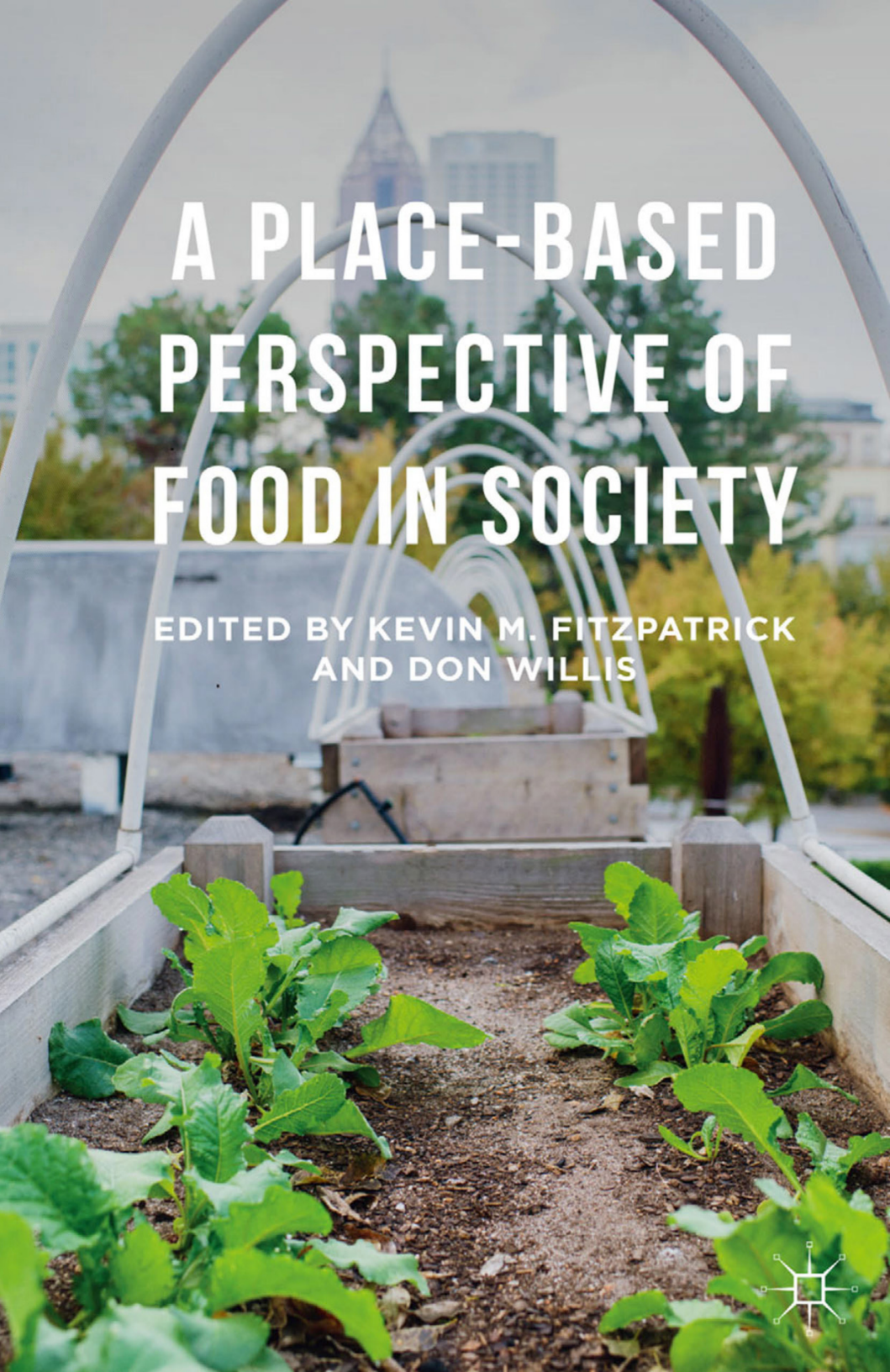
A PLACE-BASED PERSPECTIVE OF FOOD IN SOCIETY
EDITED BY KEVIN M. FITZPATRICK AND DON WILLIS

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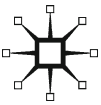

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Softcover reprint of the hardcover 1st edition 2015 978-1-137-40836-5

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First published in 2015 by
PALGRAVE MACMILLAN®
in the United States—a division of St. Martin's Press LLC,
175 Fifth Avenue, New York, NY 10010.

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ISBN 978-1-349-55257-3 ISBN 978-1-137-40837-2 (eBook)
DOI 10.1057/9781137408372

Library of Congress Cataloging-in-Publication Data

A place-based perspective of food in society / edited by Kevin M. Fitzpatrick and Don Willis.
pages cm
Includes bibliographical references and index.

