Transforming Researchers, Transforming Food Systems: The FLEdGE Network of Networks

ABSTRACT

Networked, intersectoral research partnerships represent one form of university-community collaboration that can respond to and take advantage of the complex and pluralist nature of food systems. Importantly, such partnerships can bring about transformation in many ways: within on-the-ground practice, to scholarly models, and among the perspectives, sense of connectedness, and credibility of individual researchers. This article shares insights on ways in which medium-to-large-scale research partnerships can optimize their transformational potential, specifically through attention to change at the scale of the individual participant. I draw on a set of semi-structured, qualitative interviews with participants in the Food: Locally Embedded, Globally Engaged (FLEdGE) research network, a seven-year, international partnership that brought together over 50 partner organizations and nearly 200 individual participants. Four thematic categories of effects are depicted: active change (to specific individuals and research contexts); latent change (towards future interactions and insights); distribution of leadership (across multiple sites and people); and potential challenges (that may impede or accelerate desired outcomes).

Following J.K. Gibson-Graham's proposal for deploying “thick description and weak theory” (2014), I draw on a number of elements of network theory to help surface insights about individual transformation. Together, they contribute to the growing discourse around network structure, interactivity, and performativity, as well as modes of supporting longer-term food systems transformation.

CORRESPONDING AUTHOR:
David Szanto
School of Journalism and Communication, Carleton University, CA
david.szanto@gmail.com

KEYWORDS:
food systems; FLEdGE; community-engaged research; research partnerships; networks; transformation

TO CITE THIS ARTICLE:
Szanto, D. (2022). Transforming Researchers, Transforming Food Systems: The FLEdGE Network of Networks. Collaborations: A Journal of Community-Based Research and Practice, 5(1): 1, pp. 1–15. DOI: https://doi.org/10.33596/coll.79
As highly complex research subjects, food systems invite approaches that blend disciplines, methods, and frameworks of knowledge. Further, because food systems comprise myriad actors, issues, and relationships, as well as broad temporal and spatial scales, longitudinal and multi-sited studies are often appropriate. A networked, intersectoral research partnership is a model that can respond to and take advantage of these parameters. Such partnerships can engender tangible food system transformation in many ways, through both community engagement and the effects of individual participation. This requires that several conditions be present—or intentionally created—that enable transformation within the network’s organizational and governance structures, and among individual participants (Mezirow, 2000; Wallerstein et al., 2020).

This article presents perspectives on how medium-to-large-scale research partnerships can optimize their transformational potential, specifically through attention to participants’ self-transformation. Drawing on semi-structured, qualitative interviews with participants in the Food: Locally Embedded, Globally Engaged (FLEdGE) research partnership, I outline how individual change can be supported by creating a mutually responsive dynamic among project management, ethos, and communications, and the practices and attitudes of researchers themselves. As a contribution to the discourse on community-engaged research partnerships, this text is also an invitation to other scholars addressing long-term change via networked, systems-based research.

A seven-year research partnership carried out in Canada and internationally, FLEdGE brought together over 50 partner organizations and nearly 200 individual participants. Serving as a governance and communications infrastructure for dozens of distinct projects, FLEdGE came under the aegis of the Wilfrid Laurier Centre for Sustainable Food Systems and was partially funded by a grant from the Social Sciences and Humanities Research Council of Canada (SSHRC). Together, the network members shared a commitment “to fostering food systems that are socially just, ecologically regenerative, economically localized and that engage citizens” (FLEdGE, 2016).

Due to the scope of the network and the number of people I interviewed, this article does not aim at a definitive portrait of FLEdGE or the change to which it has contributed. Rather, I draw on interviewee reflections about transformation—personal and systemic—to propose ways that researchers might embrace change and, recursively, transform food scholarship and food systems. Among other, more granular variables, this is predicated on: (a) the aptness of network conditions at the outset of research; (b) network members’ openness to self-transformation; and (c) relational feedback among network members and leaders.

