A Front Porch for Critical Agrifood Studies: Engagement Across "Food Systems"

Paper first received: 18 January 2023; Accepted: 26 February 2023; Published in final form: 28 February 2023 https://doi.org/10.48416/ijsaf.v28i2.504

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Abstract

In this editorial, the outgoing Executive Committee of the Research Committee on the Sociology of Agriculture and Food of the International Sociological Association (RC40) reflects on a high-level, unifying characteristic that animates the intellectual puzzles and socio-ecological challenges that constitute critical agrifood scholarship. The reflection is introduced as a means to characterise the field, almost 40 years after its first plantlings began to sprout in the fields of agricultural economics, rural sociology, human geography and environmental studies. At the same time, this editorial is a means to (re)introduce RC40 to readers. RC40 is a dynamic, international, welcoming network of agrifood scholars. The heart of RC40's dynamism is found in its journal: the International Journal of the Sociology of Agriculture and food (IJSAF). These platforms offer the type of inclusive spaces needed to drive intellectual exchange, while expanding critically oriented communities of practice in the pursuit of equitable, sustainable, transformative change within parts of and across different sites in the food system.

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Introduction

With this editorial, we reflect on a high-level, unifying characteristic that animates the intellectual puzzles and socio-ecological challenges that constitute critical agrifood scholarship. We introduce this reflection as a means to characterize the field, almost 40 years after its first plantlings began to sprout in the fields of agricultural economics, rural sociology, human geography and environmental studies. At the same time, we want to remind readers about, or in some cases introduce them to, RC40 (https://www.isa-agrifood.com/). RC40 is a dynamic, international, welcoming network of agrifood scholars. The heart of RC40's dynamism is found in its journal: the International Journal of the Sociology of Agriculture and food (IJSAF). These platforms offer the type of inclusive spaces needed to drive intellectual exchange, while expanding critically oriented communities of practice in the pursuit of equitable, sustainable, transformative change within parts of and across different sites in the food system.

With a field as theoretically, methodologically, and disciplinarily diverse as critical agrifood studies, we can imagine any number of ways to conduct a systematic review to identify key and emerging topics of interrogation. However, many of those options come with their own hurdles due to the sheer scope of the field, resulting in a traditional systematic literature review that affords an analysis focused exclusively on the trees at the expense of the forest. To alleviate this concern, we employ a bibliographic analysis, which is a means to visually represent multiple fields of scholarship (and their points of exchange) simultaneously in ways that are difficult to accomplish using text or numbers. This method uses software-aided text analysis and novel data visualization techniques to reveal patterns and relationships that can get lost in the noise generated by large-scale traditional literature reviews. Bibliographic analyses can trace relationships among academic publications and determine, for instance, the structure, scope, and reach of field and subfields (Fan et al. 2021). For this analysis, we interrogate how the term "food system" has been used by the various fields represented in publications captured in the Clavariate Web of Science database.

Our purpose here is to leverage a mapping of literature that uses the term "food system" as a keyword to reflect on the field of agrifood studies. As with all such enterprises, we must begin with a caveat. We are neither conflating "food systems" and "agrifood studies" nor suggesting that one must be subsumed within the other. Rather, we encourage reflection on convergence and divergence across concepts. In the last 30 years, crudely stated, agrifood studies shifted from a focus mostly on agricultural production to a focus on agrifood consumption. In the context of the USA (and perhaps further afield) the "consumption turn" grew directly from a shift in the intellectual center of agrarian studies from the Midwest (e.g., Buttel, Busch, Heffernan, Lacy, Kloppenburg, Sax, Solomon, Flora, Bonanno) to the West Coast (Goodman, Watts, and Friedland [an émigré from the East Coast]). Allaire and Boyer's (1995) analysis of post-Fordism applied to agrifood – The Second Great Transformation – highlights parallel intellectual currents in Europe at the same time. Their updated reflection on what they refer to as "regulation theory" demonstrates a similar trend to the North America shift in theoretical and empirical concerns (Allaire and Daviron, 2018). Reflecting on historical development of our field and the analysis below, we challenge readers to contemplate where future "turns" might lie and to pursue research agendas (and collaborations) that anticipate and respond to changes in intellectual foci.