1. Food—Social aspects. 2. Agriculture—Social aspects. 3. Space—Social aspects. I. Fitzpatrick, Kevin M.

GN407.P56 2015
394.1'2—dc23 2015006788

A catalogue record of the book is available from the British Library.

Design by Newgen Knowledge Works (P) Ltd., Chennai, India.

First edition: August 2015

10 9 8 7 6 5 4 3 2 1

This volume is dedicated to the millions of people around the world suffering from the consequences of limited food access and the complexities of geopolitics. Their daily struggle should be our catalyst for change.

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Acknowledgments

This volume represents an outgrowth of our continued interest in understanding the complexities of the food-place relationship. We acknowledge the support, assistance, insight, and thoughtful reflection of colleagues and staff in the development of this project. We would like to thank the University of Arkansas, Fulbright College of Arts and Sciences, the Department of Sociology and Criminal Justice as well as the University of Missouri, Department of Sociology, for creating the type of intellectual environments that allowed us to work on this project.

We would like to extend a special thanks to graduate assistants Stephanie Collier and Amanda Higginbotham whose work throughout this project was vital to its completion. In addition, Gail O'Connor and Dave Woodring did a fantastic job in carefully reviewing the manuscripts for content and style. Their constructive criticism improved the chapters and the overall organization of this volume. Finally, work like this cannot happen without the careful guidance and editorial expertise of our editorial assistant, Jocelyn Bailey. Jocelyn did a wonderful job of keeping everyone on task and carefully integrating these manuscripts into a coherent volume while providing expert advice to the authors and editors throughout the process. We would also like to thank the Palgrave Macmillan team—Nicola Jones, Elaine Fan, Deepa John, and Chelsea Morgan—for providing input and guidance throughout the editorial and production process.

Kevin M. Fitzpatrick: As with all my past work, I want to acknowledge my family and their support—particularly my wife Mary, who continues to be my biggest fan and critic. Don Willis: The support and guidance of others—namely, my wife Tara, close family and friends and, of course, my mentor, Kevin Fitzpatrick—have been invaluable to my work on this volume.

Introduction

Kevin M. Fitzpatrick and Don Willis

Place matters. It continues to be one of the primary social constants defining the distribution of standards of living and quality of life around the world. While place carries with it some conceptual baggage, there is mounting empirical evidence that zip code, county, country, and continent determine positional status in the world food crisis. Place plays a leading role in the story of what shapes our lives largely because of its intimate interplay with food and food-practices. Notwithstanding the broad distinctions between developed and undeveloped/underdeveloped food systems around the world, place continues to create barriers in the production and consumption of food for the world's populations. Even at the local level, as highlighted in the *New York Times* article "Our Coming Food Crisis" (G. Nabhan, July 21, 2013), place matters when climate changes, and farmers are forced to adapt their production strategies to accommodate dramatic shifts in temperature and rainfall.

We, of course, are not confronting just an American food crisis; farmers around the world are facing a host of problems compounded by scarce resources, an imbalance in the supply-and-demand equation, current food policies, climate change, and social, economic, cultural, and political factors that are unique to particular places. Whether focusing efforts to eliminate food deserts throughout the United States, or addressing the complexities farmers face in trying to deal with the problems of food production, distribution, and scarcity in sub-Saharan Africa, we see how the impact of place can be both dramatic and multifaceted.

Besides being places, spaces are geographic units with physical, cultural, social, and economic properties, as well as personally defined places. We would argue that both aspects of place matter for understanding the way that we interact with food and place. For some segments of the world population, being in the wrong place at the wrong time is not just a matter of bad luck but also the result of

social structure. Resources are structurally distributed across social landscapes; it is not by accident that low-income racial and ethnic minorities living in urban areas suffer high rates of obesity, malnutrition, heart disease, and food insecurity. These often highly segregated spaces achieve and perpetuate an "ecology of disadvantage" that is isolated from more privileged places and populations. There are countless examples around the world illustrating this very notion of place-based limits that compound problems many populations face when trying to access food.

As our discussion suggests, context can be as simple as geographic location, but it can be as complicated as multidimensional layers of risk (hazards) and resources (social capital and networks) that are distributed unequally across population subgroups. Simply, or from a more complicated viewpoint, food and its role both in ancient and in modern societies, was and still is highly dependent on place. Our motivation in designing this particular volume has been the lack of any comprehensive treatise of the food-place nexus. In addition, we are excited about providing a platform for scientists across multiple disciplines (sociology, anthropology, history, economics, political science, health sciences, etc.) to address this often-overlooked component in exploring the twenty-first-century story of the world food crisis, how we got here, and where we might go next.

In an article by Feagan (2007), he provides a useful overview that highlights the importance of place in understanding food systems; community-supported agriculture, community food security, and sustainable communities are all important examples of ongoing strategies that advance our interpretation of the food-place relationship. Understanding the context of food and its impact on the world's population is a "glocal" problem in need of innovation, political vision, and a new approach to solution-building that demands cross-disciplinary conversations.