Because the people and communities that networks comprise operate at multiple scales of time and space, a network of networks approach is an effective starting point. I therefore draw on diverse understandings of how networks are formed and evolve, situating FLEdGE within this array to interpret interviewees’ reflections. This includes the creation and use of social capital, and the formation of “strong ties” and “weak ties” with other network actors (Granovetter, 1983; Putnam, 1994). I also engage with the notions of “swarm creativity” in networks (Bonabeau et al., 1999; Gloor, 2006), the mutual co-production of actors and networks through the “translation” of agency (Latour, 2005; Law & Hassard, 1999), and the porosity of boundaries between communities of practice, due to their members’ movements across multiple “part-time societies” (Lien, 1997). I thus understand networks as performative—a quality that brings about transformation at multiple scales and often through unpredictable, non-linear means (Gibson-Graham, 2008; Loxley, 2007).

In what follows, I discuss four categories of change observed within FLEdGE, relating them to varied aspects of network character and behavior: cases of active change (to individuals’ knowledge bases, relationships, methods, and actions); perceptible and actionable latent change (towards future work, interactions, and insights); means for distributing leadership (including the translation of agency across other network members); and potential challenges that may impede desired outcomes, but may equally represent opportunities for accelerating transformation.

These categories offer an interpretation of what transpired within FLEdGE and, together, characterize a more general framework for understanding the relational dynamics of individuals and networks. For future research partnerships, this may suggest administrative and methodological designs, as well as ways to embed an ethos of community-building. More broadly, it may be useful for imagining medium-to-large-scale collaborations as performative networks, and offer a partial understanding of how such networks can contribute to longer-term food systems transformation.

NETWORKING NETWORK THEORIES

Social networks have been theorized extensively, with varying ontologies and contexts, and sometimes leading to conflicting structural and behavioral models (Jackson, 2005; Li & Xie, 2019; Mouzelis, 2008). Together, however, elements of these diverse models can be useful in understanding networks pluralistically.

For example, networks may be portrayed as formally organized structures composed of nodes (individuals/groups) and ties (linkages/bonds) through which discourse and materials are exchanged (Granovetter,
This understanding has given rise to the concept of social capital—the capacity to acquire goods, information, or other resources (Bourdieu, 1986), as well as a means to foster trust and commonly held norms that support collective action and/or compliance with ‘appropriate’ behaviors (Ramos-Pinto, 2006; Putnam, 2000). Social capital can also underlie the formation and translation of leadership across networks, particularly in networks characterized by heterogeneity and high-frequency interaction (Brass, 2002).

Networks are also described less structurally, as an emergent effect of relationality. Bruno Latour, for example, has stated that “there is no society, no social realm, and no social ties, but there exist translations between mediators that may generate traceable associations” (2005, p. 108; original emphasis). In this sense, a network does not pre-exist its participants’ interactions, but is instead generated post hoc. This interpretation can also extend to network leadership, reconceptualizing it as distributed and non-individual. As Denis et al. have articulated, “actors are present in leadership—enactting it, influencing it, and creating it—but they are not ‘containers’ of leadership” (2012, p. 254).

Models of non-human networks, such as insects and mycelia, also support an emergent interpretation (Bonabeau et al., 1999; Tsing, 2012), offering insight into the apparent ‘intelligence’ and ‘communication’ that emerge when large groups engage in high-frequency interaction. Some intersectional researchers have also proposed hybrid lenses, linking node-and-tie frameworks with distributed or ‘swarm’ theorizations (Salter, 2014; Southworth et al., 2005). This bridges human intelligence with ‘artificial’ intentionality, suggesting speculative possibilities for network behavior.

Within this array of patterning, FLEdGE figures largely as a node-and-tie network (Lekvое et al., 2021; Andrée et al., 2019), an assemblage of academic and community researchers, community practitioners, institutions and organizations, and technological, financial, and human resources. FLEdGE included an initial team of centralized leaders and administrators, evolving into multiple “regional nodes” and international working groups. These teams examined specific local contexts and reported on them through formalized gatherings and publications, as well as informal verbal and digital exchange. FLEdGE also comprised a set of pre-existing norms (such as funding regulations, ethics boards standards, and communications channels) and a history of collective action and publication within and about food systems research (Andrée et al., 2016; Knezevic et al., 2017; Reynolds et al., 2018). Further, as a community-engaged partnership, FLEdGE was conceived and enacted within a history of scholar-practitioner initiatives. Such efforts can be characterized by conflicting objectives, mistrust, and unequal power dynamics (Bortolin, 2011; Bradley & Herrera, 2016; Dempsey, 2010; Jagosh et al., 2015), yet they can also offer participants opportunities to address such challenges, build trust-based practices, respond to inequity with care and empathy, and establish modes of interaction that leverage difference and relationality (Baker et al., 1999; Bartlett et al., 2012; D’Este & Fontana, 2007; Tremblay & Hall, 2014). As Adams and Faulkhead (2012) have noted, “community research partnerships are messy, complex and time consuming” (p. 1016).

