not only reviewed from perspectives like *food safety* but in relation to fairness in its distribution, the sustainability of food systems as a whole, or their impact upon cultural diversity or personal identity. The ones to address of all these decisions are those that have involved the establishment of regulatory frameworks with regard to food and agriculture research.

Agro-food sciences and the technological applications in this sector have the potential to

assist all human beings to satisfy their daily need for food and not only in terms of survival stricto sensu. In terms of scientific-technological development, humans have never been closer to being able to provide each and every inhabitant of the planet with food suited to their specific nutritional needs. These ideas have repeatedly been highlighted in documents issued in the second half of the 1990s by institutions such as the OECD, the FAO, or the institutions of the EU which referred to advances in the field. Thus, for example, in 1998, the 5th European Union Framework Programme of Research and Technological Development underlined the potential of modern biotechnology vis-à-vis the obtaining of safe, healthy, balanced, and varied food. However, as it is known, this potential of food and agriculture research does not serve to explain the nature of the sociopolitical and economic tensions surrounding these advances, in particular those in agrobiotechnology. The law regulating this field has been created to mitigate potential conflicts of interests and untoward ethical practices reflected in this scenario of tension.

The laws, regulatory developments, and mechanisms of supervision currently applied to food and agriculture research are part of a fragmented model of global governance, divided into regulatory levels which compete among themselves. All of this gives rise to several questions: who created the different regulatory frameworks for food and agriculture research? What are the concerns they have addressed and where are they leading human societies? To answer these questions from a global and multicultural perspective is not easy. Law is an expression of culture which is intimately related to the geography, history, political sensitivities, and sovereignty of the states which created it. Nevertheless, on a global scale, there are a number of elements which can be critically analyzed. Among them, it is possible to study how foods have been predominantly considered as tradable commodities throughout history.

The Ethics Behind Food and Agriculture Law: Historical Background and Some Warnings Regarding Its Critical Analysis

The law is an instrument, even since the earliest societies, has been employed to resolve social problems. Compared with other mechanisms created with a similar purpose, the law is notable for its high degree of formalization and its coercive character. Nonetheless, there are significant limitations to its potential to resolve conflict. Why? Because in spite of its apparent strength, the task of the law is basically to impose behavioral guidelines (actions or omissions) upon a series of subjects, who are understood to be an important part of the problem. As the philosophy of law explains, the members of societies tend to obey the law either because they agree with the rules or for fear of sanctions, but the mere creation of a legal norm does not guarantee per se that it is going to be obeyed. However, there may well be an incorrect approach to the problem on creation of the law or the selection of behavioral guidelines that contribute nothing towards its resolution.

Contemporary food law systems are very complex systems relating to a multitude of aspects of production, distribution, and consumption of food. Moreover, their creation involves the participation of different entities, which range from local to international and are not immune to the influence of certain private stakeholders. But it is important to underline the fact that, to a certain extent, the complicated regulatory and oversight mechanisms employed share a common root with the food law that was already operational in ancient Rome. In which sense?

Food and Agricultural Law in Ancient Times

The societies of ancient Rome, Greece, or Egypt already had their own legal norms, and it is known that some of these referred to certain specific aspects of the food fact. This was an incipient *food law*, much simpler than today's in its objectives and means, but which in short prohibited or enforced certain behavior and advocated legal consequences for those who infringed its terms. With regard to the matter at hand, it also contained a provision maintained by current regulatory systems. That is the consideration of food as a tradable commodity.

It has been said that the first few thousands of years of the history of humanity boiled down to the essential chances of survival. Though not exclusively, survival depended, and still depends upon, the response provided to the daily need for food (Teuberg 1989), and this explains why like other living creatures, humans developed different skills and techniques to obtain more and better food and drink. With the first tools, Homo habilis embarked on a journey towards what thousands of years later, and thanks to other milestones such as the mastery of fire, would be the food industry. As it is known, the most significant transformation would come with livestock and agriculture, barely 10,000 years ago. The production of food from plant species and domesticated animals is one of the characteristics of the new age: the Neolithic age. Archeological samples also provide evidence that in this era people already possessed technologies which - in the strictest sense - might be described as food technologies, in other words, knowledge and practical applications of principles of the science of the preservation, processing, preparation, packaging, storage or transport of food (Curtis 2001). Products of the land, already improved by agricultural or livestock farming, were transformed into more easily consumed and better tasting products. As long as 8,000 years ago, harvests were already being stored in holes dug in the ground and then covered with clay (Al-Fayyum, Egypt).

Within the scenario of the first civilizations (Ancient Egypt or particularly the city-states of Greece and Rome) appeared the first juridical rules applied to food. Urbanization in ancient times increased consuming populations incapable of directly producing their own food, and there appeared agents specialized in food production and retailing. Knowledge with regard to processing, storage, or transport of food and drink would be crucial in the appearance of different *stages* between growers and end consumers (Burnett and Oddy 1994). This would be

a potential source of conflict, solution to which would be sought via legislation.

The first public controls of which there is evidence referred not so much to the processes of elaboration, as to the guarantee of contractual *bona fides*. This involved the supervision of prices, of systems of measurement (scales, tape measures) and quality control. In the ensuing centuries, the local administrative or judicial authorities of different countries would apply similar measures, designed to prevent charging exorbitant prices, giving short weight and the adulteration of food products (e.g., the English *Assize of Bread* and *Ale dating*, 1285). There was never any doubt – as mentioned already – that food was a consumer good.

The Food Law of the Diet Revolution (s. XVIII–XIX)

The eighteenth century saw a consolidation of the bases of what has been called the *diet revolution*, the progress of which accelerated in the nineteenth century. The confluence of industrialization and the processes of urbanization led to a significant increase in food production and in the population groups in a position to accede to this food. Western countries advanced towards an abundance of food which, in time, would be indicated as one of the features of welfare societies.

A key element in this process was scientifictechnological evolution. In the preindustrial era, access to food was very limited and existed in conditions of poor hygiene. The modern model of production and distribution would seek formulae for efficient mass production of food with the aid of scientific advances and the development of technologies in agriculture, livestock farming, and food processing. The physiocrats in France, the Royal Economic Societies in Spain, and the English Agricultural Council are some of the institutions in whose documentations are recorded inventions and discoveries that improved food (Fernandez 2009). Creators of new strains and varieties, designers of sewing machines or pumps, proposals for methods of rotation, all of these would contribute towards agriculture and livestock farming gradually acquiring an industrial profile. Relevant too were the advances regarding efficiency in mass production of food, overcoming the poor hygienic conditions of previous eras.

The *food policies* were aimed fundamentally at guaranteeing adequate food production and distribution in accordance with the health and safety parameters of the time. This was an age of confidence in market self-regulation and reinforcement of the idea of the *tradable* nature of food.

There would be no impact on regulations as a result of those critical reflections upon some aspects of food production and distribution that appeared in this era. One of the criticisms of this movement was the tendency "to put cooking into scientific, rationalized, technical and differentiated categories," coupled with proposals for a return to "natural cooking" (Teuteberg 1989). Similarly, the Lebensreformbewegung movement at the end of the nineteenth century accused modern agriculture of ruining "pure food" and endangering people's health in the quest for profit.

The Nutritional Transition of the 1960s

The demographic crises traditionally caused by famine decreased significantly from the mid-nineteenth century onwards, although many of the problems associated with hunger and malnutrition persisted until the second half of the twentieth century (Barona 2012). Political tension, economic crises, protectionist trade barriers. (national, regional, or wars or international) continued to have a major impact upon food supply.

In the first half of the twentieth century, the demands of an emerging civil society led states to reorder some aspects of food systems to avoid famine. There also appeared what is known today as the *human approach* to the food issue, that is, a journey begun at the start of the century with the institution that preceded the FAO, and which would lead to the proclamation of the human right to food within the Universal Declaration of Human Rights of 1948 (art. 25). The legal articulation of this human right, in spite of such important documents as the Declaration of Rome of 1996 or the *Millennium Goals*, has

failed to go far enough. It is not clear where or how every person may claim their right to a food appropriate to their needs. Neither has the question been addressed, certainly, of how societies should act when the need to satisfy that right proves to be incompatible with the legal status of tradable as applicable to food today.

In the second half of the twentieth century, the nutritional transition in Western societies began to become apparent. As a consequence of the industrialization of agriculture and improvements in preservation and delivery systems, the availability of food improved significantly in certain areas of the world. However, two major concerns persist. One is food safety. There is an absence of rules and control mechanisms that assure food quality in light of new production practices and the increasing distances food travels. A second concern is what Levenstein would describe as Paradox of Plenty. The so-called Green Revolution (which was more an agrochemical revolution) was based on massive fertilization campaigns and intensive pest control programs. The marked improvement in certain crops appeared to be the solution to an old problem (that of food shortage), but it created other new ones, such as the displacement of traditional crop varieties and undesired effects upon human and animal health, and on the environment.

In response to these concerns there the last decades has developed a food law that is new in terms of its contents. Food law will be new as well with regard to the subjects who create it or participate in its creation and in the territorial scales – from local to international – where it will be applied.

