

Chapter 8

Envisioning Alternative Economic Futures Through the Lens of Food



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Food and the Future

Feeding is an unavoidable human need. The diversity of natural environments on Earth and the evolution of human history explain the bewildering diversity of actual solutions people have adopted to solving it. Food trade over ever-increasing distances has played a key role in this process. Food exchanges between different geographical and cultural settings have been a powerful lever of globalization since the Portuguese and Spanish kingdoms established maritime routes to Asia and America during the 15th and 16th centuries.

Nowadays, affluent societies enjoy unprecedented food choices. Global food value chains, underpinned by intensive agriculture and livestock farming, and ruled by huge transnational corporations, fill supermarkets and restaurants with foodstuff from around the globe. A non-negligible share of our daily meals has travelled hundreds or thousands of kilometers before landing in our tables: Li et al. (2022) estimate that 19% of food calories consumed in the world are provided by internationally traded products. Current value-chain disruptions sparked by the global pandemic of Covid-19 or the war in Ukraine have raised global awareness about the true scope of the flows that nourish the world's population, the

This chapter is framed by the R&D project “Urban-Rural Governance and Food Transition in Low-Density Regions: The case of the region of Castilla y León (Spain)” (September 2021–August 2025), grant number PID2020-112980GB-C21, funded by MCIN/ AEI/10.13039/501100011033. Entities involved are the University of Salamanca (Spain), the University of Valladolid (Spain), the University of Munich (Germany) and the Fundación Entretantos (Spain). This sub-project belongs to the coordinated project “Sustainable food networks as chains of values for agroecological and food transitions. Implications for public territorial policies” (acronym ALISOS), carried out by researchers from the Spanish regions of Madrid and Castilla y León.

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interdependences between distant sites of production and consumption, and the weaknesses of this distance-intensive food supply model.¹

Such distance-intensity of the contemporary food system also implies an enormous energy consumption. According to the Intergovernmental Panel on Climate Change (Arneth et al., 2019, p. 7), food makes up between 21% and 37% of global greenhouse emissions. These high figures are not only due to transport issues. Agricultural practices have become industrialized and standardized under the pressure of global players to raise yields and lower prices. Therefore, it takes around 2,000 liters of water to produce 1 kilo of cereal, whereas a kilo of beef (without bones) needs up to 15,000 liters of water (Food and Agriculture Organization, 2017, p. 1). The intensification process is also apparent when crops like soy or palm replace forests and small family farms to increase the acreage of land ruled by the so-called *agribusiness*. As a result, biodiversity falls, family farms are crowded out of markets, and resources and profits are transferred from small-scale food producers to the few global oligopolies (e.g., Unilever, Procter & Gamble, Nestlé, Kraft Foods, Danone, Johnson & Johnson, Mars, PepsiCo, CocaCola, Cargill), which own the most popular food brands. Food policies and their subsidies (Common Agricultural Policy in the European Union probably being the most influential) should not be neglected as supporters of the consolidation of this corporate regime in the food industry (McMichael, 2009; Díaz-Méndez & Gómez-Benito, 2010).

Although no future is possible without food, it is difficult to imagine one single food future for the entire world. The homogenization forces of globalization (trade, advertising, branding, foodservice outlets, cultural exchanges) do not seem capable of fully countervailing sharp differences in income, culture, and nature across—and within—countries. Unfortunately, famine and chronic hunger still affect millions in less developed countries, whereas 17% of total global food production is wasted, mostly within households (United Nations Environment Programme, 2021, p. 8).

Despite these extreme situations, reflection on the future of food—and the food of the future—needs to be simultaneously contextual and multi-scalar to take account of the interdependences between territories involved in global food value chains. Contextuality is necessary to elaborate on food futures aligned with local actors, resources, preferences, and potentialities. Multi-scalarity connects each particular place to larger networks of food production, distribution and consumption to assess both its linkages to external inputs and its potential influence on food futures elsewhere.

¹In my opinion, this awareness should lead economic geographers to pay more attention to allegedly mundane activities—such as food provision, retailing, construction—which are frequently neglected in favor of research into high-tech industries, digital economy, finance, biosciences, and other disruptive economic realms. Recent developments about the “foundational economy” (Bentham et al., 2013; de Boeck, Bassens, & Ryckewaert, 2019; Foundational Economy Collective, 2020; Martynovich, Hansen, & Lundquist, 2023) and the “urbanization sector” (Schafran, McDonald, López Morales, Akyelken, & Acuto, 2018) partially address this gap. See also the contribution by Christian Schulz (2025) in this volume.

With these caveats in mind, in this chapter I discuss how the food scenarios are shaped and mobilized to frame the future of the European food system. I assume my own positionality as a European economic geographer well experienced in research about the food sector and, more recently, deeply interested in those alternative economies which treat food as a battlefield to build a post-capitalist future: consumer cooperatives, community gardens, farmers' markets, on-farm selling, or box-schemes, to name just a few alternative fixes for food provision.

For the remainder of this chapter, I will proceed as follows. In section "[Four food scenarios for Europe](#)" I present four food scenarios for Europe, each related to a different grand narrative about the future for humankind: business-as-usual, tech-food, bioregional, and eco-global. I briefly outline the assumptions, actors, and goals of each scenario to determine its chances of becoming *the* hegemonic food frame of the approaching European future. In section "[Alternative food networks: A brief outline](#)" I focus on the bioregional scenario to introduce alternative food networks as the cornerstone of a more localized, small-scale, and environmentally friendly future food system, based on agroecology and bioregions. Framed by the concept of prefiguration, in section "[Alternative food networks as prefigurative endeavors: Dreams and nightmares](#)" I provide an insight into the food futures conceived and performed by members of alternative food networks, drawing on empirical data from previous and ongoing research projects in Spain. In section "What's next?" I conclude with suggestions for research on food futures, some of which will be addressed in the ALISOS project that enables this contribution (see footnote on the front page).

Four Food Scenarios for Europe

Four Narratives for (Food) Futures

This section is anchored in a brief discussion of de Cózar Escalante's (2019) taxonomy of the most powerful narratives to tackle systemic threats (i.e., global warming, water scarcity, biodiversity loss) and their societal impacts (i.e., climatic migration, raising inequality, race for resources) in the current Anthropocene context.

First, *naturalism* rests upon a scientific vision of the world. In this view, science and technology constitute reliable guidelines to build a better common future for the Earth and humankind. Depoliticized and technocratic solutions (green energies, smart cities) implemented through market incentives (taxes, prices), as environmental economists suggest, are considered safe, scalable, and uncontested tools to lead the transition towards a more sustainable management of natural resources, regardless of the particularities of local contexts.

Post-naturalism goes one step beyond naturalism. Its supporters argue that "pure" nature does not exist at all. Human impact since the Neolithic era has been deep enough to transform natural processes and to subject nature to increasing societal

pressures. By means of technology, society has been able to turn nature into a cornucopia of resources, devoid of autonomous dynamics. In this vein, it seems possible to increase human control over nature through emerging technologies like geo-engineering and genetic engineering, or through an extensive use of mature options like nuclear power.

Those supporting *eco-catastrophism*, thirdly, claim that the Anthropocene heralds a global collapse. A new way of living, far from unlimited economic growth, consumerism, and short-termism, is imperative to reduce the human footprint on Earth's ecosystems. In this mindset, and as opposed to naturalism and post-naturalism, cutting-edge technology does not hold a central role as resource supplier or impact softener. Instead, eco-catastrophists praise alternative economic practices (Fuller, Jonas, & Lee, 2010; Gibson-Graham, 2008, 2014; Leyshon, Lee, & Williams, 2003; Sánchez-Hernández, 2019; Zademach & Hillebrand, 2013), inspired by non-market and non-competitive principles of coordination (community, solidarity, cooperation, sustainability, frugality, locality) as the building blocks of a non-capitalist eco-socio-economy deployed over a new geographical scale, the bioregion. These proximity economic arrangements very often resemble ideas of degrowth (Lange, Hülz, Schmid, & Schulz, 2022) and ecological economics (Jackson, 2011).

Finally, those supporting *eco-Marxism* challenge the predatory nature of capitalism and its endless quest for new markets and resources² that has been so harmful for human and non-human lives. Colonialism enabled a process of unfair ecological exchange between colonies and metropolis after c. 1500, one that should either be paid back in the form of remedies for less developed countries or considered in the institutional design of those carbon emissions markets aimed at overcoming *fossil capitalism* (Malm, 2016). Environmental/climatic, social, and spatial justices (Leyshon, Willis, & Robbins, 2006; Soja, 2010) are closely intertwined because nature and society are not self-containing realms, but mutually interconnected. From this standpoint, it is political economy, and not technology, that is the main tool for a global redistribution of wealth and sustainability.

These four narratives may be promptly translated into four scenarios about the future of food production, distribution, and consumption in Europe. I will sketch them in the following sub-sections.