Within this set of characterizations, FLEdGE can be seen as a “backbone organization” (Kania & Kramer, 2011), providing management and structural support to a large number of semi-independent initiatives, as well as a “network of networks” (Lekvое, 2014) that manifests shared and divergent qualities over its multiple scales.

Rather than taking a singular analytic approach in what follows, I use this heterogeneous understanding of networks to express how FLEdGE amplified the potential for transformation, drawing inspiration from J.K. Gibson-Graham’s proposal for deploying “thick description and weak theory” when reimagining current and future alternatives (2014). Rather than “run[ning] the risk of bleaching human behaviour of complexity” (p. S148), this approach “does not elaborate and confirm what we already know; it observes, interprets, and yields to emerging knowledge” (p. S149). In this sense, the pluralist framings above stand not as a firm structure for my analysis of FLEdGE, but instead as assorted tools to “ferret out the unapparent import of things” (Geertz, 1973, p. 26), and to illuminate insights within the interviewee’s statements.

Within my siftings of ‘weak theory’ I retain the concept of bridging and bonding ties—those relationships created among loosely and tightly connected individuals and groups. I also layer in the hybrid notion of “multiplex ties” (Brass, 2002), which informs the ways in which organizational values and interaction styles may be exchanged, producing distributed, ‘non-contained’ leadership across contexts. In addition, because FLEdGE was specifically a research network, I also draw on the relationship between transformative learning and the qualities that support it, including: “strong partner facilitation… difference between partners bridged by common purpose… and independence with interdependence” (Franz, 2005, p. 254).

METHODS

From March to May 2020, I carried out semi-structured interview-conversations with 16 members of the FLEdGE community, following a Carleton University ethics protocol. This came toward the end of FLEdGE’s formal funding period, enabling interviewees to reflect back and comment on their experience. I selected participants using the results of a 2018 social network analysis study of FLEdGE, utilizing parameters that included the
extent of their engagement within the network (strong, medium, weak), their primary institutional affiliation (university, community organization), and their region of operation (Ontario, rest of Canada, international).

To gather a range of voices, I assembled a long list that represented diversity across these three categories. Ultimately, the 16 interviewees included fewer individuals with ‘weak’ degrees of collaboration (due to such invitees citing their minimal engagement with FLEdGE), and additional effort was needed to increase international representation due to non-response or subsequent unavailability. This also occurred with several Canadian invitees. Overall, I attribute these issues to the complications brought about by the COVID-19 pandemic. In total, 11 interviewees were from university contexts and five from community organizations; five were from Ontario, five from elsewhere in Canada, and six from outside of Canada; seven represented strong engagement with the network, seven represented medium engagement, and two weak engagement (see Table 1). While FLEdGE included some members whose primary occupation was food production (fishers, farmers, foragers, processors), those who were contacted were not available for an interview.

Each interaction lasted approximately 60 minutes and was video-recorded using the Zoom platform. Interviewees agreed to non-confidential, non-anonymized participation, because of the contextual value of their positionality. That is, because the potential for self-transformation is related to career stage, value of their positionality. That is, because the potential for self-transformation is related to career stage, community roles, and types of network engagement, knowing these details would provide insights into the responses given. As well, because of the close connections within FLEdGE, anonymity would be nearly impossible once interviewee comments were cited.

To mitigate individual risk and support a more participant-driven data set, I provided each interviewee with their interview recording and my typed notes, and invited them to make changes to any details they deemed inaccurate or sensitive. While several signed off with almost no changes requested, others took the opportunity to make edits and comments, ranging from thematic revisions to very granular details and typographic errors.

