Defining alternative food networks: A systematic literature review

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Abstract:
Purpose of the Research
Over the past two decades, extensive research effort has been directed towards examining food initiatives that “somehow” differ from the ‘traditional’ or ‘conventional’. Such newly emerging food initiatives are known as ‘Alternative food networks’ (AFNs) and have been linked to broader concepts such as locality, quality, spatiality, embeddedness, sustainability and short food supply chains (SFSC). Farmers’ markets, community-supported agriculture, box schemes, cooperatives, farm shops and other initiatives have been grouped under the AFNs umbrella. However, the literature has recognised that there is a lack of clarity with regards to the concept of AFNs (Hernández, 2009; Wilson, 2013), suggesting that it is indiscriminately used to describe systems that involve anything that the conventional does not. Thus, AFNs tend to be defined by what they are not, instead of what they actually are (Feenstra, 1997). Furthermore, the need to further examine the “alternativeness” of AFNs and the unique characteristics of such initiatives has been identified (Maye and Kirwan, 2010). Thus, the aim of this paper is to contribute towards reducing this knowledge gap through a systematic literature review on AFNs. A systematic literature review can serve as a means to advancing knowledge and facilitating theory and empirical development (Fisch and Block, 2018). In this paper, we will aim to provide some clarification of the concept of AFNs by conducting thematic analysis of the academic definitions given to AFNs in the existing literature.

Background/Motivation/Support
The emergence of AFNs has been associated with multiple economic, environmental and social changes that affect actors involved in the production and consumption sides of the conventional food system. On the production side, environmental issues, such as climate change and soil degradation, and socio-economic changes resulting from globalization, have led to a continuous increase in the vulnerability of the livelihoods of producers and farm workers (Vorley, 2002). On the consumption side, AFNs have been driven by a shift in consumer perceptions and behaviors. Such changes seem to be motivated by increased public concern over issues like ecology, health (e.g. food scares) and animal welfare (Renting, Marsden and Banks, 2003).

AFNs’ body of knowledge has grown during recent years. The term has now been popularized and associated to diverse concepts such as sustainability, food security, rural development, organic agriculture, embeddedness, urban agriculture, social innovation and many more. Two main responses to the lack of clarity and other critiques of AFNs have been identified (Wilson,
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 alternativeness. The characterization of “weaker” and “stronger” proposed by Watts, Ilbery and Maye (2005) can be used as an example of this, where the authors categorize AFNs based on whether their alternativeness is product (weaker) or process (stronger) oriented. A second response has been to move away from the overall concept of AFNs by proposing different concepts or analytical frameworks that can better explain the complexities of food spaces (Wilson, 2013). For instance, Renting et al. (2003) proposed the concept of Short Food Supply Chains (SFSCs) as a substitute for AFNs and as a response to the need for more specific concepts.

It has been acknowledged that the alternative food movement has created new heterogeneous economic and social spaces for production and trading of food with qualifications -organic, local, specialty, fair trade- different from those of products supplied by the conventional food supply chain (Goodman, DuPuis and Goodman, 2012). However, due to the ambiguity of the concept, many diverse food initiatives have been described as “alternative”, without a clear indication of their nature and why they should be classified under the AFNs umbrella. Furthermore, many of these initiatives are uncritically deemed to be ‘good’ or ‘sustainable’ without a comprehensive analysis of how they challenge practices related to conventional food systems. This lack of clarity may limit the opportunities for constructive change that AFNs may encourage (Harris, 2009) and the overall advancement of the AFNs scholarship. Thus, the aim of this paper is to contribute to the debate of “alternativeness” by conducting a systematic review of the AFNs literature. We will endeavor to identify the different definitions given to the concept of AFNs, the types of AFNs that have been studied and the main conceptual areas that have been developed throughout the years. To this end, the research questions guiding this review are as follow: RQ1. How have AFNs been defined? RQ2. Which types of AFNs have been identified? RQ3. What are the main conceptual areas developed by the academic literature?

Methodology

To answer the questions surrounding this research study, the multidisciplinary databases Web of Science and Scopus were used to conduct searches. We used the keywords “alternative food network*”, “alternative agri-food network*” and “alternative agro-food network*”. After removing duplicates from the two databases, our initial sample consisted of 211 journal papers. Given the broad sense of the research questions we set out to explore, all papers that included the keywords within the abstract or title were pre-selected for review. For this purpose, we conducted a first screening of titles and abstracts and removed studies that were not relevant or directly related to the study of AFNs, resulting in 203 papers. A further screening of full papers resulted in a total of 186 papers to be taken forward for review. Using content analysis, we identified and extracted the following key data: year of publication, country where study took place, research methods used, characteristics of participants (in empirical studies), types and number of AFNs studied, main topics, and definitions of AFNs. For the analysis of the extracted data, both quantitative and qualitative methods of analysis were used. Firstly, we conducted statistical analysis using SPSS to determine the frequency distribution of some variables (key data). Secondly, for the analysis of definitions extracted from the literature, we used thematic analysis to identify patterns. Thematic analysis is a
For this study, we adopted the six phases of thematic analysis proposed by Nowell, Norris, White and Moules (2017). Due to the ongoing nature of this research and the scope of this paper, we will only report findings related to the (qualitative) thematic analysis here.