Contemporary Laws and Regulatory Mechanisms on Food and Agriculture Research: Their Main Characteristics

As studies show, human intervention in food production and preparation has not yet totally transcended the organic-biological character of food, although many changes have occurred. Historically, this character has conditioned food consumption and its commercial possibilities, which have depended on geographic and climatic location and on the existence of adequate systems for its conservation and transport. The contemporary chain connecting those who cultivate raw materials to consumers is now virtually free of limitations imposed by time, climate or distance. Furthermore, commercial networks on a planetary scale coexist with traditional food systems or those of new creation in which producers are very close to the consumer, or consumers themselves participate in the consumption of what they consume.

How has *food law* evolved? It is important to remember that regulatory mechanisms are imposed by those who *de ius* or de facto hold political power. Contemporary globalization has blurred states, which have ceded significant areas of power to supranational entities. The loss of the state as a reference has meant that *food law* has ceased to be a coherent whole, created in a constitutional legal framework that adopts as a reference a series of values and principles. This era is characterized by a legal phenomenon that has been described as *multilevel fragmentation*, and on each territorial level, the framework and the values upon which law is based are different.

A very powerful image when explaining food governance is the existence of different levels of governance, dominated by different actors and with different views and who compete among themselves for hegemony over the food system. Regulatory regimes are no longer purely "tools to resolve conflicts"; they are now an instrument which helps those who on one scale or another hold power in the market to maintain their status quo.

Explaining Contemporary Governance and Food Law as Competition Between Regulatory Regimes

Conventional, state-based regulation is no longer equipped to supervise those food supply chains that transcend its borders. Given the particularity of food as consumer good and its deep-rootedness in the traditions and cultures of countries, until a couple of decades ago, state laws had represented an obstacle to the economic integration of food markets. One example is the delicate task of arbitration performed for decades by the Court of Justice of the (now) European Union in response to allegations of illegal restrictions in this area.

But diverse historical factors obliged a relaxation of this containment in the 1990s. A typical case is that of novel food, in other words, foodstuffs with limited market presence prior to the decade of the 1990s. Some states began the task of creating laws for these, while almost in parallel international regulatory mechanisms - some state based and others market based - would establish regulatory systems for these foods (especially for GM). As these are new products, the degree of entrenchment in the traditions and legal cultures of countries is lost, and it is difficult to counter the strength of laws created at supra-state levels. We are faced with competing regulatory regimes, which vary according to scale, economic base, legality, and to the attention they pay to health, safety, and the environment (Oosterveer 2007).

Regulatory Frameworks on an International Level

Since the aftermath of the Second World War – in some cases since before – some institutions committed to guarantee access to food, personal safety, the environment, or the development of peoples (FAO, WHO, UN, etc.). But in spite of their efforts, international governance of the agrifood sector has hindered by institutions like the WTO, which have exponentially multiplied what is regarded as the tradable character of food.

The WTO SPS agreement permits signatory states to establish sanitary or phytosanitary measures to obstruct international trade in their territory. But it limits these measures to those based upon the scientifically supported existence of risks to human, animal, or vegetable health. In those cases in which scientific backing is deemed insufficient, the WTO organs of appeal only admit provisional measures if these are interpreted as "reasonable." Another significant agreement is the *TBT Agreement* (Agreement on Technical Barriers to Trade), which limits the possibility of establishing technical trade barriers such as the requirement of labeling, traceability,

or special measures in transport. These types of measures, in order to be legal, must be justifiable according to their necessity or proportionality in relation to quality, food safety, or the prevention of unfair practices.

And What Happens Within States and Regions?

Some state models, particularly in Europe, are reluctant to accept food trade which to some degree fails to take into account concerns such as the environment, ethics, or consumer protection beyond basic food safety. Thus, they implement risk assessment models which not only address unchallenged scientific evidence, but which also, for example, adopt different formulations of the precautionary principle. In other words, they employ certain risk management guidelines even when the latter have been scientifically adjudged to be uncertain. There is also the introduction of principles such as that of case by case and step by step, which involve greater controls than those allowing recourse to princifamiliarity ples such as or substantial equivalence.

Another aspect in which state models and those of some regions (like the EU) differ over what prevails in the WTO is the fact that in decision-making with regard to risks they do not restrict themselves to scientifically evaluating the latter. There is a risk management phase in which other criteria are also taken into account. Certainly, the principal criterion is the scientific assessment of risks, but in decision-making, certain other criteria are borne in mind, such as the economic impact of decisions (effects on production, on sales, the consequences of the unwanted spread of some crops) and, among others, consumer rights and interests.

The European Union regulatory model was forged early in the twenty-first century, once member states had accepted as a common reference the scientific criterion of the EFSA (created in 2002). This unique scientific criterion is just one of the steps in a process in which decisionmaking with regard to GM food and feed or functional foods also reflects criteria of another nature. This is the case, for instance, of (EC) Regulation 1924/2006 of the European Parliament and of the Council on nutrition and health claims made on foods. This Regulation establishes the creation of a single list of nutrition and health claims legally authorized for its use in the EU. This incorporation depends firstly on a scientific assessment performed by the EFSA but is also directed towards average consumers properly understanding the claims addressed to them and not being disoriented in the appropriate composition of their diet. Note that this far exceeds what the TBT agreement of the WTO considers "necessary" on labeling.

Another case worthy of mention is that of Regulations EC 1829/2003 on genetically modified food and feed and 1830/2003 concerning their traceability and labeling. Without prejudice to the stringent processes for evaluating risk to human health and the environment, the only products authorized are those that are not disadvantageous in relation to their conventional counterparts. Labeling is required to reflect not only if this is GM food but also any other *ethical concern* that consumers may find relevant.

The Way in Which Contemporary Law on Food and Agriculture Research Is Critically Reviewed

None of the current trends in food ethics question the fact that food is much more than just a tradable commodity. And some of their proposals highlight the importance of questioning the model of food governance prevailing at a global level. Under the pretext of harmonizing *common* concerns regarding trading in agro-food products – basically food safety – the tradable character of food has been reinforced, as well as the significant deregulation of the market. Is it possible to reconstruct governance and place limits on such extensive freedom in the market?

It is also interesting to observe how this trend has influenced the evolution of food science and technology. Although in their early stages, smalland medium-sized companies participated in research into and commercialization of agrobiotechnological products, the complex legislative scenario has practically stripped the major life science corporations of competence. One might ask whether, perhaps for this reason, proposals of support for alternative food systems, compatible with a better distributed socioeconomic development, tend to offer resistance to scientific and technological innovation. Have innovations in food and agriculture led to this global food system, or are those who have misused these innovations the ones to blame?

After all, for centuries food and agricultural innovation have been accepted to confer competitive advantages upon those who control their trade. This does not seem compatible with fairness, sustainability, and all human beings enjoying access to food appropriate to their needs and desires. Yet, redirecting these scientific and technological advances towards respecting contemporary values is not a matter of technology regulation. It is perhaps time for humankind to decide if accepting the tradable character historically given to food is still adequate. The search for alternatives must also consider whether those who control the market should also dominate food governance.

Summary

This entry analyzes the ethics behind historical and contemporary food and agriculture law. Contemporary food law systems are very complex systems relating to a multitude of aspects of the production, distribution, and consumption of food, but to a certain extent, they share a common root with the food law that was already operating in ancient Rome. Humans do need food to survive, but that has not been considered a key issue for the food law. For centuries legal mechanisms have considered food as a tradable commodity, and this trend has also influenced the evolution of food science and technology. The main characteristics of contemporary laws and regulatory mechanisms on food and agriculture research are presented here as well as the way in which they are critically reviewed.

Cross-References

- ▶ Biotechnology and Food Policy, Governance
- ► Functional Foods

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Literature, Food, and Gender

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Synonyms

Communication; Consumption; Metaphor; Sex; Sexuality; Symbolism; Writing

Introduction

Food's presence in novels, poems, drama, and literary essays is about more than a realistic depiction of everyday human existence. Literary scholars and anthropologists alike agree that food acts like a language, communicating between cooks and eaters, authors and readers. In literary texts, then, food forms a second layer of signs that reflect and sometimes complicate the words on the page. "Food is endlessly interpretable," asserts the literary theorist Terry Eagleton (1998, p. 204), and anthropologist Carol M. Counihan explains why: just like language, "food is a product and mirror of the organization of society on the broadest and most intimate levels" (1999, p. 6). Food, with its ability to reflect social organization and bear endless interpretation, is an ideal tool for literary authors: a language of symbols within a language of words.

