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Rethinking alternative food networks: unpacking key attributes and overlapping concepts

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ABSTRACT

Alternative Food Networks (AFN) have garnered significant attention recently, yet the concept remains fuzzy. This paper examines the evolving interpretations of AFN over the past two decades, aiming for conceptual clarity. Using a three-stage approach to systematic literature reviews, we conducted a rigorous synthesis of existing research. Through concept and thematic analyses, we identified key attributes and recurring themes associated with AFN. While a conceptual consensus remains elusive, diverse definitions often share essential attributes such as "alterity," "proximity," "connectedness," and "sustainability." Additionally, we find that AFN and short food supply chains generally describe the same phenomenon, with civic food networks viewed as a subset of AFN, emphasizing community engagement and civic participation. Notably, AFN are not always local food systems, nor do local food systems always involve AFN. To address these nuances, we present guiding questions to assist researchers in studying and reporting on AFN. This work clarifies the core attributes of AFN and offers a roadmap for focused inquiries. Ultimately, our findings aim to guide decision-making processes, ensuring that efforts to support AFN are rooted in a nuanced understanding of their complexities and potential for driving change in food systems.

KEYWORDS

Alternative food networks; short food supply chains; local food systems; civic food networks

SUSTAINABLE DEVELOPMENT GOALS

SDG 2: Zero hunger; SDG 12: Responsible consumption and production

Introduction

The origin of the concept of Alternative Food Networks (AFN) is difficult to trace, but according to Letelier et al. (2021, 187) it "emerged in the 1990s to describe networks of production, distribution and consumption of food which stood as alternatives to dominant or conventional food systems." In this context, the conventional food system can be understood as one based on large-scale, highly mechanized, and industrialized agriculture with an increased use of monocultures, fertilizers and pesticides (Beus and Dunlap

1990). Conventional food systems are also characterized by long food supply chains encompassing many nodes and food miles, which usually include supermarkets as outlets for final consumers (Ericksen 2007). Whilst this model is not widespread, it is dominant in developed countries and spreading rapidly. In contrast, AFN have been linked to broader concepts such as locality, quality, embeddedness, and sustainability (Tregear 2011). Farmers' markets, community-supported agriculture, box schemes, cooperatives, farm shops and other initiatives have been grouped under this umbrella (Bazzani and Canavari 2013; Michel-Villarreal et al. 2019).

Despite the optimistic vision surrounding AFN, several critiques highlight their limitations. Critics argue that AFN often struggle with scalability and impact, questioning whether these initiatives can effectively address the broad issues inherent in conventional food systems (Kump and Fikar 2021). Furthermore, as AFN gain popularity, there is a risk of co-optation, where large corporations may adopt AFN principles superficially, potentially undermining their original values and goals (Ajates 2021). This heightens the potential for unfair competition, wherein the "false" AFN undermine the more "authentic" ones (Belletti and Marescotti 2020). Additionally, some AFN face challenges related to accessibility and inclusivity, with concerns that they may reinforce class and geographical exclusions for a range of stakeholders, including producers and consumers (Goszczyński and Śpiewak 2023; Turkkan 2023). These critiques emphasize the need for a more critical examination of AFN to ensure they fulfil their intended promise of sustainable and equitable food systems.

Against this backdrop, some fundamental questions arise: Why do scholars use AFN to refer to such diverse initiatives with arguably very different rationales and outcomes? What commonalities justify grouping these initiatives under a single term, and how do they differ from one another? AFN have created new heterogeneous economic and social spaces for production and trading of food with special qualifications such as organic, local, specialty, fair trade, and sustainable, which are different from those of products supplied by the conventional food supply chain (Goodman, DuPuis, and Goodman 2012). This promise of "difference" (Le Velly 2019) has attracted plenty of research into the potential tangible and intangible benefits. Yet, due to the ambiguity of the concept, many diverse food initiatives have been described as AFN in the literature, without a clear reflection on the nature of their "alterity." In many cases, such initiatives are uncritically deemed to be "good" or "sustainable" without a comprehensive analysis of how exactly they challenge unsustainable practices of conventional food systems (Forssell and Lankoski 2015).

Although numerous definitions have emerged over the years, Tregear (2011) recognized a lack of clarity with regard to the overall concept of AFN, suggesting that the concept is universally used to describe systems that differ from the mainstream and is usually defined by what "it is not," instead of



what it is. The author called for greater conceptual transparency in AFN studies to minimize risks of misunderstandings between scholars from different disciplines and of varied perspectives, and emphasized the importance of greater clarity and transparency to ensure that AFN concepts continue to be "genuinely useful building blocks for explaining real world phenomena, rather than somewhat fuzzy abstractions" (Tregear 2011, 428).

The need for conceptual clarity

To this day, conceptual ambiguity remains a challenge, and the literature reflects an ongoing recognition of the need for greater conceptual clarity regarding the concept of AFN (De Bernardi et al. 2020; de Souza 2020; Gori and Castellini 2023). This is compounded with a tendency to use AFN and other concepts interchangeably, including "short food supply chains" (SFSC), "civic food networks" (CFN) and "local food networks." Over time, the initial traits of AFN have undergone evolution, expanding, and diversifying into various typologies. Today, there is a discernible tendency toward the dilution, if not actual erosion, of the original ecological, ethical, and political values and objectives. Concurrently, there is a growing emphasis on purely economic objectives (Belletti and Marescotti 2020; Sonnino and Marsden 2006).

Two main responses to address the current lack of conceptual clarity have been identified in the literature (Wilson 2013). On the one hand, some authors have attempted a more comprehensive qualification of what is meant by "alternative" through a characterization of different degrees or types of alterity. The characterization of "weaker" and "stronger" proposed by Watts, Ilbery, and Maye (2005) is an example of this. A second response has been to move away from the overall concept of AFN by proposing different conceptual or analytical frameworks that can better capture the complexities of "alternative" food spaces (Wilson 2013). For instance, Renting, Marsden, and Banks (2003) proposed the concept of Short Food Supply Chains (SFSCs) as a substitute for AFN, and as a response to the need for more specific concepts. Others claim that it would be more appropriate to speak of "civic food networks" (Renting, Schermer, and Rossi 2012) or "autonomous food spaces" (DiVito Wilson 2013) to avoid the fuzziness of the AFN concept. More recently, Le Velly (2019) argued in favor of retaining the alternative/conventional pair, but proposed to see AFN as "projects," where projects refer to the reasons and ends that orient the action of collectives toward a desired future.

The persistent ambiguity in defining AFN stems from a lack of conceptual clarity, which leads to conflations and an inconsistent understanding of their key attributes. Yet, clearly bounding and characterizing phenomena under study has been recognized as a crucial step in research, as it establishes a shared understanding among researchers and ensures clarity, accuracy and transferability of findings (Stichler 2018). While various definitions highlight attributes like locality, sustainability, and quality, there is no clear, unified framework that adequately captures the fundamental attributes of AFN and distinguishes them from conventional food systems. Clear and well-defined concepts are essential for establishing a shared understanding among scholars, policymakers, practitioners, and other stakeholders. Without conceptual clarity around what constitutes AFN, progress is hindered, making it challenging to accurately assess their impacts and potential within food systems.

Moreover, the diverse initiatives classified as AFN often lack a thorough critical analysis of their "alterity" or how they differ from traditional food systems. To fully grasp the complexities of AFN, we must engage in a more nuanced examination of their unique characteristics. Without such reflection, critical inquiry, and transparency, we risk diminishing the authentic efforts of producers, consumers, and broader civil society working toward innovative food production and consumption models rooted in principles of difference, change, and sustainability. It is vital to deepen our understanding of the "alterity" of AFN and to enhance transparency in how these initiatives are reported in the literature. By doing so, we can ensure that the contributions and challenges of AFN are accurately represented and supported within the broader discourse on food systems.

Thus, the aim of this paper is to conduct an extensive review of AFN scholarship and to apply principles of concept analysis methodology (Koop and Lodge 2017; Walker and Avant 2011) to identify and dissect the different definitions given to the concept of AFN over the years, providing a thorough examination of their nuances through conceptual clarification. Conceptual clarification involves defining a concept more clearly by resolving ambiguities, identifying fundamental attributes, and distinguishing it from related or overlapping concepts (Bringmann, Elmer, and Eronen 2022). This process may contribute to strengthening theoretical foundations, improving communication among scholars, and enhancing the validity of research.

Our study proceeds as follows. In the next section, we provide an overview of the process followed to conduct the review of the literature to identify existing AFN definitions. Then, we summarize the data extracted from the reviewed literature, with a focus on highlighting key attributes of extracted definitions of AFN. Lastly, we discuss the main results from the analysis and propose ways to advance research in relation to more consistent conceptualization and usage.