The Business-as-Usual Scenario

Naturalism underpins the *business-as-usual* scenario. Since the industrial revolution, agrifood technology has developed two main processes: appropriation and substitution (Atkins & Bowler, 2001). Appropriation transforms biological processes into

²For example, ongoing projects funded by Silicon Valley tycoons to develop outer space tourism, or discussions about starting human settlements and mining on Mars or the Moon.

industrialized ones which are later re-introduced to the food value chain, either as inputs for farmers (machinery, fertilizers, seeds) or as new foods (butter, cheese). Substitution replaces agricultural products with inputs supplied by industrial corporations, and it is able to produce non-existing foods (margarine) by mixing chemical additives and generic substances (fat, glucose, proteins, carbohydrates). Both processes steadily push the production frontier beyond the traditional biophysical limits of agriculture. Such trust in technology aims at developing new foods or to add new properties to available foods, in terms of shelf-life, color, taste, flavor, texture, or convenience.

Corporate power is central to this scenario at every stage of the value chain: farming, processing, and distribution. It is only these huge corporations that can co-ordinate the complex web of actors and factors that deliver food to Europe from the rest of the world. Cheap prices and year-round availability—anchored in low salaries, economies of scale, and pressure on natural resources—are this model's key advantages.

Its development in the near future will be shaped by the corporate strategy of attaching new attributes to food items that fulfil emerging consumer demands: greenwashing, localness, seasonality, veganism, or animal welfare will play a key role in the naturalist scenario. Authorities and private stakeholders have developed a whole set of certifications and labels (eco, vegan, local) to address each particular consumer niche in Europe. Financialization is not absent in this strategy, as institutional investors are aware of the potential of such labels for raising profits in the agrifood sector (IPES Food, 2022).

According to the naturalist narrative, therefore, this business-as-usual scenario relies on technology and market incentives as the main drivers of a future food system capable of co-opting every emerging societal demand about sustainability without compromising profitability and corporate control over resources. However, the role of public authorities on the European, national, and regional scale is also influential in framing such a future. The *Farm to Fork Strategy* (European Commission, 2024b), launched by the European Union in 2020, is aimed at developing a safer, fairer, healthier, more efficient, and less industrialized food system in its member states. Common Agricultural Policy and the *Biodiversity Strategy 2030* (European Commission, 2024a) are all aligned around the same broad goals of reducing greenhouse gas emissions and achieving carbon neutrality by 2050.

The Tech-Food Scenario

Post-naturalism underpins the *tech-food* scenario, which is even more strongly based on science and technology than the business-as-usual one. Biotechnology, in the form of genetically modified organisms (GMOs), 3D food printing, plant-based “meat” or proteins, or even insect and algae farming (Burke-Shyne, Gallegos, & Williams, 2021; House, 2018; Mouat, Prince, & Roche, 2019; Sexton, 2020), is supposed to overcome current biophysical constraints in food production. In the

context of more frequent droughts and raising temperatures in Europe, food security would receive a huge boost in this scenario, as these new food items are not as sensitive to soil and climate restrictions. These new high-tech foods are coupled to the primary sector in a very different way to actual food. In-lab and in-factory food processing are likely to gain momentum at the expense of fresh or “natural” produce. The aforementioned “substitution” process will probably become far more important than today, with in-house-grown protein forming the cornerstone of our food intake. Veganism, animal welfare, and criticism of meat consumption altogether may be strong societal forces behind this process.

The tech-food scenario will likely bring a higher level of concentration, in two directions. First, firm concentration: R&D requirements in terms of technology, skilled labor, or funding are very high to develop the substances that are to be transformed into tasty food. Only large corporations—or large investors—seem capable of providing such a complex web of resources. It is also critical to achieve economies of scale for supplying large markets with affordable tech-food. Therefore, secondly, a wave of geographical concentration of food production may be expected. The decoupling of agriculture and food, the demise of traditional farm knowledge, and the locational requisites for large factories and other knowledge-intensive and capital-intensive facilities (labs, universities, experimental farms, research centers), will make urban settings far more attractive and profitable than rural ones. Proximity to consumer markets, of course, is also influential in this locational shift. If food production becomes an even more industrial activity, the role of localization and agglomeration economies may also be expected to grow. According to this rationale, the initial stage of concentration may be followed by well-known processes (imitation, standardization, maturity) that lead to the geographical diffusion of tech-food production in the long run. The territorial side of this scenario emerges as an exciting research topic for the next 25 years.

Once again, the state is involved in the scenario’s framing. Europe’s food regulation is rather strict covering safety, health, consumer rights, animal welfare, producers’ intellectual property, geographical origin, product traceability, soil protection, and biodiversity. Most EU countries have banned GMOs. Meat and dairy processors have demanded that food authorities ban the use of the words “meat” or “milk” for labeling plant-based meat, milk, or cheese. This situation suggests that deep regulatory changes are needed for the tech-food scenario to become hegemonic in the short and medium term. The core of the coming debate is the very definition of what food is and what food is not. If food is slowly reduced to a generic nutritious staple, this scenario will have more chances. But if European citizens keep food attached to a wide range of socio-cultural meanings, a massive turn to high-tech food seems unlikely. Only new legal definitions of marketable and safe food, and massive educational campaigns enhancing new dietary patterns, may slowly change European food ideology.

The Bioregional Scenario

The food scenario based on eco-catastrophism is radically different from the business-as-usual and tech-food ones. Technology and scientific knowledge lose ground and traditional agricultural and food-processing practices come to the fore. Certified organic food is, of course, one pillar of this scenario, but it is not the only one.

Agroecology lies at the core of this scenario (Sanz-Cañada, Sánchez-Hernández, & López-García, 2023; Van der Ploeg, 2021). The family farm becomes the building block of the food system. Instead of farm specialization and intensive production (the cornerstone of the two other scenarios), agroecologists propose diversification, extensive cultivation, self-sufficiency, circularity, and traditional expertise as the guiding principles for farm management. Minimization of external inputs (fertilizers, seeds, machinery, loans, scientific know-how, land ownership) and maximization of in-farm resources, in the broadest sense of the word, reconnect territory, agriculture, and animal husbandry (González de Molina & López-García, 2021).

Food value chains, thus, become shorter and seasonal instead of globalized and seasonless. The regional scale, and not the global one, emerges as the food system's new ecological and cultural frame. This is exactly what the *bioregion* term means (Peters, Bills, Lembo, Wilkins, & Fick, 2009; Vicente-Vicente, Sanz-Sanz, Napoléone, Moulery, & Pierr, 2021a): a given population's food, energy, and water consumption should not exceed the region's capacity if ecosystems are to be preserved. Agricultural management has co-evolved for decades with natural endowments, so there is also a cultural content in the definition and demarcation of bioregions.

The bioregional scenario is alternative to the other ones not only because of its geography and its agricultural foundations. Its economic coordination is also different, in the sense of critical against capitalism, corporations, financialization, and food processing and retailing companies. Short food supply chains—within bioregions, if possible—challenge market, hierarchy, and competition as principles of economic exchange. A sense of community and solidarity between producers, retailers, and consumers pervades the many different alternative food networks celebrated by bioregionalism (see section “[Alternative food networks as prefigurative endeavors: Dreams and nightmares](#)” for further details). Small-scale production, cooperative firms, fair prices, local market channels, democratic governance, and caring for persons and nature are supposed to replace the current power that food corporations exert upon resources, employees, prices, and consumers.

The role of the state in such a scenario is rather ambiguous. As discussed in section “[Alternative food networks as prefigurative endeavors: Dreams and nightmares](#)”, many members and partners of alternative food networks reject state intervention and demand autonomy. In their view, current regulation (eco-labels included) is instrumental to big food corporations. Nevertheless, looking at alliances between progressive local governments and grassroots food movements (Sánchez-Hernández & Glückler, 2019; Moragues-Faus, 2020; Vara-Sánchez, Gallar-

Hernández, García-García, Morán-Alonso, & Moragues-Fus, 2021) clearly shows that the public sector's support may be a decisive contribution to this scenario. The Milan Urban Food Policy Pact (2024) is probably the most influential political network for the relocalization of food supply. Its members claim “to develop sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights-based framework, that minimize waste and conserve biodiversity while adapting to and mitigating impacts of climate change”. The reconstruction of food linkages between cities and their rural surroundings is a key argument of the Milan Pact, just as the concepts of bioregion and *city-region food systems* suggest (Food and Agriculture Organization of the United States, 2024a). Urban agriculture, responsible public food procurement, or support to direct selling will become very popular proposals in the bioregional future.

Moreover, the Food and Agriculture Organization of the United States (FAO) also endorses agroecology as a feasible option for empowering rural communities worldwide (FAO, 2024a). In 2022, the Food, Farming and Countryside Commission (FFCC) of the United Kingdom released a report (FFCC, 2022) highlighting agroecology as a strong economic, social, and ecological alternative to the current state-of-the-art in food provision within the European context.

Therefore, alternative forms of food provision should not be discarded as naïve or utopic. Their minority status is not at odds with growing citizen interest for a healthier and more local and sustainable diet, a concern shared by public authorities all over Europe. It is precisely the tension between a community-led transition and an alliance with political stances that carves the divide inside the alternative food arena, a topic further debated in section “[Alternative food networks as prefigurative endeavors: Dreams and nightmares](#)”.