This volume is organized into four distinct parts. The first part, "Historical Contexts," begins with a comprehensive discussion of the history of food and agriculture. Roudart and Mazoyer take on the formidable task of providing insights into the origins and propagation of agriculture from the Neolithic Era to the present day. Their discussion formulates an interesting interrelationship with this history and the evolution of our contemporary diet, which has constantly been modified in the context of place. The second chapter in this part addresses the industrialization and globalization of food. Maya-Ambía frames this discussion in the context of two important frameworks (Food Regime and Global Chains), with insightful observations from his own

work and travel. Despite the big business of food, Maya-Ambía identifies key elements regarding the importance of the "local" place and its complicated culture and structure impacting food distribution and consumption. The third chapter in this part offers a set of historical examples that highlight the importance of the food-place relationship. Tauger walks us through history and around the globe while teaching us important lessons from the past—arguing that ignoring the role of place can have disastrous consequences for populations if care is not taken regarding overall food security while minimizing risk.

The second part of the volume, "Social and Cultural Contexts," begins with an exploration of the role of knowledge and food movements in our understanding of the food-place relationship. Sumner highlights how we acquire knowledge and use this place-based information to think more deeply and act more responsibly about what we grow, how we grow it, and, ultimately, how we consume it. The remaining two chapters in this second part of the volume provide fascinating insights into the distinctiveness of place-based food and flavor, using examples of Southern food and the Brooklyn "culinary renaissance." Byrd explores the intersection of food, space, and structural inequality in the South from a historical as well as a contemporary viewpoint. Her comments regarding this complicated interrelationship are fresh and insightful as Southern food and cookbooks anchor this exploration into foodways. The final chapter in this part, authored by LeBesco and Naccarato, explores the emerging food movement in Brooklyn and its role in ethnic and immigrant communities. The paradox of old and new is a food-related tension, not unlike the one found in other places around the country, yet LeBesco and Naccarato's observations on these neighborhoods are fascinating and peppered with interviews and insights from the cast members in this complicated drama.

The third part of the volume, "The Context of Power and Inequality," begins with Wengle's discussion of the political economy of food and a cross-national comparison of food policy in the United States and in Russia. We learn an important lesson in this chapter about the distinct role of place and political context in the formation and function of food-related policies. The analysis illustrates the uneven effects of national policy within and across nations. The chapter also raises a number of critical questions for future research regarding how significantly food-related policies have perpetuated a disappearance of the "agriculture of the middle," which has implications for the connection of farming practices to place and social context. In the following chapter, Larimore and

Schmutz explore the power dynamics of place within a global food system and the manner in which they reproduce inequalities both in food access and in environmental degradation. The authors begin to connect the dots between food-related inequalities and intersecting social inequalities of race, class, and gender. In doing so, a more complex picture of place-based solutions comes into view—one that highlights social inclusion over solely economic concerns. Gartin completes this part of the volume with a chapter that takes us across three continents to examine the most intimate of concerns regarding the food-place nexus—health and well-being. Gartin uses each of these three places as case studies and analyzes the tensions between them and the global food market. These case studies provide examples of varying solutions to this tension and their outcomes in terms of access, diet, and health.

The fourth and final part of the volume, "The Future of Food," is a discussion of solutions: what is working and what is not. This part begins with Timmer's chapter on place-based responses to the global food economy. The chapter explores the connection between global and local systems of food distribution and access while focusing on the important role that the "food revolution" is playing in reclaiming the importance of place in our understanding of where food comes from and its impact on population health. Lafferty follows with a chapter that draws on scholarship that addresses "troubling" alternative food practices and pushes the conversation further by asking whether food movements are reaching the places and spaces where access to healthy, culturally appropriate food is needed most. While some earlier chapters have critiqued the market and economic focus of many alternative food movements, Lafferty reframes the discussion in terms of social justice and food sovereignty. In the final chapter of this volume, Hossfeld and colleagues highlight place by focusing their lens on Southeastern North Carolina and a particular local food initiative there. In describing a single initiative and its operation within a unique place, the authors provide a rich and detailed description of the successes and struggles faced by such a program—often from the perspective of farmers who have participated in the initiative. The authors argue that this program's success in access, equity, and inclusion make it an exemplary model for other local initiatives, though they are also quick to point out how there is no single solution to such a complex web of inequalities.

Food and place are ubiquitous in the lives of all humans. They are fundamental to our experience of the world both as a physical and a social environment; thus, these concepts provide fertile ground

for work from a multitude of scholarly disciplines and approaches. The story of humans and their role within the relationship between food and place is a complicated one. This volume represents an interdisciplinary effort to tell that story. While these chapters do a masterful job of outlining the importance of the food-place relationship across space, time, country, region, and discipline, the story is by no means complete. Advocates and researchers must remain vigilant in their efforts to bring both theoretical understanding and real-world praxis to the issues these authors have discussed. Our hope is that this volume has begun a process of cross-fertilization of knowledge and ideas that will lead to the type of innovative thinking and action needed to address the complexities and consequences of the food-place relationship.