Methodology

To achieve the aim of this study, we chose the systematic literature review (SLR) methodology. This methodology has been recognized as a powerful tool for evaluating, summarizing and disseminating evidence about a given research topic. It is said to minimize bias by adopting a more transparent

process of review that increases replicability (Auler, Teixeira, and Nardi 2016). The three-stage SLR approach by Tranfield, Denyer, and Smart (2003) was selected for its structured methodology, which aligns with our research goals by ensuring a comprehensive review of literature. The framework promotes a replicable, scientific, and transparent evaluation of existing evidence, aiming to reduce bias that might arise from arbitrary inclusion or exclusion of studies during the literature review process (Linnenluecke, Marrone, and Singh 2020). The stages including planning, conducting, and reporting, help systematically to identify and analyze relevant studies. While this choice aligns with recent reviews in the field (Acerbi and Taisch 2020; Tavares et al. 2023; Toth-Peter et al. 2023), the approach can be resource-intensive, reliant on the availability of comprehensive literature, and may limit flexibility in adapting to evolving research questions or incorporating unexpected findings that emerge during the review.

Stage 1: planning the review

After years of researching AFN and reviewing peer-reviewed articles on the topic, it has become clear that confusion surrounding the concept persists. Given the extensive AFN literature that has developed over the past decade, a concept analysis was undertaken to analyze existing definitions of AFN. This analysis aims to achieve conceptual clarity by resolving ambiguities, identifying essential attributes, and distinguishing AFN from related or overlapping concepts. The search terms were intentionally limited to "alternative food network" and "alternative agro(i)-food network" to maintain a focused and concept-specific analysis. This narrow scope may exclude relevant studies that use related terms; however, this approach aligns with the study's objective to critically examine the development and usage of the AFN concept in academic literature.

We utilized Web of Science and Scopus-Elsevier databases to carry out our search. Scopus-Elsevier is one of the most comprehensive databases and has been recognized as containing more high-quality, peer-reviewed publications than other databases (Ferreira Gregorio, Pié, and Terceño 2018). Web of Science was also used to enhance the coverage of the review as it includes unique journals and articles that may not be indexed in Scopus-Elsevier. Following this, the inclusion and exclusion criteria were established: we ensured the selection of relevant papers by limiting the search to papers containing the defined keywords in the title, abstract or keywords section. We also limited the search to English-language documents only. The type of document was limited to "article" and source type to "journal." No restrictions were established in terms of year of publication. The initial search was conducted in March 2022. The final search string used is the following:

TITLE-ABS-KEY ("alternative food network*") AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English"))

Stage 2: conducting the review

Our initial sample consisted of 391 journal articles from Scopus-Elsevier and 413 journal articles from *Web of Science*. Given the broad scope of the research aim, all papers that included the keywords within the abstract or title were preselected for review. Following an initial screening and removal of duplicates the sample was reduced to 483 papers. After a second screening of titles and abstracts, studies that were not relevant or directly related to the study of AFN were removed, resulting in a final sample of 461 articles. A further screening of full texts resulted in a total of 84 articles that defined AFN. This review procedure is summarized in Figure 1.

The definitions in 84 articles were taken forward for further review using thematic analysis. Thematic analysis was based on the six-phase thematic analysis approach proposed by Braun and Clarke (2006). The adoption of this framework ensured a structured and consistent approach to coding and helped maintain coherence and consistency throughout the coding process. Phase 1 required familiarization with the data and established a preliminary understanding of possible emergent patterns from the extracted definitions. Phase 2 called for the identification of initial codes across the data. This phase focused on identifying key attributes of AFN as prescribed by the principles of concept analysis (Walker and Avant 2011). The purpose of this method is to identify and highlight characteristics that exemplify the concept under study (White 2009). It involves a systematic examination of the structure and components of a concept, aiming to provide a clearer understanding of its essential characteristics. To this end, we focused on how the concept is defined, used, and understood within literature. In the context of this study, this method has the potential to help in developing a more precise and shared understanding of AFN. Phase 3 involved categorizing the identified codes into emergent themes. Here, consideration was given to how different codes may fall under a wider theme. In phase 4, identified codes and themes were refined. This step involved reviewing whether the codes within each theme were consistent and form a coherent pattern. In phase five, names were assigned to the overarching themes based on the main aspects of the data that they represented. Lastly, phase 6 involved the writing up of individual case reports.

The coding process was conducted solely by the first author, as part of their PhD project. Several steps were taken to ensure rigor and reliability in the analysis. Peer debriefing was employed throughout the process, with the first author regularly discussing emerging themes with coauthors to ensure alignment with the research aims and consistency across the

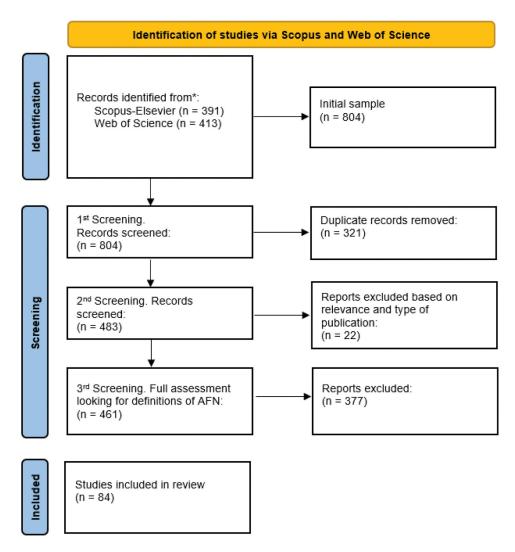


Figure 1. Selection and assessment procedure (adapted from Page et al. 2021).

data. Additionally, coding checks were performed where themes and subthemes were reviewed and refined in collaboration with coauthors. To further enhance dependability and transparency, an audit trail was maintained (Guest, MacQueen, and Namey 2012). A key aspect of this audit trail was linking verbatim quotes from the literature to specific codes, ensuring transparency between the raw data and the researcher's interpretations.

Stage 3: reporting and dissemination

The results reported in the following section highlight the key emerging themes derived from the sample of definitions of AFN. This thematic



exploration provides valuable insights into the diverse interpretations of AFN, enhancing the understanding of the concept and its core attributes.

Results

In total, 84 definitions were extracted from a sample of 461 papers reviewed. Some of the most cited definitions of AFN are those proposed by Feenstra (1997) and Renting, Marsden, and Banks (2003). Feenstra (1997, 28) explains that AFN are "[...] rooted in particular places, [AFN] aim to be economically viable for farmers and consumers, use ecologically sound production and distribution practices, and enhance social equity and democracy for all members of the community." A slightly more ambiguous definition is proposed by Renting, Marsden, and Banks (2003, 394) who see AFN as a "... broad embracing term to cover newly emerging networks of producers, consumers, and other actors that embody alternatives to the more standardised industrial mode of food supply [...]." On the other hand, Jarosz (2008, 232) provides a definition that encompasses most of the characteristics identified across the sample of definitions. The author suggests that there are four main ways to define AFN:

(1) by shorter distances between producers and consumers; (2) by small farm size and scale and organic or holistic farming methods, which are contrasted with large scale, industrial agribusiness; (3) by the existence of food purchasing venues such as food cooperatives, farmers markets, and CSA and local food-to-school linkages; (4) by a commitment to the social, economic and environmental dimensions of sustainable food production, distribution and consumption.

More recently, Allaby, MacDonald, and Turner (2021, 678) highlighted four similar key characteristics that define AFN and differentiate them from conventional food systems:

First, shorter distances between producers and consumers; second, small-scale farms operating with sustainable practices; third, direct marketing through initiatives such as farmers' markets; and fourth, a commitment to the social, economic, and environmental dimensions of food production, distribution and consumption.

Thematic analysis of AFN definitions

Through a thematic analysis of definitions, five main themes and associated codes to characterize AFN were identified (see Table 1). The codes included in the table are verbatim quotes taken from the definitions analyzed here.