The Eco-Global Scenario

The bioregional scenario appears to be somehow disconnected from the world beyond its regional borders. The political economy approach of the eco-Marxist narrative may be helpful to scale the bioregional scenario up to a higher geographical scope. Supporters of bioregionalism must clarify the issue of food exchanges and trade across bioregions, because they do not give sound responses to simple questions like: How can megacities be fed? Is urban agriculture a reliable solution, or is it merely a palliative or even an entertainment? What about eating fish in Austria or oranges in Sweden? What is the alternative to World Trade Organization rules and corporate-led food value chains?

Yet full de-globalization and pure re-localization of food and diet seem unrealistic in the 2020s. So, if a bioregional scenario is to be a serious option, its supporters must conceive of a fair, sustainable, and non-colonialist way of overcoming the constraints of bioregions to nourish densely populated territories (Vicente-Vicente et al., 2021a, b). Economic efficiency, environmental sustainability, and social

justice, within and beyond bioregions, should be the threefold goal of a future trans-scalar food political economy subject to a more democratic and inclusive governance system. La Via Campesina (2024), URGENCI (2024), or Fairtrade schemes (Fairtrade Ibérica, 2024) are but some of the grassroots initiatives tackling the challenge of re-localizing food circuits without falling into parochialism (Winter, 2003) and lack of solidarity with “others”.

Towards a Hybrid Food Future

These four food scenarios for Europe are not mutually excludable. Rather, they will co-evolve because their stakeholders interact, react, clash, and strive to increase their social, economic, and political influence in Europe. The European Union guidelines (Common Agricultural Policy, Farm to Fork, Green Deal) will probably enhance some convergence around the now prevailing business-as-usual scenario. National and regional authorities must act in line EU regulations to receive EU funding, itself a powerful tool for working towards such a future.

However, the most likely future food fix in Europe is a hybrid one, where the hegemony of the current status quo will be eroded, to a greater or lesser extent, by changes induced from the other scenarios, namely the tech-food and the bioregional ones. Three factors will probably lead to such hybrid future.

First, the hegemony of the corporate regime and the market share of global food value chains is not equally spread all over Europe nowadays. Cross-national differences are probably smaller than cross-regional ones, mostly if the urban-rural divide is accounted for. Southern Europe’s attachment to locally/regionally sourced food is deemed higher than that of Northern Europe (Parrott, Wilson, & Murdoch, 2002; Joosse, Olders, & Boonstra, 2021), whereas labeled organic food has reached substantial market shares in countries like Sweden, Denmark, Germany, Austria, or Switzerland (IFOAM, 2021).

Second, the very geographical diversity of Europe does not provide equal opportunities for the bioregional scenario to develop. Soil fertility, water availability, and climatic conditions change drastically at the regional scale, namely in large countries, thus influencing the volume and scope of nearby food supply and consumption. The settlement pattern and the level of urbanization are also vital, because proximity linkages are more likely to flourish in rural settings and mid-size cities—although empirical evidence is not conclusive here, because metropolitan dwellers are also engaged in the promotion of short food supply chains (box schemes, consumer cooperatives, community-supported agriculture) with farmers within their vicinity.

Third, the tight relationship between household/individual traits and dietary patterns. Many different consumption profiles coexist within each country, region, city, or bioregion, shaped by income, age, nationality, religion, education, values, ideology, or health condition. The so-called “foodies” are rarely found in poor families, but they all live in the same cities, regions, and bioregions too. This social

dimension of feeding, then, crosscuts geographical and market factors to make the hegemony of one food scenario impossible at any geographical scale.

Therefore, from the perspective of economic geography, it is possible to imagine a rich diversity of food futures and fixes in Europe at the regional level, all of them framed by the overarching guidelines of the European Union and the foreseeable influence of the business-as-usual scenario. According to local circumstances, the alliance between local authorities and conscious/knowledgeable/activist citizens might push alternative food practices beyond their current niches and encourage the development of bioregional food frames. Internal consensus and political stability appear to be key conditions for this development to come true (Sánchez-Hernández & Pitarch Garrido, 2019). The share of tech-food in this variegated and unstable environment is subject to political, climatic, and market contingencies, as suggested above. It might supplement food shortages in regions with poor natural endowments, fulfil demands from growing market niches (veganism, vegetarianism, locavores), or reinforce the main scenario with a new generation of highly processed and very affordable foodstuff.

Alternative Food Networks: A Brief Outline

In this section, I briefly describe *alternative food networks* (AFN) as forms of economic coordination whose members are challenging the current hegemony of global food value chains and corporate control over the food supply in Europe. Their challenges concern three dimensions of food (Sánchez-Hernández, 2009): product (food's properties and qualities), process (food's supply chain), and place (food's geographical provenance).

Regarding the product, AFN members strongly reject highly processed food items due to their high content in sugar, fat, and chemical additives. In the same vein, they also refuse fresh produce (fruits, vegetables, milk, meat, fish) sourced from industrialized farming systems where fertilizers, antibiotics, heavy equipment, and genetically modified organisms (GMOs) are commonly used. Health implications—both individual and public ones—and the environmental impact of these appropriation and substitution processes constitute the main reasons for such criticism.

In terms of process, AFN members point to the tight control large, often transnational corporations exert over the food value chain: primary production, processing, warehousing, and retail. Other critical functions like research and development, financing, advertising, lobbying, or logistics usually fall under the control, direct or indirect, of so-called *big food*. The members of this organizational framework pretend to be the only solution to developing the large-scale food operations worldwide necessary to feed Western countries. The size of these big players reduces prices all along the value chain and pushes out small independent competitors (farmers, processors, retailers), thus fueling a continuous process of firm concentration that reduces choices at both ends of the food chain (the “hourglass model”):

producers find almost no delivery options apart from large supermarkets and food factories, whereas consumers find almost no food outlets other than large supermarkets as well.

Third, and closely related to product and process concerns, corporate food travels long distances *from farm to fork*. The term *food miles* embodies the wide concern about the environmental effects of the distance-intensive hegemonic food system. But the reduction of food miles and the subsequent re-localization of food supply (within the bioregional boundaries, if possible) is not only a matter of carbon footprint reduction. Consumers and producers are kept apart from each other by several intermediaries who market such commodified food, detached of its natural, cultural, and geographical meaning. The linkage between food and place, so important in Mediterranean countries, is blurred in the corporate system made of *food from nowhere*. Thus, a true food re-localization includes the reconnection of consumption and production, mostly via short food supply chains where intermediaries are reduced to a minimum and direct sales enjoy a greater market share.

More “natural” food marketed through a short/local network of small actors who interact face to face emerges as the cornerstone of the bioregional scenario AFN members demand. Such food is allegedly healthier, less harmful to the environment (soil, animals, climate), embedded in the local traditions, and sourced by local actors. Prices, a key issue in any economic arrangement, are supposed to be lower and fairer: lower because geographical proximity and less intermediation reduce costs, fairer because no big players can extract value via economies of scale, bargaining power, or monopolistic practices.

All these elements underpin the usual definitions of alternative food networks. With their pioneering contribution, Whatmore and Thorne (1997) highlighted actors’ reconnection, value redistribution, and participatory governance as the three fundamentals of AFNs. Sánchez-Hernández (2024, p. 2) defined these networks as

arrangements of food production, distribution and consumption (and co-ordination of these processes) whose values and practices promote a food environment respectful of nature and health, establish a more equitable distribution of economic value among the actors involved, reduce the number of intermediaries, usually operate in a frameworks of geographic proximity, and are ruled by participatory, inclusive and democratic decision-making mechanisms based on mutual trust among the people involved.

Shorter or longer, in these definitions, food is no longer commodified and thus recovers its role as a valuable nexus between individuals, community, society, and nature.

Members of AFNs adopt manifold empirical forms. At the stage of production, small organic, agroecological, and nearby farmers constitute the basis of the alternative food system, along with facilities that process inputs from those suppliers to make jam, cheese and other dairy products, honey, bakery, meat products, beer, wine, or preserves. But it is in the relationship between producers and consumers that the alternativeness comes to the fore (Fig. 8.1).