The open-ended question design allowed for emergent threads that the participant and/or I found relevant. Initial questions focused on participants’ perceptions of their engagement with FLEdGE, as well as the structure and objectives of the network. Subsequent questions focused on transformation—to objectives, perspectives, methods, relationships, and other aspects of the interviewees’ professional activity.

I parsed the research notes according to interviewee references to change or transformation, including mechanisms that may have enabled it. I also noted indications of whether the change was understood to be positive or negative, appropriate or unexpected. From this, I identified four broad categories of change, as detailed below. I also relate transformation to the prevailing qualities of the network, to the participants’ other professional and personal contexts, and to their sensed ability to alter those conditions either directly or indirectly.

| NAME                        | AFFILIATION(S) DURING FLEdGE                                      | ROLE(S)               |
|-----------------------------|-------------------------------------------------------------------|-----------------------|
| Nii Addy                    | McGill University, Montreal, QC, Canada                          | Asst. Professor       |
| Molly Anderson              | Middlebury College, Middlebury, VT, USA                          | Professor             |
| Peter Andrée                | Carleton University, Ottawa, ON, Canada                          | Professor             |
| Lauren Baker                | Toronto Food Policy Council, Toronto, ON, Canada                 | Policy Advisor        |
| André Biscoia de Lacerda    | Embrapa (Brazilian Agricultural Research Corporation), Brasilia, DF, Brazil | Research Scientist/ Research Station Manager |
| Florence Egal               | independent consultant, Rome, Italy                              | Consultant            |
| Cornelia Flora              | Iowa State University, Ames, IA, USA                             | Professor             |
| Irena Knezevic              | Wilfrid Laurier University, Waterloo, ON, Canada; Mount Saint Vincent University, Halifax, NS, Canada; Carleton University, Ottawa, ON, Canada | Research Assoc.; Postdoctoral Fellow; Asst./Assoc. Professor |
| Louise Livingstone          | Harvest Hastings, Hastings, ON, Canada                           | Coordinator           |
| Kristen Lowitt              | Memorial University, St. Johns, NL, Canada; McGill University, Montreal, QC, Canada; Brandon University, Brandon, MB, Canada | PhD candidate; Postdoctoral Fellow; Asst. Professor |
| Catherine Mah               | Dalhousie University, Halifax, NS, Canada                        | Canada Research Chair/Assoc. Professor |
| Hugo Martorell              | Concordia University; Dawson College; USC Canada, Montreal, QC, Canada | Master student; Research Assoc.; Regional Coordinator |
| Ken Meter                   | Crossroads Resource Center, Minneapolis, MN, USA                 | Food Systems Analyst  |
| Kent Mullinix               | Kwantien Polytechnic University, Surrey, BC, Canada               | Director of Sustainable Agriculture and Food Security |
| Connie Nelson               | Lakehead University, Thunder Bay, ON, Canada                     | Professor             |
| Raychel Santo               | Johns Hopkins Center for a Livable Future, Baltimore, MD, USA     | Senior Program Coordinator |

Table 1 Interviewees and institutional affiliations/roles.
FINDINGS & DISCUSSION

Interview data revealed four clusters of transformation or transformative potential. They include: (a) active change, including tangible effects within the day-to-day work of practitioners and researchers; (b) latent change, suggesting shifts in perspective or capacity that may engender future effects; (c) distributed leadership, and the ways in which networks disseminate leadership values and styles; and (d) potential challenges that accompany networked relationships and that can both accelerate and restrict change. Throughout, I highlight opportunities for supporting longer-term and/or recursive transformation within the broader context of food systems scholarship, practice, and activism.

ACTIVE CHANGE

The changes to local food systems brought about by FLEdGE have been well documented (see fledgeresearch.ca). At the same time, specific forms of transformation also took place among individual FLEdGE members. These include: (a) greater scope of research, contacts, and resources; (b) an expansion of disciplinary boundaries, beyond those initially brought to the network; and (c) increased credibility, within members’ local circles and across sectors.

Greater Scope

Interviewees expressed that FLEdGE gave them increased access to resources—funding, collaborators, knowledge—and broader research opportunities and community contacts. Although this was a key objective of FLEdGE, numerous interviewees also spoke of the pleasure and satisfaction that came with this access. They noted that the breadth of resources was advantageous for research, but also for making human connections. As Catherine Mah said, “FLEdGE is not about the structures, it’s about the people. I felt like I was an Atlantic person, a resident, a citizen, connected to the local food movement and to food policy locally.”

