

Geographies of Food

An Introduction



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An Introduction

Moya Kneafsey, Damian Maye, Lewis Holloway and
Michael K. Goodman



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We dedicate this book to the memory of Sally Eden (1967–2016). Geographer, colleague and friend, Sally was an incredible and generous scholar and she is greatly missed.



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Preface

Interest in “food geography” has grown rapidly over recent years. Reflecting the huge popular and societal interest in all aspects of food—from concerns about health, global hunger and malnutrition, to climate change, environmental destruction, and animal welfare—there are now hundreds of journal papers and books about various aspects of the geography of food, and many universities and colleges now offer modules and courses on the topic. The Association of American Geographers recently launched a specialty group on the “Geography of Food and Agriculture” and in Britain, the “Food Geographies Working Group” of the Royal Geographical Society with the Institute of British Geographers was established in 2016. These groups help to promote food geographies research and scholarship and reflect the growing number of geographers, scholars, activists, and campaigners interested in developing and improving their “geographical imagination” about food.

All this creates an exciting context for teaching and learning, and there is now a vast resource of data, research, opinion, and news (both “real” and “fake”) about food. The sheer volume and diversity of material can be quite bewildering and in our work as university lecturers and researchers, we have found relatively few introductions that provide an overview and entry point to the now large body of research and scholarship about food geographies. For example, considerable time has elapsed since the publication of textbooks such as David Bell and Gill Valentine’s *Consuming Geographies: We Are Where We Eat* (1997), Peter Atkins and Ian Bowler’s *Food in Society: Economy, Culture, Geography* (2000), and Guy Robinson’s *Geographies of Agriculture* (2003). There have been some excellent recent textbooks taking particular slices through food’s geographies, such as Elizabeth M. Young’s *Food and Development* (2012), and Colin Sage’s *Environment and Food* (2011), Warren Belasco’s *Food: Key Concepts* (2008), Michael Carolan’s *The Sociology of Food and Agriculture* (2012), and two books simply entitled *Food* from Jennifer Clapp (2012) and John Coveney (2014). There are also important edited collections such as Rachel Slocum and Arun Saldanha’s *Geographies of Race and Food: Fields, Bodies, Markets* (2013), Richard LeHeron et al.’s *Biological Economies: Experimentation and the Politics of Agri-food Frontiers* (2016), Alison Alkon and Julie Guthman’s *New Food Activism* (2017), Carole Counihan and Penny Van Estrik’s *Food and Culture* (2008), and Paul Stock et al.’s *Food Utopias: Reimagining Citizenship, Ethics and Community* (2015). Our aim is that this book will complement these existing works by providing an accessible, introductory, and holistic overview of scholarship in food geographies. Crucially, we hope it will help readers to understand what geographical perspectives can offer in terms of understanding food, and also the ways in which food offers us a lens through which to understand geography.

In writing this introduction to such a large and exciting body of scholarship, we have inevitably had to make choices about what to include and exclude, and so we have concentrated on the aspects which we consider to be most important and enduring. Whilst we draw on many sources, scholars, and perspectives, the intellectual coherence of the book is ensured by consistently returning to the core geographical perspectives of place, space, scale, and agency. This is a book which addresses the “what,” “where,”

“who,” “how,” and “why” questions about food. What is food and where does it come from? Who grows and makes food, and who eats it? Why do some people have more than enough whilst others go hungry? How is food made and what are its impacts on people and places? Questions about power, injustice, and inequality are always present when we start to map the geographies of food, but so are stories of hope, possibility, and new futures. Whilst we engage with many problems, we also discuss many exciting new possibilities, and try to reflect the politics of hope and optimism which infuse many grassroots movements which are trying to develop new and better ways of “doing food.” We try to examine the problems and possibilities of food in equal measure and we foreground the particular insights that geographical perspectives can yield, by concentrating on the spatial expressions of food’s production, transformation, and consumption.

Whilst this book is intended to provide an introduction to “geographies” of food, we stress that geographers tend to draw on a wide range of disciplinary approaches and that the study of food lends itself—indeed really requires—interdisciplinary perspectives to illuminate the full complexity of the relationship between people, places, and food. For this reason, food geographers often draw ideas and inspiration from sociological, anthropological, artistic, and many other disciplinary perspectives. By the same token, we hope that this book will be of interest to students from the host of other disciplines who are engaged in understanding food in all its different dimensions. It is only by combining insights from many different perspectives that we will be able to understand and address the many complex, difficult, and often troubling questions which arise from studying and thinking about food.

We have high hopes for this book in introducing you to the multiple, complex, and fascinating geographies of food. First, we hope you enjoy reading it as much as we have enjoyed writing it. We have worked to produce a book that hopefully doesn’t just get you interested in the multiple topics we cover, but stimulates your geographical imagination about food, eating, and all the activities that go into bringing you your dinner. To help support this, we have tried to craft our more general points around examples that you can explore further based on your interests. Second, we have tried to bring in multiple voices by asking a number of food geographers and scholars for their insights on many of the topics in the book. We have asked them to reflect on these topics through their research and their own personal experience in efforts to further pull you into the book and bring some of the topics alive through the first-person accounts of our colleagues. Finally, like we do in our teaching, we ask you to think about your roles in creating your own “food places” as well as the multi-scaled, interconnected geographies that produce the food system. This reflection is key: thinking about your own position in the food system not only helps to personalize and bring home the relevance of the ideas in this book, but also encourages you to better understand your daily engagements with the production and consumption of food, and reflect on your place within efforts to create better food futures for yourself and for the planet. Bon Appetit!

Part 1 The Place of Food



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1 Introducing Geographies of Food

1.1 Introduction

There is nothing more geographical than food. Eating connects us to the land, to animals, to technologies and virtual space, to ecological processes, and to other people both near and far, in multiple places and spaces and across multiple scales. It connects us into relationships of power, politics, and identity, questions of agency and structure, relations of inequality and (in)justice, and feelings of despair and hope. Biting into an apple, a cassava, or a hamburger might connect you to your own backyard or garden, to a local, outdoor market, a complex refrigerated supply chain, or a landscape thousands of miles away. That same bite might tie you into networks of global food policy, international trade, urban activists working to create “food justice,” farmer-led movements to assert “food sovereignty,” or even to “happy cows” that ate grass and lived on pastures, rather than inside a confined animal feeding operation (CAFO) or “factory farm.” These food networks can be simple or complex, fair or unequal, “good” or “bad,” local or global—and sometimes many of these things at once. You may know nothing at all about what you are eating except that the food on your plate tastes good. Or, you may have acquired foods sold and packaged with “stories”—and geographical stories at that—telling you about their origins, about their ethics and who might have touched them along the way. Any way you square it, food and its geographies are intimately and inseparably connected.

To understand how food stitches together such a wonderful mosaic of materialities, people, places, spaces, and scales—and at the same time how foods themselves are produced by these geographies—it takes what David Harvey (1990) and others have called a “geographical imagination.” This geographical imagination is vital in helping us to understand and interpret the vast array of information and data now available concerning food and all its many dimensions. For example, we can uncover information about who eats what through maps showing, for instance, how much corn is produced in the US or how much meat is consumed in parts of Africa. Yet, without a geographical imagination that works to understand the food stories of these places, we are unable to understand those data or to interpret why those maps look the way they do. Knowing data and seeing maps are important, but *how* we see them, how they are contextualized and the connections embedded in their representations can only be understood through a sensitivity to geography. A geographical imagination provides a powerful window, not just on who eats what, but also on how the world’s food systems are put together and why food production and consumption work—or don’t—for different people and places.