Table 1	1. Thematic	analycic	of AFN	definitions
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Themes	Codes
Whatness	"Systems and channels"
	Food production-consumption practices, "a comprehensive body of practices," "wide ranging body of practices" "Supply model"
	"Organised flows of food products"
	Hybrid or socially embedded networks, "networks of producers, consumers, and other actors"
	"Spaces in the food economy"
	"Economic platforms"
	"Processes that integrate new complexes of production-consumption" "Grassroots collectives"
	"Community-led initiatives"
	"Community organizations"
	"Innovative food supply chains," "short production and distribution chain"
	"Novel forms of food production, distribution, and consumption," "forms of food supply (and
A1. 1.	increasingly also consumption)"
Alterity	"Alternative to the industrialized food supply," "alternatives to industrial modes of food supply" "Differ from conventional food supply systems," "different from the mainstream [] in many ways," "dealing with food provisioning in a different way from the mainstream agro-food system"
	"Contrasted with large scale, industrial agribusiness," "contrasting with large-scale [] agribusiness"
	"Resistance to dominant market logic"
	"Counter to the dominant (or conventional)," "means of effectively countering rural decay"
	"Corrective to conventional agri-food systems" "Call into question the current industrial food system"
	"Producing, distributing, and consuming food outside the conventional food system," "Operate
	outside of corporate-industrial food regimes," "food distribution models outside of the conventional food system"
	"Seek to challenge the ecological, social, and economic impacts of a globalized food system"
	"Providing a spatial, economic, environmental, and social alternative to conventional food chains," "offer alternatives to conventional modes of food supply"
Connectedness	"Reconnect producers with consumers"
comiccicaness	"Reconnect productivity and nature"
	"Flows of product that connect people"
	"Ways to reconnect food producers with consumers"
	"Intentions to reconnect with local food producers"
	"Bring together farmers and consumers" "Involve close connections between producers, processors, and consumers"
	"Rebuilding relations of care, trust, and commitment"
Proximity	"Shorter distances/shortness of the supply chain," "Based on short food supply chains that enable direct contact between producers and consumers"
	"Rooted in places/embedded in place," "place-based and community connected," "territorially embedded"
	"Based on closer proximity," "characterized by spatial and temporal proximity"
	"Local or regional in scale," "local, decentralized approaches"
	"Promote direct producer-consumer relationships," "link producers and consumers in direct ways and/or at the local scale"
Sustainability	"Defined by an explosion of organic, fair trade, quality, and specialty goods"
	"Response to environmental, health, justice, and ethical concerns" "Small-scale farms operating with sustainable practices"
	"Draw on alternative production principles such as organic, Fairtrade, or local production," "Selling quality products from fair trade, local and ecological"
	"Values of mutual trust, social justice, embeddedness and environmental sustainability are embraced"
	"Use ecologically sound production and distribution practices, and enhance social equity and democracy for all members of the community"
	"Respect for local production and nature" "Eco-friendly production methods closer to natural cycles"
	"Eco-triendly production methods closer to natural cycles" "Committed to social justice, ecological sustainability, and economic viability"
	"Commitment to sustainable food production and consumption"
	"Economically viable and use of ecologically sound production and distribution practices" "High quality and ecologically and/or ethically superior goods"



Whatness

The first theme relates to efforts to describe the "whatness" or essence of AFN. They have been explained in at least ten different ways, from spaces in the food economy (Duram and Mead 2014) to complex processes of food productionconsumption (Miller 2015). Several authors define AFN as a set of "practices" related to the production, distribution, and retail activities, that attempt to differentiate AFN initiatives from the mainstream (Barbera, Dagnes, and Di Monaco 2020; Martindale 2021; Pardillo Baez, Sequeira, and Hilletofth 2020; Piccoli, Rossi, and Genova 2021). AFN have also been defined as "spaces" in the food economy that attract a variety of initiatives characterized by certain claims and characteristics that differ from the conventional food networks (Argüelles 2021; Bui et al. 2016; Escobar-López et al., 2021). And most commonly, AFN are simply defined as socially embedded (Blumberg and Mincyte 2020) food "networks" that typically encompass producers, consumers, and other actors (Brunori, Rossi, and Guidi 2012; Renting, Marsden, and Banks 2003; Zagata 2009) that share common objectives and embody alternatives (Nizam and Yenal 2020). There is a reference to producers and consumers as key actors, but it is also acknowledged that other stakeholders may be involved, although no single definition elaborates on this. Yet, a systematic literature review of AFN sheds some light on this by identifying a wide variety of stakeholders involved in AFN, including managers, organizers, activists, government officials, and distributors (Michel-Villarreal et al. 2019).

Alterity

The second theme "Alterity" emerges from efforts to define AFN by what they are not (Tregear 2011) and differentiate them from the "mainstream." For instance, Cox et al. (2008) suggest that AFN are food production - consumption practices of any scale which present possibilities for producing/consuming food in ways that differ from those typical in industrialized food systems. It was noted that most conceptualizations tend to highlight the oppositional nature of AFN in the context of conventional food systems. AFN are said to differ (Holloway et al. 2006), counter (Hedberg 2016), resist (Kulick 2019) and even correct (Som Castellano 2016) conventional food systems, which are perceived as placeless and faceless (Turner et al. 2016) highly standardized (Renting, Marsden, and Banks 2003; Weissman 2015), based on largescale, mono-cultural and for-profit production (Edwards 2021), and surrounded by environmental, health, justice, and ethical concerns (Rosol and Barbosa 2021).

The alterity of AFN has been widely discussed (Holloway et al. 2016; Watts, Ilbery, and Maye 2005), and a framework that could help us understand the different degrees of alterity, and how this interacts with the "whatness" of AFN, is the one suggested by Rosol (2020). Building on Watts, Ilbery, and Maye (2005) framework, it proposes three alterity pillars of AFN, namely

alternative food (e.g., the quality of the products in circulation), alternative networks (e.g., distribution channels and production-consumption relations) and alternative economies/models (e.g., the forms of work and enterprise organization). The author argues that "we need to look beyond definitions based on products or distribution systems alone" (Rosol 2020, 57) as these characteristics are increasingly co-opted by the conventional food systems. Instead, alternative economies/models may refer to forms of economic transactions (e.g., barter and production for self-consumption), working practices (e.g., voluntary work), forms of economic organization (e.g., cooperatives and collectives) and forms of financing (e.g., member subscription and crowdfunding). These three pillars of alterity can be seen in the definitions of AFN, as demonstrated by codes under the theme "Whatness." However, there has been a more marked emphasis on explaining alterity in terms of the production-distribution systems/relationships (i.e., networks), and only more recently alluding to the alternative economies/models.

While the distinction between AFNs and conventional food systems is often contested and not always clear-cut, with some arguing that the dichotomy is increasingly being replaced by the concept of hybridity (Le Velly and Dufeu 2016), key differences can still be illustrated through the themes of "Connectedness," "Proximity," and "Sustainability" (see Table 1). These themes highlight how AFN seek to offer alternatives to conventional systems. However, the "alternativeness" of AFN is not a fixed characteristic; rather, it represents a series of variable traits that initiatives embody to differing degrees (Watts, Ilbery, and Maye 2005), further blurring the lines between alternative and conventional practices.

Connectedness

The theme "Connectedness" refers to the types of producer-consumer relationships that AFN help to create or regain. Several outcomes and antecedents of reconnection are highlighted in AFN definitions. Through the reconnection of producers and consumers, producers can skip intermediaries and bring back some of their profits (Jarzębowski, Bourlakis, and Bezat-Jarzębowska 2020; Trauger 2007), and consumers increase their interest in agricultural and environmental challenges (Hayden and Buck 2012) and change their purchasing habits (Bui et al. 2016). Touri (2018) refers to the capability of AFN for rebuilding relations of care, trust, and commitment. The antecedents that facilitate such relations within AFN can include democracy, solidarity, knowledge sharing (Piccoli, Rossi, and Genova 2021) and cooperation (Zagata 2009). From the consumers' perspectives, AFN can be seen as manifestations "of individuals' intentions to reconnect with local food producers and to reembed themselves in community-based values and institutions" (Migliore et al. 2019, 129). The concept of "Connectedness" is also linked to the idea of alternative economies/models proposed by Rosol (2020). The new types of

producer-consumer relationships that AFN help to create can translate into new economies/models such as community-supported agriculture (CSA), where the commitment required from consumers is greater than in conventional food spaces. Thus, "Connectedness" translate into a spectrum of working practices, forms of economic organization, and forms of financing created by new types of producer-consumer relationships within AFN.

In AFN literature, Venn et al. (2006, 254), proposed four different categories of AFN "according to the relative 'connectedness' of food consumers to the act of food production," including "producers as consumers," where food is produced and consumed by the same people, "producer - consumer partnerships," where consumers gain a certain amount of control and agency through mutually beneficial arrangements (e.g., CSA contracts), "directselling," where consumers' contact with the act of food production is limited to "moments of connection" (e.g., through weekly contact at a farmers' market), and "specialist retailers," where consumers are less likely to come into direct contact with the food producer, engaging with intermediaries instead. These categories highlight the varying degrees of consumer involvement in food production, illustrating how the structure of AFN can range from direct engagement to more mediated forms of participation.