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Part I

Historical Contexts

Chapter 1

The Origins and Propagation of Agriculture: The Formation of the Contemporary Diet

Laurence Roudart and Marcel Mazoyer

Introduction

The human species, *Homo sapiens*, is heterotrophic, meaning that to live, human beings must consume organic matter (carbohydrates, lipids, proteins, and nucleic acids) provided by other living entities, whether plants, animals, fungi, or microorganisms. To subsist in a given place, a human population must accordingly be in a position to continually procure edible organic matter. These foodstuffs may be produced on-site or imported. Thus, whatever the era, the presence of a human population in a given place is determined by the edible species available on-site and by the knowledge of techniques (implements and practices) for deriving foodstuffs from these species. But it is also determined by foods produced in other places and by the means of transporting them to their place of consumption. In short, the presence of a human population depends both on ecological and on technical and cultural conditions.

From an ecological standpoint, each place of production can be characterized by its ecosystem—that is, its biotope (climatic and soil conditions) and its biocenosis (all the plant and animal populations living in the place). An ecosystem can be modified by human activity. During every period, the ecosystem, whether modified or not, determines the range and the proportions of the different species, especially food-providing species, that are present. Culturally speaking, for the last 200,000 years, the human species has acquired its nourishment from hunting, fishing, or the gathering of wild species living spontaneously in ecosystems that

have barely, if at all, been modified by humans. Diets were entirely dependent upon the food-providing species present in each place, with most groups of humans being nomadic. Only in the Neolithic period, between 10,000 and 5,000 BP (Before Present, conventionally taken to mean before 1950) did a few recently settled societies of hunters, gatherers, and fishers develop of their own accord into communities of farmers, who grew plants and bred animals to produce food.

Today, the human race obtains virtually all its food from forms of agriculture, which vary greatly from place to place. For instance, a farmer in the Corn Belt of North America, operating on his own with powerful machines, can cultivate several hundred hectares of corn and produce thousands of tons of grain for conversion into ethanol. He functions in a very different ecological, technical, economic, and social context from that of his counterpart in the inner Niger delta in West Africa, who—with the help of his family and draft zebus—can cultivate a few hectares of rice and produce fewer than ten tons of grain that are intended mainly for his family's consumption.

Basic foodstuffs, being heavy, bulky, and perishable, are ill-suited to transport over long distances. Yet in ancient times, cities of several thousand inhabitants in the Nile Valley and in Mesopotamia were supplied by water transport. Rome, which reached about a million inhabitants in 2000 CE, was provisioned by boats bringing grain from all parts of the Mediterranean basin. Until the advent of the railways in the nineteenth century and of motorized vehicles in the twentieth, land transportation of foodstuffs was effected by cart, pack animals, or human backs; and it took place only over short distances and in limited volumes. Even today, when the means of transport have never been so powerful, the international trade in agricultural produce accounts for only about 15 percent of world output (FAO, 2014). Farmers and their families, accounting for some 40 percent of the world's population, continue to consume a major part of their own crops. And in developing countries, the majority of the nonagricultural rural population and many town-dwellers continue to consume what is produced in their local region or country.

Although the emergence of agriculture is a very recent phenomenon when compared to the vast duration of human prehistory, it is nonetheless too ancient for any written testimony or memory to have survived. Over the last few decades, however, advances in archaeology have enabled science to deduce with reasonable accuracy which places, at what time, and under which circumstances

societies of predators became societies of farmers. Archaeology also has created knowledge of where, when, and how Neolithic farmers subsequently spread cropping and breeding practices across the world. Lastly, research conducted in other fields, such as history, anthropology, geography, or agronomy, have established that it is now possible to reconstitute the way in which the main types of Neolithic farming and diets continued to develop and diversify in relation to the ecological and cultural conditions pertaining to each place in the world. These are the central issues we address in this chapter.

Ecosystem Diversity at the End of the Paleolithic Era

At the end of the Paleolithic era, some twelve thousand years ago, following the long Würm glaciation, the Holocene, a relatively warm period, commenced and has, with some slight variations, lasted until the present. The ice cap retreated by three thousand kilometers, and new vegetal landscapes came into being (see Figure 1.1) (Cox & Moore, 2010). The humans of the time adapted to these diverse ecological conditions. They improved their chipped stone tools and shaped highly specialized new tools from materials such as wood, ivory, or horn, allowing them to exploit the particular resources of each environment. With the combined effects of global warming, the global dissemination of vegetal or animal populations with edible species, and the development of appropriate modes of predation, the human population was close to reaching the area it occupies today. This area extends from the southernmost point of the South American continent, home to the now-extinct Phrygian people, to the Arctic polar regions inhabited by the Eskimos; and it goes from sea level up to the grasslands of Central Asia and the Andes, at altitudes of five thousand meters.