The main aim of this book is to encourage and support you to use your geographical imagination to critically analyze the shifting places and spaces of food and the multiple, complex, and often uneven relationships of power that connect them. In order to start out on this endeavor, this first chapter introduces some of the key conceptual ingredients which you will need in order to bring your geographical imaginations of food to life. We start by outlining what we mean by the concept of “food geographies.” This involves unpacking the multiple meanings of food and then considering how these meanings relate to core

geographical concepts of place, space, scale, and mobility. We then focus on the idea of “geographical imaginations,” and introduce some of the main ways in which Geography, as an academic discipline, with a particular history, concepts, and methodologies, has contributed to the patterns and processes of food production and consumption that we see today.

1.2 What are food geographies?

In general terms, we use the concept of “food geographies” to describe the spatial distribution, patterns, and arrangements of food production, distribution, and consumption around the world. This distribution is far from accidental, and has been shaped by the complex interplay of many relationships between and amongst people, animals, plants, and the environment. These relationships have often been uneven, and infused with power and control. Before delving more into the spatialities of food though, we first of all need to pause and consider what food actually is.

1.2.1 Multiple food meanings

Food is an essential ingredient for human life, along with water and air. We need food to live, and what we eat helps to shape our physical identity: our body shape is influenced by eating behaviors and these in turn are often established during childhood (in fact, even before birth our future health is influenced by what our mother ate). Our diet is a major influence on our health and indeed the health of the planet, and also influences how we perceive ourselves at different stages in life. Did we have an abundance or scarcity of food when growing up? Do we now think of ourselves as too fat, too thin, or just right? Can we change this if we want to? Are we a “healthy” or “ethical” eater, and what does it mean to eat “healthily” or “ethically”? What did we learn about food when we were growing up and how does this influence our choices today?

However, we should think about food beyond its role in fulfilling a fundamental human need, because in reality food has *multiple meanings*. There are a number of different dimensions to this multiplicity. For example, the same plate of food can taste very different to different people or even at different times in your life. While we all have to eat, our experience of food is refracted through the many varied and intersecting layers of our identity, including but not limited to our place of birth and childhood, our age, family situation, class, race, gender, body shape, and health conditions. The same food can be acceptable or desirable to some, while being disgusting or taboo to others. We can understand this multiplicity of food as being *material-semiotic*. This means that food simultaneously has material, physical characteristics *and* is embedded with multiple layers of meaning and cultural significance. So, food is *material* in terms of the actual, physical commodities that grow or are reared, that move around, and that you cook and eat. It is also *semiotic*—that is, involved in the making and communication of meaning—so that it can be represented and representational in things like advertisements, on social media and food labels. Food can be as much, if not more, in your mind and imagination as on the end of the fork in front of you. Within these multiple layers of meaning, food can take on sacred importance through religious festivals and it can represent national or local identities, cultures, and landscapes. It can be seen as simply fuelling one’s body for everyday life, or as highly tuned fuel driving sporting performance. Foods—and even exactly the same foods depending on quantities—can be healthy and nutritionally sufficient, and they can be unhealthy and nutritionally insufficient. Food can be used as a political weapon by withholding it and causing famines or it can be imbued with “commensality,” joy, and collectivity through family meals, community festivals, and political activism. It can be a source of celebration or shame, or it can be a source of wealth to be traded on futures markets and through financial instruments. Food can move us, in sometimes unexpected ways.

4 Geographies of Food

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It can change your mood, and your moods can change it and how you think about it: inspired by a celebrity chef you might just think, “I’ll cook that differently today!” Food prepared by a loved one comes laden with emotional baggage. The smells and tastes, even just the memory, of certain foods can remind us of other places and times, perhaps of our childhoods. We can get nostalgic with food. In these ways, food is strongly associated with our individual and cultural identities and experiences. It “identifies who we are, where we came from, and what we want to be” (Belasco 2008: 1). It also has *affect*, meaning more than (just) an association with meaning and identity, and implying an inexpressible and sometimes profoundly moving set of feelings and sensations, potentially both joyous and melancholic.

Luis Vivero-Pol (2017b) identifies six different—and sometimes competing—“dimensions” of food, as illustrated in Fig. 1.1.

We’ve already discussed what is perhaps the most obvious dimension, which is that food is essential for human life. Additionally, as Vivero-Pol shows, food can be thought of as a natural, **renewable resource**, being based on domesticated and wild plants and animals—although of course its renewability entirely depends on how it is managed. Another dimension is that food is what Vivero-Pol calls a “**cultural determinant**.” In many symbolic and practical ways, food forms an integral part of our cultural identities. Eating is of fundamental importance to the experience of being human. In most cultures, for example, eating together in family or kinship groups is when social identities, relationships, and hierarchies are performed, such as who does the food preparation and washing up, who is allowed to speak, or who sits at the “head” of the table. Our encounters with food are so powerful that even the smell of particular foods can evoke memories (either happy or sad) of childhood many years later. This is one reason why migrants often seek out particular foods which remind them of home.

As well as forming the memories, practical knowledge, and sense of self which contribute to our individual identity, the production, preparation, consumption, and disposal of food shapes the way our surroundings



Fig. 1.1 Six dimensions of food, by Luis Vivero-Pol (2017).

look, sound, and smell (for further discussion of this, see Chapter 2). Think of how agricultural landscapes are shaped by the work of the farmers to produce the foods that have become integral to our perceptions of different countries around the world: terraced paddy fields producing rice in China, the great plains of North America growing grain for the meat and wheat-based diets that are now becoming global, the stone-walled fields of England's northern uplands enclosing lambs for the British "Sunday roast." These are typical, "iconic" landscapes, which become enrolled into popular representations or images of the different nations in which they are located. Food doesn't just shape rural landscapes though. Think about the urban fabric of towns and cities: who could imagine a French village without its bakery and the delicious smell of freshly baked bread and pastries wafting out of the door? Or a bustling New York street without its busy eateries and the jostling of tastes and aromas from a hundred cuisines from a hundred different places? Or a town square without its busy weekly market selling local specialties and filled with the noise, hustle, and bustle of people looking for their favorite foods? The work that goes into the production, processing, retailing, distribution, and consumption of food shapes the geographies, landscapes, infrastructures, and public and domestic spaces of everyday life—often in entirely mundane ways which are barely even noticed in daily routines.

Food is moved around because it is a **tradeable good**, the fourth of Vivero-Pol's dimensions. Food has been traded since the origin of settled agricultural societies. In contemporary food trade, food is often regarded as a commodity (Vivero-Pol 2017b). Agricultural commodities include grains (e.g. rice or wheat) and sugar. The price of commodities is usually determined by international markets. The idea of food as a commodity is very different to the ways in which food is understood in many indigenous cultures, for example where food is often regarded as a common good or a "gift" which is acquired through cultivating relationships of care and respect for soils, plants, animals, water, and kin (Daigle 2017). As Jennifer Clapp writes (2012: 17):

[W]e have moved increasingly away from food being viewed primarily as a source of nourishment and a cultural feature of society, and toward food as any other product that firms produce, sell and trade. The people who eat those food products in turn have been reduced to "consumers," rather than being considered simply as "eaters". Distance between the production and the eating of food, is increased by the commodification of food within the global economy.

The distancing or "disconnection" of people from food has very real impacts on people's lives. As Clapp (2012) explains, it means that access to food becomes a market transaction and so people's ability to acquire food is largely determined by their ability to pay for it. The ability to pay is unevenly distributed throughout society, with the effect that some people are excluded from accessing enough nutritious food. The commodification of food is also associated with "de-skilling," which refers to the loss of knowledge and skills about how to grow, prepare, store, and preserve food (Howard 2016). This in turn creates greater dependency on food companies that provide "convenient" foods and ready-to-eat meals which require little skill or time to prepare—and encourages the purchase of required technologies such as large fridge-freezers, microwaves, and dishwashers.