This enabled those in both civil and academic contexts to use FLEdGE contacts in other areas of their work, bridging communities and, informally, further expanding the reach of the network. “Through FLEdGE and through the experience of the project, I’ve been able to understand who are...my go-to people’,’ said Lauren Baker. “FLEdGE has provided a real ‘container’ for nurturing those relationships, and deepening them.” She also noted her work at the City of Toronto was influenced by food research beyond the municipality and even outside of Canada.

FLEdGE also enabled pre-existing relationships to be reactivated. During his editorial work on the book, Sustainable Food System Assessment, Ken Meter reconnected with FLEdGE member Nevin Cohen, a former contact. Similarly, Connie Nelson, from Northern Ontario, and Nii Addy, from Quebec, both brought to FLEdGE substantial contacts from past work. In Nelson’s words, “At one time, I had eight grants going—and then along came FLEdGE... We had done a few other projects together, with that same core group of people, and we started building on the relationships that we had already established.”

The ever-expanding network made it difficult to stay up to date with everyone’s work, but also increased diversity and the cross-pollination of research, and thus the potential for on-the-ground transformation. Interviewees noted that each FLEdGE meeting or workshop brought new people, new contacts with future graduate students, and new insights that could be brought ‘inwards’ toward FLEdGE objectives or ‘outward’ toward participants’ other professional goals.

Florence Egal, once labeled “a compulsive networker” while at the Food and Agriculture Organization of the United Nations (FAO), strongly believes in maintaining a flow of information among communities, which she says FLEdGE facilitated: “[I was] an occasion to expand the network, and now whenever I see things published by people in one network and I think it’s relevant, I throw it into my other networks.” This was similarly valuable for early-career participants. Kristen Lowitt, who had been a postdoctoral researcher when first involved with FLEdGE, brought her own contacts to the network while also gaining new ones that support her current work. In her words:

FLEdGE provided me with the space to sustain partnerships over a longer period of time. It can be hard sometimes...to maintain a cohesive research program. FLEdGE provided some of the consistency for me [as well as] access to funding and resources, which enabled me to maintain research partnerships even in geographic areas where I wasn’t located at the time.

Beyond the anticipated benefits of developing weak and strong ties within the network, two other forms of active change were identified, related to disciplinary boundaries and self-perception.

Expanded Disciplinary Boundaries

Institutional and sectoral norms—including standards of discourse and methodology—often limit the ease with which diverse collaborators can work together and share understandings. Enabling familiarity and facility with other disciplines, practices, and worldviews can therefore help enact the “two-eyed seeing” (Bartlett et al., 2012) and “solution-oriented knowledge” (Tremblay & Hall, 2014) that can support longer-term, systemic change.

André Biscaia de Lacerda, who works in agroforestry with farmers in Brazil, expressed limited comfort with FLEdGE’s dominant social science framing, but also an appreciation for the negotiated exchange it demanded.
Usually I work with pure science, forestry people... so it was good to start working with people in the social sciences. That was awesome. I also felt that, on the other side, these people were interested in my experience as a forester, as a person in the field, making things happen in terms of forestry and agroecology, and in contact with farmers on a daily basis.

Similarly, Addy’s background in education included bringing together different disciplinary practitioners, yet he himself had little exposure to the methods and perspectives of those he worked with in FLEdGE. In part thanks to supervising a food systems graduate student, Addy was exposed to food discourse, and now engages with it in his research. Moreover, his pre-existing cross-disciplinarity helped him accept the sometimes non-linear nature of food systems behaviors: “Personally, I think it is much better to allow what happens to happen. To get data that is ‘more real’—insights that are more informative—and that can help us reach the idea of sustainable food systems [and] understand the complexity of it.”

Several interviewees who had been establishing their research programs during their time with FLEdGE expressed that they also already valued cross-disciplinary work. Raychel Santo highlighted a recent urban agriculture project, in which she worked with a team of physical scientists testing Baltimore water samples for heavy metals, complementing their risk-assessment approach with a social science perspective. In contrast, communication scholar Irena Knezevic recalled reframing certain questions within her FLEdGE node as “communications conundrums,” in turn allowing them to be understood and approached from an alternate disciplinary perspective.