Direct exchange between producers and consumers is the basis of on-farm selling, farmers’ markets, eco-markets, “box schemes,” community-supported agriculture

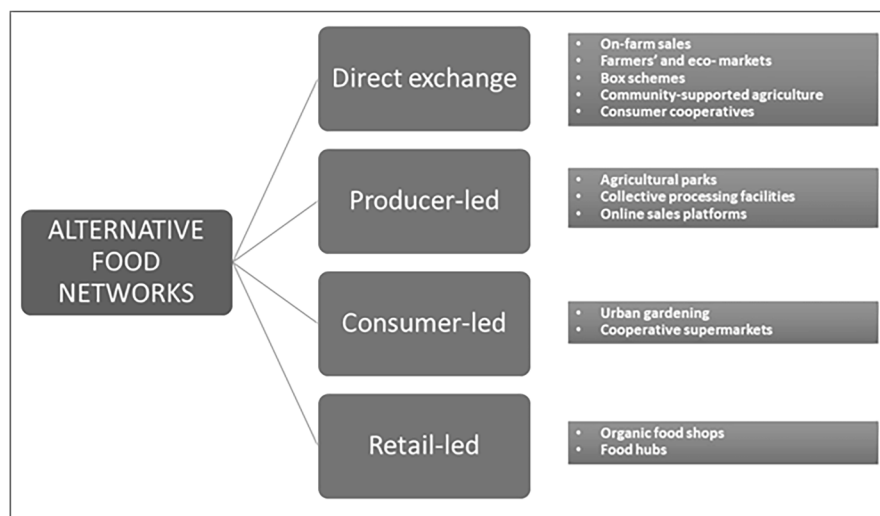


Fig. 8.1 A typology of alternative food networks as chains of values. Source: Design by author

(CSA), and consumer cooperatives/consumer groups/solidarity purchasing groups. These tight networks attach personal relationships of trust and regard to food (Kirwan, 2006; Macías Vázquez & Morillas del Moral, 2022). Trust is not only built upon eco-labels, but on enduring and non-hierarchical relationships. In CSAs, for instance, consumers pay farmers for their food in advance, so the latter can be confident that their yearly production will be sold and consumed. Consumer cooperatives often visit their suppliers' farms to be aware of the farming process and to develop strong ties with the owners. More sophisticated governance frameworks are "participatory guarantee systems" (PGS), where farmers, processors, and consumers discuss and sign a formal agreement with which they lay out quality requirements in detail (Loconto & Hatanaka, 2018). In the view of many AFN partners, these democratic and horizontal agreements should replace "organic," "bio-," or "eco-" labels, enacted by public authorities in a top-down process that usually burdens small actors with high costs and heavy bureaucracy that only large companies can afford.

Producer-led networks are also noteworthy. Managers of agricultural parks (Yacamán Ochoa, 2018; Zazo Moratalla & Paül Carril, 2021, for instance) claim to be preserve agricultural land and production on city outskirts to deliver fresh and local food to households, retailers, or even public facilities (schools, hospitals). This associative arrangement is intended to both save costs and increase scale economies of individual farmers and to stretch the scope of fresh food available for buyers, thus reducing their transaction costs. Another possibility is that of collective processing facilities. The legal and sanitary requisites for transforming fresh produce into processed food often lie beyond the reach of very small farmers. But if they jointly invest in a cooperative facility/kitchen that meets all regulations, it becomes possible

to retain added value by making small batches of craft food. Both agricultural parks and collective processing facilities sometimes receive some funding support from local governments. Finally, farmers' individual specialization is also the basis of joint online sale platforms which connect households and local producers.

Consumer-led networks start with the most elementary arrangement: self-supply through urban and community gardens where neighbours raise vegetables for their own consumption or for delivery outside the market (bartering, gift). Urban gardening, and urban agriculture as a whole (Espinosa Seguí, Maćkiewicz, & Rosol, 2017; Poniży et al., 2021; Tornaghi, 2014), has quickly spread over European cities during the last two decades or so. A grassroot initiative at their beginning, they often become one more piece in the toolbox of urban policymakers that strive for a greener city. Cooperative supermarkets are a far more sophisticated alternative fix. To escape from the tyranny of big supermarkets, conscious consumers—often middle-income ones—set up a cooperative shop where they can buy a wide range of fresh and processed food supplied by alternative-local-organic farmers and processors. According to cooperative principles, supermarket management is ruled by democratic, transparent, and participatory procedures.

Retail-led alternative networks take several forms as well. Organic-only food outlets have become commonplace in European cities, according to the usual market-led process. First movers used to be environmental activists or health-concerned people who sold the very few organic food items available decades ago. Nowadays, such small independent shops hardly compete with organic food sold in hegemonic supermarkets or franchised shops. However, the so-called *food hubs* are conceived as an autonomous fix for those alternative food actors who strive for keeping apart from mainstream food retailers. Food hubs gather fresh and processed food from small independent farmers, craft processors, or collective processing facilities (LeBlanc, Conner, McRae, & Darby, 2014; Motzer, 2019). Such food is handled, stored, packaged, and delivered to end consumers, either households or foodservice outlets. Producers do not need to drop their boxes at every purchaser's door any longer. Instead, they drop their stuff at food hubs, which take the responsibility of solving the last mile problem. For instance, restaurants which claim to cook "good" food use to find food hubs extremely useful and convenient.

This broad overview of AFNs is crowded with small actors, in terms of land ownership, production volume, staff, sales turnover, or geographical reach. Big players have been mentioned just as latecomers who capitalize on growing demand for healthy, natural, and local food. This process has been labeled as "conventionalization" by Guthman (2004) when she describes the ability of the big food to co-opt new societal demands. This threat from "the system"—a topic further discussed in the next section—has encouraged some alternative players to scale up their operations all along the alternative food value chain. The usual way to develop this new path is the foundation of social firms ruled by the principles of co-operativism, a formula with a long tradition as an alternative to capitalism (Ajates González, 2017, 2020). Most of these companies remain specialized in one single stage of the value chain, but in some cases evolve towards a sort of vertical integration. Not only individual consumers, but organic retailers, mainstream

supermarkets, and the rocketing increase of responsible and lifestyle-prone restaurants (vegan, vegetarian, organic, local), are the market target of these new actors.

Another powerful leverage for scaling up alternative food supply up is the support of the public sector. I have already underlined some of these interventions (agricultural parks, collective food processing). Allowance, or active promotion, for urban gardening is a must in current city planning. But there is wide consensus (FAO, 2021) that public procurement is the true key to boosting sustainable food—and any kind of bioregional food future—beyond its current environmental, social, and economic boundaries. Canteens at school, campus, hospital, or any other public facility constitute a substantial amount of food consumption. Even food banks should consider offering safe and nutritious food to the excluded.

Public regulation and contracts may positively discriminate the purchase of every kind of “green” source. Such policies, currently active in many European cities (Neto et al., 2016), may shape cooperation among producers to fulfil this strategic market niche. A closer connection between cities and their rural surroundings under new schemes for territorial governance should enhance the transition towards a bioregional food future (Blay-Palmer et al., 2018; Houdart, Le Bel, & Lardon, 2020; Wallet & Bouroullec, 2021).

Despite their diversity, all the alternative initiatives and networks already mentioned share the common features listed above to challenge the corporate food regime. Regarding product, they rely on sustainable primary production, mostly organic or agroecological. Regarding process, they prefer small scale stakeholders connected by cooperative, democratic, and participatory governance rules. Regarding place, food miles reduction is the overarching criterion to allow engagement in these food fixes, which their promoters claim to be anchored in geographical proximity. Loosely defined, see Feagan (2007) or Reckinger (2022) for an extensive discussion of the term, proximity serves as a gateway to interpersonal trust. The main outcome is supposed to be a sustainable, inclusive, and post-capitalist food system bounded within the limits of the bioregion.

Alternative Food Networks as Prefigurative Endeavors: Dreams and Nightmares

With the description provided in section “[The bioregional scenario](#)”, I was not acknowledging the rich insights about the bioregional scenario that inspire AFNs’ stakeholders’ daily performance. Nor was I highlighting the internal contradictions and fears of these same individuals about the (food) future. In this fourth Section, I am narrowing my focus from AFNs as a whole to the prefigurative experiences of AFN makers, their lived geographies, their vision of an alternative food future, and the legitimization strategies they resort to for overcoming daily constraints posed by the corporate food environment. But it is also necessary to underline their fears about

Table 8.1 An Overview of the Author's Research Background on the Economic Geography of Food

Period	Empirical focus	Theoretical framework
1996–2006	Craft food in inland Spain Wine and meat processing under the protected designation of origin label (PDO)	Industrial districts Innovative milieus Territorial development
2007–2015	Protected designations of origin (PDO) as innovative institutional settings: quality & fine wines Location trends of food industry	Convention theory (orders of worth) Worlds of production
2016–2025	Alternative economic practices: production, distribution, and consumption Recent turn to short food supply chains	Critique of capitalism Community & diverse economies Social and solidarity economies From “food value chains” to “values-based food chains”

Note. Source: Design by author

what the future may look like if the bioregional scenario is colonized by powerful forces from the tech-food and the business-as-usual ones.

I have drawn my empirical material to dive into these topics from a number of sources (Table 8.1). First, I am utilizing my long-term research experience with the agrifood industry (wine, meat), its innovation strategies, and its contribution to rural development in Spain. Second, I am applying more recent research on alternative economic practices in Spanish cities (Sánchez-Hernández, 2019), where I found alternative food networks to be a key node of criticism of capitalism. Semi-structured interviews, questionnaires to members, monitoring of virtual spaces (social networks, blogs), attendance of live activities (fairs, exhibitions, assemblies), and documentary revision provided rich information records. Researchers involved in the ongoing ALISOS project (see footnote on the front page) are developing this initial approach to locate every AFN based in the neighboring Spanish regions of Madrid, a true city-region, and Castilla y León, a sparsely populated inland region deeply committed to the development of a high-end, sustainable, and localized food supply system.