For many critics of the way our current food system works, the commodification of food is the root cause of hunger and environmental destruction. As Agyeman and McEntee (2014: 217) put it, "contemporary food injustices are the direct result of a commodity-driven system where hunger is a by-product of profit." This is because, as Vivero-Pol (2017b) explains, the commodification of food presents a direct contradiction and challenge to the concept of food as a universal human right (for more on this, see Chapter 8).

An alternative construction of food, and Vivero-Pol's sixth dimension, is to see it as a **public good**. Unlike private goods, which are allocated by market forces, these are goods which are provided to all

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members of a society, usually by public institutions. Consumption by one person doesn't reduce the availability of the good to another person, or exclude anyone from access. In theory, anyone can benefit from public goods, even if they have not paid for them. Public goods are usually produced by governments because the market does not. Typical examples include public infrastructure such as sewage systems and pavements, or services such as education and defense, although in many countries previously public goods are increasingly commodified (e.g. university education, health care). Another, related way to think of this is to conceive of food as a "commons." Commons are resources that can be accessed and used by the community that governs their management, whether this be on a local, national, or global scale. In simple terms (following Quilligan 2013), whereas public goods are those requiring management by the state (on a local, regional, or national scale), common goods, or commons, are those which result from the expression of mutual and collaborative effort by social groups. According to Vivero-Pol, "[T]he consideration of food as commons rests upon revalorizing the different food dimensions that are relevant to human beings, thereby reducing the importance of the tradeable dimension that has rendered it a mere commodity" (2017b: 8). Food regarded as a commons would be governed in a polycentric¹ manner by "food citizens" (rather than food "consumers") who develop "food democracies" which adequately value the different dimensions of food. To paraphrase from Vivero-Pol, every eater should have a say in how food resources are managed and every eater should be guaranteed a fair and sufficient access to those resources, regardless of purchasing power. The end goal of a food commons should not be profit maximization but increased food access, building community and reducing the disconnect between field and table.

Not only does food have multiple meanings and dimensions, but the boundaries of what counts as food are themselves changing. Food is transformed, in geographically- and culturally-specific ways. Foods and food production can be transformed through new technologies such as genetic modification and gene editing, for example. Foods can be grown in laboratories and towers, and there is even the potential that we might "print" our own foods using 3D printers. Innovation has clearly always been significant to changing production-consumption relations and to diets: consider how important ingredients like potatoes and tomatoes are to European meals, despite their relatively recent incorporation into that cuisine. Just think about how different our diets would be without preservation and preparation technologies such as canning, refrigeration, and microwaving. And yet, as we will emphasize throughout this text, we should ask critical questions about what can be presented as inevitable change, as "progress," or as a simple "technological-fix" for particular problems. Lessons from the past, such as those learned from the "Green Revolution," as we will see later in the book (Chapter 7), tell us that innovation and change, while it can present many benefits, often have downsides for some people and places, or for the environment. On this last point, for example, there is growing concern that the ways in which we produce, make, sell, eat, and waste food are seriously damaging the Earth's natural processes, including but not limited to climate change (The Lancet Commission 2019). To summarize, then, food is what the philosopher Annmarie Mol (2008) calls "ontologically multiple." The concept of "ontology" refers to and describes the nature of reality or being. Depending on how it is approached, known, and engaged with, food is part of multiple realities for different people, times, and contexts. Food carries within it multiple ways of "being" through the multitudinous ways we know it, grow it, procure it, transform it, move it, and, in the end, eat it. In the next section we examine how food relates to the core geographical concepts of place, space and scale.

¹A polycentric system has many centres of control or authority.

1.2.2 Food, place, space, and scale

Foods are shaped in unique ways by the different places in which they are grown, processed, retailed, prepared, and consumed. At the same time, producing and consuming food shapes and reshapes these places. Going further, we can say that food doesn't just move across space and between places: it plays a role in actually making geographies. Space is not simply a surface upon which things can be located, but is continually *produced* or *made* by circulations of and interrelationships amongst different people, material goods, and cultures. Geography is always under construction, "it is always in the process of being made. It is never finished; never closed" (Massey 2005: 9). This implies that food production and consumption, and geography, are *co-produced*: the ways in which foods are produced, circulated, transformed, and consumed are affected by geographical difference and by the specificities of particular places; at the same time, food's mobilities and transformations act to make geographies, in some cases sustaining particular spatial relationships and place identities, and in other cases changing them. This matters for places of all sizes: from the local food truck and café, to your home or backyard barbeque, to your region or the country you live in, travel to, or migrate from. Thus, the concept of *place*, key to our geographical imagination, is one of the most important and central lenses through which to understand the geographies of food.

Capturing *relationships* and *relationalities* is also fundamental to how we understand food's geographies, in the sense that places are created by and emerge out of the social, political, economic, environmental, and cultural relationships that are constructed and intersect at different times and across different spaces. Throughout this book we try to illustrate that places are relational to food and food is relational to the locations in which it is *em-placed*. This can be seen in the ways that, for example, kitchens as places are made by—but also make—the foods cooked in them, or in how farming landscapes all over the world have profound economic and political relationships to national policies, global trade pathways, and international finance. We explore specific examples of the relationalities of food and place in the book, such as how food deserts in North America are connected to historical racism, urban planning policies, and food networks that often fail to provide healthy foods in low-income neighborhoods, or in the ways that peasant farming movements around the world are trying to defend locally-embedded knowledge systems from the control of global corporations seeking to patent and take ownership of traditional plants and animal breeds.

In thinking through the co-production of food, place, and space, an additional important geographical concept is that of *scale*. From local food, to regionally-labelled products, to the industrially-produced, unknown bulk commodities going into the production of "global foods," we examine how the notions of scale embedded in food bring its geographies and spatial characteristics to the forefront. In particular, it is the *relationalities of scale* that are key here and of interest in the book: how and in what ways is food both intimate, personal, and individual as well as "global" in the transnational food networks that feed many of us? In other words, how are the global-scale processes of the food system relational to what we actually eat every day? Your neighborhood restaurant providing Mexican food might be supplied by companies that source their corn for tortillas from the Midwest of the US, their chillies from Peru, and their beef from Argentina or Brazil. Food is—at one and the same time—multi-scalar, moving from and across the scales of the body, and into local, regional, national, and global spaces and places. This is encapsulated in Swyngedouw's (1997) notion of the *glocal*: food is "glocal" in that it has embedded within it the relational scales of the local and global and everything in between. To study food is to study the geographical relationalities of space, place, and scale.

There is also a *politics of scale* which is very much rooted in food's geographies. For example, take the notion and meanings embedded in the concept of *local food*. Many rich, urbanized countries have seen a strong consumer trend towards buying local food. But who defines what counts as "local"? Is an airfreighted

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avocado from Mexico or Israel “local” because you bought it in a store you walked to from your house? What is “local” at a farmers’ market? Is it ten miles away, or can it include foods coming from 100 miles away? This is equally problematic when we think of the political meanings attached to local food. As we shall see later in the book, local food has been understood as “better” and more “ethical” versus other types of food based on food miles, environmental concerns, and the support of local growers and retailers. Yet, it can be more expensive, raising questions about who can afford it and who has access to it. The local is not, by default, better or more progressive, nor is it by itself a political force able to change the structural inequalities of the food system. Rather, as many food scholars argue, we must critically question *the social construction* of scale in food networks (Born and Purcell 2006). What the social construction and politics of scale, and indeed of the politics of foods more generally, tells us is that a *critical* and *reflexive* geographical imagination is required to know about the multiplicities of food’s geographies, and that asking analytical questions and working to disturb assumptions is as important as finding out the answers to how we get the food we eat.