All cultures use food as a means to distinguish among categories of people (Counihan 1999). Different foods and food-related practices indicate membership in different classes, castes, races, and gender categories. Yet food has a special relationship to sex. Like sex, food is a biological necessity, but the acts associated with it are loaded with social meanings (Douglas 1999). Moreover, like sex, food brings what is outside the body into the body, and like sex food initiates a physical union with the outside world (Counihan 1999). Thus, food can represent the penetrability and penetrative capabilities of the human body, its ability to absorb and dominate others, and the body's capacity, as mere matter, to be subsumed and controlled by others. Given the metaphorical as well as social links between food, gender, sex, and language, food becomes a highly effective way for literary authors to depict and explore gender roles in their work. The purpose of this entry is to examine the ways that literary authors use food and the practices related to it to depict both normative and nonnormative modes of performing gender. In the texts discussed below, food symbolizes the relationship between characters and their own gendered bodies, and makes visible the social exchanges that occur between characters. This entry will discuss authors' frequent association of particular foods with male and female genders in English and other literary traditions, as well as the gendered associations of serving, cooking, and eating food for men and women. Finally, it will examine the use of food in some literary texts to depict characters' resistance to normative gender roles, concluding that in some texts, to defy normative practices of eating, cooking, and serving is to defy the utility of the gendered codes that determine what it means to be an ethical agent in one's community.

Reading Food's Gendered Implications in Literary Texts

A scene from the British comedy The Country *Wife* (1701), by William Wycherley, shows how food can function on multiple levels of meaning to expose social and sexual tensions in a literary text. In Wycherley's play, the seductive Mr. Horner treats Marjorie Pinchwife to a basket of oranges, an imported and relatively expensive fruit at this time. When Marjorie's husband, Mr. Pinchwife, finds out what Horner has done, he responds angrily. Mr. Horner protests: "I have only given your [wife] an orange, sir!" (3.2.598), "Only squeezed my orange, sir," replies Pinchwife, "and given it me again" (3.2.599-600). In this exchange, food means at least two things: the orange is "only" an orange mere matter to be eaten and expelled - but it also symbolizes the body of Marjorie Pinchwife, "squeezed" by Horner, and therefore rendered sexually useless to her husband.

Although the orange in this scene represents a sexual exchange as well as an edible treat, it is important to emphasize that there is no universal code by which an orange, or indeed any other food, can be interpreted. The orange that symbolizes adventure and sexual transgression in Wycherley's The Country Wife, for example, carries an almost opposite connotation of banality and social conformity in Jeanette Winterson's novel Oranges Are Not the Only Fruit (1985) a connotation that depends in part on the much lower cost and greater availability of oranges in the mid-twentieth century as compared to the 1700s. An orange might symbolize monstrosity in one text, because citrus fruits were notoriously difficult for early horticultural scientists to classify (Freedberg 1992), or it might stand in for the fruits of Eden in the biblical book of Genesis as it does in Andrew Marvell's 1653-4 poem, "Bermudas" (Deutsch 2009). Instead of attempting to decipher the universal meanings of foods across all texts, this entry deals almost exclusively with texts in the British and North American literary traditions, recognizing that as a reflection of the cultures in which food is eaten, written, and shared, food's meaning depends heavily on context.

Masculine and Feminine Foods in Literature

Food has no universal code (Douglas 1999). Still, literary critics and anthropologists have ventured a few generalizations regarding the foods more often associated with women or men. Tomoko Aoyama writes that "while meat and offal tend to be categorized as masculine food in many cultures, sweets are usually considered feminine" (Aoyama 2008, p. 172), a division that the activist and author Carol J. Adams analyzes as symbolic of men's social power over both women and other animals (Adams 1990). Indeed, scenes of meat eating are frequently mobilized in literary texts to represent male characters' relationship to the power accorded them through their gender, especially power over women. In her fictional book Sociable Letters, the sixteenth-century author Margaret Cavendish describes a fight between a wealthy knight who loves beef and his wife, who thinks beef is a disgusting and unfashionable dish. When the lady C.C. orders a fashionable feast, the family cook, "knowing his Master loved ro[a]st beef," chooses to defer to male authority and serves a joint of beef. The knight and lady throw food and come to blows over the dish, but throughout this scene, beef represents the enduring power of both the "old country fashion" and the Master's power with which it is associated: "all the fine Quelquechose was overthrown in the hurly burly, but the Beef was so Substantial and Solid, as it strongly kept its place" (Cavendish 1997, p. 45). The beef a type of meat that was already steeped in associations with the power of the British landed class (Thirsk 2007) – then comes to represent Sir G.C.'s power over both his wife and his household.

In the letters of Margaret Cavendish, men are associated with the strong, substantial qualities of meat. Women in literary texts are also associated with meat; however, they are more frequently identified with the materiality of meat: its deadness, its exchangeability, its submission to the knife and jaw. This idea of women as edible is both old and widespread. Counihan notes a strong relation between women and food in general, across all societies, and she attributes this association primarily to women's reproductive capacities: "Women are food to the fetus and infant," notes Counihan, so that across cultures. "although women's feeding activities are undertaken with widely ranging amounts of autonomy, prestige and control, they are nonetheless universally linked to womanhood" (Counihan 1999, p. 63). Thus, foods associated with animal and plant reproduction, notably milk, eggs, and fruit, are often also foods associated with women's bodies and sexuality. In some cases foods represent the female body itself, especially its fertility, power, and physicality: in the novel, Bailey's Café, one character symbolically enacts the labor of another by cutting the pit out of a ripe plum (Naylor 1992), and in the 1959 play A Raisin in the Sun by Lorraine Hansberry, the character Ruth Younger feeds her husband scrambled eggs that foreshadow Ruth's decision to abort the child she is carrying (Matthews 2008).

In a device that is mimetic of the discharges of child birth and sexual arousal, women in literary works also sometimes drip or leak as a sign of their excessive consumption of food and sex, and these uncontainable liquids reflect the fear that women's sexuality cannot be disciplined to desire only within the boundaries of designated social institutions such as marriage (Kowaleski-Wallace 1997). In Christina Rossetti's poem *Goblin Market* (1862), for example, eating the fruit of "goblin men" (1.49) is a sexual initiation into "joys brides hope to have" (1.314). The young girl Laura trades a lock of hair for the chance to "suck[] their fruit globes fair or red" (1.128), but when she is denied more fruit, she trudges home, "her pitcher dripping all the way" (1.263). The squeezed orange that is Marjorie Pinchwife and the dripping pitcher that is Laura are both symbolic of these female characters' unruly flow toward men they haven't married, and many other texts depict women who are literally overflowing with sexual energy and excess food. Petal Bear, a character in E. Annie Proulx's novel The Shipping News (1993), overflows with both: the novel's narrator reports that 4 days after giving birth, Petal "hauled a dress that wouldn't easily show stains over her slack belly and her leaking breasts and went out to see what she could find" (p. 14). In Thomas Middleton's play A Chaste Maid in Cheapside (1613), written almost four hundred years earlier, the out of control women celebrating the birth of Master and Mistress Allwit's newest child gossip and gorge on sweets and alcohol until their bodies can hold nothing more: Mistress Allwit bears a daughter, while the rest of the women wet their seats (3.ii.220).

Cooking and Serving in Literature

As social exchanges, the practices associated with preparing and serving foods are perhaps even more reflexive of gendered social relations than are foods themselves. In British and North American literary traditions, the most positive representative of femininity and the soundest ethical agent is usually the woman who serves food to others instead of eating it herself. Likewise, a female character's refusal to prepare and serve food to others is often paralleled by other antisocial and non-gender-normative behaviors such as greed for power, violence, and unbridled sexuality. The Shipping News (1993), contains an example of each kind of woman. Set in the late twentiethcentury Newfoundland, Canada, the character Beety Buggit's homemade bread and tea are part of a communal effort to morally and spiritually recuperate the novel's male main character, Quoyle. The narrator notes that Beety's home contains not one but two tea kettles, each one constantly kept hot (p. 137), and her husband reports that "Beety makes bread every day" (p. 101).

The tea and toast of the Buggit house stand in stark contrast to the "never-used pot" (p. 23) and "sandwich cheese, streaked with green" that the novel associates with Quoyle's depraved exwife, Petal (p. 14). For Petal, the failure to nurture her family through food extends to other moral failures. She is a "bitch in high-heels" (p. 24) who cheats on her husband and tries to sell her two daughters into the sex trade. Her failure to nurture through tea and sandwiches in the kitchen parallels her failure to nurture in any other context, while the two raw eggs she gives to her husband one Christmas symbolize the two daughters she bears to Quoyle (p. 307). Just as Quoyle has to cook the eggs himself, he must raise the two girls on his own.

Scenes of women serving in literary works often acknowledge the power inherent in women's control of the kitchen. In Like Water for Chocolate (1992), a novel by Louise Esquivel, the main character, Tita, cooks for Pedro, the man she loves but is not allowed to marry, and the dishes themselves are experiences of physical intimacy akin to sex. Through them, Tita enters Pedro's body, so that normative sexual roles are reversed. Eating Tita's food, "Pedro didn't offer any resistance. He let Tita penetrate to the farthest corners of his being" (p. 52). Power in the kitchen, however, is tinged with danger: women who introduce the wrong foods into the bodies of their culinary dependants act as agents of incoherence within their family systems. In Tobias Smollett's novel The Expedition of Humphrey *Clinker* (1771), for example, the dining table is the center of dysfunction in a British upper class house. The food Mrs. Baynard provides is "contrived...without one substantial article adapted to the satisfaction of an English appetite" (p. 295) and is one facet of the "cold, comfortless, and disgusting" habits of conspicuous consumption in her household. Poor eating has "preyed upon" her husband's health, so that his wife seems to be consuming her husband through the very food she serves him (p. 290).