Dreaming of a Bioregional Scenario

Prefiguration is a widely used concept in the study of economic experiments whose actors are claiming to build an alternative to capitalism (Polletta, 1999). Boggs (1977, p. 2, cited in Jeffrey & Dyson, 2021, p. 643) defined prefiguration as “the embodiment, within the ongoing political practice of a movement, of those forms of social relations, decision-making, culture and human experience that are the ultimate goal.” Living today as one wishes everyone else to live in the future forms the core of prefigurative practices. Prefiguration, then, is a strong political claim which consists

of “[...] the self-conscious channelling of energy into modelling the forms of action that are sought to be generalized in the future in circumstances characterized by power, hierarchy, and conflict” (Jeffrey & Dyson, 2021, pp. 643–644).

AFNs, in Allaire’s words, are “the promise of difference” (Allaire, 2021, p. 225), that is, they promise a different present and future. AFNs may be conceived as an attempt to prefigure the bioregional scenario depicted above. Such an attempt, according to the definition of prefiguration, is a political one. AFNs are political endeavors aimed at defining a new political economy and a new political ecology of food. Their threefold challenge (product, process, and place) rests upon a different way of organizing the food system which is political in nature.

Direct democracy is the true alternative AFNs present. The different cases presented in section “[Alternative food networks: A brief outline](#)” all share a deep commitment to the participation of every member of the network. The decision-making process is based on assemblies where everyone can attend, talk, discuss, and vote. Long meetings in search of consensus to avoid exclusionary processes or feelings lie at the organizational heart of AFNs. Voluntary work to keep the project alive, task rotation of every member to avoid specialization, or team work to carry on duties, all reinforce this flat and non-hierarchical model of governance. Quantitative and qualitative data emphasize democracy, participation, and freedom as reasons to engage and stay involved in AFNs.

This alternative organization not only empowers members. AFNs wrap food with a rich web of social, natural, political, and geographical meanings and attributes. These attributes turn fetishized “alternative” food (eco-labels, local labels, branded items) into contextualized and socialized food (Clark, Jablonski, Inwood, Irish, & Freedgood, 2021; Kallio, 2020). Such de-fetishization of food is another important political and social fact because it also opens the door to food’s de-commodification, a by-process with potential consequences in the economic field.

Prefiguration within AFNs, then, defines a new political framework for food. Such a framework, secondly, is not subordinated to the economy, namely the capitalist system. AFNs aim at placing the economy as a tool or instrument to reproduce life on Earth—just the opposite of the economy’s current hegemony in every aspect of human (and natural) life. An alternative economy, then, is instrumental for proceeding towards a bioregional food future. De-fetishized, de-commodified food is no longer the domain of market, competition, and private property. In the AFN mindset, food and feeding fall—or should fall—into the domain of the commons (Vivero-Pol, Ferrando, De Schutter, & Mattei, 2019). Commoning—the process of defining and managing the commons outside of private property, competition, and markets—is another hot topic in the AFN arena, along with water, land, and energy. Of course, commoning of those natural resources critical for humankind is properly aligned with claims for participation, consensus, and food democracy. In the most horizontal AFNs, as a matter of fact, prices are subject to negotiation in assemblies. The goal is to set a “fair” price, one that makes a living for producers and is affordable for consumers. In cooperative supermarkets, partners’ voluntary work reduces the company’s overall costs so as to cut final prices as well. This means that suppliers

do not need to compete with each other on a price basis, whereas consumers can access “alternative” but affordable food.

Turning food into a political issue to divert it from capitalist markets shares the same rationale as those criticising the privatization of education or health care. Cooperation among all stakeholders along the (short) food supply chain redistributes resources and value. This community-led and trust-based mode of economic coordination prefigures a less competitive economy, a less individualistic labor market, and a less hierarchical governance of firms.

Every community needs a territorial attachment to realize itself. The process of food commoning tightens that attachment because food is obviously connected with nature. And the choice of the bioregion as a main source of food increases the linkage even more. Looking after nature becomes self-evident if the nexus democracy-community-environment is as neat as the practice of AFNs underlines.

Therefore, the politicization of food reshapes societal priorities. Democracy, now at the apex of the scale of values, re-locates the economy as a tool, not as a goal. A democratic governance of the economy is the logical consequence, hence heading to a resignification of nature, the place where food comes from.

This bioregional scenario seems to be anchored in cities. AFN-led prefiguration is today a mostly urban process. According to empirical data, it is large cities that are the cradles of AFNs. This somewhat counterintuitive fact seems anchored in several economic, social, and political factors. First, a critical threshold of conscious citizens is easier to reach in large cities. Second, the corporate food regime is even more hegemonic in urban settings, so food criticism is more likely to arise. Third, values and attitudes (health, lifestyle, hedonism, ideology) cognate to “food alternativeness” widen the niche of potential promoters and consumers of AFN; although these people are not as engaged as the foundational activists, they strongly contribute to sustaining the more evolved AFN types (cooperative supermarkets, organic food shops, alternative foodservice), whose members are striving to replace conventional facilities. Fourth, this wider range of AFN in large cities unleashes a sort of cumulative and demonstrative effect which attracts more people. Fifth, when this new urban foodscape (Moragues-Faus & Morgan, 2015), carved out in the cracks of the hegemonic one, catches the attention of local authorities, urban food policies may eventually absorb ideas from the alternative realm. Empirical data from Spain clearly shown that such urban food policies are well settled in larger cities, although the political bias of local governments either boosts or hampers their evolution over time (Sánchez-Hernández & Glückler, 2019; Sánchez-Hernández & Pitarch Garrido, 2019). And sixth, urban food networks (C40 Cities, 2024; Milan Urban Food Policy Pact, 2024; Red de Municipios por la Agroecología, 2024) constitute an excellent resource for individual cities to gain access to better practices and knowledge about the transition to a more sustainable, localized, and fair food system.

The dream of a bioregion that nourishes its population in a long-term equilibrium is, at the moment, prefigured in the more conventional geographical scales of the functional region or the city-region (Blay-Palmer et al., 2018; Vicente-Vicente et al., 2021b; FAO Green Cities Initiative, 2024b). It is the city—its authorities and some of its dwellers—that is now trying to bring about the future. City actors outnumber

rural actors, although those promoting ideas of participation, democracy, consensus, and urban-rural alliances are trying to balance the obvious power unbalances implicit in the bioregional scenario and in its prefigurative practices.

Fearing Other Future Food Scenarios

Two sets of threats are putting the achievement of a bioregional food future at risk: those internal to AFNs and their contradictions, and those external that are derived from the implicit or explicit reaction of the prevailing corporate forces, which back the business-as-usual and the tech-food scenarios. Both sets are, however, connected to the same dilemma: Should AFNs scale up to develop a bioregional future, or are their current small-scale operations capable of replacing the hegemony of the big food?

AFNs' partners usually represent themselves as members of a community. The political challenge described above stems from a strong sense of membership and empowerment, embodied in the institution of consensus as the cornerstone of the decision-making process. Nevertheless, for many AFNs to deliver a larger food portfolio it seems necessary to adopt firm-like management practices: steering boards, labor division, staff recruitment, contracts, ICT tools, registration as legal entities, tax payment... Face-to-face contact fades in this new environment at the expense of the sense of community, and AFNs lose a bit of their alternative identity.

In economic terms, AFNs also need profits to pay daily operation costs. An increase in scale implies higher amounts of profit, thus disturbing price bargaining. Voluntary work on a long-term basis raises burn-out at the end, so capitalist relationships (staff recruiting, wages) pop up as solutions. The concern about the *economic* future thus pollutes the communitarian spirit. Fieldwork in Spain clearly demonstrates that several AFNs are more focused on paying the cost of utilities (power, water, premises, fuel) than on foodscape transformation.

Moreover, a richer food portfolio, attuned to contemporary dietary habits, usually compromises the bioregion's supply potential: AFNs then start to market fair, organic, or agroecological but distant food, thus eroding their foundational principles once more. The bioregion, then, loses ground as the scalar framework of the food future.

This stylized description of the political, economic, and ecological risks that point to AFNs pushes some of its members to strongly reject scaling up. Instead, they use to prefer leaving the group and setting up another one (the "mushrooming" strategy), firmly committed with the alternative way of doing. In their view, scaling-up is a highway to authenticity loss, to "conventionalization" and to final integration in the capitalist food system.

Those AFN members who share the idea of scaling-up argue that it is the only way to slowly replace the corporate foodscape with an alternative one. They believe that it is precisely the (too) small size of most AFNs that makes conventionalization feasible and profitable, as less conscious consumers have difficulty engaging in AFN

for different reasons: a narrow assortment, time availability, higher prices, convenience... Instead, large cooperatives at the production, processing, and retail stages, and positive support from local authorities, hold—they argue—the potential to undermine corporate actors' current hegemony. Decent work, fair contracts and prices, sustainable sourcing, or participatory management should not be at odds with fulfilling conscious consumers' demands.