Building on the varying degrees of connectedness and consumer involvement in AFN, it is essential to consider how specific motivations and dynamics influence the strength of these producer-consumer relationships. Preference, circumstance, and the AFN's vision for change significantly shape members' connectedness. While some members are content with weaker ties, most prefer in-person connections at collection points and through volunteering (Furness et al. 2022). Studies have shown that few people join CSA for community-related reasons, and sharing financial risks with farmers is not a primary motivator. Although members express interest in local political or social issues, CSA do not seem to foster a strong sense of community, suggesting that CSA membership is neither representative of nor conducive to building community (Pole and Gray 2013). Grassroots dynamics further influence the level of community involvement in AFN, with factors such as social cohesion, economic inequality, and cultural values shaping participation. Some initiatives, such as civic food networks, prioritize community-building and shared governance, fostering a sense of ownership and collaboration (Wahn 2024). However, not all AFN focus on these principles. To enhance community engagement, future AFN development should prioritize participatory frameworks that promote collective action rather than individual consumerism.

Proximity

The theme "Proximity" captures the view that AFN are mechanisms to shorten supply networks to create geographical and/or relational proximity. Sage



(2003) explains that many AFN initiatives use direct marketing to short-circuit long food supply networks. The shortening most commonly occurs in the distance between the physical location of the site of production and the site of purchase or consumption (Evers and Hodgson 2011; Jarosz 2008). However, the shortening can also translate into the reduction of the number of intermediaries between producers and consumers along supply networks, which can many times result in direct face-to-face interactions between producers and consumers at the point of sale (Venn et al. 2006). This is where AFN and other concepts such as short food supply chains (SFSC) and local food networks seem to converge. Re-localization implies that through the shortening of food networks (both in terms of distance and actors), consumers can become aware of the provenance and modes of production of the food that they purchase. This knowledge is said to be reassuring to those consumers concerned with health, safety and environmental issues or the socio-economic well-being of farmers (Turner and Hope 2015). The different types of "Proximity" are conceptualized in a framework originally proposed by Marsden, Banks, and Bristow (2000). The authors define "Proximity" in terms of physical distance, value-chain distance (i.e., number of intermediaries in the supply chain), and informational distance (i.e., increased availability of information via face-to-face communication or labels on the packaging on products).

Sustainability

PadilloBaez et al. (2020)

AFN have been widely associated with superior practices across the social, economic, and environmental sustainability dimensions (Forssell and Lankoski 2015), and this is reflected in the theme "Sustainability." Accordingly, sustainability has become a key characteristic often used in AFN definitions. For instance, Jarosz (2008, 232) suggests that AFN are characterized by "a commitment to the social, economic and environmental dimensions of sustainable food production, distribution and consumption." The sustainability of AFN has been associated to their production methods which are said to be environmentally friendly (Naylor 2012), but also to certain qualities of the products sold through them (e.g., organic, artisanal, local, etc.) (Barnett, Dripps, and Blomquist 2016). Furthermore, AFN are said to contribute toward the conservation of local food culture (Pesci and Brinkley 2021), social and economic equity in the food chain (González de Molina and Lopez-Garcia 2021), and mutual trust and social justice (Slavuj Borčić, 2022). Padillo Baez et al. (2020), explain that AFN are a set of practices that play a role in fostering a sustainable and civil economy, environment, biodiversity, and respect for tradition. Lastly, AFN are said to be characterized by decentralized, independent, community-focused, and sustainable business models (De Bernardi, Bertello, and Venuti 2019).

Yet, sustainability is a contested claim in the context of AFN. Forssell and Lankoski (2015, 72) acknowledged that "the promise of specific real-life AFN is demarcated by what AFN characteristics they exhibit," including physical proximity, alterity or quality of products offered (i.e., environmentally benign production choices), and new forms of governance and strong relationships. There is agreement that the sustainability of AFN will vary among different types, but also within the same types of AFN, and will depend on different attributes or characteristics (Kneafsey et al. 2013; Mastronardi et al. 2019). For instance, a farmers' market that supports the use of organic or agroecological practices may deliver more environmental sustainability than one that does not. Similarly, a CSA initiative may deliver more socio-economic sustainability (e.g., economic risk sharing and shared responsibility) than a farmers' market due to differing forms of financing and levels of consumers' commitment. All this suggests that the sustainability of AFN needs to be critically evaluated on a case-by-case basis. Scholars need to approach the sustainability promise of AFN with caution and carefully consider the actual evidence behind sustainability claims. In the literature this should be reported in more detail to improve transparency.

It is also important to highlight some criticisms associated with the "sustainability" of AFN. A key critique of AFN is their tendency to cater predominantly to middle-class, white consumers, raising concerns about inclusivity and accessibility (Goszczyński and Śpiewak 2023; Turkkan 2023). This demographic bias highlights broader structural inequalities, where access to sustainable food is often linked to socio-economic status. This critique highlights the need to engage with issues of equity and inclusion in AFN literature to ensure broader sustainability impact.

Another important challenge relates to the transformative potential of AFN in relation to the dominant food system. While AFN present themselves as alternatives that emphasize sustainability, the extent to which they challenge and transform the conventional food system remains debated. It has been argued that AFN face significant difficulties in scaling up, which limits their capacity to drive systemic change (Kump and Fikar 2021). Drawing from sustainability transition theory, AFN often remain in the niche phase, unable to break into or disrupt the dominant food regime (Bui et al. 2016). This suggests that while AFN may offer innovative practices and alternatives, they largely exist on the periphery and struggle to influence the broader structures of the mainstream food system.

Alternative, short, civic or local? Uncovering differences

The concepts of AFN, short food supply chains (SFCS), civic food networks and local food networks are often used interchangeably. The literature review uncovered some trends in the use of these similar



concepts. For instance, some of the most common keywords within the sample reviewed are SFSC and local food, which may suggest that authors see these concepts as synonyms or at least related to the same phenomena. Nonetheless, this conceptual equivalence remains largely unexplored in the literature.

Alternative food networks or short food supply chains?

Some authors argue that a main characteristic of AFN is that they are based on SFSC (Rosol and Barbosa 2021; Sitaker et al. 2020) or that AFN include SFSC (Kessari et al. 2020). The concept of SFSC was first proposed by Marsden, Banks, and Bristow (2000) and later Renting, Marsden, and Banks (2003), as a substitute for the concept of AFN. The authors' rationale was the need for more specific conceptualizations. Since then, there has been a notable growth in literature focussed around the conceptual aspects of SFSC, and the concept itself has gained significant importance in policy making. For instance, the French Ministry of Agriculture, Food and Forestry suggests that SFSC are those systems that involve only one or fewer intermediaries (Galli and Brunori 2013). Building on this, the European Network for Rural Development defines SFSC in relation to the reduction of intermediaries and physical distance between the producers and consumers (Peters 2012). A report on behalf of the European Commission further suggests that the number of intermediaries in a SFSC should be minimal or ideally nil (Kneafsey et al. 2013). Most recently, the United Nations Industrial Development Organization (Belletti and Marescotti 2020) defined SFCS as follows:

The term 'short food supply-chains' (SFSCs) encompasses different typologies and operating models. [...] Broadly speaking, SFCSs aim at reducing the 'distance' between agriculture and final consumption, directly re-connecting farmers to consumers, and are at the crossroad of economic, environmental and social issues and needs.

In this case, the shortening of the supply chain is not only based on the number of actors within the chain or the physical distance. Instead, the shortening of the "distance" can be understood from three distinct perspectives: minimizing the physical distance between farmers and end consumers, decreasing the number of intermediary steps linking farmers to end consumers, and fostering greater cultural and social closeness between farmers and consumers (Belletti and Marescotti 2020).

This recent interpretation is more in line with the origins of the concept. In their original paper, Marsden, Banks, and Bristow (2000) proposed that the number of intermediaries or the physical distance that products travel is not what ultimately distinguishes SFSC (previously known as AFN); instead, the connection between consumers and producers through products embedded with information is what is critical. Following a similar line of thought, Renting, Marsden, and Banks (2003) define SFSC in terms of "shortened"



producer-consumer relations and information-embedded products. They proposed three different categories of SFSC: face-to-face SFSCs, proximate SFSCs and extended SFSCs, with each category involving a different degree of proximity between producers and consumers.

Drawing from the origins of the SFSC concept, it is argued that the SFSC concept, particularly as introduced by Marsden, Banks, and Bristow (2000), encompasses the same phenomena targeted by AFN. The discourse or literature of SFSC, specifically the definitions, contribute additional precision, emphasizing geographical, relational, and informational "proximity," a pivotal attribute of AFN discussed earlier. It is noteworthy that while numerous AFN definitions characterize the phenomena in relation to their sustainability inclination, such inclination is not prominently reflected in SFSC definitions, hinting at the implicit inclusion of sustainability within the conceptual framework. Importantly, the concept of SFSC has emerged as more pivotal for policymaking compared to AFN.

Alternative food networks or local food systems?