Men's cooking in literary texts, like their association with meat, often reflects a cultural expectation of mastery over their bodies and the outside world. Male cooks, notes Aoyama, are the culinary artists and "celebrated chefs" of the professional cooking world, while "women...are expected to take charge of the much less glamorous, unpaid work of everyday domestic cooking" (2008, p. 172). This distinction often holds in literary texts as well. Aoyama analyzes a series of modern Japanese works where men occupy a position of authority in the kitchen, teaching daughters or mistresses to cook the food they like (2008). Likewise, in Sorry Fugu (1989), a short story by the American author T.C. Boyle, a chef afraid of bad reviews from a young female restaurant critic reeducates her taste in an erotically charged scene where he places buttery squid rings in her mouth with his own fingers (p. 17). For both male and female characters then, scenes of cooking and feeding in literary texts are struggles for power over and access to the body of another person. Women's cooking is usually positive, but only if it is directed toward the nourishment and service of male bodies. Men's cooking and serving, on the other hand, in general bears positive associations only when it can be viewed as an expression of mastery, either over the skill of cooking or over women who must be taught to correctly prepare and enjoy food. Quoyle's response to Petal's raw eggs is a case in point. He makes an omelet of them and hand-feeds it to his wife "as if she were a nestling bird," an act that The Shipping News depicts not as meaningful nurture but as a symptom of Quoyle's "pathetic" self-hate (p. 307).

Eating, Food Refusal, and the Gendered Contexts of Self-Control

For both male and female characters in literary texts, self-regulation of one's appetite is a positive sign of self-control. Especially for female characters, the choice to refuse food, even to the point of starvation, can signify a character's manipulation or even transcendence of the networks of social and sexual exchange that control them, while for male characters, mastery of the appetite symbolizes the self-mastery necessary for participation in the public sphere.

This entry has addressed the ways in which foods can symbolize sexual penetration because of food's capacity to traverse the boundaries of the body. This metaphorical parallel makes food refusal an especially symbolic action for characters whose bodily autonomy has been explicitly violated through rape or abduction. In such scenarios, authors sometimes use the refusal to eat as their characters' last bastion of control. Perhaps the best-known example of this kind is Clarissa Harlowe, the heroine of Samuel Richardson's eighteenth-century epistolary novel Clarissa (1747-8). Self-starvation in *Clarissa* leads to transcendence of an unequal and disempowering patriarchal power structure, and self-denial is framed as self-determination (Ellman 1993). After being raped by her former suitor, Robert Lovelace, who has kidnapped and drugged her with a cup of adulterated tea, Clarissa symbolically closes the borders of her body, refusing to allow any sustenance to pass across the boundary of her mouth. She starves herself to death in order to gain release from the brutal and tyrannizing power that the men in her life - including her father, brother, and uncles as well as Lovelace have exercised on her body. In the end she is a "lovely skeleton" (p. 1231), and Richardson implies a correlation between the thinness and lightness of her body and the density and intensity of her spirit and her faith in god.

Masculine Self-Control and Political Participation

Self-control in relation to food is linked to bodily autonomy for male characters as well. In many texts men's gustatory self-control is a basic requirement for the right to own property and participate in civil discourse. In Henry David Thoreau's series of biographical essays, *On Walden Pond* (1854), for example, the author associates political autonomy with control over his own food supply when he provides detailed descriptions of the production and processing of a field of beans that he will eventually harvest and trade for other food. As he works, Thoreau hears the sounds of military exercises in the distance and links "the liberties of Massachusetts and of our fatherland" (p. 205) to his own labor in the field. Though Thoreau doesn't eat the beans himself, they allow him to master his own food supply, assuring that the basic needs of his body are met. Thoreau links this bodily integrity – his ability to exchange his own labor for his own body-sustaining food – to the quest for intellectual and political autonomy that brought him to Walden Pond in the first place. He views the bodily autonomy he gains through exchanging his own labor for food as more valid than the purely intellectual autonomy pursued by "my contemporaries devoted to the fine arts in Boston or Rome" (p. 207).

For African-American male characters in the novels of Gloria Naylor, food figures the enormous social pressures under which non-white men operate in the public sphere. For Naylor's men, the right to participate in the almost exclusively white world of business in the twentieth century can only be achieved through the most extreme acts of bodily self-control. In the novel Linden Hills (1985), an African-American business executive, Maxwell Smyth, finds that being "always immaculate and controlled" makes his race disappear in the eyes of others (p. 103). He polices his own diet with such minute attention that he no longer needs to defecate, since, "through a careful selection of solids and liquids, he was able to control not only the moment but the exact nature of the matter that had to bring him daily to that blue and white tiled room" (p. 105). In Naylor's novels, as in Thoreau, controlled consumption is part of the performance of normative masculinity and is a necessary adjunct to participation in civil and professional life. For the men in Naylor's novels, however, the labor required to force the black male body to appear as normative is a complex and potentially self-destructive undertaking, one that eventually, as in Clarissa, makes the body wholly disappear. Again, this self-destruction is symbolized through food: a quickly - warming glass of whiskey on the rocks symbolizes the way in which Maxwell's apparent mastery of bodily integrity will lead, paradoxically, to the disintegration of his sense of self - rigid ice cubes melt into the brown whiskey, weakening it, and Naylor writes that, "very soon, there would be nothing but a mouthful of watery bourbon that could be gotten rid of in a single swallow" (p. 111).

Queer Food

Refusing to eat, serve, or cook in genderdesignated ways is a sign that a character refuses to abide by the social system in which they are enmeshed. Where the offending man or woman is punished, the literary work might be said to take a conservative approach to the relationship between gender, food, and ethics, as, for example, in the case of Petal Bear, the depraved wife of Quoyle in *The Shipping News* (1993), whose gender nonconformity, expressed in part through her refusal to cook for her family, is definitely unethical and is punished accordingly by a violent death (p. 24).

But not all novels punish non-gendernormative relationships to food or associate them with unethical behavior. Refusing to eat according to the rules can be a powerful symbol of bodily self-determination for queer and other non-gender-normative characters. In Alison Lee's short story A Lesbian Appetite (2002), the narrator insists that "healthy food" is the food of sex and pleasure (p. 170), whether that means eggplant or red velvet cake. Although teachers, doctors, and manipulative lovers try to feed the narrator food that they claim is morally and nutritionally superior, the value of food in this story is explicitly in the social relations that it enables. Cooking, eating, and lovemaking are linked in that all require sensuality, respect for the body, and reciprocity in order to be good for you.

Subverting the connection between dietary self-control and political personhood, Sherman Alexie's short story What You Pawn I Will Redeem (2003) critiques the idea that men who eat and drink to nauseous excess are unworthy of self-determination and property ownership. The story follows Jackson Jackson, a homeless Spokane man who describes himself as "an alcoholic Indian with a busted stomach" (p. 178). After finding his grandmother's powwow regalia in a Seattle pawnshop, Jackson has between lunchtime and lunchtime to earn the \$999 he needs to buy it back. Instead, Jackson spends his money on liquor and McDonald's hamburgers that he promptly vomits up again. Drinking excessively, getting something for nothing, disrupting traffic, and dancing in a woman's clothes, Alexie's character defies the relationship between controlled consumption of foods, proper performance of gender, and social participation. What should be abjecting, antisocial, punishable behavior, however, results instead in reward: Alexie's character gets his grandmother's rain dance costume returned to him, and the story refuses to represent as natural the symbolic connection between men's gustatory self-control and their personal and political autonomy. The fact that this story relies in part on magical realism - the pawnshop is never in the same place twice – underscores how unusual its depiction is of a world where the good guys can eat and drink until they vomit without giving up their status as ethical agents.

Summary

Literary texts use food to represent and reflect on social practices around gender. While food is highly symbolic, foods are not universal symbols and must be interpreted within the historical and cultural context of the literary work in which they are found. Focusing especially within the British and North American Literary tradition, however, this entry draws some broad conclusions: women, who are associated through food with reproduction and nurture, must cook for and serve food to others in order to read as ethical agents. Conversely, women who refuse to cook are generally depicted as antisocial. Men's relationship to food reflects an expectation that men hold social and sexual power over others. Thus, men's association with meat reflects male power over women and animals. Moreover, men are required to control their own diets and the diets of others in order to qualify as autonomous individuals and participate in public life. This entry also examines the ways in which some texts resist these normative relationships between food and gender. Some works discussed here expose the unsettling fact that self-starvation may be a female or black male character's only means of gaining bodily autonomy, while others dissever the links between uncontrolled eating and antisocial behavior for people of any gender.