Still, institutional resistances remained. Mah self-identifies as “a connector,” yet received pushback to this quality earlier in her career: “I have had more senior research colleagues tell me I’m integrated or transdisciplinary to a fault. ‘Why do you need to make connections? Can’t you focus on a specific area?’” As a Canada Research Chair in population health, however, Mah had to be strategic when deploying different research models. As she said:

Even for those network members whose comfort with other disciplines remained low, FLEdGE enabled productive collaboration. As agricultural scientist Kent Mullinix said, “I’m not used to social science people, and I don’t speak the same language. I don’t necessarily understand methodologies in some of the disciplines represented within FLEdGE... But that’s not bad, and I learned a lot, and enjoyed learning it.” Mullinix also extolled the ways in which FLEdGE represents a critical step towards the “integrated discipline” of food systems:

If your tool is only a hammer, then you can only solve for a nail. But if you’ve got wrenches, and saws, and hammers, and squares, then you can do a lot more stuff... Our real challenge is to create visions in people’s minds of alternate futures, of what can be, and how they can be in it, and data isn’t going to do the trick... [With food] we’re talking about the essence of human existence, and rethinking that element of being human, substantially... It’s obvious that no single discipline can deal with this, because food systems are the epitome of this complex challenge.

Increased Credibility

Many interviewees spontaneously spoke of the credibility that the FLEdGE affiliation gave to their work. This was the case for both emerging and established scholars, and was a reciprocal effect for both academic and community partners. That FLEdGE was a community-engaged research network meant that scholarly efforts were grounded in food sector realities and lived experience. This translation of agency across participants generated “traceable associations” (Latour, 2005, p. 108) that outline network structures. In more tangible form, such associations were represented by outputs not limited to scholarly articles and books chapters, but also videos, blog posts, report cards, and maps, among other forms.

Concomitantly, network members also produced more conventional academic texts, involving community partners in the process. Meter noted that his position as editor and author on an academic volume gave him credibility in the wider circles of his professional community. Hugo Martorell, who now works outside of academia, similarly recognized that to publish with senior scholars such as Peter Andrée was both a learning experience and a privilege. He also acknowledged that, as a graduate student in Montreal, he gained credibility from his affiliations outside of the province.

Biscaia de Lacerda discussed the tensions between Brazilian government policies and on-the-ground practices of yerba mate farmers, including the perception that forest conservation has to come at the cost of agricultural productivity:
I don’t understand why we need to have this incompatibility… If you have a forest you cannot touch it, but you can have monocultures, and that’s okay. You cannot combine both things. But those farmers do work through agroforestry and agroecology. They do combine things. So I try to create or improve systems that combine production with conservation, and at the same time give these farmers some voice.

Biscaia de Lacerda noted that he is able to leverage his research organization’s profile towards ‘officially’ valorizing their community-partners’ traditional knowledge. As well, while he initially sensed few points of connection between his experience and the work of another FLEdGE researcher in Canada’s Northwest Territories, he eventually found value in the parallels their projects shared: “I guess we do have common ground—it’s just a matter of being open and trying to learn from what we see. It takes some time to understand how you can learn from others…”

Lowitt’s experience also depicts mutual exchange and community-engagement:

I was part of another partnership-grant team while I was doing my doctoral research… working in rural-remote regions of Newfoundland to look at social-ecological sustainability of fisheries and fisheries communities. The grounding in that prepared me for what FLEdGE was about and what FLEdGE was trying to do. It was a very interdisciplinary network—social scientists, natural scientists, biologists—trying to work together to… mobiliz[e] knowledge in ways that benefit communities.

Lowitt lent her own connections to the network, and in turn acquired both confidence and a layer of recognition: “[FLEdGE is] where I had a foundation, had a footing, and started to form relationships and connections. And then it has evolved into more of a leadership role, and then ultimately into my own funded projects, which rolled out of that early work and mentorship.”

Several interviewees stated that FLEdGE’s international reach added credibility at both the individual and group level. Peter Andrée expressed it this way:

I didn’t recognize that the research we had been doing had this international resonance… There must be at least a half a dozen of us, if not a dozen, for whom this work was important in terms of getting tenure and promotion. These kinds of projects are important for funding, and for contacts, but also the international profile that our universities look for us to have.