The literature review also identified that keywords such as "alternative food networks," and "local food networks" or "local food systems" or "local food," are often used interchangeably to refer to the same phenomena. For instance, Wiśniewska-Paluszak and Paluszak (2021) suggests that local food systems are usually referred as alternative food networks. In a critical review of literature to identify the most significant elements in the field of AFN, González De Molina and Lopez-Garcia (2021) use keywords such as "alternative food networks," "local food systems" and "sustainable food systems" as equivalent concepts. Other authors highlight the link between AFN and local food. For instance, Brinkley, Manser, and Pesci (2021) explain that the proximity of producers and consumers within local food systems creates a sense of community and social values, which gives rise to alternative food networks. Papacharalampous (2021) suggests that alternative food networks usually include shorter supply chains, such as CSA, cooperatives, and other local food systems. These seems to suggest that local food systems are antecedents for the creation and operation of alternative food networks.

The concept of local food lacks a precise definition, as its interpretation varies based on the distinct socio-economic and political circumstances (Enthoven and van den Broeck 2021). Local food can usually be characterized by geographical proximity (e.g., distance between food production and consumption), relational proximity (e.g., closer relationships between producer and consumer), and values of proximity (e.g., environment, social, ethical, health, safety) (Eriksen 2013). AFN play a key role in the geographical proximity of local food systems, as local food is usually provided via alternative food networks such as farmers markets and CSA. However, Enthoven and Van den Broeck (2021) warns that the two concepts can wrongly be used interchangeably as AFN are not always local (e.g., extended SFSC), while local food systems do not always involve AFN (e.g., supermarkets and large retailers sourcing food locally). Thus, AFN and local food systems seem to share characteristics of proximity, connectedness and sustainability, and hence, interact very closely.

Local food systems facilitate the creation of many forms of AFN, and AFN facilitate the operation and distribution of local food. One of the main distinctions is that AFN are not always constrained by a specific physical (territorial) locality, and their "alterity" can be explained by other characteristics such as alternative economies and models and informational or valuechain proximity. Lastly, whereas local food has been increasingly co-opted by conventional value chains via the selling of locally sourced products, the mainstreaming of AFN has proven more difficult.

Alternative food networks or civic food networks?

A clear definition of Civic Food Networks (CFN) is lacking, with overlapping interpretations (Giovannini, Forno, and Magnani 2023). The term arose in response to critiques of the AFN concept (Bos and Owen 2016). Renting, Schermer, and Rossi (2012) called for new theoretical frameworks to capture the evolving roles of citizens, consumers, producers, and civil society, focusing on the unique social and economic relations in emerging food networks. They subsequently introduced "civic food networks" as an alternative analytical concept.

CFN embody evolving relationships between consumers and producers, engaging in new forms of food citizenship (Renting, Schermer, and Rossi 2012). They extend beyond traditional food practices, fostering cooperation among local actors and shifting governance toward civil society and local administrations. Often emerging from urban areas, CFN drive innovations such as urban agriculture and introduce discourses linked to movements like degrowth and ecofeminism. Frequently, CFN involve participatory initiatives, such as consumer cooperatives and collective urban gardening, aimed at reshaping the dominant food system through civic engagement (Bos and Owen 2016).

Kneafsey et al. (2013) identify three approaches to civic engagement in CFN: first, through food democracy, which empowers stakeholders to shape the food system; second, aligning with food sovereignty, emphasizing the right to choose foods and challenge power relations; and third, promoting food citizenship, where individuals actively organize and participate in communitydriven systems. These approaches foster civic engagement that encourages community action and organization (Kneafsey et al. 2013).

CFN are a distinct type of AFN that prioritize civic engagement (Smith 2023). While CFN fall under the AFN umbrella, not all AFN qualify as CFN. The key difference lies in CFN' civic focus, which transcends providing



alternative food sources to foster public dialog, collaboration, and social empowerment. Through public forums and community initiatives, CFN drive broader social change and collective action in food systems (Wahn 2024), distinguishing them from other AFN that may focus on local or ethical practices without a civic engagement agenda.

Conclusions and future research

This paper presents findings from the analysis of AFN definitions, identified through a systematic review of 461 papers. This analysis allowed a more precise characterization of AFN based on five main emerging themes (see Figure 2). Generally, AFN seem to be defined as spaces, practices, networks, or organizations that are somehow different from conventional food systems. Their "alterity" can be linked to the nature of food sold, the network used for



Figure 2. Key attributes of AFN based on the literature review.

distribution, or the new or alternative economies/models adopted. Other important attributes identified in the definitions are "connectedness" (i.e., values or principles underpinning the relations), "proximity" (i.e., shortness or embeddedness of distribution channels) and "sustainability" practices or outcomes. The "alterity" of AFN could be seen as a spectrum along which different initiatives can be placed, based on their specific characteristics or attributes. Researchers studying AFN should aim to critically assess and clearly articulate these attributes, enabling a deeper understanding of the nuances that distinguish AFN. This approach will also enhance the transferability of findings, allowing for more meaningful comparisons and applications across different contexts.

Although full conceptual consensus has not been reached within the literature, with many authors acknowledging that a universally accepted definition of AFN does not exist (De Bernardi et al. 2020; de Souza 2020), AFN conceptualizations tend to share a series of attributes. Thus, AFN can be defined, by one or several of the following:

- (1) by their "alterity," which can be linked to the nature of food sold, the networks used for distribution, or the new or alterative economies/ models adopted
- (2) by their "connectedness," which refers to closer producer-consumer relationships that can translate into new working practices, forms of economic organization, and forms of financing
- (3) by their "proximity," which can refer to the physical distance, valuechain distance and/or informational distance
- (4) by their "sustainability," which reflects a commitment to social, economic, and environmental food production, distribution, and consumption practices.

This study has also explored the relationships and distinctions among AFN, Short Food Supply Chains (SFSC), local food systems, and Civic Food Networks (CFN). While these terms are often used interchangeably in the literature, this research underscores the necessity of understanding their specific attributes, uses, and implications. The SFSC concept emerged as a refined framework for conceptualizing AFN, gaining traction in policy discussions largely due to its clear focus on reducing intermediaries and shortening the distance between producers and consumers. Despite the differences in terminology, the core attributes of SFSC and AFN closely align, suggesting that they can be viewed as interchangeable. The evolution of SFSC from the AFN concept highlights this connection, reinforcing the idea that both concepts aim to address similar phenomena. Conversely, AFN are not always local, and local food systems can operate independently of AFN, as seen in supermarkets that source food locally. Both AFN and local food

systems may share characteristics of proximity, connectedness, and sustainability, fostering close interactions between them. Local food systems often give rise to various forms of AFN, while AFN facilitate the operation and distribution of local food. A key distinction is that AFN are not constrained by geographic boundaries, with their uniqueness often tied to alternative economic models and informational proximity. CFN, emerging from critiques of AFN, provide a distinct perspective by emphasizing civic engagement and community involvement in shaping food systems. While CFN can be considered a subset of AFN, their focus on social empowerment and public dialog sets them apart from other forms of AFN. Ultimately, the evolution of the literature surrounding these related concepts has led to different emphases, yet they collectively share a common goal of reshaping food systems.

Our study contributes toward a better understanding of the key attributes of AFN and consequently a more consistent use of the concept. Two decades ago, Renting, Marsden, and Banks (2003, 394) recognized the importance of not theoretically restricting "definitions of AFN given the scarcity of theoretical and empirical work conducted upon them." Since then, a wealth of literature has emerged, and empirical evidence is now plentiful. Hence, there is an opportunity to work toward more conceptual clarity in future research studies. The findings presented here can be used to more critically examine and report on the heterogeneity of AFN. Such effort could shed some light on the specific and shared features of diverse AFN, contributing to a better understanding of how these alternative forms of provisioning challenge conventional food practices. Without more criticality, we risk putting anything and everything under the AFN label. By increasing transparency and attention to the key attributes of AFN in future studies, we can better understand whether and how different attributes translate into similar or different outcomes (e.g., do varying degrees of "proximity" lead to the same sustainability performance?).

Achieving greater conceptual clarity by more clearly characterizing AFN in future studies is also essential from a methodological perspective. AFN studies have largely relied on qualitative methods such as case studies (Michel-Villarreal et al. 2019; Tregear 2011) which are seen as suitable for capturing the complex processes, relationships, interactions, and dynamics within AFN in their real-life contexts. However, effective case studies require clear boundaries around the unit of analysis under intensive exploration and a "thick description" of it (Yin 2014) to maximize transferability of findings beyond the immediate study. Doing this typically involves in-depth local observation and consideration of factors unique to the cases (e.g., the proximity, alterity or connectedness of a given AFN). Therefore, the transferability of findings largely depends on the extent to which key attributes are shared between cases. For instance, if case A (the AFN under study) and case B (the AFN to which findings will be applied) share sufficient similarities, the findings from case A are more likely to be relevant and applicable in case B. Therefore, for



scholars to transfer or generalize findings, both cases must be clearly and thoroughly characterized (Merriam 1998). This paper advocates for more explicit characterization of AFN in future studies, so that scholars can better assess the transferability between cases. The key attributes identified here can help provide "thicker descriptions" of cases, enhancing the precision with which future studies can compare and transfer findings across different AFN.