Cross-References

- Alcohol as Food and the Good Life
- Eating Disorders and Disturbed Eating
- Ethical Assessment of Dieting, Weight Loss, and Weight Cycling
- ► Fasting
- Food and Class
- ► Hospitality and Food
- Kristeva and Food
- Meat: Ethical Considerations
- Pregnancy and Food
- ▶ Punishment and Food
- ▶ Race, Racial Identity, and Eating
- Taste, Distaste, and Food

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Local and Regional Food Systems

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Synonyms

Civic agriculture; Community food security; Community food systems; Community-based food systems; Food democracy; Food economies; Local food systems; Regional food systems; Sustainable food systems

Introduction

Local and regional food systems, sometimes referred to as "community food systems," are collaborative networks that integrate sustainable food production, processing, distribution, consumption, and waste management in order to enhance the environmental, economic, and social health of a particular place. These networks reflect growing public interest in restoring the vital connections between agriculture, food, environment, and health. Local and regional food system networks engage a wide range of community partners in projects to promote more locally based, self-reliant food economies. Particular community projects and strategies vary, but most collaborations seek to increase resident participation to achieve one or more of the following goals (UC SAREP website: http://www.sarep. ucdavis.edu/sfs/def):

- A stable base of family farms that use sustainable production practices and emphasize local inputs
- Marketing and processing practices that create more direct links between farmers and consumers
- Improved access by all community members to an adequate, affordable, nutritious diet
- Food and agriculture-related businesses that create jobs and recirculate financial capital within the community
- Improved living and working conditions for farm and food system labor
- Creation of food and agriculture policies that promote local or sustainable food production, processing, and consumption
- Adoption of dietary behaviors that reflect concern about individual, environmental, and community health

While no local and regional food system can claim to fully embrace or embody all the articulated goals, this framework provides an animating vision that spurs and sustains local action. Pursuing diverse goals simultaneously creates a host of practical and ethical challenges. These challenges, described more fully below, include (1) finding price points that work for farmers while ensuring low-income consumers have access to healthy food and food system workers have decent wages and benefits; (2) confronting racial and class bias while forging practical solutions; and (3) reconciling the desire to stay true to deeply held values with the need to compromise in order to achieve incremental changes (Campbell et al. 2013). Negotiating trade-offs among various goals and competing values is integral to this public work.

History of the Local and Regional Food System Idea

The attempt to be holistic in conceiving and pursuing local food system work is intentional. It stems both from the effort of local communities to solve interconnected problems (rather than treating them in isolation) and from a desire to consider multiple values in designing food and agricultural systems, rather than elevating a single value – economic efficiency – above all others. Local food system promoters consider agriculture, food, health, and environment as interrelated aspects of a single system whose overall health requires intentional efforts to develop meaningful connections among all sectors. These ideas have deep intellectual roots and can now draw on lessons from decades of on-theground experimentation.

The concept of a sustainable, local community food system emerged both from intellectual criticism of the agro-industrial food system and from community-based efforts to promote environmentally enhancing forms of economic development. Early roots can be traced to the 1960s and 1970s, when concerns began to be raised about the environmental damage caused by chemically intensive agriculture. While organic or sustainable production practices were viewed by many as necessary alternatives, by themselves these changes did not deal with a range of serious social and economic issues also associated with conventional food and agricultural practices. To address these, scholars and activists began to critique not only chemical regimes but also the effects of increasing scale, concentration of power, overreliance on specialized experts, and accounting systems, which allow large firms to internalize profits while externalizing costs to the larger community. These costs included serious problems, such as pollution, waste disposal, added burdens on welfare services, and deterioration of local tax bases. Driven by growth imperatives and by narrow economic conceptions of value and efficiency, conventional agriculture and food systems were viewed as sacrificing other values and priorities: healthy rural communities, a connection to place, the pleasures and nutrition associated with good food, husbandry, good work, decent wages and working condieconomies, tions, local and appropriate technologies.

More recently, climate change concerns are providing a further rationale for local and regional food systems. These concerns include the environmental costs of shipping food long distances and the vulnerability of centralized production systems to climate shifts. For others, such as those in the food sovereignty movement, the primary driver of re-localization is the desire to maintain democratic control over the local food supply in the face of global commodification.

Increasingly, local and regional food and agricultural systems are being viewed as an important path toward creating a more sustainable future (Feenstra and Wilkins 2009). Beginning in the 1970s and continuing until today, scholarpractitioners from fields as diverse as economics (Schumacher 1973), agriculture (Berry 1977), nutrition (Gussow 1978), and sociology (Lyson 2004), along with many others, have articulated an alternative model for food and agricultural systems. At the core of many of these visions was an emphasis on building local connections between consumers and producers, between producers and communities, and between urban and rural areas. Many began to see the work of building relationships and connections as the path toward greater community control over their economic destiny. For others, the motivation was to reveal the human dimension underlying economic interactions, the beauty and the wisdom 50 s embodied in the natural world, and the possibilities of preserving what is unique within local and farm

regional cultures, including the joy of sharing locally grown and lovingly prepared food.

Examples of Local Food System Strategies

Spurred by the intellectual critiques, and in some cases inspiring them, community-based projects to develop local and regional food systems began to emerge. Many local leaders are promoting local food systems as an economic development strategy that supports local farmers, protects landscapes, and provides consumers with access to healthy and nutritious food. Local projects have taken many forms; just a few are highlighted here to suggest some of the most widely shared activities and emerging institutional connections.

Many of the most well-known and widespread local food system projects have involved developing new markets that more directly link farmers and consumers. These include farmers' markets whose numbers increased nationally from 1,700 to more than 7,800 between 1994 and 2012 (USDA Agricultural Marketing Service website, nd), public food markets such as the Ferry Building in San Francisco or the Reading Terminal Market in Philadelphia, communitysupported agriculture, and direct delivery options for institutions and retailers. Local leaders also created spaces for growing food such as community gardens or rooftop gardens, often in lowincome neighborhoods where healthy food distribution was minimal.

In the late 1990s, nonprofits, school food service professionals, farmers, and community members realized that public schools could be another avenue through which to purchase and educate young people about local, sustainable foods (Feenstra and Ohmart 2012). The concept swept the nation as hundreds of schools and communities bought into the concept of healthier foods for their children and more economic security for regional farmers. According to the most recent statistics, more than 38,629 schools in all 50 states are involved in farm-to-school programs with more than \$354 million in sales to regional farmers estimated (National Farm to School Network website, nd). The farm-to-school concept has now spread to other institutions such as colleges, universities, hospitals, prisons, and corporate cafeterias.

Noting that local governments have departments for necessities like housing and transportation, but none for food, many communities have begun to develop local or regional food policy councils. These councils are a means to institutionalize and better coordinate the newly emerging local food and agricultural activities and programs (Clancy et al. 2007; Harper et al. 2009). A number of cities, counties, and even states now maintain food policy councils or alliances (Centers for Disease Control [CDC] 2010). The idea is that citizens want to participate more actively in controlling the policies governing their own food systems and help to plan for the future food security for their communities.

The private sector has played a major role also. Restaurants and cafes, inspired by Alice Waters' example at Chez Panisse in Berkeley, California, began searching for top quality, locally grown, sustainable ingredients from regional farmers. "Foragers," restaurant staff whose job it is to find local growers and ranchers, visit nearby farms and ranches and build personal relationships with the restaurant. The "Chefs Collaborative," a nonprofit network of chefs that are "changing the sustainable food landscape using the power of connections, education and responsible buying decisions" (Chefs Collaborative website, nd), was formed in 1993 to support a growing group of restaurateurs committed to principles of environmental sustainability, seasonality, preserving diversity and traditional practices, and supporting local economies.

As one might expect with a movement that emphasizes locality, there is no single, overarching entity coordinating local food system efforts. However, in many states this work is supported by leading nonprofit organizations or university programs in the area of sustainable agriculture. In addition, local food activists have developed extensive national and international networks to share ideas and information. National professional associations such as Agriculture and Human Values, the Rural Sociological Society, the Community Development Society, the American Dietetic Association, and the American Planning Association now provide ongoing opportunities for discussing and analyzing local and regional food systems.

Internationally, the Slow Food Movement has emphasized building connections between the plate and the planet to counter the influence of fast food on society. The US affiliate, Slow Food USA, now has over 250,000 supporters, 25,000 members, and 225 chapters nationwide. The organization advocates for food and farming policy that is good for the public, good for the planet, and good for farmers and workers (Slow Food USA website, nd).

While funding for local and regional food systems remains miniscule in comparison to the resources agribusiness can call upon, the past two decades have witnessed a significant uptick in both public and private foundation support. For example, the USDA has supported these efforts through agencies such as the Agricultural Marketing Service (farmers' markets); the Cooperative State Research, Education, and Extension Service (regional research); the Sustainable Agriculture Research and Education Program (sustainable agriculture and food systems); and the National Institute for Food and Agriculture (research and outreach on sustainable food systems and food security). Foundations such as the W.K. Kellogg Foundation, the Robert Wood Johnson Foundation, the California Endowment, the Jesse Smith Noyes Foundation, and many others have supported the development of local food systems and encouraged communities to work toward making them self-sustaining.