Methods

The lead author (Michael Carolan) and second author (James Hale) established the parameters for conducting the bibliographic analysis based on best practices listed elsewhere (e.g., van Eck and Waltman 2021). Those steps were as follows: (1) conducting a search of "food system" from Web of Science (WOS) based on identified keywords; (2) limiting parameters to after 2001; (3) and searching among articles, book chapters, early access, and books. This generated a list of 12,123 publications. Hale ran the analysis through the bibliographic software. Hale then grouped the publications by WOS categories. The top twenty recurring categories, based on the outcome of our search, are listed below (note: some publications span multiple WOS categories, which explains by the below numbers add up to more than 12,123):

- I. food and science technology (n=3209)
- 2. ag. multidisciplinary (n=1876)
- 3. green sustainable science technology (n=1411)
- 4. environmental sciences (n=1381), environmental studies (n=1117), ecology (n=280)
- 5. geography (563), sociology (475), regional urban planning (417), development studies (275), history philosophy of science (267)
- 6. agronomy (881)
- 7. nutrition dietetics (867)
- 8. agricultural economics policy (742) and economics (580)
- 9. applied chemistry (578)
- 10. public environmental occupational health (572)
- II. biotech applied microbiology (250)
- 12. multidisciplinary science (267)

The bibliographic software (VOS) further organizes these groupings into four meta-categories: social sciences, biological sciences, management, conservation and ecological sciences, and health sciences.

Figure I : Keyword network for "food system"

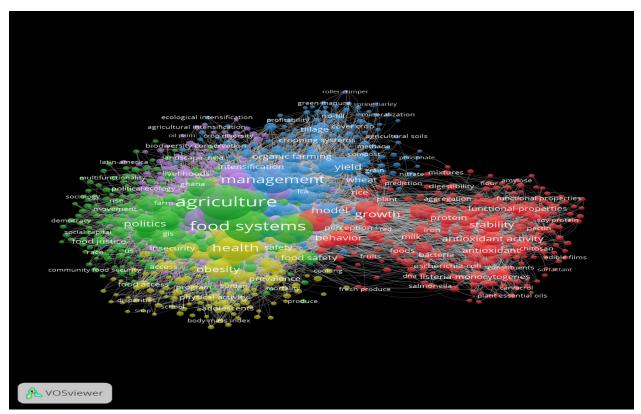


Figure I highlights keywords that were listed alongside "food system" across and within those four meta-categories (keywords were captured and counted by the software and not predetermined by the authors).

Following van Eck and Waltman (2021), the nodes furthest to the right represent publications in the biological sciences; the top, from management, conservation and ecological sciences; the left, from social sciences; and the bottom, from health sciences. Items refert to 'the objects of interest', which in this case are food system-related keywords. Links represent "a connection or a relation between two items" e.g., bibliographic coupling/co-occurrences between keyworks, publications, journals. The weight indicates the importance of the item—"items with a higher weight are shown more prominently than items with a lower weight". Relatedness means that items connected by lines are more related than items lacking a line. Finally, distance describes the strength of that relatedness. The closer items are to each other, when connected by a line, the stronger their relatedness.

Discussion

Several things become clear from this analysis. To begin, the term "food system" is polysemous, which is to say, it has multiple meanings. This is something we expected to find, based on anecdotal observations. In addition to showing its definitional mutability, the analysis also allows us to create groupings based on how the term is put to work. This allows for the visualization of its use within and across the social sciences, health sciences, biological sciences, etc.