During this time, most hunters, fishers, and gatherers moved from one encampment to the next after exhausting local resources. However, in some especially favored places that were rich in food species, certain groups of people could settle each year during the harvest season—or even year-round—at seaside or lakeside locations that were rich in fish or other seafood. Certain groups could even become sedentary, thanks to progress made in conservation processes (drying, smoking, cold storage, silos, etc.) (Guilaine, 1991; Testart, 2012). Under these conditions, a few millennia after the beginning of the Holocene, several human societies worked out a new form of toolmaking—stone polishing. The Neolithic era then began, and with it the earliest developments of

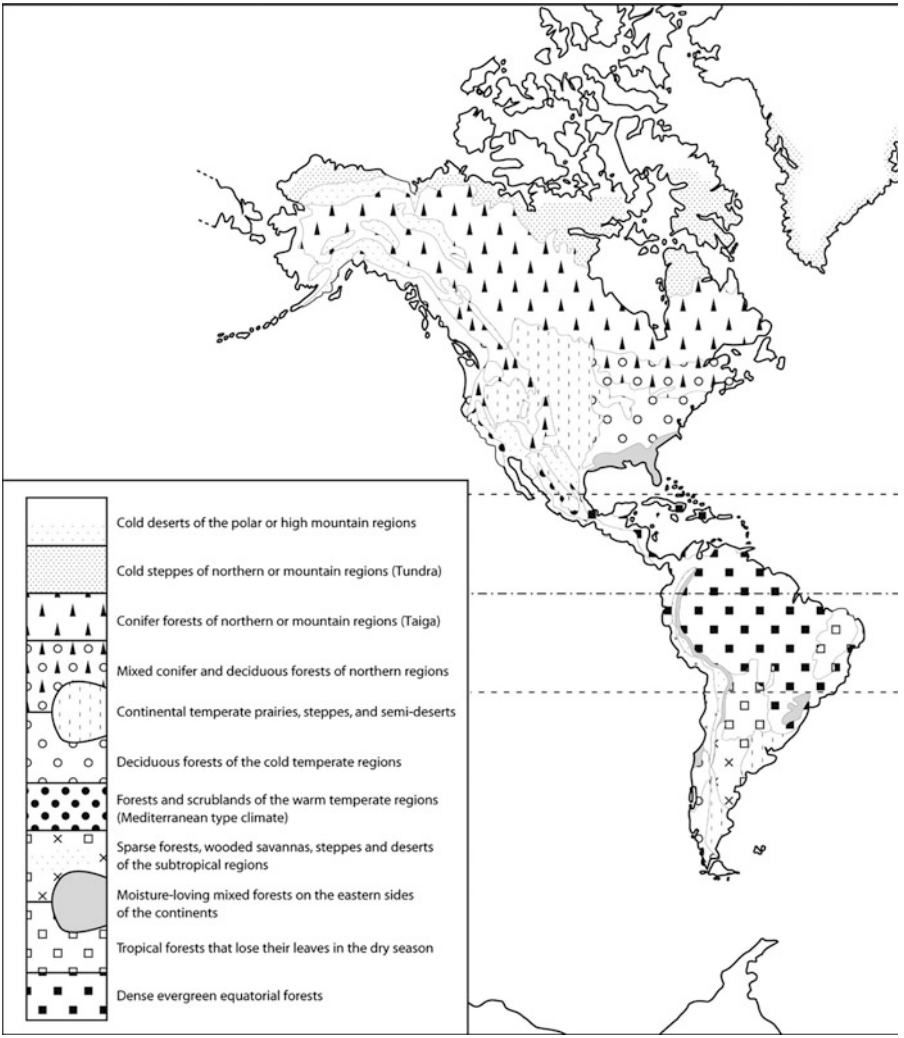

Figure 1.1 Schematic Map of "Original" Plant Formations 10,000 Years Ago

Source: Mazoyer M., & Roudart L. (2006). *A History of World Agriculture: From the Neolithic Age to the Current Crisis.* New York, NY: Monthly Review Press.