Key Values and Principles in Developing Local and Regional Food Systems

As in other forms of community development work, staying on course requires grounding and

deep commitment to underlying principles and values. Local food system leaders often cite their commitments to social, economic, and environmental justice and health, to democratic participation, to the importance of local wisdom and knowledge, to community spirit, and often to their own spiritual traditions. The challenge is holding true to these commitments to sustain work in tough times while remaining open to those who disagree or need pragmatic accommodations that may involve some compromise or trade-offs. Ultimately, this requires a form of public responsibility that can take many years to mature. While newcomers to communities can bring much to the table, there is no substitute for seasoned leadership with broad community connections, a nuanced understanding of local realities, and practical judgment. At the same time, it is important to continually broaden the circle to include the full range of community voices, taking advantage of previously untapped or underappreciated leadership.

A review of local and regional food system projects in California found that community leaders had to work hard to create new social, political, and economic spaces and connections (Feenstra 2002). In identifying key elements of successful work, local leaders mentioned three themes most frequently: (1) public participation, (2) partnerships, and (3) policy work. At their best, these processes become ways in which core values and principles are embedded in everyday practice.

Public Participation

Local and regional food system projects often create new physical spaces where people can gather, such as farmers' markets or community gardens. But beyond and behind many of these visible spaces, they work by creating multiple opportunities for individuals to come together and talk about food system concerns, visions, and activities. Gradually, participants in these discussions develop mutual awareness and trust, which can be difficult to build given the pull of competing values and priorities. Working through friction or around obstacles is inherent in most projects, requiring patience, persistence, and skill in group processes and good communication. Some forms of public engagement are more immediately appealing, such as harvest fairs, school garden days, or other community events that create local celebrations. To stay engaged, the public must find the work not only meaningful but also fun and socially enriching. In all these ways, local food system leaders attempt to enact commitments to the value of democracy, sociability, and local culture.

Partnerships

Because food system work encompasses a wide range of goals, core groups frequently need to reach out to other individuals and organizations with complementary expertise or objectives. This can include a broad range of community activists interested in sustainability or social justice, but also many mainstream institutions, including traditional agricultural organizations like the Farm Bureau or Cooperative Extension. Universities often are important partners, providing research, access to grants, technical skills, or facilitation. Universities can also provide a broader vision that helps locate local projects in a bigger picture, helping participant see their work as part of something larger. Partnership development is the way key values such as community are expressed, based on the importance given to expanding connections and relationships beyond typical boundaries.

Policy Work

For values to have lasting impact, they must become embedded in policy and institutions. Local and regional food system projects address policy issues at multiple levels – from school districts to city, county, state, or national governments. For example, some local areas have inserted food policy into their county's General Plan, and others have worked on farmland protection policies or school lunch policies. This work sometimes involves community-organizing efforts, such that youth or low-income workers or others are given an opportunity to voice their concerns in the democratic process. Many local areas find it important to articulate a compelling narrative that gives a rationale for emphasizing local food systems, while simultaneously working on better data to track the impact of initiatives.

Key Challenges Facing Local and Regional Food Systems

Working with a team of faculty and graduate students at UC Davis, a bibliography of peerreviewed articles on local and regional food systems was recently compiled focusing on articles published since 2000 (UC SAREP website community food system bibliography). The rapid growth of this literature (over 1,600 articles were identified), mimicking the growth in community interest, is reflective of the surge in interest in this field. But considerable challenges remain. An initial analysis of this literature, covering over 500 articles, identified three persistent strategic challenges facing community food system practitioners: (1) an economic challenge rooted in the difficulty of finding price points that work for farmers while ensuring low-income consumers have access to healthy food and food system workers have decent wages and benefits, (2) a social challenge to confront racial and class bias while forging practical solutions, and (3) a political challenge of reconciling "insider" and "outsider" strategies, the former emphasizing incremental reform and the latter systemic change (Campbell et al. 2013). These challenges resist simple solutions, posing difficult trade-offs between competing values.

Economic Challenge: Simultaneously Meeting the Needs of Farmers, Laborers, and Consumers

Research on local food systems brings into sharp relief the challenges and trade-offs involved in meeting the needs of different food system constituencies. The first challenge is finding a price point high enough to provide a stable and secure income for farmers but also low enough to ensure lowincome consumers have access to healthy food. Even organizations that deeply believe in both these goals have a hard time achieving them simultaneously. By eliminating middlemen, farmer's markets and other direct marketing schemes partially address this challenge. But research points to the need to supplement market-based solutions with public investments (Allen 2010; Campbell and Feenstra 2001).

A distinct but related lens on economic issues (and in turn race and class) involves labor, focusing on pay and working conditions for those who are employed to grow, harvest, process, market, distribute, and serve food. Since its inception, the sustainable agriculture movement has included activists motivated by concerns for farm workers. But it has also been critiqued by those who do not feel the movement is making enough progress in addressing farm or food system labor issues. Local food system initiatives face this same challenge but also the broader challenges of providing sustainable wages and benefits for workers across the food system, such as those in food-processing industries.

Among the motivations for re-localization of food is the preservation of small- and mediumscale family farms. Yet this motive runs up against some evidence suggesting that there are better working conditions for farm labor on large farms than on smaller, organic farms (Shreck et al. 2006). The larger point is that all farmers – big and small, organic or conventional, locally oriented or global – participate in the same economic system and face strong pressures to reduce labor costs and protect profit margins.

Social Challenge: Confronting Racial and Class Bias

Another persistent challenge identified in the literature on local food systems concerns racial and class bias. At issue is the degree to which relocalization reinforces or exacerbates existing racial and class privileges, rather than challenges or transforms existing race/class relations. Some question whether initiatives led predominantly by white, well-to-do leaders can effectively address the social and cultural concerns and ideas of nonwhite and poor individuals and communities. At the same time, when food activists – mostly white and affluent – seek to expand healthy food options in low-income communities, they have been criticized for imposing their preference for minimally processed, local, and organic food on the rest of the population (Guthman 2011). Transcending these tensions will not be easy, but in many urban areas, social justice advocates have begun to demonstrate how people of color can take ownership of community food initiatives (Bonacich and Alimahomed-Wilson 2011).

Political Challenge: Reconciling Diverse Approaches to Creating Change

Local actors face additional trade-offs as they forge political strategies to create, implement, and support local food systems. For example, a common question is whether to pursue an "insider" or "outsider" strategy in making change, emphasizing reform at the margins or more fundamental systemic change (Campbell 2002). Some advocates work within mainstream institutions in order to encourage incremental adoption of short-term objectives, compromising in the process and risking co-optation. Others seek deeper institutional change or work to build alternative systems that attempt to preserve movement values in their purest forms, even at the cost of short-term gains. Still others argue for middle ground solutions that weave together these approaches. Finding common ground amidst strategic differences can be challenging, but not impossible (Stevenson et al. 2007).

Another way the political challenge is framed in the literature has to do with the scale at which change strategies are focused. One approach emphasizes a bottom-up approach using local initiative and action to carve out alternatives in light of existing constraints and opportunities (Campbell and Feenstra 2001). A more topdown approach emphasizes political and economic reform on broader scales in order to create greater space in which local reform can advance. The skills and proclivities for working at these different scales are distinct, and while some local practitioners have succeeded in aligning themselves with larger coalitions, knitting the two together effectively can be elusive.

Summary

Local and regional food systems have emerged as one important strategy for restoring the vital connections between agriculture, food, environment, and health. They have emerged from local efforts to regain control over the relationship to the food and agricultural system and as a response to the costs to communities of the agri-industrial model of food and agriculture. The projects emphasize public participation, partnerships, policy work, and the principles and values associated with sustainability, equity, and democracy. In pursuing these values and goals, local food system projects must navigate persistent strategic challenges which often require difficult trade-offs among values. These include finding strategies that simultaneously benefit farmers and lowincome consumers, dealing with race and class issues given the predominant white and well-to-do constituency in many local projects, and striking the right political balance between incremental reform at the local level and pursuit of broader systemic changes. A growing body of research is tracking the work and more intentional partnerships between academics and practitioners are needed to capitalize on local experience to generate usable knowledge.

Cross-References

- ► Agriculture of the Middle
- ► Civic Agriculture
- Community-Supported Agriculture
- Environmental Justice and Food
- ► Farmers' Markets
- ► Food and Class
- ► Food and Place
- ► Food Security

- Local and Regional Food Systems
- Public Institutional Foodservice
- ▶ Race, Racial Identity, and Eating
- ► Urban Agriculture

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Local Food Procurement

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Synonyms

100-mile diet; Local eating; Local food sourcing; Locavore; Locavore diet; Locavore lifestyle; Locavore philosophy

Introduction

The term "locavore" was coined in 2005 by Jessica Prentice, who, along with Sage Van Wing and Dede Sampson, made a commitment to eat only food sourced within a 100-mile radius of their homes in Northern California. This effort was publicized in the media during World Environment Day in San Francisco and subsequently entered the lexicon. While this might have been the first documented use of the term "locavore," the idea – and necessity – of eating a local diet was not a new one.