Food’s places are connected to—but can also be disconnected from—other places across space. These connections, no matter how short or long, are through what we and other scholars call food *chains*, *networks*, and *systems*. Chains, networks, and systems act as metaphors and “ways in” to understanding how places are connected through relations of power, culture, identity, politics, and physical space. Table 1.1 below summarizes the features of these different forms of connection.

You will notice all of these terms being used widely in literature concerned with food, and confusingly, they are not always used with the same meaning. They will appear throughout the book, reflecting the terminology used in the particular bodies of scholarship we are drawing on at different points. Concepts such as chains, networks, and systems open up food’s geographical imagination to ideas of connection, relationality, and flows across space. But this imagination is also about disconnections: where are those places where food chains, networks, and systems *don’t* connect people and places to each other? Why and in what ways are some people and ecologies *not* connected to others in ways that would ensure their health and flourishing livelihoods? Who controls these relationalities? These are the sorts of important questions that food geographers look to ask and that require a geographical imagination through which to think critically and work towards solutions. In the next section we focus on processes of mobility and transformation which are necessary for the construction of food’s geographies.

1.2.3 Mobilities and transformation: power and control

Food, in order to *become* food, must move and be transformed. This could be as simple as pulling a carrot up out of the ground, taking it home, and washing it before eating it, or it could be as complex as manufacturing a convenience meal involving many ingredients from different places, and many technologies and people. Animals, plants, seeds, knowledges, and people—such as migrant workers, or enslaved people in former times—are all moved and transformed as food is brought into being. These movements and transformations are associated with the movement of money, and the accumulation of financial value, as food is processed, branded, and sold in various ways. In itself, this accumulation of value is associated with the accumulation of meaning, as food becomes labeled as (say) artisanal or local, or is branded with the logos of our favorite fast food outlets or supermarkets.

Consumption then involves further rounds of transformation, as food is prepared and eaten, as it moves from shops to homes or restaurants, and then literally through our bodies as it is broken down into its nutritional components and eventually excreted out as waste. Work, or labor, is involved during these movements and transformation. This work can be the domestic labor involved in shopping, cooking, or

Table 1.1 Food supply chains, networks, and systems

Food supply chain	This consists of all the actors involved in moving a product from producer to consumer, including farmers, wholesalers, distributors, and retailers. “Upstream” supply chains are those which provide inputs to the farmer, such as seeds and fertilizers. “Downstream” supply chains are those which move the product to the final consumer. Supply chains are often referred to as “value chains,” because value is added to the product at each step of the chain. For example, a raw agricultural product such as wheat is processed and turned into a food product such as a loaf of bread. Through packaging and branding, further value is added to the product. Many agricultural commodities are moved through long and complex supply chains, characterized by many intermediaries (see Jackson et al. 2006 for a review). The complexity of these types of chains means that when things go wrong, it can be difficult to identify where the problem has occurred, as happened in the famous “Horsegate” incident when horsemeat illegally entered European food chains in 2013. “Short food supply chains” are those in which there are as few intermediaries between the producer and consumer as possible. These chains are a lot more transparent in the sense that the consumer can sometimes more easily know where the food comes from, and also more added value is retained by the farmer or producer, rather than intermediaries. Examples include direct sales, such as farmers’ markets or farm shops.
Food network	One criticism of the supply-chain approach is that it tends to promote a linear style of thinking through its focus on the movement of commodities from “A to B,” such as from the farm to the supermarket. The concept of food networks tries to capture the ways in which actors shape and are shaped by the political, cultural, and social environment, which can include influences from beyond the farm, food plant, or supermarket. To varying degrees, and influenced by “Actor-Network Theory,” these accounts also recognize the agency of non-human “actants” in food networks, such as animals, plants, certification schemes, and technologies. Much work on local “alternatives” to the industrialized agriculture and mass retail model has been framed in terms of “networks” and has emphasized the importance of interpersonal relationships and shared value systems between food producers and consumers (Maye et al. 2007). These accounts illustrate the dynamic and active role of consumers, who are sometimes conceived as rather a “passive” or “absent” element in the food chain concept.
Food system	The concept of the food system (as illustrated in Fig. 1.2) is potentially even more holistic than that of food networks, and is generally and in everyday language used to refer to all the processes involved in growing, distributing, and retailing food. In its more highly theorized forms, the concept draws on the notion of socio-ecological systems which are formed of biophysical and social factors linked through “feedback mechanisms” (Tendall et al. 2015). At a minimum, a food system includes the activities of food production, processing, packaging, distribution, retail, and consumption. Broadly, a food system includes “determinants” and “outcomes” of its activities. The determinants are the bio-geophysical, social, economic, and political environments (or food system “drivers”), and the outcomes are the food and livelihoods associated with its production and consumption. A key aspect of the food systems concept is that activities and outcomes can “feed back” into the environmental and socio-economic drivers. For example, the food system contributes to environmental change, which in turn becomes a driver of change in the overall food system.



Fig. 1.2 A conceptual diagram of the food system, from UNEP (2016).

growing food for home consumption, or the paid labor of those involved in the food economy in many different spaces—the school canteen, the supermarket checkout, the fields, and the meat processing plant, for example. In many societies, this work is undertaken primarily by women. At the spatial scale of the home or household, for instance, women still do a great deal of food work which helps to keep families, communities, and societies functioning. This can include the physical work of acquiring food either by growing it (most small-scale farmers in the world are women) or shopping for it and bringing it home. Then there is the work of preparation—the cleaning, peeling, chopping, cutting, cooking, and serving of the food, followed by the clean-up of the utensils and the disposal of any waste. There is also the emotional labor of shouldering the responsibility for providing healthy, nutritious diets for children and other family members,

which often falls on mothers and other females in households, and is often done in the context of limited resources (Cairns and Johnston 2015). As feminist geographer Gibson-Graham (2006) has argued, the vast majority of this care work—whether done by women, men, or children—is not given any monetary value, and yet it is vital to enabling economies and societies to operate: people need to eat in order to go out to work, attend school, look after each other, and thrive.

All this transformation produces what tends to be seen as waste. This includes what we excrete from our bodies, food which spoils in storage or is lost to vermin, along with so-called “waste” and/or “surplus” food generated by supermarkets and the catering trade. Increasingly, however, thought is being given to how such “waste” can be transformed rather than accepted as a loss. Crops, for example, can make use of treated sewage, and some food waste can become inputs into industrial processes and energy generation. Supermarket and catering “waste” food is increasingly used to feed people experiencing food insecurity. We should, of course, question a situation where slightly out of date or oddly shaped food is defined as “waste” in the first place, and where some people are unable to feed themselves adequately without resorting to what others reject. But nevertheless, movements to reduce waste might be seen as a more positive engagement by the public with a wider environmental politics (Eden 2017).

The processes whereby food is moved and transformed involve power relations operating at different scales, across different spatial and temporal dimensions. At a global scale, one of the most fundamental sets of power relationships which has shaped the geographies of food, at all scales, from the local right through to the global, is that between the Majority World and the Minority World. The former is where most people live: “[I]t covers Asia, Africa, the Arabic-speaking world, Latin America, the Caribbean, and the Indigenous Peoples of the planet. It is the home of the oldest intellectual traditions, but it also contains the largest number of people living in poverty” (Tandon and Hall 2014: 54). It is contrasted with the Minority World, which is inhabited largely by white, relatively wealthy, formally-educated, industrialized peoples who constitute a small fraction of the world population. In this book, we use the terms “Majority” and “Minority” as an alternative to the terms “first” and “third” world, which are considered outdated and pejorative, as well as the more commonly used “developed” and “developing” world distinction. The latter has been criticized because it presupposes a “development” trajectory in which the “developing” countries must “catch up” with the “developed” ones by following models of economic growth and associated cultural change which are largely defined and driven by powerful elites and institutions headquartered in the wealthiest countries. We avoid using these terms, unless we are citing other people who have used them. Instead, we refer mainly to “Majority” or “Minority” Worlds, and sometimes to “high-income” and “low-income” or “wealthy” and “poor” countries. Where possible we use more precise geographical descriptors such as country names or regions (e.g. sub-Saharan Africa). We acknowledge that whatever terms are used to discuss broad differences of economy, culture, and society inevitably mask huge variations and diversity of experience *within* countries and regions. For example, “high-income” countries are often home to many people living on low incomes, whilst “low-income” countries can also include relatively wealthy inhabitants. However, the terms we have chosen to use provide an important reminder of the uneven global distribution of power and wealth, which is so crucial to understanding food’s geographies.