Lessons are gleaned from this analysis by approaching the term as a boundary object (Star 2010); a device that allows otherwise disparate intellectual networks and communities of practice to cohere. Susan Leigh Star (1989, p. 37) defined "boundary objects" as "objects that are plastic enough to be adaptable across multiple viewpoints, yet maintain continuity of identity." Boundary objects facilitate collaboration and interaction between diverse actors even though they may hold different understandings of what the boundary object is and ought to be due to having different goals. This concept is often used to explain interpretative flexibility of an object or phenomenon across heterogeneous networks (e.g., Betzold et al. 2018; Konefal and Hatanaka 2011; Søraa and Vik 2021). Star (2010, p. 601) later re-visited the concept to amplify, and analytically clarify, the following characteristics: "(1) interpretive flexibility, (2) the structure of informatic and work process needs and arrangements, and, finally, (3) the dynamic between loosely structured and more tailored uses of the objects." She did this to make sure the concept was not reduced to only the first characteristic: interpretative flexibility—a move, too, that foregrounds "agency" (e.g., definitional fluidity) and while backgrounding structure (e.g., definitions need to be socially embedded). The bibliographic analysis also allows us to describe critical agrifood studies as field built on its ability to moderate engagements that result in the explicit co-mingling of facts and values.

Starting with a higher-level observation, "food system" as a concept is put to work in very different ways across disciplines and fields. We can see this in its links to such concepts as "protein" and "antioxidant" in biological sciences and "food sovereignty" and "justice" in social sciences. This observation leads us to suggest that the concept of "food system" has practical value as an interface across disparate fields and literature in keeping with the logic of a boundary object. The figure thus lends support to the thesis that the term "food system" connects otherwise disparate fields, as evidenced by the highly networked web generated by the bibliographic software. The image also shows what could be called interpretative nesting. "Food system," in other words, co-occurs with other terms that are equally interpretatively flexible—like "growth," "management," "food," "health," and "sustainability." Together, these terms help to build research networks.

Ten years ago, Carolan (2013) wrote about the "wild side of agri-food studies," a piece that speaks to the conceptual, analytic, definitional, and methodological heterogeneity of the field. This "big tent" is generative and intellectually exciting, but there are also pitfalls and constraints. For example, certain fields of scholarship command greater financial resources and visibility.

Critical agrifood studies offers opportunities for helping to make this heterogeneity work in a way that is ultimately productive by embracing the significance of values and culture, which includes the values and socio-cultural standpoint of researchers. Critical agrifood studies not only shines a spotlight on the opportunities for, and barriers to, (agri)food systems change (see e.g., Friedland, Ransom and Wolf (2010) for an invitation to readers to reflect on this argument more deeply). The field also unpacks how certain forms of knowledge may be legitimized, or not. Yet, perhaps even more importantly, we can use these same tools to unpack and contextualize all knowledge claims, which can be incredibly productive from the standpoint of fostering more inclusive types of research collaborations.

This is one way research (and bibliographic) networks as diverse as those displayed in the figure are maintained, by interrogating not only subjects related to food production and consumption by also by interrogating subjects related to knowledge production and consumption. To talk about knowledge is also to talk about power, which is another important, though sometimes under recognized, component of the boundary object concept. Once the social embeddedness of knowing is foreground, it becomes impossible to talk about what knowledge without also asking about whose knowledge (Harding 1991).

In this volume of IJSAF, we have five articles of original research that demonstrate the range of topics and theoretical entry points found in critical agrifood studies. The articles range from discussing food insecurity among migrant workers in the US (Soper 2022) to African swine fever in Vietnam (Kingsbury et al. 2022), farm abandonment in Costa Rica (Rodriguez-Lizano, Montero-Vega, Sibelet 2022), industrial meat production in the US (Chiles and Lougheed 2022), and solidarity across the international Slow Food movement (Shawki and Hunter 2022). As is typical of articles in IJSAF, these papers look to both produce and critique knowledge, they offer 'productive critiques'. These studies and this mode of scholarship also foregrounds lived experience.

Clearly, a focus on food systems has enriched the field of agrifood studies (and built bridges to new communities of scholarship). This brief editorial is an opportunity to reflect on what concepts outside of food systems remain central to agrifood studies. Some of these concepts are precisely where we can add value—e.g., political economy, rural community, globalisation, public policy, and contestation.