The seeds of the locavore movement may have been planted over a long period of time, but it was not until the first decade of the twenty-first century that people became very focused on the localized provenance of their food, due to increased interest in environmental ethics, health, and economic concerns and a movement away from corporate farms and industrialization in foods. When this movement was given a name and parameters in 2005, it grew steadily as a lifestyle - embraced wholeheartedly by some who sought to only source their food locally - but also grew as a lifestyle choice of those who shifted more of their food procurement to local sources. Proponents claimed that local sourcing kept money in the local economy, supported community, and promoted personal and environmental health through the conscious and sustainable business practices of the farmers and other food businesses that locavores supported. However, critics were quick to point to new studies that indicated that local food procurement was not the only or best way to ensure sound environmental practices, that a localized food system could denigrate food security in both America and around the world, and that accepting and working with a more globalized food system could do better at addressing the initial concerns of early locavores.

While the locavore movement as it was conceived in 2005 is still in its infancy, many of those who consider themselves locavores look at local food choices as more of a philosophy to source from smaller, environmentally conscious farms, who adhere to similar values as themselves.

History

Before industrialization and advances in refrigeration, mass production, food preservation, and transportation, food was traditionally sourced locally. The first permanent European settlers in northeastern North America brought with them some provisions. However, soon an agricultural community model was established, and early settlers fed themselves from personal farms or items that were traded or sold within growing villages and cities. By the 1600s the settlers had access to certain exotics such as tea, sugar, and coffee as standard fare in their diets due to their early availability via global trade routes, and by the 1700s a number of nonlocal products were fully integrated with the otherwise mostly locally sourced diet.

By the 1800s, large urban areas were growing in the north, creating low-income slums with little access to fresh produce. Farm animals, such as dairy cows, were still being kept within city limits, but the conditions were increasingly unsanitary leading to spoilage and illness. Outside of prime harvest times, hearty vegetables like cabbage and foods preserved in salt or vinegar provided the main sustenance for urban dwellers. Beyond urban centers, small towns and cities were established as the hub for a mainly agricultural society. A wide variety of pickling and preservation methods were used to keep local produce edible for months past harvest, which were developed by early settlers or brought over mainly from Europe. However, those who could afford it expanded their diet with foods imported from other parts of the country and from around the world.

There was continual migration from Europe, forcibly from Africa, and by 1820 the start of a wave from Asia – all which increased exponentially in the ensuing decades with the advent of steamships. With the greater number of people from many nationalities arriving, food and cultural migration and influences began in earnest, as did the introduction of many new flavors, ingredients, dishes, and preservation techniques – expanding what was grown locally and also increasing the demand for nonlocal goods.

Technological advances greatly affected foodways by the mid-1800s as well. The invention of the cast-iron stove meant that open fires were no longer required to cook, and the increasing availability of refrigeration - both via transportation methods and at home - meant that fresh foods could travel far from their place of origin and stay edible longer, setting the stage for perishables to be sourced from farther away and making local food less important to the average American's diet. Industries were soon being built around large-scale canning, which began to centralize the farming of certain produce and further lower people's reliance upon locally grown food. Also, this marked a shift from taste and flavor being the primary area where food was judged to safety and uniformity becoming more important (Roudot 2004). The late 1800s brought even cheaper sugar to North America, and the invention of "milk chocolate" - or candy made with cocoa powder from Central America and soon farther afield - led to even greater popularity of this nonlocal exotic and expanded the global nature of the average American's perception of food culture.

Further technological advances in food preservation, refrigeration, and sanitation spurred cultural changes, and women in both urban and rural areas were more likely to purchase staples like pickles, cheese, and canned goods at a store rather than make them at home. Fewer homes had personal gardens as well, and in 1920, the urban population of the country exceeded the rural population for the first time, marking the tipping point for the movement toward industrialized food and away from subsistence farming and local food sourcing (Swanson 2012).

The two world wars also greatly influenced the movement away from locally sourced products and toward convenience foods. With more women in the workforce, less time was spent on food preparation. Packaged foods like TV dinners became popular, and the introduction of fast-food chains made eating out more accessible. Agriculture moved toward monoculture as well, all of which helped push culinary trends toward flavor homogenization, and after the rationing of the Second World War, feeding people food of uniform quality and safety became the highest priority, rather than flavor (Roudot 2004). Common household activities from a generation prior, such as canning, pickling, and cheese-making, were becoming increasingly rare in urban and suburban homes, and the supermarket offerings of these products were mass-produced.

The "counterculture" movement of the 1960s reinvigorated some interest in gardening, vegetarianism, and food co-ops and brought attention to the potential health risks of the red meat- and preservative-heavy meals that had become prevalent in American homes, while Rachel Carson's 1962 book Silent Spring highlighted the environmental consequences of the rampant pesticide usage of large-scale farms and, by extension, industrial farming practices. Also important was the 1973 film Soylent Green which presented a dystopian future where all foods were processed and the environment was ravaged, causing death, disease, and war among humans. These factors influenced a shift in culinary tastes that gained speed in the 1970s when Alice Waters began to popularize "Californian" cuisine that emphasized fresh, seasonal ingredients and traditional preparation methods. The growing movement began to evolve into a resurgence in interest in specialty cheeses, gardening, and small-farm production, further spurred by Wendell Berry's 1974 World's Fair speech and subsequent publications against industrial farming, which helped carry the "backto-the-land" movement into the 1980s (Paxon 2010). Berry continues to be an inspiration to those interested in local food sourcing and still frequently speaks about his perceived ills of capitalism and the industrialization of the food system.

By the 1980s, the number of small and "organic" farms, long in decline, was starting to increase, and the first federal laws standardizing organic practices were passed in 1990. Consumer demand for organic food grew steadily, in part because of the desire to be more environmentally responsible and also more conscious about what chemicals one was exposed to. However, as the organic food industry expanded, some of the negative characteristics of industrialized conventional food remained. Organic foods were being grown and shipped from around the world, where regulation was lax or faulty and large conventional food producers were using technically organic practices while perpetuating some of the same business models that turned consumers away from industrialized conventional farming in the first place, such as crop monoculture and ultrapasteurization of dairy. The locavore movement grew out of the disillusionment of those who supported the organic movement but wanted more transparency and control over their food sources. Many who sought organic food for ideological reasons wanted to support growers of produce and livestock in ways that were more aligned with their values.

This cultural shift was apparent in a small but active portion of the population into the new millennium. As the first rumblings of the recession were being felt early in the 2000s, so rose the interest in family gardens, in small-scale farming, and in skills like preserving and cheese-making – and by 2005 the term "locavore" was coined. Culinary culture also saw the birth and popularization of the international "Slow Food" movement – akin to Alice Waters's Californian cuisine and founded by the Italian Carlo Petrini – that called for a return to locally grown, seasonal, traditional, and sustainable food sourcing and preparation.

This relatively small but significant shift in food trends in the mid-2000s occurred in part because it became increasingly easier to source local food. Since the US Department of Agriculture (USDA) began publishing the national directory of farmer's markets in 1994, the number of farmer's markets had more than quadrupled nationally by 2012 (USDA 2012). With these new markets came new customers interested in fresh, high-quality, local produce and products made from ingredients - and by people - they felt they could trust. In addition, these markets provided a literal marketplace where small and start-up businesses could sell products made from local ingredients and begin to gain customers relatively easily, with no need for distributors or middlemen. Add to this the recession that began in 2007 and an increase in unemployment and underemployment. This spurred people looking to cut costs to grow their own food, resulting in a spike of sales of seeds in 2007 and 43 million American households growing their own food by 2009 (Sanburn 2011). An additional effect of this was the increased understanding of the seasonality of produce and the experience of the improved taste of fresh, garden-grown goods. This also led to the continued growth of people starting foodbased businesses (Casserly 2012); a greater cultural interest in homemade, local, and highquality food products; and more people trying traditional preserving and pickling methods to continue to eat locally sourced food out of season, thereby reducing the need for imported produce.

Barbara Kingsolver's 2007 nonfiction book Animal Vegetable Miracle, which detailed a year in the life of her family in Southern Appalachia growing or otherwise locally sourcing nearly all of their food, also did much to publicize the new locavore movement during this period. This served as an inspiration for others to make efforts to do the same and spawned numerous locavore experiments, blogs, and articles. At the same time, more investigative works such as 2008's In Defense of Food by Michael Pollan took a hard look at the realities of North America's food system and its negative implications on the population's health and the environment, inspiring people to source their meat and produce from local farmers who offered more transparency in their methods of production.