This endless debate that pervades the alternative arena is influenced by the external pressure from the hegemonic actors of the food system who are also building their own futures. According to the conventionalization thesis (Guthman, 2004; Sánchez-Hernández & Espinosa Seguí, 2020), food corporations have de-politicized and re-fetishized organic and local food through the massive development of labels and brands. Such “healthy” and “sustainable” food is widely available in supermarkets all over Europe. Prices are reasonably affordable, and convenience is maximum. These conventional retailers meet the needs of those potential AFN subscribers mainly interested in their own health. Therefore, it is not necessary to invest in community membership, assemblies, and voluntary work to access to “good” food. Values of sustainability, local commitment, healthy diet, and a greener future for everyone are thus co-opted by the power of corporations and their ability to make profit from every societal demand.

At a higher level of generalization, several AFN fears stem from more than just big-company competition. Their prefigurative practices are supposed to be a political challenge, one capitalism and governments are trying to undermine. Co-optation is but one of “the system's” tools in that direction. Many researchers have mentioned regulation as a powerful guardian of the status quo. Small agroecological producers or processors often find food safety rules and organic standards, for instance, too expensive to meet. Urban gardening is frequently harassed by real estate and land property acts, and municipality-led urban gardens are usually more focused on leisure and “urban greening” than on feeding the city differently (Sánchez-Hernández & Glückler, 2019). Complaints about tax elusion and unfair competition by urban gardens and farmers' markets on the part of groceries and other retailers are also not unusual.

Hence, according to this narrative of fear, the state-capitalism nexus, founded upon private property, taxation, and regulation, reacts upon the political content of AFNs. A promised future made of cooperation, commoning, commitment to nature, and attachment to bioregions defines an alternative political economy and ecology. Nevertheless, external and internal factors make prefiguration very difficult in capitalist societies—accordingly, the bioregional food scenario remains likely to wield less influence compared to the power of corporations and technology.

What's Next?

In this chapter, I have discussed four scenarios for a future food system in Europe. By combining the role of firms, technologies, markets, and regulation, four possibilities emerge: business-as-usual, tech-food, bioregional, and eco-global, each one with a geography of its own. However, the most likely future for food in Europe is a hybrid one under the rule of the business-as-usual framework and with a high degree of geographical variation. I have scrutinized the bioregional scenario in depth because its proponents demand an alternative food future based on community-based economic arrangements, small-scale (agro)ecological production, distribution, and consumption of food, and attachment to the local and regional scale.

The alternative food networks that underpin the bioregional scenario thus challenge the hegemony of the corporate food regime led by powerful global companies. They prefigure instead a future made of a closer and tighter bonds between society, food, and territory. Such a future is threatened by the internal divide in the alternative arena between “scaling-up” and “mushrooming” strategies to cope with external pressure from conventional actors which supply affordable “good food” devoid of the meanings and values that inspire alternative networks and their futures.

Beyond internal contradictions and external threatens, the bioregional standpoints—rooted in the eco-catastrophist narrative—play a significant role in driving the future of the European food system. Despite its niche nature, bioregionalism and alternative food networks have been fertile labs developing new ideas and practices that challenge the food market status quo. The current market share of “eco-” and “bio-” foods, labels, and shops, the growing number of farmers’ markets, the quest for locally sourced food in foodservice and supermarkets, or responsible public food procurement schemes all seem hard to imagine without the continuous pressure of the variegated initiatives from the bioregional realm. The same applies to the enactment of food and agriculture regulations in the European Union (and in many European cities as well) whose policymakers subscribe to principles of localness, fairness, and sustainability. Tech-food itself may be considered a market-led response to societal demands (veganism) and global concerns about water scarcity and livestock-driven greenhouse gas emissions. Therefore, food scenarios should not be regarded as autonomous entities, but as interlocking webs of action, reaction, competition, and reconfiguration of the European food system. Irrespective of their size and power, all four scenarios play a role in shaping current individual beliefs, collective behaviors, and public policies related to food.

This chapter is but a preliminary attempt to define food scenarios in the European geographical context. Nevertheless, the reflection about food futures may benefit from insights from several theoretical and conceptual standpoints intended to shed light on the relationship between the present and the future. Of course, researchers of food futures have already resorted to the theory of socio-technical transition to frame the potential of AFNs to grow at the expense of corporate food players. The same applies to degrowth studies.

But it seems also possible to merge scenario-thinking and multilevel perspective to achieve a deeper understanding of the true possibilities of the bioregional scenario to increase its influence and, perhaps, to feed Europe with a degrowing consumption of resources. Those adopting this line of reasoning should not forget the inextricable nexus between food, water, housing, and energy. It accordingly seems quite narrow-minded to forecast food futures in isolation from the broader field of the ecological transition that encompasses the material foundations of human life. Applying a multi-sectorial forecasting process that places food in a wider network of basic human needs might lead to the conception of stronger and more comprehensive scenarios.

One last question is worth asking. Most alternative food networks were settled by grassroots movements critical of capitalism. Food was chosen as a battlefield to fight the economic, social, and political structures involved in the reproduction of capitalism. Terms like “change,” “autonomy,” “autogestion,” “revolution,” or even “rebellion” were commonplace in the onset of AFNs. Why have these words—and ideas—lost momentum in favor of “transition,” a softer, milder, and probably catch-all term? Is this, perhaps, a new symptom of capitalism’s endless ability to absorb threatening societal demands and make more money? In this particular field of food, is “transition” the harbinger of those market- and technology-based scenarios?

References

- Ajates González, R. (2020). An integrated conceptual framework for the study of agricultural cooperatives: From repolitisation to cooperative sustainability. *Journal of Rural Studies*, 78, 467–479. <https://doi.org/10.1016/j.jrurstud.2020.06.019>
- Ajates González, R. (2017). Going back to go forwards? From multi-stakeholder cooperatives to open cooperatives in food and farming. *Journal of Rural Studies*, 53, 278–290. <https://doi.org/10.1016/j.jrurstud.2017.02.018>
- Allaire, G. (2021). Alternative food networks and the socialization of food. In A. Maurer (Ed.), *Handbook of economic sociology for the 21st century: New theoretical approaches, empirical studies and developments* (pp. 221–235). Cham: Springer. https://doi.org/10.1007/978-3-030-61619-9_15
- Arnell, A., Barbosa, H., Benton, T., Calvin, K., Calvo, E., Connors, S., ... & Zommers, Z. (2019). *Climate change and land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems: Summary for policymakers*. Geneva, Switzerland: IPCC. Retrieved from <https://www.ipcc.ch/site/assets/uploads/2019/08/Fullreport-1.pdf>
- Atkins, P., & Bowler, I. (2001). *Food in society: Economy, culture, geography*. London: Arnold.
- Bentham, J., Bowman, A., de la Cuesta, M., Engelen, E., Ertürk, I., Folkman, P., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M., & Williams, K. (2013). *Manifesto for the foundational economy* (CRESC Working Paper 131). Manchester: Centre for Research on Socio-Cultural Change. Retrieved from <https://foundationaleconomycom.files.wordpress.com/2017/01/wp131.pdf>
- Blay-Palmer, A., Santini, G., Dubbeling, M., Renting, H., Taguchi, M., & Giordano, T. (2018). Validating the city region food system approach: Enacting inclusive, transformational city region food systems. *Sustainability*, 10(5), 1680. <https://doi.org/10.3390/su10051680>