One of the most obvious—but often unacknowledged—ways in which contemporary patterns of food mobility and transformation were established was through the Atlantic slave trade. Although this took place hundreds of years ago, this brutal interaction between the Minority and Majority Worlds has shaped the food geographies that we observe today in multiple ways, ranging from the kinds of foods now made available to consumers on supermarket shelves, to the structures of trade through which global food commodities flow. Between 1532 and 1832, around 12 million people from West and Central Africa were shipped to the Americas, mainly to work on sugar, rice, cotton, and coffee plantations. The produce of their

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forced labor was traded across the oceans and it made slave traders, commodity traders, landowners, and Western European governments very rich. Their accumulated wealth is literally inscribed in global cities such as London and Amsterdam and much of the American East Coast. Whilst the Atlantic slave trade was not the only example of slavery, it—along with the rise of colonialism—exerted a profound impact on the emergence of global economies in food and other goods. Industrialization in Britain, for example, was partly enabled through the import of cheap food to feed factory workers, and cheap raw materials such as cotton, for the manufacturing industries. Cheap food meant that wages could be kept low and profits could be protected. The wealth of the British Empire was underpinned by this model. Food and other raw materials were cheap because they were produced either by enslaved people, indentured workers, or colonized and dispossessed peoples in lands which were acquired by imperial explorers and early imperial corporations. Yet the experiences of the people who were enslaved or dispossessed have often remained untold or deliberately obscured, and certainly they have rarely been told in their own words (Bressey 2009a). Food was at the heart of these untold stories and historic relationships between peoples and continents, and the patterns in trade, landscapes, food cultures, geopolitical relations, and identities which were established during the era of Atlantic slavery are still present today: although they are no longer major producers, the Caribbean islands and Central and South American states, for example, still export agricultural commodities to global markets and their landscapes still feature monocultural plantations producing sugar, bananas, and coffee.

In her book *Black Rice*, Judith Carney (2001) demonstrates how enslaved people diffused their knowledge about tidewater rice production from West Africa to South Carolina and the eastern Amazon in Brazil. Contrary to common beliefs at the time, rice had been grown in West Africa for some 2,000 years before slavery. Whereas accounts provided by the plantation owners privileged notions of “white” technical superiority and ingenuity, Carney’s work reveals how the enslaved Africans brought their long-crafted knowledge systems—as well as their physical labor—to the production of rice. This made possible the emergence of a hugely profitable export economy and generated considerable wealth for the plantation owners. It also meant that rice became incorporated into the diets of those places and remains important to this day (Carney 2013).

In these ways, the foundations of the modern, global geography of food were forged largely through the influence of Europe’s colonial powers. These powers not only controlled the physical movements and transformations of people and ingredients around the globe, but also exported their ideas about what to eat and how to farm to Africa, South America, and Asia. Underpinned by a belief in the superiority of “Western” and “white” science, this involved ignoring or appropriating many ancient knowledges, practices, and understandings of food—sometimes with disastrous consequences. Jack Kloppenburg (1991) has argued that the application of Western science produced an agriculture which is unsustainable and socially damaging. It developed “solutions” to agricultural problems (such as a need to increase outputs or reduce pest damage to crops) which were then applied indiscriminately, regardless of the specific conditions found in different regions, on particular farms, or within individual fields. Kloppenburg’s view is that an “alternative” perspective based on farmers’ localized, experiential, and working knowledges of their own farms would be more likely to lead to sustainable agricultural practices.

One of the most influential writers and campaigners on food and environmental justice, Vandana Shiva, has also drawn attention not only to the ways in which Western science ignored or appropriated traditional expertise and skills, but also to how this was a highly gendered process. In her groundbreaking book *Staying Alive*, first published in 1999, she argued that women have been central to agriculture through their work in the fields and food chain. Drawing on her experience of working with Indian farmers, she argued that agriculture had been evolved by women, using knowledge systems and insights closely modeled on

natural processes of renewal and regeneration. She pointed out that women still produce over half of the world's food, and provide more than 80% of food needs in food-insecure households. The reason this often goes unremarked is that this work is not recognized by economists: it tends to be work to provide food for the household, rather than the market, and is often not remunerated in wage form. She contrasts the diversity of crops used by women farmers with the monocultures promoted by Western (mainly male) scientists. She points out that in India, women lack property rights including rights to land and resources like water and biodiversity and intellectual property. Indeed, in women-centered agriculture, she argues that knowledge is shared, "plants are 'kin' not 'property'—and sustainability is based on the renewal of the Earth's fertility and the renewal and regeneration of biodiversity and species richness on farms" (xvi). This is in contrast to "patriarchal agriculture" which seeks to enclose and control natural resources through violence against nature, including the imposition of monocultures and the use of artificial pesticides, fertilizers, and genetically engineered or modified crops. Whilst Shiva's work has not been without its critics (and has, unsurprisingly, been strongly contested by advocates of biotechnology), she is far from alone in her stance, and her work continues to inspire many in their struggles for greater sovereignty over seeds and other environmental resources.

In today's global food system, some authors suggest that colonial power has been replaced by corporate power. Some writers have described this as "neo-colonialism," or the rise of the new "food empires" (van der Ploeg 2010). This new type of "food empire" is dominated by a small number of very big corporations which control the production, processing, and trade of the primary commodities on which the food system is based, including agricultural inputs such as seeds, machinery, and fertilizers and key crops such as soya, grains, meat, sugar, and oils. They also dominate the branding and retail of the foods made from these