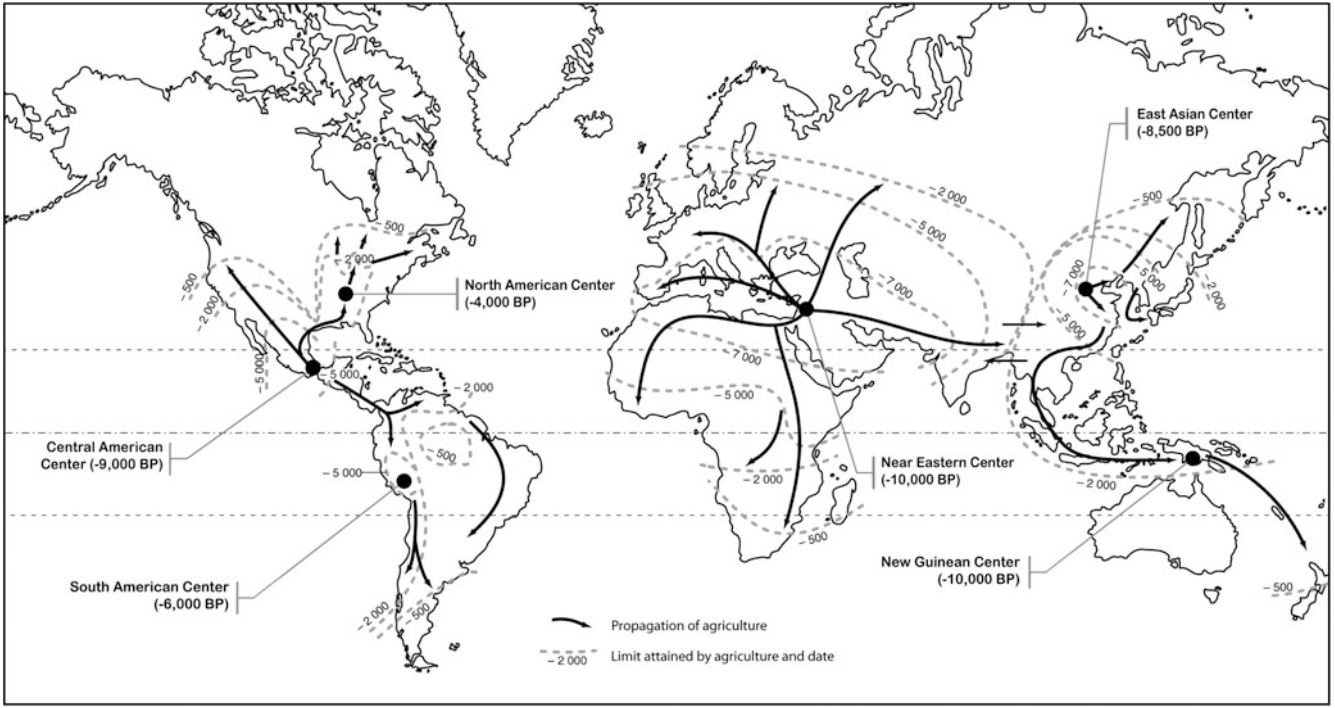

Figure 1.2 Centers of Origin and Areas of Propagation of the Neolithic Agricultural Revolution

Source: Mazoyer M., & Roudart L. (2006). *A History of World Agriculture: From the Neolithic Age to the Current Crisis.* New York, NY: Monthly Review Press.