The aim of this paper was not to establish a universal definition of AFN, as these socially constructed initiatives arise from very diverse communities and exhibit a broad range of characteristics. Instead of seeking a singular definition, we advocate for enhanced precision in future research by clearly bounding the object of study, emphasizing a core set of essential attributes inherent to AFN. The challenge for researchers lies in recognizing these attributes in the real-world manifestations of AFN and transparently disclosing them in their reports. Drawing from the key attributes outlined in Figure 2, we propose the following guiding questions for researchers aiming to identify, study, and report on AFN:

- How is the initiative characterized by "alterity"? Is it linked to alternative food, alternative networks and/or alternative economies/models?
- How does the initiative facilitate closer relationships between producers, consumers, and other actors in the chain? Does this translate into new working practices, forms of economic organization, and forms of financing?
- How does the initiative encourage geographical, relational and/or informational proximity?
- Is the initiative driven by a commitment to social, economic, and environmental food production, distribution, and consumption practices? What sustainability practices or outcomes are observed?

This research carries important implications for both theory and practice in the field of AFN. The findings underscore the importance of establishing a clear and consistent framework for understanding AFN, which can enhance theoretical development and facilitate more robust scholarly discourse. By identifying key attributes and distinguishing AFN from similar concepts, this study contributes to a deeper understanding of the dynamics within AFN, enabling researchers to frame their studies accurately and develop more targeted interventions that address the specific needs and challenges of different communities. By proposing a set of key attributes and guiding questions, we aim to enhance understanding of the AFN concept and encourage more transparent and comprehensive reporting in future studies. Practically, the insights gained from this research can inform policymakers, practitioners, and community stakeholders in designing and implementing initiatives that promote sustainable food practices. A clearer conceptualization



of AFN can guide decision-making processes, ensuring that efforts to support these networks are grounded in a nuanced understanding of their complexities and potential for driving change in food systems. Ultimately, understanding the essential attributes of AFN can deepen comprehension of how communities are coming together to address issues related to food and sustainability, and to develop more effective policies and interventions that can support and promote these initiatives.

Disclosure statement

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Data availability statement

Data will be made available on request

References

- Acerbi, F., and M. Taisch. 2020. A literature review on circular economy adoption in the manufacturing sector. Journal of Cleaner Production 273:123086. doi: 10.1016/j.jclepro.2020. 123086.
- Ajates, R. 2021. Reducing the risk of co-optation in alternative food networks: Multi-stakeholder cooperatives, social capital, and third spaces of cooperation. Sustainability 13 (20):11219. doi: 10.3390/su132011219.
- Allaby, M., G. K. MacDonald, and S. Turner. 2021. Growing pains: Small-scale farmer responses to an urban rooftop farming and online marketplace enterprise in Montréal, Canada. Agriculture and Human Values 38 (3):677-92. doi: 10.1007/s10460-020-10173-y.
- Argüelles, L. 2021. Growing farming heroes? Politics of imaginaries within farmer training programs in California. Annals of the American Association of Geographers 111 (5):1385-402. doi: 10.1080/24694452.2020.1823202.
- Auler, D. P., R. Teixeira, and V. Nardi. 2016. Food safety as a field in supply chain management studies: A systematic literature review. International Food and Agribusiness Management Review 20 (1):99-112. doi: 10.22434/IFAMR2016.0003.
- Barbera, F., J. Dagnes, and R. di Monaco. 2020. Participation for what? Organizational roles, quality conventions and purchasing behaviors in solidarity purchasing groups. Journal of Rural Studies 73:243–51. doi:10.1016/j.jrurstud.2019.10.044.
- Barnett, M. J., W. R. Dripps, and K. K. Blomquist. 2016. Organivore or organorexic? Examining the relationship between alternative food network engagement, disordered eating, and special diets. Appetite 105:713-20. doi: 10.1016/j.appet.2016.07.008.
- Bazzani, C., and M. Canavari. 2013. Alternative agri-food networks and short food supply chains: A review of the literature. Economia Agro-Alimentarie 15 (2):11-34. doi: 10.3280/ ECAG2013-002002.
- Belletti, G., and A. Marescotti. 2020. Short food supply chains for promoting local food on local markets. United Nations Industrial Development Organization. Accessed October 30, 2023. https://hub.unido.org/sites/default/files/publications/SHORT%20FOOD%20SUPPLY% 20CHAINS.pdf.



- Beus, C. E., and R. E. Dunlap. 1990. Conventional versus alternative agriculture: The paradigmatic roots of the debate. *Rural Sociology* 55 (4):590–616. doi: 10.1111/j.1549-0831.1990. tb00699.x.
- Blumberg, R., and D. Mincyte. 2020. Beyond europeanization: The politics of scale and positionality in Lithuania's alternative food networks. *European Urban and Regional Studies* 27 (2):189–205.
- Bos, E., and L. Owen. 2016. Virtual reconnection: The online spaces of alternative food networks in England. *Journal of Rural Studies* 45:1–14. doi: 10.1016/j.jrurstud.2016.02.016.
- Braun, V., and V. Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2):77–101. doi: 10.1191/1478088706qp063oa.
- Bringmann, L. F., T. Elmer, and M. I. Eronen. 2022. Back to basics: The importance of conceptual clarification in psychological science. *Current Directions in Psychological Science* 31 (4):340–46. doi: 10.1177/09637214221096485.
- Brinkley, C., G. M. Manser, and S. Pesci. 2021. Growing pains in local food systems: a longitudinal social network analysis on local food marketing in Baltimore county, Maryland and Chester county, Pennsylvania. *Agriculture and Human Values* 38 (4):1–17. doi: 10.1007/s10460-021-10199-w.
- Brunori, G., A. Rossi, and F. Guidi. 2012. On the new social relations around and beyond food. Analysing consumers' role and action in gruppi di acquisto solidale (solidarity purchasing groups). *Sociologia Ruralis* 52 (1):1–30. doi: 10.1111/j.1467-9523.2011.00552.x.
- Bui, S., A. Cardona, C. Lamine and M. Cerf. 2016. Sustainability transitions: Insights on processes of niche-regime interaction and regime reconfiguration in agri-food systems. *Journal of Rural Studies* 48:92–103. doi: 10.1016/j.jrurstud.2016.10.003.
- Cox, R., L. Holloway, L. Venn, L. Dowler, J. Ricketts-Hein, M. Kneafsey, and M. Tuomainen. 2008. Common ground? Motivations for participation in a community-supported agriculture scheme. *Local Environment* 13 (3):203–18. doi: 10.1080/13549830701669153.
- de Bernardi, P., A. Bertello, and F. Venuti. 2019. Online and on-site interactions within alternative food networks: Sustainability impact of knowledge-sharing practices. *Sustainability* 11 (5):1457. doi: 10.3390/su11051457.
- de Bernardi, P., A. Bertello, F. Venuti, and E. Foscolo. 2020. How to avoid the tragedy of alternative food networks (AFNs)? The impact of social capital and transparency on AFN performance. *British Food Journal* 122 (7):2171–86. doi: 10.1108/BFJ-07-2019-0537.
- de Souza, R. T. 2020. Box-scheme as alternative food network—the economic integration between consumers and producers. *Agricultural and Food Economics* 8 (1):1–25. doi: 10. 1186/s40100-020-00162-4.
- Duram, L., and A. Mead. 2014. Exploring linkages between consumer food Co-operatives and domestic fair trade in the United States. *Renewable Agriculture and Food Systems* 29 (2):151–60. doi: 10.1017/S1742170513000033.
- Edwards, F. 2021. Overcoming the social stigma of consuming food waste by dining at the open table. *Agriculture and Human Values* 38 (2):397–409. doi: 10.1007/s10460-020-10176-9.
- Enthoven, L., and G. van den Broeck. 2021. Local food systems: Reviewing two decades of research. *Agricultural Systems* 193:103226. doi: 10.1016/j.agsy.2021.103226.
- Ericksen, P. J. 2007. Conceptualizing food systems for global environmental change research. *Global Environmental Change* 18 (1):234–45. doi: 10.1016/j.gloenvcha.2007.09.002.
- Eriksen, S. N. 2013. Defining local food: constructing a new taxonomy-three domains of proximity. *Acta Agriculturae Scandinavica*, *Section B-Soil & Plant Science* 63 (sup1):47-55. doi: 10.1080/09064710.2013.789123.
- Escobar-López, S. Y., S. Amaya-Corchuelo, and A. Espinoza-Ortega. 2021. Alternative food networks: Perceptions in short food supply chains in Spain. *Sustainability* 13:2578. doi: 10. 3390/su13052578.