That profile may also have been raised because FLEdGE members operated in Canada’s two languages, linking francophone and anglophone circles. Egal counted this as catalyzing information flow, while also noting it helped her be recognized as more than “just an ‘FAO retiree’.”

These examples show that the network comprised numerous forms of relationality. The value of work already taking place was crystallized, translated, and exchanged across community boundaries, in turn tracing out a network of connections. The multiplex nature of FLEdGE’s social ties enabled its members to gain social capital, raise their profile and that of their work, and scale up regional and international successes. Said long-time scholars Nelson, “I’m so grateful to FLEdGE, because it brought some credentials to local food systems research.”

**LATENT CHANGE**

Beyond the more-evident forms of change, several subtler threads also emerged. Engagement with the FLEdGE network may have induced forms of researcher transformation that will bring about effects in the future, as well as in other physical or conceptual spaces.

I identified three categories of what I term latent change among FLEdGE participants. They include: (a) shifts in perspective that may contribute to alternative research approaches; (b) the valorization of pluralistic knowledge, including non-scholarly forms; and (c) other potentialities that indicate future directions or opportunities for transformative food system research.

**Shifts in Perspective**

Critical food scholarship often positions community-based initiatives that promote sustainability and social justice in opposition to large-scale, “industrial” food actors (Anderson et al., 2016; Blay-Palmer, 2010; Long & Heasman, 2004). As some interviewees noted, however, such dichotomies can limit the potential for hybrid or collaborative approaches: Said Addy: “The big companies themselves [may be seen as] ‘the enemies’, but the people within them are not enemies. They have similar values… How do we engage those people?” Having contacted a number of corporate executives during his work with FLEdGE, Addy came to appreciate that impact can be created by engaging with business leaders, rather than continually opposing them.

Andrée noted a similar shift, including increased sympathy for industry and government employees, and “a better understanding of conventional food systems, and some of the big players in that area.” Allowing resonance with the so-called ‘other side’, may create opportunities to work toward common goals and have more impact when designing the elements of alternative food systems. Understanding industry from the ‘inside’ can also help shift timelines and expectations when it
comes to making systemic change. As Knezevic put it, “over the years, I’ve really become a big believer in the idea of death-by-a-thousand-cuts to the neoliberal food system. We all want to see these grand, big changes... and I don't think that’s how it works, ever.”

Many interviewees expressed the importance of exposure to Indigenous food issues, which helped them think and act differently in their research. As U.S.-based scholar Cornelia Flora put it:

We were learning things like what happens when it’s so hot that the moss dies, and then the moose die, and then the people have nothing to eat. So being able to see, in this more northern area, what happens as the climate is changing—that was a very important learning: everything is related to everything else... We were co-learning...

Already grounded in rural and Indigenous research, Lowitt described how FLEdGE added to her conceptual frameworks around justice and solidarity. Bringing this bear on community-engaged research led her to understand that “there’s an evolution in the story that you can tell.”

U.S. researcher Santo noted that witnessing land acknowledgements at the start of FLEdGE meetings shifted her perspectives on place, as well as some of her assumptions about food issues. “I think actually FLEdGE was the first time I went to a meeting with a land acknowledgement,” she said. “I had never seen it in person, and it was kind of impressive, and it definitely made me think about how we should be doing more of that here.” Whereas Santo noted there is now more research about Native American foodways, it is a recent change, and one that she has become aware of at least partially through FLEdGE.

Another shift related to how research networks structure their objectives around outputs. “Even if it’s just a blog post or the FLEdGE newsletter, there are other ways to have the impact of your research be more broadly communicated,” said Lowitt. “And also the support for open-access publishing... and the aim of providing community access to scholarship.” The dominance of publishing was also reduced for Lowitt, in favor of producing value for her collaborators: “I’m not going to risk a relationship with a community partner just for the sake of one output,” she affirmed.