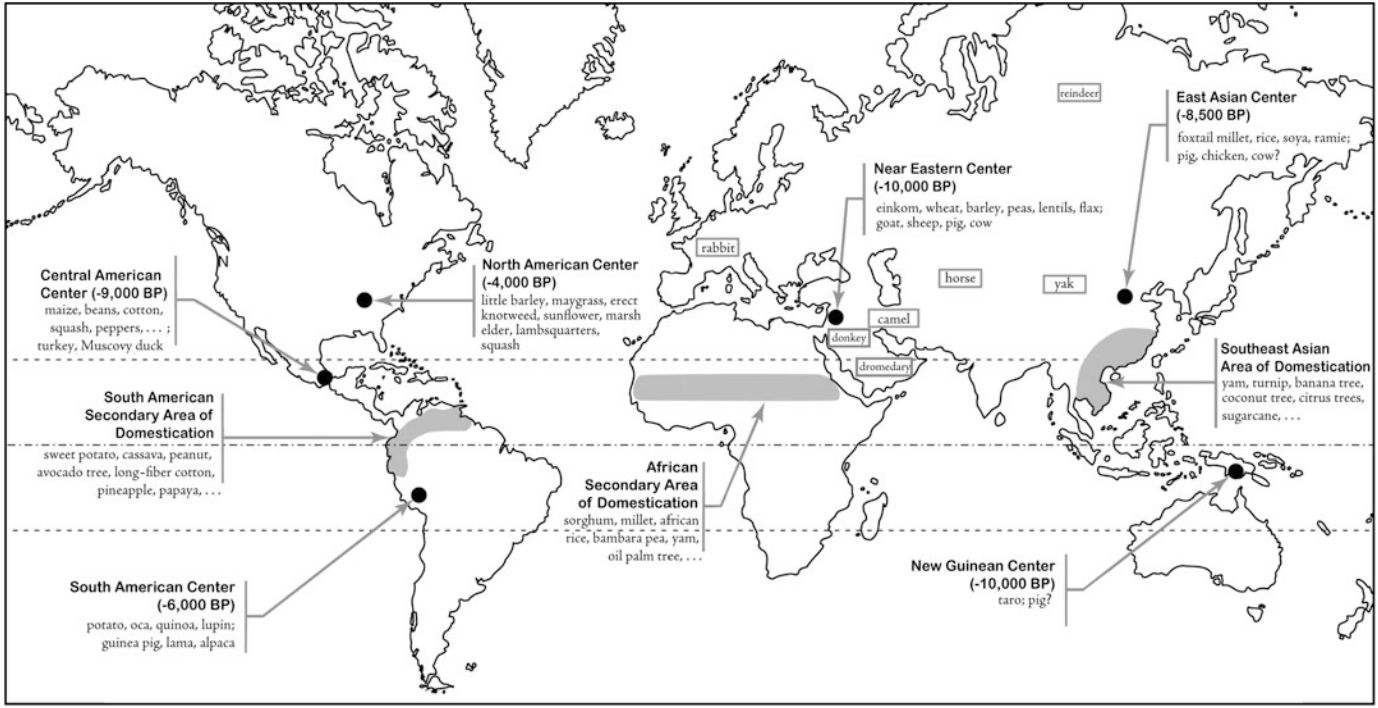

Figure 1.3 Centers of Origin of the Neolithic Agricultural Revolution and Secondary Areas of Domestication

Source: Mazoyer M., & Roudart L. (2006). *A History of World Agriculture: From the Neolithic Age to the Current Crisis*. New York, NY: Monthly Review Press.

agriculture. The emergence of Neolithic agriculture was long regarded merely as a sort of rapidly spreading innovation that was made necessary by an acute food crisis resulting from the overexploitation of wild resources. However, in recent decades, archaeological research has shown this to be untrue. The transformation from a society subsisting on simple predation into a society living mainly on the product of cultivation and breeding is to be seen as a complex chain of material, social, and cultural changes that condition one another and unfold over several hundreds of years (Demoule, 2009a).

Emerging Agriculture and the Primary Food Patterns in the Neolithic Era

Archaeological research has shown that agriculture appeared independently in various parts of the world, which we call the "places of emergence" or "centers of origin" of Neolithic agriculture. Given the present state of knowledge, the existence of six such places of emergence can be identified (see Figures 1.2 and 1.3): *the Near Eastern* place, which formed in Syria-Palestine between 10,000 and 9,000 BP; the *Central American* place, which developed in Southern Mexico after 9,000 BP; the *East Asian* place, which formed in Northeast China on the middle reaches of the Yellow River after 8,500 BP, before extending to the northeast and the southeast; the *New Guinean* place, which perhaps emerged in the interior of Papua-New Guinea some 10,000 years ago; the *South American* place, which developed in the Andes before 6,000 BP; and the *North American* place, which grew in the middle basin of the Mississippi between 4,500 and 2,500 BP. A number of other regions in Africa and Asia were perhaps also places of emergence, but the issue continues to be debated (Demoule, 2009a; Grigg, 1977; Mazoyer & Roudart, 2006).

In the *Near East*, and more exactly in the triangle formed by the Dead Sea, the Taurus range, and the Zagros Mountains, the best known of the six places of emergence of Neolithic agriculture can be found. It is here that we can document the slow transition from predation to agriculture that lasted over a thousand years (Cauvin, 2007).

Near Eastern Place of Emergence

Abundance of Resources, Sedentary Populations, and Tool Specialization

In the Near Eastern region, the global warming of the Holocene period gradually replaced the cold steppe—with artemisia and

reindeer—with a savanna that was rich in wild food resources such as acorns and pistachios, cereal grains (einkorn, wheat, barley) and legumes (peas, lentils, grass peas, vetch), game (boars, aurochs, onagers, mountain sheep, wild goats, deer, gazelles, rabbits, hares, birds), and fish in some places. Resources were even abundant enough for the human population to settle. Living first in grottos, this population increased gradually. Once the grottos became insufficient, people moved into artificial habitats, composed of round dwellings within wooden superstructures, grouped in villages of 0.2 to 0.3 hectare (Cauvin, 2007). Several tools and techniques determined the use of the new resources and the development of the new sedentary lifestyle: axes and adzes of polished stone for cutting and shaping the timber, stone sickles for harvesting, stones and rollers for grinding grains, and silos for stocking wild cereals. Afterward, for thousands of years, these tools and techniques were used in farming.

Protoagriculture, Protobreeding, and Domestication

Protoagriculture and protobreeding are the terms we give to the earliest cultural and breeding practices applied to still-wild populations of plants and animals. The very few remaining archaeological traces of these practices allow us to surmise that the earliest sowing practices occurred near the habitations, on terrains already cleared and enriched with domestic waste. Protoagriculture might also have developed on land enriched by alluvial deposits from overflowing rivers, where appropriate, and later on wooded ground: indeed, with axes made of polished stone, it was fairly easy to fell trees, which were then burned before cropping began (Rollefson & Köhler-Rollefson, 1992).