- Evers, A., and N. L. Hodgson. 2011. Food choices and local food access among Perth's community gardeners. *Local Environment* 16 (6):585–602. doi: 10.1080/13549839.2011. 575354.
- Feenstra, G. 1997. Local food systems and sustainable communities. *American Journal of Alternative Agriculture* 12 (1):28–36. doi: 10.1017/S0889189300007165.
- Ferreira Gregorio, V., L. Pié, and A. Terceño. 2018. A systematic literature review of bio, Green and circular economy trends in publications in the field of economics and business management. *Sustainability* 10 (11):4232. doi: 10.3390/su10114232.
- Forssell, S., and L. Lankoski. 2015. The sustainability promise of alternative food networks: An examination through "alternative" characteristics. *Agriculture and Human Values* 32 (1):63–75. doi: 10.1007/s10460-014-9516-4.
- Furness, E., A. S. Bellamy, A. Clear, S. M. Finnigan, J. E. Meador, S. Mills, A. E. Milne, and R. T. Sharp. 2022. Communication and building social capital in community supported agriculture. *Journal of Agriculture, Food, Systems, and Community Development* 12 (1):1–16. doi: 10.5304/jafscd.2022.121.009.
- Galli, F., and G. Brunori, eds. 2013. Short food supply chains as drivers of sustainable development. Evidence document. Document developed in the framework of the FP7 project FOODLINKS (GA No. 265287). Laboratorio di studi rurali Sismondi.
- Giovannini, M., F. Forno, and N. Magnani. 2023. Practicing sustainable eating: zooming in a civic food network. *Agriculture and Human Values* 41 (3):1–13. doi: 10.1007/s10460-023-10526-3.
- González de Molina, M., and D. Lopez-Garcia. 2021. Principles for designing agroecology-based local (territorial) agri-food systems: A critical revision. *Agroecology & Sustainable Food Systems* 45 (7):1050-82. doi: 10.1080/21683565.2021.1913690.
- Goodman, D., E. M. DuPuis, and M. K. Goodman. 2012. *Alternative food networks: Knowledge, practice, and politics*. USA and Canada: Routledge.
- Gori, F., and A. Castellini. 2023. Alternative food networks and short food supply chains: A systematic literature review based on a case study approach. *Sustainability* 15 (10):8140. doi:10.3390/su15108140.
- Goszczyński, W., and R. Śpiewak. 2023. The dark side of the bun: Endo and exogenous class exclusions in Polish alternative food network. *Food, Culture, and Society* 26 (5):1107–33. doi: 10.1080/15528014.2022.2096367.
- Guest, G., K. M. MacQueen, and E. E. Namey. 2012. *Applied thematic analysis*. Thousand Oaks, CA, USA: Sage Publications.
- Hayden, J., and D. Buck. 2012. Doing community supported agriculture: Tactile space, affect and effects of membership. *Geoforum* 43 (2):332–41. doi: 10.1016/j.geoforum.2011.08.003.
- Hedberg, R. C. 2016. The ecology of alternative food landscapes: A framework for assessing the ecology of alternative food networks and its implications for sustainability. *Landscape Research* 41 (7):795–807. doi: 10.1080/01426397.2015.1074168.
- Holloway, L., R. Cox, M. Kneafsey, E. Dowler, L. Venn, and H. Tuomainen. 2016. Are you alternative? 'alternative' food networks and consumers' definitions of alterity. In Interrogating alterity, 201–14. Routledge.
- Holloway, L., R. Cox, L. Venn, M. Kneafsey, E. Dowler, and H. Tuomainen. 2006. Managing sustainable farmed landscape through 'alternative' food networks: A case study from Italy. *The Geographical Journal* 172 (3):219–29. doi: 10.1111/j.1475-4959.2006.00205.x.
- Jarosz, L. 2008. The city in the country: Growing alternative food networks in metropolitan areas. *Journal of Rural Studies* 24 (3):231–44. doi: 10.1016/j.jrurstud.2007.10.002.



- Jarzębowski, S., M. Bourlakis, and A. Bezat-Jarzębowska. 2020. Short food supply chains (SFSC) as local and sustainable systems. *Sustainability* 12:4715. doi: 10.3390/su12114715.
- Kessari, M., C. Joly, A. Jaouen, and M. Jaeck. 2020. Alternative food networks: Good practices for sustainable performance. *Journal of Marketing Management* 36 (15–16):1417–46. doi: 10. 1080/0267257X.2020.1783348.
- Kneafsey, M., L. Venn, U. Schmutz, B. Balasz, L. Trenchard, T. Eyden-Wood, E. Bos, G. Sutton, and M. Blackett. 2013. Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics, EUR 25911. Luxembourg: Publications Office of the European Union.
- Kneafsey, M., L. Venn, U. Schmutz, B. Balázs, L. Trenchard, T. Eyden-Wood, E. Bos, G. Sutton, and M. Blackett. 2013. Short food supply chains and local food systems in the EU. A state of play of their socio-economic characteristics. *JRC Scientific and Policy Reports* 123:129.
- Koop, C., and M. Lodge. 2017. What is regulation? An interdisciplinary concept analysis. *Regulation & Governance* 11 (1):95–108. doi: 10.1111/rego.12094.
- Kulick, R. 2019. More time in the kitchen, less time on the streets: The micropolitics of cultivating an ethic of care in alternative food networks. *Local Environment* 24 (1):37–51. doi: 10.1080/13549839.2018.1546281.
- Kump, B., and C. Fikar. 2021. Challenges of maintaining and diffusing grassroots innovations in alternative food networks: A systems thinking approach. *Journal of Cleaner Production* 317:128407. doi: 10.1016/j.jclepro.2021.128407.
- Letelier, E., B. C. Aguayo, P. Saravia, N. Carroza, and J. Vanhulst. 2021. Territoriality, environment and hybrid governance tensions in alternative food networks: Cases of small-scale viticulture in Chile. *Environmental Policy & Governance* 31 (3):186–98. doi: 10.1002/eet.1926.
- Le Velly, R. 2019. Allowing for the projective dimension of agency in analysing alternative food networks. *Sociologia Ruralis* 59 (1):2–22. doi: 10.1111/soru.12217.
- Le Velly, R., and I. Dufeu. 2016. Alternative food networks as "market agencements": Exploring their multiple hybridities. *Journal of Rural Studies* 43:173–82. doi: 10.1016/j.jrurstud.2015. 11.015.
- Linnenluecke, M. K., M. Marrone, and A. K. Singh. 2020. Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management* 45 (2):175–94. doi: 10. 1177/0312896219877678.
- Markuszewska, A., A. Prior, A. Strano, B. Bálint, B. Midoux, C. Bros, C. Koutsaftaki, C. Jochum, C. Buffet, D. McGlynn, et al. 2012. Local food and short supply chains. *EU Rural Review. A Publication from the European Network for Rural Development. No. 12.* https://ec.europa.eu/enrd/sites/default/files/E8F24E08-0A45-F272-33FB-A6309E3AD601.pdf.
- Marsden, T., J. Banks, and G. Bristow. 2000. Food supply chain approaches: exploring their role in rural development. *Sociologia Ruralis* 40 (4):424–38. doi: 10.1111/1467-9523.00158.
- Martindale, L. 2021. 'I will know it when I taste it': Trust, food materialities and social media in Chinese alternative food networks. *Agriculture and Human Values* 38 (2):365–80. doi: 10. 1007/s10460-020-10155-0.
- Mastronardi, L., D. Marino, V. Giaccio, A. Giannelli, M. Palmieri, and G. Mazzocchi. 2019. Analyzing alternative food networks sustainability in Italy: a proposal for an assessment framework. *Agricultural and Food Economics* 7 (1):1–19. doi: 10.1186/s40100-019-0142-8.
- Merriam, S. B. 1998. Qualitative research and case study applications in education. Revised and expanded from" case study research in education", 350. Sansome St, San Francisco, CA 94104: Jossey-Bass Publishers.