- Burke-Shyne, S., Gallegos, D., & Williams, T. (2021). 3D food printing: Nutrition opportunities and challenges. *British Food Journal*, 123(2), 649–663. <https://doi.org/10.1108/BFJ-05-2020-0441>
- Clark, J. K., Jablonski, B. B. R., Inwood, S., Irish, A., & Freedgood, J. (2021). A contemporary concept of the value(s)-added food and agriculture sector and rural development. *Community Development*, 52, 186–204. <https://doi.org/10.1080/15575330.2020.1854804>
- C40 Cities (2024). *Food systems*. Retrieved July 23, 2024 from <https://www.c40.org/what-we-do/scaling-up-climate-action/food-systems/>
- de Boeck, S., Bassens, D., & Ryckewaert, M. (2019). Making space for a more foundational economy: The case of the construction sector in Brussels. *Geoforum*, 105, 67–77. <https://doi.org/10.1016/j.geoforum.2019.07.011>
- de Cózar Escalante, J. M. (2019). *El Antropoceno: Tecnología, naturaleza, y condición humana* [The Anthropocene; Technology, nature, and the human condition]. Madrid: Los Libros de la Catarata.
- Díaz-Méndez, C., & Gómez-Benito, C. (2010). Nutrition and the Mediterranean diet: A historical and sociological analysis of the concept of a “healthy diet” in Spanish society. *Food Policy*, 35(5), 437–447. <https://doi.org/10.1016/j.foodpol.2010.04.005>
- Espinosa Seguí, A., Maćkiewicz, B., & Rosol, M. (2017). From leisure to necessity: Urban allotments in Alicante province, Spain, in times of crisis. *ACME. An International E-Journal for Critical Geographies*, 16(2), 276–304. Retrieved from <https://acme-journal.org/index.php/acme/article/view/1402>
- European Commission. (2024a). *Biodiversity strategy for 2030*. Retrieved July 23, 2024, from https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en
- European Commission. (2024b). *Farm to fork strategy for a fair, healthy and environmentally-friendly food system*. Retrieved July 23, 2024, from https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en
- Fairtrade Ibérica. (2024). El Comercio Justo como vía para alcanzar la Justicia Social y Medioambiental [Fair trade as a way to achieve environmental and social justice]. Retrieved July 23, 2024, from <https://www.fairtrade.es/>
- Feagan, R. (2007). The place of food: Mapping out the ‘local’ in local food systems. *Progress in Human Geography*, 31(1), 23–42. <https://doi.org/10.1177/0309132507073527>
- Food and Agriculture Organization of the United Nations (FAO). (2017). *Water for sustainable food and agriculture: A report produced for the G20 presidency of Germany*. Rome: FAO. Retrieved from <https://www.developmentaid.org/api/frontend/cms/file/2023/02/i7959e.pdf>
- Food and Agriculture Organization (FAO). (2021). *Public food procurement for sustainable food systems and healthy diets—Volume 1*. Rome: FAO, Alliance of Bioersity International and CIAT and Universidade Federal do Rio Grande do Sul. <https://doi.org/10.4060/cb7960en>
- Food and Agriculture Organization of the United Nations (FAO). (2024a). *Agroecology knowledge hub*. Retrieved July 23, 2024, from <https://www.fao.org/agroecology/home/en/>
- Food and Agriculture Organization of the United Nations (FAO). (2024b). *Green cities initiative*. Retrieved July 23, 2024, from <https://www.fao.org/in-action/food-for-cities-programme/en/>
- Food, Farming and Countryside Commission (FFCC). (2022). *An agroecological UK in 2050: What does food and farming look like after the transition?* Bristol: FFCC. Retrieved from <https://ffcc.co.uk/library/an-agroecological-uk-2050>
- Foundational Economy Collective. (2020). *What comes after the pandemic? A ten-point platform for foundational renewal*. Manchester: Foundational Economy Collective. Retrieved from <https://foundationaleconomy.com/wp-content/uploads/2020/03/what-comes-after-the-pandemic-fe-manifesto-005.pdf>
- Fuller, D., Jonas, A. E. G., & Lee, R. (Eds.). (2010). *Interrogating alterity: Alternative economic and political spaces*. London: Routledge.
- Gibson-Graham, J. K. (2008). Diverse economies: Performative practices of “other worlds”. *Progress in Human Geography*, 32(5), 613–632. <https://doi.org/10.1177/0309132508090821>

- Gibson-Graham, J. K. (2014). Rethinking the economy with thick description and weak theory. *Current Anthropology*, 55(S9), 147–153. <https://doi.org/10.1086/676646>
- González de Molina, M., & López-García, D. (2021). Principles for designing agroecology-based local (territorial) agri-food systems: A critical revision. *Agroecology and Sustainable Food Systems*, 45(7), 1050–1082. <https://doi.org/10.1080/21683565.2021.1913690>
- Guthman, J. (2004). The trouble with “organic lite” in California: A rejoinder to the “conventionalisation” debate. *Sociologia Ruralis*, 44(3), 301–316. <https://doi.org/10.1111/j.1467-9523.2004.00277.x>
- Houdart, M., Le Bel, P.-M., & Lardon, S. (2020). Repenser l’analyse de la participation dans les dispositifs publics de développement territorial: Illustration tirée de l’élaboration d’un projet alimentaire territorial [Rethinking the analysis of participation in public territorial development schemes: Illustration drawn from the development of a territorial food project]. *Géographie, Économie, Société*, 22(2), 159–182. <https://doi.org/10.3166/ges.2020.0019>
- House, J. (2018). Insects as food in The Netherlands: Production networks and the geographies of edibility. *Geoforum*, 94, 82–93. <https://doi.org/10.1016/j.geoforum.2018.05.011>
- International Federation of Organic Agriculture Movements (IFOAM). (2021). *Reflect, reunite, revitalize: Annual report 2020: Consolidated annual report of IFOAM-Organics International & its Action Group*. Bonn: IFOAM-Organics International. Retrieved from <https://www.ifoam.bio/sites/default/files/2021-06/Annual%20Report%202020.pdf>
- International Panel of Experts on Sustainable Food Systems (IPES-Food). (2022). *The politics of protein: Examining claims about livestock, fish, “alternative proteins” and sustainability*. Brussels: IPES-Food. Retrieved from https://www.ipes-food.org/_img/upload/files/PoliticsOfProtein.pdf
- Jackson, T. (2011). *Prosperity without growth: Economics for a finite planet*. London: Routledge.
- Jeffrey, C., & Dyson, J. (2021). Geographies of the future: Prefigurative politics. *Progress in Human Geography*, 45(4), 641–658. <https://doi.org/10.1177/0309132520926569>
- Joose, S., Olders, P., & Boonstra, W. J. (2021). Why are geographical indications unevenly distributed over Europe? *British Food Journal*, 123(13), 490–510. <https://doi.org/10.1108/BFJ-01-2021-0107>
- Kallio, G. (2020). A carrot isn’t a carrot isn’t a carrot: Tracing value in alternative practices of food exchange. *Agriculture and Human Values*, 37, 1095–1109. <https://doi.org/10.1007/s10460-020-10113-w>
- Kirwan, J. (2006). The interpersonal world of direct marketing: Examining conventions of quality at UK farmers’ markets. *Journal of Rural Studies*, 22(3), 301–312. <https://doi.org/10.1016/j.jrurstud.2005.09.001>
- Lange, B., Hülz, M., Schmid, B., & Schulz, C. (Eds.). (2022). *Post-growth geographies: Spatial relations of diverse and alternative economies*. Bielefeld: transcript.
- La Via Campesina (2024). *La via campesina* (home page). Retrieved from <https://viacampesina.org/es/>
- LeBlanc, J. R., Conner, D., McRae, G., & Darby, H. (2014). Building resilience in nonprofit food hubs. *Journal of Agriculture, Food Systems, and Community Development*, 4(3), 121–135. <https://doi.org/10.5304/jafscd.2014.043.005>
- Leyshon, A., Lee, R., & Williams, C. C. (Eds.). (2003). *Alternative economic spaces*. London: Sage.
- Leyshon, A., Willis, K., & Robbins, P. (Eds.) (2006). Geographies of environmental justice [Special issue]. *Geoforum*, 37(5).
- Li, M., Jia, N., Lenzen, M., Lenzen, M., Malik, A., Wei, L., Jin, Y., & Raubenheimer, D. (2022). Global food-miles account for nearly 20% of total food-systems emissions. *Nature Food*, 3, 445–453. <https://doi.org/10.1038/s43016-022-00531-w>
- Loconto, A., & Hatanaka, M. (2018). Participatory guarantee systems: Alternative ways of defining, measuring, and assessing “sustainability”. *Sociologia Ruralis*, 58(2), 412–432. <https://doi.org/10.1111/soru.12187>