These popular books, coupled with the recession and the exponential growth of farmer's markets, inspired more people to embrace the idea of "locavorism" - resulting in "locavore" being named the "Word of the Year" by the Oxford American Dictionary in 2007. While this is an emerging field, there have been a number of studies done in the past decade that look at the claims of a local diet and the perceived ills of the conventional food system. The arguments presented for locavorism were numerous and included lowering environmental impact in transporting and refrigerating goods to local communities, rather than farther afield; lessening the use of chemicals, as many of these farmers practiced organic or otherwise low- or no-chemical methods of planting, harvesting, fertilization, and pest prevention; and keeping money in the local economy by supporting small farmers. Those who supported a more global approach to food sourcing countered the above arguments with alternate research and noted the increasing world population and need to address food security and the ingrained presence of certain exotic foods in the Western culture as a major defense of a globally sourced diet.

Environmental Impact

The increase in interest for locally sourced food has inevitably sparked debate about the true benefits of eating a local diet. One of the primary arguments for a local diet was a desire for food that did not need to be shipped far, thus limiting fossil fuels used to transport goods all over the country or world, and to keep it cool during that journey. A study in 2005 demonstrated how far a typical meal might travel to get to one's plate: Rich Pirog, the associate director of the Leopold Center for Sustainable Agriculture at Iowa State University, showed how the ingredients that go into a cup of strawberry yogurt traveled 2,211 miles just to reach the processing plant - not including how far it travels to get to the consumer's fridge or the fossil fuels used to keep it cool on this journey. This study, and others like it, sparked supporters of local food who noted that it was relatively easy to agree that yogurt made from local milk, sweetened with local fruit and honey, would have a smaller "carbon footprint," defined as a total set of greenhouse gas emissions caused by the production of a product. However, using the carbon footprint calculation as the main reason to buy locally sourced food brought up counterarguments and questions about the feasibility of this calculation for every food consumed. Detractors noted that shipping by rail is known to be ten times more efficient than by truck, which can alter the carbon footprint of a product depending on its transportation method and not its place of provenance, while others noted that the overall environmental cost of food transportation was negligible compared to other environmental concerns (McWilliams

2009). However, Pirog along with a group of researchers also conducted a study that analyzed the average distance traveled of a variety of produce items to Iowa markets, looking at local, regional. and conventional transportation methods. They found that conventional methods took food on a 1,500-mile ride - versus less than fifty for locally sourced items – and emitted 4–17 times more carbon dioxide. A comparable study in Canada found that replacing imported food with similar local products would be a benefit to the environment equivalent to taking more than 16,000 cars off the road (DeWeertd 2011). However, this debate brought up important alternatives for lowering the carbon footprint of food sourcing without insisting upon only eating foods sourced within a specific radius, thereby causing some strict proponents of locavorism to rethink their reliance on carbon footprint calculation as

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the sole basis for their dietary choices.

Those who support a focus on local eating have also begun emphasizing its economic and community-building aspects noting that buying local keeps more money in the local economy. The movement for local eating has evolved to a larger "buy local" philosophy, with many studies asserting the economic benefit of supporting smaller, local farms and food-related businesses. One example notes that 68 % of money spent at a locally owned business stays within the immediate economy, while only 43 % of money spent at a chain store remains local (Frazier 2007). Thus, many locavores argue that with food costs making up 10-20 % of the average American's budget, keeping that money within the local community helps spur the economy while also helping environmental and personal health.

A recent USDA study also states that expanding local food systems increases employment and income in a community and can, but does not necessarily, reduce greenhouse gas emission (Martines et al. 2010). Although, the same study also noted insufficient evidence to support whether local food access improves diet or food security.

However, it is exactly that notion of food security and cost that critics of locavorism cite when they declare this lifestyle both unsustainable on a global scale and elitist. Many local food proponents admit that locally sourced food often costs more than its industrial counterpart and acknowledge that barriers such as access to farmer's markets and other retail operations offering local produce can also limit access to consumers of lower socioeconomic status. Their counterargument is to fight the governmental system that overwhelmingly supports corporate food systems through subsidies, regulations, and other federal programs while making it easier to produce, distribute, and sell local, organic produce to a wider consumer base.

There has been a growing middle ground between ardent locavores and local food critics, most apparent with the increasing number of food co-ops around the country. Supporters of food co-ops, or groups who cooperatively buy food – often focusing upon organic, local, and sustainably sourced items – are attempting to address the issues of food insecurity and claims of elitism. The co-ops are often member owned or run and offer prices at a distinct discount from traditional grocery stores through methods such as bulk and seasonal purchases.

Proponents of locavorism cite these co-ops, weekly farmer's markets, cheese-making classes, and other community activities as having capital beyond monetary or environmental. The social benefits of the growing consciousness about local food sourcing are often cited as a positive effect beyond environmental or economic, by making a place for social activity and promoting a sense of community (Brown and Miller 2008). Additionally, proponents note that creating community through local food sourcing also has the potential to help shift broader support to change the systems in place that make conventional and mass-produced foods cheaper, organic, and sustainable and foods from smaller farms more expensive. These social benefits also often extend to help mitigate the sometimes increased price of locally sourced food by creating systems where, for example, more affluent community members help subsidize CSA subscriptions for lower-income members.

Feasibility for Larger Implementation

Another argument against strictly local eating is the feasibility of this as an option to feed the world's growing population. The 2012 book *Locavore's Dilemma: In Praise of the 10,000-Mile Diet* argued that our industrialized and globally sourcing food system actually created many positive changes in food policy – such as stronger safety measures and greater food security – and that a strictly local diet would increase food costs, poverty, and food insecurity (Desrochers and Hiroko 2012).

James E. McWilliams also makes a similar argument in his 2009 book Just Food: Where Locavores Get It Wrong and How We Can Truly Eat Responsibly. He notes that using food miles as the main delineator for a sustainable diet does little to solve the larger environmental, health, and economic issues that locavores and concerned consumers alike cite as important to consider in sourcing food. His research asserts that with the world's population projected to reach 9.5 billion people by 2050, there needs to be realistic and environmentally sustainable methods of feeding this vast number. However, McWilliams and others who believe that there are ways to improve our current food system without advocating for a strictly localized one argue that the answer to this dire global problem lies in part in using a combination of approaches including technological advances, like responsible genetically modified crops that can help crops be more productive and disease-resistant; moving toward large-scale agriculture that is more environmentally healthy; and exploring new avenues for nutrition, such as aquaculture. These more holistic approaches toward global food sustainability can embrace many of the same values that a locavore prizes - food that is kinder to the environment, produced using transparent methods, and financially supports all members of food production and not primarily executives of large corporations - but does so in a manner that is realistic about the needs of the growing world population and the existing global nature of food production.

Locavores counter the argument that locally sourced food cannot feed the world's population,

however, with statistics that note that global food systems already produce enough nutrition to feed 12 billion people, and that the issue lies not in greater production, but rather helping food get to those who are in need. They assert that a localized system with more smaller farms closer to large population centers can help address malnutrition (Philpott 2012). Further, local sourcing proponents posit that keeping arable land in the hands of local farmers and away from large corporations can only help food security and economic stability.

Food Culture

Even model locavores such as Barbara Kingsolver allowed a few specific exotic foods in her family's otherwise locally sourced diet, reflecting the ingrained nature of certain nonlocal ingredients in the Western food culture. For centuries foods such as sugar, coffee, chocolate, spices, and tea have been imported from around the world and have become a vital part of many Westerner's daily food rituals. Almost all ardent locavores who have written about and publicized their food sourcing methods in an effort to support this lifestyle and its values have made exceptions for one or more products. These exceptions often are made with caveats for fair-trade procurement - defined as a trading partnership, often certified by an outside nonprofit governing agency, that ensures that the rights of marginalized producers and workers are paid fairly and that the goods themselves are produced in an environmentally and economically sustainable manner. Locavores who support fair-trade exotic products argue that items like coffee or chocolate are a desired and necessary part of their diet and, by only buying certified fair-trade items, they can ensure that the values they ascribe to the rest of their locally sourced diet are present in the procurement of a few exotic items as well.

Critics of a strictly locavore diet, however, would be quick to point out the hypocrisy of these exceptions, noting that once any nonlocal product is deemed an allowable item, it dilutes the strict locavore's stated philosophy. Further, these critics cite the global nature of food culture in general and assert that greater global understanding is found through exploring other culture through edibles.

Summary

While there is no one definition of locavorism. most accept this lifestyle to be defined as one that only sources food from within a specified radius of 100-500 miles and generally ascribes to organic and environmentally conscious farming practices. Those in favor of a local diet cite many positive attributes, such as a food system that is kinder to the environment and keeps money in the local economy, and consider locavorism more of a holistic philosophy of consuming products from smaller, more environmentally conscious purveyors. Critics note the increased cost and potential food insecurity that can result from a focus on only locally sourced goods, as well as the ingrained nature of exotics in the Western diet. However, most supporters and even some critics of a strict locavore diet do admit that there are many positive aspects to sourcing more food from smaller, often local, farms and other purveyors whose philosophy about environmental and economic issues are more consumer focused. Thus, while a locavore is focused on distancebased food sourcing, the increased interest and studies surrounding this lifestyle have expanded its definition to include a broader set of values rather than a rigid lifestyle to which one strictly adheres.

Cross-References

- Farmers' Markets
- Local and Regional Food Systems
- Slow Food

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