These musings bring us to the front-porch metaphor that is referred to in the title of this editorial. RC40, and its journal IJSAF, represent fruitful, visible spaces for gathering. Such exchanges might be for purposes of becoming socialised into broader critical agrifood studies communities of practice, though "socialised" is perhaps too strong a word given the field's "wild side" (Carolan 2013). Also, such exchanges are opportunities to branch out and engage outside of agrifood studies. Lest we forget, front porches are great places to strengthen existing relations and also to connect with people and communities beyond one's field of scholarship. Today's socio-ecological challenges highlight the value of collaboration within fields and in connecting with others that identify with different disciplinary 'homes'.

IJSAF and RC40 welcome you. Join us on our front porch.¹

¹ RC40 is the Sociology of Agriculture and Food Research Committee of the International Sociological Association. To join ISA and RC40 go to <u>https://www.isa-sociology.org/en/membership/individual-membership</u>. If you are not in a position to commit to these memberships, we welcome you as an RC40 affiliate. Sign up through the RC40 website – <u>https://www.isa-agrifood.com/</u>, and this will ensure you receive periodic updates about our programming and opportunities for engagement.

References

- Allaire G and Boyer R (eds.) (1995) La grande transformation de l'agriculture, lectures conventionalistes et regulationnistes. Paris: Economica.
- Allaire G and Daviron B (eds.) (2018) Ecology, Capitalism and the New Agricultural Economy. London: Routledge.
- Betzold A, Carew AL, Lewis GK, and Lovell H (2018) The emergence, articulation and negotiation of a new food industry initiative in rural Australia: Boundary object, organisation or Triple Helix model? *Sociologia ruralis* 58(4): 867-885.
- Carolan MS (2013) The wild side of agro-food studies: on co-experimentation, politics, change, and hope. Sociologia Ruralis. 53(4): 413-431.
- Chiles R and Lougheed S (2022) Legitimating Visions, Mitigating Risks: Industrial and Agrarian Strategies to Resolve the Enigma of Animal Welfare. *The International Journal of Sociology of Agriculture and Food* 28(2): 59-74.
- Fan D, Zhu CJ, Huang X, and Kumar V (2021) Mapping the terrain of international human resource management research over the past fifty years: A bibliographic analysis. Journal of World Business, 56(2), https://doi.org/10.1016/j.jwb.2020.101185.
- Friedland W, Ransom E, and Wolf S (2010) Agrifood alternatives and reflexivity in academic practice. *Rural Sociology* 75(4): 532–537.
- Harding SG (1991) Whose science? Whose knowledge? Thinking from women's lives. Ithaca, NY: Cornell University Press.
- Kingsbury A, Son H, Ha H, and Kieu H (2022) African swine fever and the adaptive capacity of ethnic minority smaller-scale producers of pork in the Northern Mountainous Region of Vietnam. *The International Journal of Sociology of Agriculture and Food* 28(2): 23-39.
- Konefal J and Hatanaka M (2011) Enacting third-party certification: A case study of science and politics in organic shrimp certification. *Journal of Rural Studies* 27(2): 125-133.
- Rodriguez-Lizano V, Montero-Vega M, and Sibelet, N (2022) Drivers and actions that determine the choice of young farmers in Costa Rica to stay on the family farm. *The International Journal of Sociology of Agriculture and Food* 28(2):41-58.
- Shawki N, and Hunter G (2023) Building Solidarity in the Slow Food Movement. The International Journal of Sociology of Agriculture and Food 28(2): 75-93.
- Soper R (2022). Comparative Food Insecurities: Farmworker Perception of How the Quality and Quantity of Food Changes with Migration. *The International Journal of Sociology of Agriculture and Food* 28(2): 7-21.
- Søraa RA, and Vik J (2021) Boundaryless boundary-objects: Digital fencing of the CyborGoat in rural Norway. Journal of Rural Studies 87: 23-31.
- Star SL (2010) This is not a boundary object: Reflections on the origin of a concept. Science, Technology, & Human Values 35(5): 601-617.
- Star SL (1989) The structure of ill-structured solutions: Boundary objects and heterogeneous distributed problem solving. In Distributed artificial intelligence, Gasser L and Huhns MN (eds.), pp. 37-54, Burlington, MA: Morgan Kaufmann.
- van Eck N and Waltman L (2021) VOSviewer Manual, July 22, University of Leiden, Leiden, The Netherlands, https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.17.pdf