CONCENTRATION IN THE AGRI-FOOD SUPPLY CHAIN

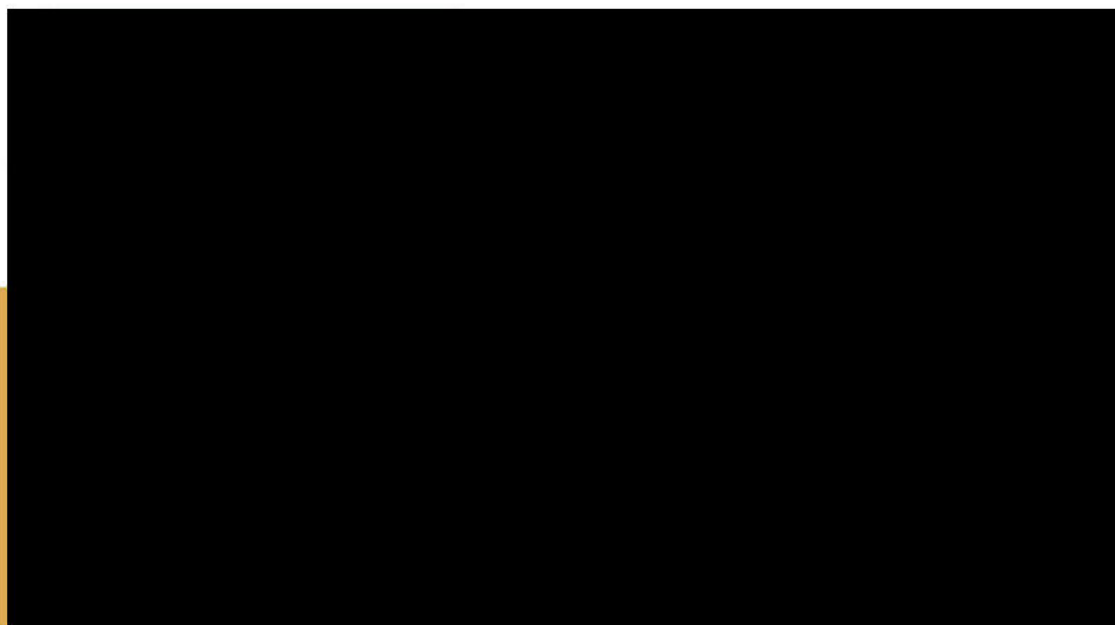


Fig. 1.3 Concentration in the food system, reproduced with permission of IPES-FOOD (2017), *Too Big to Feed: Exploring the Impacts of mega-mergers, consolidation and concentration of power in the agri-food sector*.

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basic ingredients. The power of these firms can be visualized when we look at the “hourglass” structure of the food system (see Fig. 1.3), whereby a small number of corporations effectively control access to food for billions of consumers, and access to markets for billions of farmers.

One of the results of this is that “although farming is still the biggest employer on the planet (with 1.4 billion people engaged), it is no longer the main power in the food system” (Lang and Heasman 2015: 20).

The great majority of consumers are unaware of these concentrated power structures, and of the ways in which these corporate giants are using Big Data and consumer surveillance tools to track their habits. As Howard notes, uncovering who owns what is “challenged by the opaque and constantly shifting corporate parentage of many brands and subsidiaries” (Howard 2016: 6). So even if consumers are trying to make ethical and sustainable choices, they may unwittingly support the activities of large corporations which actually demonstrate little concrete commitment to these values. The infographic below (Fig. 1.4), produced by Oxfam as part of their “Behind the Brands” campaign, for example, shows the ten food companies which control the world’s most valuable food brands.

Whilst we have so far talked about power at a global scale, it is important to remember that power operates on a whole variety of spatial scales and is expressed in different forms within the context of different relationships ranging from families and communities through to regions and nation states. Throughout this book we return to issues of power in relation to many different places and spaces of food. A theme which recurs is *power through politics*, by which we mean politics via international and national agricultural policy regimes. Where food is grown is as much influenced by political and economic factors as

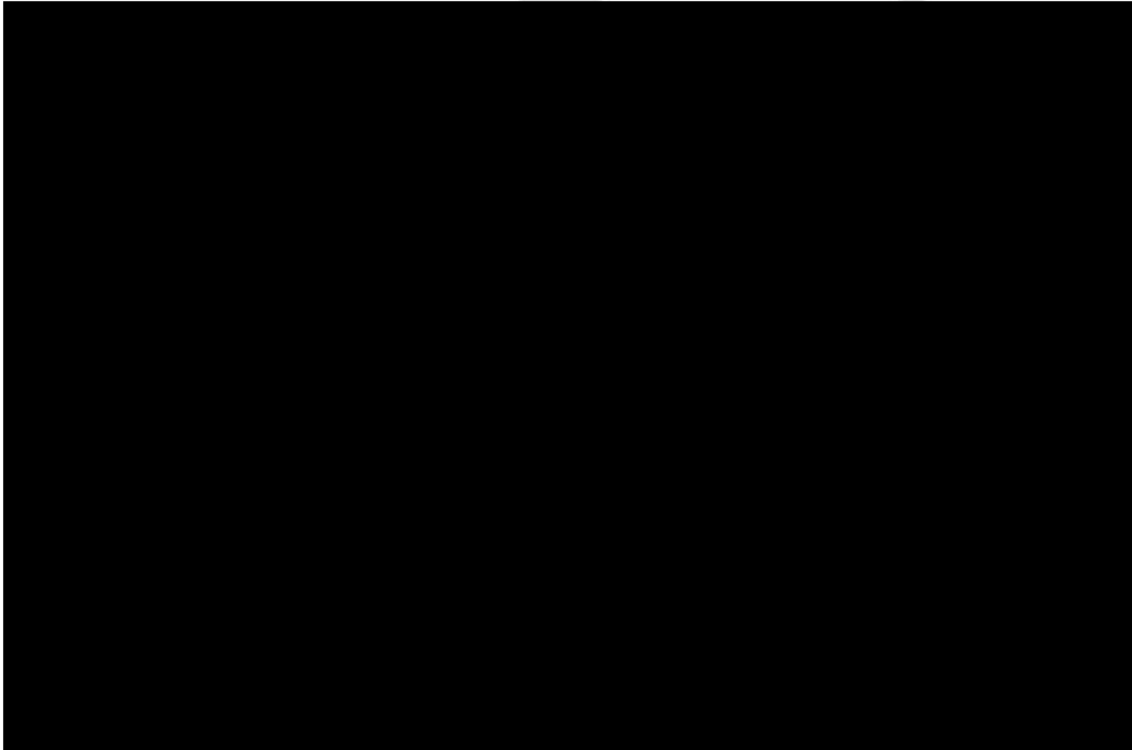


Fig. 1.4 Infographic showing the top ten food companies in 2013, produced as part of Oxfam’s “Behind the Brands” campaign. Reproduced with permission from Oxfam.

it is by appropriate growing conditions. Policy instruments like the European Union's Common Agricultural Policy (CAP) and the United States' Farm Bill, for instance, are highly political instruments which are used to support the farming industries in the EU and USA. Despite various shifts in response to pressure from the World Trade Organization, these policies provide subsidies to farmers in these countries, effectively protecting them from complete exposure to global competitive markets and creating competitive advantage.

Politics is not just enacted by governments and big business, of course. There are many examples of *resistance* and attempts to reclaim control at different levels of the food system. The most symbolic and well researched examples in the Minority World are known as "Alternative Food Networks," which constitute a varied assemblage of diverse practices, including: localized and short food chains, producer and consumer cooperatives, local procurement schemes, and civil society groups such as the Slow Food movement that preserve traditional and regional cuisines and transnational networks such as the Fair Trade movement. In the Majority World, there are many examples of local, national, and international grass-roots movements whereby small-scale farmers or peasants are mobilizing to defend their local seeds, plants, agricultural heritage, and livelihoods. The Food Sovereignty movement, for example, is a global coalition representing over 200 million small and medium-scale farmers, landless people, indigenous peoples, migrants, and agricultural workers from seventy countries. The overall aim of the movement is to enable communities to regain control over the way food is produced, traded, and consumed.

Politics, power, and control thus constitute key themes that help us to understand food mobilities and transformations, and disentangle food system relations and associated geographies. Food politics is essential to the way we interpret what food provisioning means to economy–society–environment relations, opening up important questions about ethics and responsibility at the individual and societal level, including personal and collective responsibilities and actions.