**Findings**

During the first phase of the thematic analysis (Nowell et al, 2017), we became familiar with the data and established a preliminary understanding of possible patterns emerging from 31 explicit definitions of AFNs extracted from 186 papers reviewed. For instance, we identified that some of the most cited or referred to definitions of AFNs are those proposed by Feenstra (1997) and Renting et al. (2003) (table 1).

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Definition of AFNs</th>
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<tr>
<td>Feenstra (1997)</td>
<td>“[...] rooted in particular places, [AFNs] aim to be economically viable for farmers and consumers, use ecologically sound production and distribution practises, and enhance social equity and democracy for all members of the community”.</td>
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<tr>
<td>Renting et al (2003)</td>
<td>“The term alternative food networks (AFNs) is here used 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 [...]”</td>
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</table>

Phase two (coding) of the thematic analysis allowed us to identify initial codes across the dataset and develop a list of 36 codes. Subsequently (phase three and four), the identified codes were systematically analyzed and categorized into five different emerging themes. Lastly, in phase five, we assigned names to the overarching themes based on the main aspects of the data that they represent (table 2).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Codes</th>
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| Ontology | Systems and channels  
|         | Food production-consumption practices  
|         | Alternative supply model  
|         | Organized flows of food products  
|         | Hybrid networks  
|         | Spaces in the food economy  
|         | Processes that integrate new complexes of production-consumption  
|         | Set of relationships  
|         | Connections between production-consumption actors  
|         | Forms of food provisioning  |
| Antipode | Alternative to the industrialised food supply  
|         | Differ from conventional food supply systems  
<p>|         | Contrasted with large scale, industrial agribusiness |</p>
<table>
<thead>
<tr>
<th>Theme</th>
<th>Characteristics</th>
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| Resistance to dominant market logic | • Counter to the dominant (or conventional)  
• Corrective to conventional agri-food systems  
• Operate outside of corporate-industrial food regimes |
| Reconnection        | • Reconnect producers with consumers  
• Re-connection between producers and consumers  
• Flows of product that connect people  
• Ways to reconnect food producers with consumers  
• Reconnecting consumers and producers |
| Proximity           | • Potential to shortcircuit long supply chains  
• Closer links  
• Shorter distances  
• Rooted in places  
• Embedded in place  
• Local  
• Re-localisation  
• Direct sale |
| Sustainability      | • Commitment to sustainable food production and consumption  
• Economically viable and use of ecologically sound production and distribution practices  
• Environmentally friendly/sustainable  
• High quality and ecologically and/or ethically superior goods  
• Defined by an explosion of organic, fair trade, quality and specialty goods  
• Organic, sustainably grown food |

Theme 'Ontology' denotes efforts to explain the 'whatness' of AFNs. They have been explained in at least ten different ways, from simply ‘spaces in the food economy’ to complex processes of food-consumption. The 'Antipode' theme is highly prevalent and is related to the oppositional nature of AFNs in the context of traditional food systems. AFNs are said to differ, counter, resist and correct industrialized food systems. Theme 'Reconnection' is less predominant but still consistent and reflects the intention of some authors to define AFNs as initiatives aimed at reinstating the relationship between producers and consumers. Theme 'Proximity' represents another prevalent pattern that alludes to the closeness, embeddedness, shortness and/or localness of AFNs in comparison with conventional food systems. Lastly, theme 'Sustainability' refers to certain qualities of AFNs products (e.g. organic, fair trade, etc.) and the sustainable practices that are said to characterize AFNs.

Overall, AFNs seem to be defined as phenomena that are somehow oppositional to conventional food systems. However, to what extent and how they are distinct is still unclear. There are some definitions that attempt to provide a more comprehensive demarcation and suggest that AFNs are not only different from conventional food systems but are also characterized by proximity (shortness embeddedness, etc.) and sustainability. Then again, to what extent they are proximate or challenge the unsustainable practices of conventional food systems is still ambiguous.
Contributions to Theory and Practice

This paper presents findings from a thematic analysis of definitions of AFNs identified through a systematic review of 186 papers. Our analysis allowed a characterization of AFNs based on five main emerging themes from the 31 definitions reviewed. Thus, our study can be seen as a contribution towards a better understanding of the diversity of conceptual definitions of AFNs and an attempt to encourage a more consistent use of the concept. Renting et al. (2003, p.394) recognized the importance of not theoretically restricting “definitions of AFNs given the scarcity of theoretical and empirical work conducted upon them” back in 2003. Since then, a wealth of literature has emerged, and empirical evidence is now plentiful. Hence, there is an opportunity for future research studies to use this evidence base in order to critically examine the phenomena’s heterogeneity. Such effort could shed some light on the specific and shared features of AFNs and contribute to a better understanding of how these alternative forms of provisioning challenge traditional food practices.

Selected References