- Michel-Villarreal, R., M. Hingley, M. Canavari, and I. Bregoli. 2019. Sustainability in alternative food networks: A systematic literature review. *Sustainability* 11 (3):859. doi: 10.3390/su11030859.
- Migliore, G., P. Romeo, R. Testa, and G. Schifani. 2019. Beyond alternative food networks: understanding motivations to participate in orti urbani in Palermo. *Culture, Agriculture, Food and Environment* 41 (2):129–39. doi: 10.1111/cuag.12229.
- Miller, W. M. 2015. UK allotments and urban food initiatives: (limited?) potential for reducing inequalities. *Local Environment* 20 (10):1194–214. doi: 10.1080/13549839.2015.1035239.
- Naylor, L. 2012. Hired gardens and the question of transgression: Lawns, food gardens and the business of 'alternative'food practice. *Cultural Geographies* 19 (4):483–504. doi: 10.1177/1474474012451543.
- Nizam, D., and Z. Yenal. 2020. Seed politics in Turkey: The awakening of a landrace wheat and its prospects. *Journal of Peasant Studies* 47 (4):741–66. doi: 10.1080/03066150.2019.1708725.
- Page, M. J., J. E. McKenzie, P. M. Bossuyt, I. Boutron, T. C. Hoffmann, C. D. Mulrow, L. Shamseer, J. M. Tetzlaff, E. A. Akl, S. E. Brennan, et al. 2021. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 372:n71. doi: 10.1136/bmj.n71.
- Papacharalampous, N. 2021. A new rural in the city: a no-middlemen markets' ethnography. *Journal of Rural Studies* 86:702–10. doi: 10.1016/j.jrurstud.2021.06.002.
- Pardillo Baez, Y., M. Sequeira, and P. Hilletofth. 2020. Local and organic food distribution systems: Towards a future agenda. *Operations and Supply Chain Management: An International Journal* 13 (4):336–48. doi: 10.31387/oscm0430274.
- Pesci, S., and C. Brinkley. 2021. Can a farm-to-table restaurant bring about change in the food system?: A case study of chez panisse. *Food, Culture, and Society* 25 (5):1–22. doi: 10.1080/15528014.2021.1948754.
- Piccoli, A., A. Rossi, and A. Genova. 2021. A socially-based redesign of sustainable food practices: Community supported agriculture in Italy. *Sustainability* 13 (21):11986. doi: 10. 3390/su132111986.
- Pole, A., and M. Gray. 2013. Farming alone? what's up with the "C" in community supported agriculture. *Agriculture and Human Values* 30 (1):85–100. doi: 10.1007/s10460-012-9391-9.
- Renting, H., T. K. Marsden, and J. Banks. 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment & planning A* 35 (3):393–411. doi: 10.1068/a3510.
- Renting, H., M. Schermer, and A. Rossi. 2012. Building food democracy: Exploring civic food networks and newly emerging forms of food citizenship. *The International Journal of Sociology of Agriculture and Food* 19 (3):289–307.
- Rosol, M. 2020. On the significance of alternative economic practices: Reconceptualizing alterity in alternative food networks. *Economic Geography* 96 (1):52–76. doi: 10.1080/00130095.2019.1701430.
- Rosol, M., and R. Barbosa Jr, 2021. Moving beyond direct marketing with new mediated models: evolution of or departure from alternative food networks? *Agriculture and Human Values* 38 (4):1021–39. doi: 10.1007/s10460-021-10210-4.
- Sage, C. 2003. Social embeddedness and relations of regard: alternative 'good food'networks in south-west Ireland. *Journal of Rural Studies* 19 (1):47–60. doi: 10.1016/S0743-0167(02) 00044-X.
- Sitaker, M., J. Kolodinsky, W. Wang, L. C. Chase, J. V. S. Kim, D. Smith, H. Estrin, Z. V. Vlaanderen, and L. Greco. 2020. Evaluation of farm fresh food boxes: A hybrid alternative food network market innovation. Sustainability 12 (24):10406. doi: 10.3390/su122410406.



- Slavuj Borčić, L. 2022. The production of urban commons through alternative food practices. *Social and Cultural Geography* 23 (5):660–77. doi: 10.1080/14649365.2020.1795234.
- Smith, K. 2023. Scaling up civic food utopias in Australia: The challenges of justice and representation. *Sociologia Ruralis* 63 (1):140–59. doi: 10.1111/soru.12368.
- Som Castellano, R. L. 2016. Alternative food networks and the labor of food provisioning: A third shift? *Rural Sociology* 81 (3):445–69. doi: 10.1111/ruso.12104.
- Sonnino, R., and T. Marsden. 2006. Beyond the divide: rethinking relationships between alternative and conventional food networks in Europe. *Journal of Economic Geography* 6 (2):181–99. doi: 10.1093/jeg/lbi006.
- Stichler, J. F. 2018. Ensuring shared understanding: Defining and analyzing concepts. *HERD:* Health Environments Research & Design Journal 11 (3):6–10. doi: 10.1177/1937586718772635.
- Tavares, T. M., G. M. D. Ganga, M. Godinho Filho, and V. P. Rodrigues. 2023. The benefits and barriers of additive manufacturing for circular economy: A framework proposal. *Sustainable Production and Consumption* 37:369–88. doi: 10.1016/j.spc.2023.03.006.
- Toth-Peter, A., R. T. de Oliveira, S. Mathews, L. Barner, and S. Figueira. 2023. Industry 4.0 as an enabler in transitioning to circular business models: A systematic literature review. *Journal of Cleaner Production* 393:136284. doi: 10.1016/j.jclepro.2023.136284.
- Touri, M. 2018. Development and communication in trade relations: new synergies in theory and practice. *Development in Practice* 28 (3):388–99. doi: 10.1080/09614524.2018.1432569.
- Tranfield, D., D. Denyer, and P. Smart. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systeatic review. *British Journal of Management* 14 (3):207–22. doi: 10.1111/1467-8551.00375.
- Trauger, A. 2007. Un/re-constructing the agrarian dream: Going back-to-the-land with an organic marketing co-operative in south-central Pennsylvania, USA. *Tijdschrift voor economische en sociale geografie* 98 (1):9–20. doi: 10.1111/j.1467-9663.2007.00372.x.
- Tregear, A. 2011. Progressing knowledge in alternative and local food networks: Critical reflections and a research agenda. *Journal of Rural Studies* 27 (4):419–30. doi: 10.1016/j. jrurstud.2011.06.003.
- Turkkan, C. 2023. What is the 'alternative'? Insights from istanbul's food networks. *Food, Culture, and Society* 26 (2):265–85. doi: 10.1080/15528014.2021.1960004.
- Turner, B., and C. Hope. 2015. Staging the local: rethinking scale in farmers' markets. *The Australian Geographer* 46 (2):147–63. doi: 10.1080/00049182.2015.1020602.
- Turner, K. L., I. J. Davidson-Hunt, A. A. Desmarais, and I. Hudson. 2016. Creole hens and ranga-ranga: Campesino foodways and biocultural resource-based development in the central Valley of Tarija, Bolivia. *Agriculture* 6 (3):41. doi: 10.3390/agriculture6030041.
- Venn, L., M. Kneafsey, L. Holloway, R. Cox, E. Dowler, and H. Tuomainen. 2006. Researching European 'alternative'food networks: some methodological considerations. *Area* 38 (3):248–58. doi: 10.1111/j.1475-4762.2006.00694.x.
- Wahn, I. L. 2024. Civic food networks and agrifood forums: a social infrastructure for civic engagement. *Agriculture and Human Values* 41 (3):1–15. doi: 10.1007/s10460-023-10536-1.
- Walker, L., and K. Avant. 2011. Strategies for theory construction in nursing. Upper Saddle River, NY: Pearson Prentice Hall.
- Watts, D. C. H., B. Ilbery, and D. Maye. 2005. Making reconnections in agro-food geography: Alternative systems of food provision. *Progress in Human Geography* 29 (1):22–40. doi: 10. 1191/0309132505ph526oa.
- Weissman, E. 2015. Brooklyn's agrarian questions. Renewable Agriculture and Food Systems 30 (1):92–102. doi: 10.1017/S1742170514000222.



White, K. A. 2009. Self-confidence: A concept analysis. Nursing Forum 44 (2):103-14. doi: 10. 1111/j.1744-6198.2009.00133.x.

Wilson, A. D. 2013. Beyond alternative: Exploring the potential for autonomous food spaces. Antipode 45 (3):719-37. doi: 10.1111/j.1467-8330.2012.01020.x.

Wiśniewska-Paluszak, J., and G. Paluszak. 2021. The Urban and Peri-Urban farms (UPFs) relational model: The case of greater Poland voivodeship, Poland. Agriculture 11 (5):421. doi: 10.3390/agriculture11050421.

Yin, R. K. 2014. Case Study Research: Design and Methods, 5th ed. Thousand Oaks, CA: Sage. Zagata, L. 2009. The analysis of the current forms of organic chicken husbandry in the Czech Republic and their social consequences. Agricultural Economics (Zemědělská ekonomika) 55 (6):271-83. doi: 10.17221/48/2009-AGRICECON.