In other words, in the Neolithic era, sedentary human societies subjected small wild populations of plants and animals to new, *artificial* conditions, resulting from the practices of protoagriculture. These populations thereafter led a separate existence, distinct from that of their wild fellows. After several generations, many of these plant and animal populations proved amenable to domestication—losing some of their genetic, morphological, or behavioral features that had become incompatible with their new existence—and acquired other, more advantageous features. Although they continued to resemble the wild populations from which they had sprung, these domestic populations were now distinguished by a series of characteristics that formed the "domestication syndrome." For instance, wild cereals have ears that are easily detached and shelled, thus favoring their natural dissemination, while the ears of domesticated cereals are difficult to

detach and shell, which is conducive to their multiplication by harvesting and sowing (Pernès, 1983). In the Near East, the earliest traces of completely domesticated plants and animals (see Figure 1.3) date from 9,500 BP. For these plants and animals to have been domesticated by that time, the protoagriculture and protobreeding of their still-wild forms must have begun several dozens, if not hundreds, of years before (Gautier, 1990; Harlan, 1992).

The period between 9,500 and 9,000 BP also saw the move away from small villages, with their well-spaced round dwellings, to larger villages with more contiguous rectangular houses, and populations ten times as large. There were also major developments of polished stone axes and adzes, utilitarian fired pottery, and a large number of feminine statuettes and figurines, probably symbolizing fertility. It is not easy to establish links of cause and effect between these innovations since they do not appear in chronological order in the different excavated sites. However, they are all situated in the entire Near Eastern area by 9,000 BP, at a time when domesticated plants and animals were providing the human population with the bulk of their food (Cauvin, 2007).

These changes attest to a major increase in the population as well as to far-reaching social and cultural transformations that are difficult to chart accurately. However, the evidence suggests that small domestic groups that were involved in production and consumption came into being, each with its own roof, fire, and silo. For each of these groups, it would not be difficult to sow its preferred seeds on a prepared patch of ground; nor would it be difficult to capture, tame, and reproduce in captivity the most easily mastered of its favorite types of game. Even hunter-gatherers were capable of doing this. What was no doubt more difficult was to preserve the harvest, produced by their own seeds from the pre-existing "gathering rights" of the other groups, and to subtract the animals one had raised from their "hunting rights."

It was also difficult to keep a part of the harvest as seeds and a part of the herd for reproduction purposes and to then distribute the fruits of their labor between the different members of the group—not only on a daily basis, but also when the eldest members died or the group was subdivided. Thus, these domestic groups, which had now become farmers, certainly respected a minimum number of new social rules allowing their own reproduction as well as the proportional reproduction of the cultivated plants and domestic animals upon which their survival depended (Demoule, 2009a; Liu, 2007; Mazoyer & Roudart, 2006). In addition, one may assume that

this new lifestyle could not have been understood, transmitted, and improved upon without the help of a renewed form of language that could describe the new physical conditions (habitat, environment, tools, farming practices), the new social rules, and the corresponding ideas, representations, and beliefs (Bellwood, 2004; Cavalli-Sforza, 2001; Renfrew, 1990).

Conditions for the Emergence of Agriculture

The places where agriculture emerged in Neolithic times have in common a range of ecological and technocultural characteristics, which were seldom conflated. First, the wild, food-producing species, notably plants, were plentiful enough to enable small groups of hunters, gatherers, and fishers to become sedentary and to subsist for generations. That was long enough for the populations to perfect techniques for building solid, perennial dwellings and to develop sophisticated techniques for harvesting, preserving, and preparing foodstuffs. Second, some of the local, wild, food-producing species could be successfully grown, bred, and domesticated to satisfy a major part of the population's dietary requirements. Third, the societies then living in such places were in a position to establish the rules of conduct by which agricultural activities could be pursued. In short, agriculture could emerge only in places that were ecologically privileged and, at the same time, particularly advanced in a cultural sense.

In these especially favorable places, the emergence of agriculture was not a response to some acute crisis in predation resulting from the overexploitation of wild resources by a rapidly growing sedentary human population. There is in fact no evidence of any such crisis during the lengthy transition period between predation and agriculture (Cauvin, 2007). Nor was it caused by the spread of some belated and fortunate discovery that one could reap more abundantly what one had sown. After all, it is scarcely imaginable that *Homo sapiens* gatherers, who had been sedentary for centuries and had observed how seeds sown serendipitously around their dwellings produced easily harvested ears of grain or leguminous pods, had remained unaware of the connection between sowing and harvesting. As for capturing, taming, and raising young animals, any hunter-gatherer's child was capable of doing so. The dog, prized as the nomadic hunter's asssitant, had been domesticated since the late-Paleolithic period.

Most plausibly, the populations in these places developed cropping and breeding practices once the demographic density had attained a critical threshold. Beyond this threshold, wild food resources being