- Macías Vázquez, A., & Morillas del Moral, J. A. (2022). Ethical values in a post-industrial economy: The case of the organic farmers' market in Granada (Spain). *Journal of Agricultural and Environmental Ethics*, 35, 9. <https://doi.org/10.1007/s10806-022-09879-2>
- Malm, A. (2016). *Fossil capital: The rise of steam power and the roots of global warming*. London: Verso.
- Martynovich, M., Hansen, T., & Lundquist, K.-J. (2023). Can foundational economy save regions in crisis? *Journal of Economic Geography*, 23(3), 577–599. <https://doi.org/10.1093/jeg/lbac027>
- McMichael, P. (2009). A food regime genealogy. *The Journal of Peasant Studies*, 36(1), 139–169. <https://doi.org/10.1080/03066150902820354>
- Milan Urban Food Policy Pact (2024). Local solutions for global issues. Retrieved July 23, 2024, from <https://www.milanurbanfoodpolicypact.org/>
- Moragues-Faus, A. (2020). Towards a critical governance framework: Unveiling the political and justice dimensions of urban food partnerships. *The Geographical Journal*, 186(1), 73–86. <https://doi.org/10.1111/geoj.12325>
- Moragues-Faus, A., & Morgan, K. (2015). Reframing the foodscape: The emergent world of urban food policy. *Environment & Planning A: Economy and Space*, 47(7), 1558–1573. <https://doi.org/10.1177/0308518X15595754>
- Motzer, N. (2019). “Broad but not deep”: Regional food hubs and rural development in the United States. *Social & Cultural Geography*, 20(8), 1138–1159. <https://doi.org/10.1080/14649365.2018.1428822>
- Mouat, M. J., Prince, R., & Roche, M. M. (2019). Making value out of ethics: The emerging economic geography of lab-grown meat and other animal-free food products. *Economic Geography*, 95(2), 136–158. <https://doi.org/10.1080/00130095.2018.1508994>
- Neto, B., Rodríguez Quintero, R., Wolf, O., Sjögren, P., Lee, P., & Eatherley, D. (2016). *Revision of the EU green public procurement criteria for food and catering services*. EUR 28050. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2791/099130>
- Parrott, N., Wilson, N., & Murdoch, J. (2002). Spatializing quality: Regional protection and the alternative geography of food. *European Urban and Regional Studies*, 9(3), 241–261. <https://doi.org/10.1177/096977640200900304>
- Peters, C. J., Bills, N. L., Lembo, A. J., Wilkins, J. L., & Fick, G. W. (2009). Mapping potential foodsheds in New York State: A spatial model for evaluating the capacity to localize food production. *Renewable Agriculture and Food Systems*, 24(1), 72–84. <https://doi.org/10.1017/S1742170508002457>
- Polletta, F. (1999). “Free spaces” in collective action. *Theory and Society*, 28, 1–38. <https://doi.org/10.1023/A:1006941408302>
- Ponizy, L., Latkowska, M. J., Breuste, J., Hursthouse, A., Joimel, S., Külvik, M., Leitão, T. E., Mizgajski, A., Voigt, A., Kacprzak, E., Maćkiewicz, B., & Szczepańska, M. (2021). The rich diversity of urban allotment gardens in Europe: Contemporary trends in the context of historical, socio-economic and legal conditions. *Sustainability*, 13(19), 11076. <https://doi.org/10.3390/su131911076>
- Reckinger, R. (2022). Values-based territorial food networks: Qualifying sustainable and ethical transitions of alternative food networks. *Regions & Cohesion*, 12(3), 78–109. <https://doi.org/10.3167/reco.2022.120305>
- Red de Municipios por la Agroecología (2024). Red de entidades locales con políticas alimentarias basadas en la agroecología [Network of public entities with agroecology-based food policies]. Retrieved July 23, 2024, from <https://www.municipiosagroeco.red/>
- Sánchez-Hernández, J. L. (2009). Redes alimentarias alternativas: Concepto, tipología y adecuación a la realidad española [Alternative food networks: Concept, typology, and adaptation to the Spanish context]. *Boletín de la Asociación de Geógrafos Españoles*, 49, 185–207. Retrieved September 17, 2022, from <https://bage.age-geografia.es/ojs/index.php/bage/article/view/781>
- Sánchez-Hernández, J. L. (Coord.). (2019). *Espacios y prácticas económicas alternativas en las ciudades españolas* [Alternative economic spaces and practices in Spanish cities]. Cizur Menor:

- Thomson-Reuters-Aranzadi. Retrieved September 18, 2022, from <http://hdl.handle.net/10366/144026>
- Sánchez-Hernández J. L. (2024). Sustainable food networks, hybridization and values: a case study in Castilla y León (Spain). *Frontiers in Sustainable Food Systems*, 8, 1392013. <https://doi.org/10.3389/fsufs.2024.1392013>
- Sánchez-Hernández, J. L., & Glückler, J. (2019). Alternative economic practices in Spanish cities: From grassroots movements to urban policies? An institutional perspective. *European Planning Studies*, 27(12), 2450–2469. <https://doi.org/10.1080/09654313.2019.1644295>
- Sánchez-Hernández, J. L., & Pitarch Garrido, M. D. (2019). Las modalidades, el alcance y los límites del giro alternativo de las políticas urbanas en España [Varieties, reach, and limits of the alternative turn in Spanish urban policies]. In J. L. Sánchez Hernández (Coord.), *Espacios y prácticas económicas alternativas en las ciudades españolas* (pp. 277–295). Cizur Menor: Thomson-Reuters-Aranzadi.
- Sánchez-Hernández, J. L., & Espinosa Seguí, A. (2020). ¿Alternativa o adaptación? Los grupos de consumo de alimentos ecológicos en el área urbana de Alicante [Alternative or adaptation? Consumer cooperatives of organic food in the Alicante urban area]. *Scripta Nova: Revista Electrónica de Geografía y Ciencias Sociales*, 24, 638. <https://doi.org/10.1344/sn2020.24.27056>
- Sanz-Cañada, J., Sánchez-Hernández, J. L., & López-García, D. (2023). Reflecting on the concept of local agroecological food systems. *Land*, 12(6), 1147. <https://doi.org/10.3390/land12061147>
- Schafraan, A., McDonald, C., López Morales, E., Akyelken, N., & Acuto, M. (2018). Replacing the services sector and three-sector theory: Urbanization and control as economic sectors. *Regional Studies*, 52(12), 1708–1719. <https://doi.org/10.1080/00343404.2018.1464136>
- Schulz, C. (2025). Economic geographies of post-growth. In J. Glückler, M. Garschagen, & R. Panitz (Eds.), *Placing the future* (pp. 167–184). Knowledge and Space: Vol. 20. Cham: Springer. https://doi.org/10.1007/978-3-031-76841-5_9
- Sexton, A. E. (2020). Food as software: Place, protein, and feeding the world Silicon Valley-style. *Economic Geography*, 96(5), 449–469. <https://doi.org/10.1080/00130095.2020.1834382>
- Soja, E. W. (2010). *Seeking spatial justice*. Minneapolis, MN: Minnesota University Press.
- Tornaghi, C. (2014). Critical geography of urban agriculture. *Progress in Human Geography*, 38(4), 551–567. <https://doi.org/10.1177/0309132513512542>
- United Nations Environment Programme (UNEP). (2021). *Food waste index report 2021*. Nairobi: UNEP. Retrieved from <https://www.unep.org/resources/report/unep-food-waste-index-report-2021>
- URGENCI. (2024). URGENCI (main page). Retrieved July 23, 2024, from <https://urgenci.net/>
- Van der Ploeg, J. D. (2021). The political economy of agroecology. *The Journal of Peasant Studies*, 48(2), 274–297. <https://doi.org/10.1080/03066150.2020.1725489>
- Vara-Sánchez, I., Gallar-Hernández, D., García-García, L., Morán-Alonso, N., & Moragues-Faus, A. (2021). The co-production of urban food policies: Exploring the emergence of new governance spaces in three Spanish cities. *Food Policy*, 103, 102120. <https://doi.org/10.1016/j.foodpol.2021.102120>
- Vicente-Vicente, J. L., Sanz-Sanz, E., Napoléone, C., Moulery, M., & Piorr, A. (2021a). Foodshed, agricultural diversification and self-sufficiency assessment: Beyond the isotropic circle foodshed: A case study from Avignon (France). *Agriculture*, 11(2), 143. <https://doi.org/10.3390/agriculture11020143>
- Vicente-Vicente, J. L., Doernberg, A., Zasada, I., Ludlow, D., Staszek, D., Bushell, J., Hainoun, A., Loibl, W., & Piorr, A. (2021b). Exploring alternative pathways toward more sustainable regional food systems by foodshed assessment: City region examples from Vienna and Bristol. *Environmental Science & Policy*, 124, 401–412. <https://doi.org/10.1016/j.envsci.2021.07.013>
- Vivero-Pol, J. L., Ferrando, T., De Schutter, O., & Mattei, U. (Eds.). (2019). *The Routledge handbook of food as a commons*. New York: Routledge.
- Wallet, F., & Bouroullec, M. D. M. (2021). Politique publique et développement des chaînes alimentaires courtes de proximité: Une analyse des PDR de la Région Occitanie [Public policy

- and the development of short local chains: An analysis of the RDPs in the Occitanie Region]. *Développement Durable & Territoires*, 12(1). <https://doi.org/10.4000/developpementdurable.18989>
- Whatmore, S., & Thorne, L. B. (1997). Nourishing networks: Alternative geographies of food. In D. Goodman & M. J. Watts (Eds.), *Globalising food: Agrarian questions and global restructuring* (pp. 211–224). London: Routledge.
- Winter, M. (2003). Embeddedness, the new food economy and defensive localism. *Journal of Rural Studies*, 19(1), 23–32. [https://doi.org/10.1016/S0743-0167\(02\)00053-0](https://doi.org/10.1016/S0743-0167(02)00053-0)
- Yacamán Ochoa, C. (2018). El Parque Agrario: Planificación estratégica para la preservación y gestión de los espacios agrarios metropolitanos [Agricultural Parks: Strategic planning for the conservation and management of metropolitan agrarian spaces]. *Ciudad y Territorio: Estudios Territoriales*, 50(198), 787–704. Retrieved from <https://recyt.fecyt.es/index.php/CyTET/article/view/76700>
- Zademach, H.-M., & Hillebrand, S. (Eds.). (2013). *Alternative economies and spaces: New perspectives for a sustainable economy*. Bielefeld: transcript.
- Zazo Moratalla, A., & Paül Carril, V. (2021). What is an agricultural park? Observations from the Spanish experience. *Land Use Policy*, 112, 105584. <https://doi.org/10.1016/j.landusepol.2021.105584>

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