1.3 Geographical imaginations and food's geographies

So far, we have been using key geographical concepts such as place, space, scale, relationality, and mobility to talk about the spatial distribution, patterns, and meanings of food. We have also emphasized that the relationships through which geographies of food are developed are infused with power and inequalities. What we have not discussed yet is the particular ways in which Geography, as an academic discipline, with a particular history, concepts, and methodologies, has contributed to the patterns and processes that we've been describing. We have highlighted the pivotal role of slavery and colonialism in terms of providing many of the foundational structures for today's global food geographies, but it is important to recognize that the discipline of Geography actually helped to forge the ways of seeing and thinking about the world which helped empires to flourish. As Boyle notes, Geography is "essentially a European branch of knowledge, reflecting European ways of making sense of the world" (2015: 37), and the development of the discipline was inextricably bound up with Europe's colonization of Latin America, Asia, and Africa. Through their cartographic, descriptive, and analytical skills, geographers provided empire builders and colonialists with valuable information about the resources, climate, infrastructure, and foodstuffs found in foreign lands (Legg 2017), which were then exploited, mined, farmed, and traded very often to the detriment of the livelihoods of local people. Cartographers imposed boundaries and invented place names which would be meaningful to colonial settlers moving into so-called "undiscovered" and "empty" territories. In so doing, they usually ignored the pre-existing names and place identities which indigenous peoples used to navigate their landscapes—names which in turn spoke of important natural or sacred features or cultural and historic events. The boundaries imposed by imperial geographers were used to enclose and

defend precious natural resources which could then be exploited for the benefit of settler colonies and the European nations. As critical scholars have shown, the colonial mindset and worldview considered (among other things) that all parts of nature, as well as the bodies of animals and indigenous peoples, were essentially “resources” which could be used in the pursuit of wealth accumulation for imperialist powers (Mignolo 2007).

Particularly since the 1980s, there has been a growing critique of the repressive authority and limitations of this kind of geographical imagination, which has largely been a product of the scholarly and educational system produced by and for white men, and heavily based on the structures of thought developed through colonization. Authors arguing for “postcolonial” geographies have shown how this has often excluded or ignored “local,” “traditional,” or “indigenous” knowledges, and privileged Western “scientific” knowledges above others, as we mentioned earlier. Postcolonialism, however, is a contested term, not least because it is unclear that colonialism has been relegated to the past. As Marcus Power (2004) points out, its meaning is not limited to “after colonialism” or “after independence,” but is more about contesting colonial domination and the legacies of colonialism:

Postcolonial theory involves discussions about experiences of various kinds: migration, slavery, suppression, resistance, representation, difference, race, gender and place (among others). It also challenges imperial histories which wrote colonised “others” out of the script, or denied them a place in history altogether.

Power 2004: 123

Postcolonial scholarship can be regarded as contributing to decolonization or what Stephen Legg (2017) describes as “un-acquiring colonies.” Taking this further, “decolonialism” aims to unpack and deconstruct enduring colonial practices and structures of thought and the processes by which “authoritative” and “authorized” knowledge about the world is created and validated. Patricia Noxolo (2017: 342) explains that decolonial writing has been led by scholars who are indigenous, or First Nations people, and “there is nothing ‘former’ or ‘post’ about the colonialism that they write about: they are writing out of and about the continuous colonization and re-(or neo-)colonization of the countries where their ancestors have always lived.” Moreover, decolonial theory is focused on an “epistemic challenge to colonialist thinking, with an emphasis on radical delinking from the sources of ongoing inequalities that have deep historical roots in European imperialism, but that are continually re-staged and re-routed through the continuing and deepening inequalities brought about through neoliberalism, including in the neoliberal university system” (Noxolo 2017: 342). For example, diverse indigenous ontologies contest common colonial concepts such as the idea that land can be enclosed, owned, and controlled, and they also nurture respectful, rather than extractive or exploitative, relationships with “non-human kin” such as land, water, animals, and plants (Daigle 2019).

Thinking about postcolonialism and decolonialism is important for our thinking about food geographies, not only because it helps us understand the historic roots of contemporary structures, injustices, and often hidden traumas, but it also opens up our minds towards very different ways of thinking about the meaning of food, and the relationships of humans to each other and to the myriad life forms with which we share the planet. This opening up of thinking and doing, while not always explicitly approached through postcolonialism and decolonialism, can be seen in many of the resistance-oriented food movements we discuss in the book, such as those for food sovereignty and justice, the desire to define food as a “common good,” and also the rising tide of veganism sweeping the Minority World. Indeed, as we hope you can start to see through our analysis and the case studies in the book, the actions of various different global and local “imperial” powers, whether they be historic or contemporary, have been critiqued and resisted across the

current and historical geographies of food. And, whilst this book is not explicitly framed by postcolonial and decolonial critique and practice, we recognize that many of these critiques have begun to filter into and out of critical geographical and food scholarship to understand and work against injustice, racism, and the ecological problems bound up in the contemporary food system (e.g. Slocum and Saldanha 2013; Alkon and Agyeman 2011; Alkon and Guthman 2017; Cook and Harrison 2003, 2007; Hayes-Conroy and Hayes-Conroy 2013; Lawson-Welch 2018; see also Rahman forthcoming).

Building on these ideas, it is important to be critically aware that the food geographies literatures that we draw from in this book represent a particular kind of knowledge, produced primarily in American, British, Australasian, and Western European universities, written in English—by white people more often than not—and published by companies based in the aforementioned places. We are all authors who live and work in these places too. The reason we note this is to draw your attention to the issue of “situatedness” in relation to reading, writing, and thinking about food geographies. Essentially this means that any author, and any reader, will interpret written texts through the prism of their own worldviews, knowledge, lived experiences, political views, and feelings. Perhaps this all seems straightforward. Yet it is important to be aware that in the production of any written text, there are exclusions, silences, and stories that remain untold. Choices are made in terms of what is written about and what is forgotten or left aside. Writing helps to bring particular worlds into being, by telling stories in certain ways and foregrounding some actors, characteristics, and processes and not others, and the disciplinary writings of Geography are no different from other forms of writing in this respect. Hence in writing this book we have tried to be as comprehensive as possible, within the practical constraints of word limits and our own experiences, but inevitably we have had to make decisions about what material to include and exclude. In doing so, we have been guided by several principles. First, we have a desire to introduce and reflect the vibrancy and breadth of food geographies research and the multitude of topics and debates that food geographers have engaged with. In this introduction we have briefly referenced the work of critical geographers (including feminist, postcolonial and decolonial scholars), and their ideas re-emerge at different points in the book. Second, we have tried to develop an overall approach which highlights the structural issues of trade, capitalism, race, class, and global geopolitics that underpin the inequities in the food system and shows how geographical concepts can help us to understand and challenge these issues, as well as address the impacts that current food systems have on people and planet. Third, we have given prominence to the many ways in which people and communities in different places around the world are trying to resist some of the damaging impacts of industrialized, modern food systems. They are doing this by developing new visions and alternatives for the future of food which often draw on traditional and locally embedded knowledges or relations of care for each other and for our planetary resources, as well as novel social, economic, and technological innovations for more sustainable food systems and networks. We recognize, and try to show, that whilst some of these initiatives have floundered, and some may inadvertently create new forms of exclusion, it is important to provide space for their stories. Fourth, we have tried to avoid creating easy, oversimplified binaries (such as “technology” = bad; “tradition” = good) and instead try to provide examples and case studies which engage carefully with the complexities and contradictions which are found in attempts to create better food systems. Despite omissions, which doubtless there are, we hope we have done justice to the rich diversity of geographical thought and scholarship on food.

1.4. Structure of the book

This book starts from a seemingly straightforward, yet, in practice, complex question: where does food come from and where does it go? It then moves on to some of the problematic, difficult questions which

have surrounded human relationships with food, especially since the end of the Second World War: who gets to eat and who doesn't? Why does hunger persist even when there is enough food? Why do our food systems cause so much environmental damage? Why do people eat diets which are bad for them and bad for the planet? Why do we accept animal suffering in order to feed ourselves? Why is so much food wasted? The book is structured into four main parts.

Part 1, The Place of Food, lays out the conceptual foundations of the book and outlines the key lenses which geographers have used to study food, as well as some of the ways in which the study of food provides insights into different geographies—of culture, trade, and politics, for instance. This first chapter has therefore introduced key concepts which run throughout the book, beginning with a discussion about multiple food geographies and then moving on to place, scale, mobility, and geographical imaginations. Chapter 2 then delves into the complex ways in which spatial identities and food “make one another” as food is produced, processed, and travels from field to fork. Drawing on an influential paper by Ian Cook and Phil Crang (1996), we examine the ways in which food becomes “placed” in, or “displaced” from, particular locations, and the effects that this “placing/displacing” can have. We look at instruments like “Geographical Indications” which can also be used to protect regional foods and traditional production methods against imitations but can also prevent some producers from accessing markets. Through examples, we show that the processes whereby *places make food* and *food makes places* are thoroughly interlinked and practically impossible to separate out in analytical terms. That is why we need to think about food and places as being in a “co-productive” relationship.

Moving on to **Part 2, Geographies of Food Production, Transformation, and Consumption**, and inspired by Ian Cook et al.'s (2004, 2006, 2008) injunction to “follow the thing,” we follow food's story from fields and farms and other sites of food production, through processing and transformation to the different places and spaces of consumption. Although our approach is in some ways quite linear, from production through to consumption, in each chapter we emphasize that the ways in which these different spaces and processes are organized and managed cannot be analytically separated from each other. For example, food production is shaped by the patterns and trends of consumption, the role of politics and technology, and the influence of environmental change, of which farming itself is a major driver. Chapter 3 addresses a deceptively simple question: where does food come from? It takes agricultural production as a starting-point and identifies general global patterns of where and how food is produced. It argues that food production does not happen in particular places by “accident” or simply because of “natural processes,” but rather is the outcome of particular policies, decisions, and power struggles which shape the patterns and relationships of farming and food systems. By also discussing *urban* food production, it challenges assumptions that all food is grown in the countryside and is primarily a land-based concern. Chapter 4 then takes up the story of what happens to food as it moves around the planet and is transformed in various ways. We consider how food's mobilities are entangled with global trade regulations which aim to liberalize trade, and we identify the different types of physical, economic, and symbolic transformation that happen, as “raw” agricultural ingredients (grains, meats, and so on) are processed into new products. Next, Chapter 5 focuses on geographies of food consumption and eating. We conceptualize food consumption as an activity that produces material, social, cultural, economic, and political effects upon the world, our communities, and ourselves. Consuming and eating food—and the ways this is deeply embedded with our social identities and material beings—is deeply and intimately connected to its cultivation, transformation, transportation, and sale. Consumption is thus a form of agency, and consumers are active agents in creating the world, with processes of consumption and production intimately related and in many ways inseparable.

Part 3, Geographies of Food Crisis and Response, consists of four chapters which focus on the enduring and intensifying crises in modern food systems, and the varying responses to these. Chapter 6

identifies a particular moment—the 2007–8 food price “spike”—when the contours of the contemporary global food crisis came into sharp relief. The events of 2007–8, whilst regarded as a temporary emergency, refocused international political attention on longer-term trends and vulnerabilities in the food system and, in particular, raised awareness of the threats posed by financialization of the food system, climate change, population growth, and potentially catastrophic natural resource depletion resulting from increased urbanization and industrialized agriculture (e.g. degradation of soil and fresh water; biodiversity loss and mass species extinction on land and in the oceans). Chapter 7 focuses on the people and places that are most affected by ongoing food crises—those in the Majority World. It outlines the scale and geography of malnutrition and hunger in the Majority World and provides a critical overview of the causes of persistent hunger, including the historical legacy of empire and colonialism, the globalization of food trade, the “Green Revolution,” neo-liberalism and structural adjustment policies, land-grabs and bio-piracy. The chapter demonstrates how poverty and hunger—particularly for farmers—in the Majority World are interlinked with the “cheap” food economy and neo-liberal growth policies of the Minority World. The chapter then considers how these problems are being addressed, comparing one set of solutions which involves making the current system work “better,” and another set which involves completely rethinking issues of power, control, and “sovereignty” in the food system.

Chapter 8 tackles the question of food insecurity in the Minority World, where, despite an overabundance of food, large numbers of people living on low incomes struggle to obtain enough to eat for themselves and their families, and have to make do with cheap and nutritionally inferior food. It examines evidence about the scale of the problem, and discusses what it is like to live in food insecurity. It looks at the causes of food insecurity, namely low income, deprivation, and inequality, and then examines solutions to the problem, comparing “market solutions” which depend on the redistribution of surplus and donated food through charitable and third-sector agencies, with “rights-based” and “food justice” solutions which call for the reform of welfare systems, the implementation of a universal living wage, and support for community-led initiatives to prevent food insecurity. Following on from this, Chapter 9 examines initiatives that have been developed by farmers, public and private institutions, and social movements in the Minority World to build more sustainable food systems and to enable farmers to communicate better with consumers. Often described as attempts to “reconnect” food production with food consumption, these “alternative” food projects range from those which seek to simply improve the current food system to those which seek to completely transform it.

Finally, **Part 4, Geographies of Possible Food Futures**, includes the last two chapters of the book, and draws on the material and arguments presented in earlier chapters to think about the future. In many parts of the book, the ways in which contemporary food systems are problematic in terms of environmental damage and human and animal health and wellbeing are emphasized. In the face of powerful entities such as global agribusinesses, we might imagine that people are relatively powerless in their roles as small-scale or peasant farmers, hungry children, obese consumers, exploited workers, and so on. Yet it is important to emphasize that people are not passive actors in the food system. Consumers, for example, can be regarded as *active*, as having the ability to effect change in food provisioning (for example by choosing more “ethical” foods, or by boycotting “unethical” foods), and, everyone can be regarded as *food citizens*, playing active and participatory roles in redefining food systems which are fit for purpose. In Chapter 10 we think about different and competing visions for what might lead to “better” ways of “provisioning” food in the future. This implies a willingness to develop different geographical imaginations: “better” food provisioning is likely to be associated with different spatial orderings; different ways of thinking about and using the spaces and places used for growing, processing, selling, and consuming food; and different ways of thinking about the relationships between (for example) the urban and the rural, the Majority and Minority Worlds, and the

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different spaces associated with agricultural research, farming, food distribution, eating, and food waste. A shift in how we imagine food provisioning is closely intertwined with shifting geographical imaginations. Chapter 11 concludes the book, revisiting some of the key ideas we opened with and emphasizing some of the diverse paths that food provisioning, and food geographies, might follow in the future. It also encourages you to think about the role of geographers and other citizens in creating possible food futures.

It is very likely that you will want to dip in and out of this book, reading the chapters that are most relevant at the time. To help you navigate around the book and find connected sections, we have cross-referenced between sections and chapters, and you can also make use of the contents page and index. We have included as many photographs, maps, and figures as we could manage, and each chapter contains “Activities” where we invite you to answer questions, try out some quick analytical activities, and apply some of the concepts we cover to various data sets, as well as your own food experiences. We would like you to be active readers who not only think about your place within food geographies but also work to actively emplace yourself within the geographies of food that you already know or start to learn more about. Chapters also include Boxes which illustrate key ideas in more depth and detail. Each chapter starts with some suggested learning outcomes, and ends with a list of suggested further reading. Finally, scattered throughout the book is a series of “Insights” from colleagues of ours, who we invited to share thoughts about their research, as well as what got them interested in food geographies in the first place. These Insights bring different but also “unfiltered,” grounded, and inspiring voices into the book’s exploration and analysis of food’s complex geographies. Overall, we hope that all of this makes for an interesting “menu” of reading and thinking, and above all, we hope that this book will inspire you to become a more active food citizen, just as much as writing it has helped us to improve our own engagement with the complexities and challenges of creating better food geographies.