Individuals’ perspectives on their own place amidst the intersections of research, advocacy, and activism also shifted. As Mah noted, “food scholarship and food activism has changed so much over the last twenty years. What is exciting to me the most about FLEdGE is that FLEdGE has also changed along with that.” Nelson’s longitudinal view of Northern Ontario echoed Mah’s comment. She observed that food issues have changed in parallel to the times, and while she does not identify FLEdGE as the driver of systemic transformation, her work with the network shifted how she engages with food scholarship: “I think I have a better understanding of the breadth of diversity in [food in Ontario]. And I think I gave up on deductive approaches, including social constructivism.”

For their part, Molly Anderson, Biscaia de Lacerda, and Santo all identify as being engaged with ‘the food movement’. The notion comes with caveats—“I do think it’s kind of an ambiguous term,” said Santo, “and not many people know exactly what we’re advocating for, and that’s maybe one of the challenges. Food pulls together so many issues.” Yet for researchers now, civil society and grassroots action seem integrated with scholarship. In Biscaia de Lacerda’s words:

I started being very concerned about doing something that could change people’s lives, somehow... There was this realization that what I was doing needed to be useful—I need to talk to people, and then they might feel that they are important as well, and they might become interested. It’s building together, a bottom-up approach.

Valorizing Pluralism
A common theme among interviewees was the importance FLEdGE placed on pluralistic knowledge and voices. Meetings, in particular, were valued for the time and space they created for diversity—“allowing the conversation to happen” and “allowing everyone to find their own way to engage.” Andrée called this an openness to different ideas, even radical ideas,” also highlighting that FLEdGE researchers were well placed to actualize those ideas.

The diversity of representation was critical for refiguring ‘expertise’. As Egal stated, “[people] making decisions right now...are considered ‘experts’ at the national or international level, and sometimes have no field experience whatsoever...” This theme was also raised by Flora:

The local people were the experts. No one knew this particular piece of land or this community setting as well as the people who were working on it. It was almost in the DNA of the project: everybody’s work is important, everybody’s work is honored, we’re going to get frontline people as well as the people who were advising the FAO...

The intentional mix of participants found common ground in the very subject the network had been assembled around: “The glue was food,” as Flora noted. The effect of such diversity appears also to have informed some of the perspective shifts discussed above. Said Knezevic:
It has been really humbling, in so many ways. Not as in “I was naive, and now I know this…” but humbling in these wonderful ways. Meeting community leaders who have so much knowledge and so much understanding. And ideas that had not necessarily been represented in academic research before...

Lowitt agreed: “It’s fundamentally about a process of the co-production of knowledge with community members.” Coming to such a recognition was also critical for Meter, particularly as food scholarship receives attention from institutions:

We’re at a stage in the food issue right now, where universities that have been denying this issue for twenty, thirty, forty years are now discovering that there’s money to be made by advancing community food work or sustainability scholarship… And the disparity is becoming wider and the disparity of resources is becoming more harsh… We have funders who don’t fund community groups because they’re not tied with an institution like a university… [FLEDGE] is that potential meeting ground, and you have people leading FLEDGE who understand that that’s the dynamic, and are doing scholarship based on decolonizing academic research...

Mah mirrored this view, including the potential risk it presents, as the range of food research broadens, and as its value is increasingly attached to capitalist concerns. In her words, “there are very different camps in terms of the process for achieving social change… Those broader debates very much coalesce in the area of food, because food touches economy, it touches institutions, and governance.” Nevertheless, the pluralist nature of food also prompts optimism. Being exposed to it not only helped Mullinix integrate agricultural science into the broader framework of food systems, but also reshaped how he conceives of project scoping in the first place: “The breadth of [FLEDGE] has in fact broadened my own thinking, enriched my thinking, and that comes to bear on project conceptualization. Which seems like no big deal, but in this work it’s the biggest deal, right?”

Other Potentialities

Food systems are characterized by complexity—mess, in sociologist John Law’s phrasing (2004). As Addy noted, allowing food research to be ‘messy’ is important, yet it can also produce a lack of clarity around project boundaries, objectives, and methods. Many interviewees recognized that some aspects of FLEDGE were messy, in both positive and problematic senses. Within such disorder, several other potential sources of transformation appear.

Over the timeline of FLEDGE, a number of partnerships, networks, and projects shared both human resources and objectives. While this may have confused matters at the individual level, it also suggests that FLEDGE was and is part of an ongoing continuum of research, activism, and change. Said André, “there was a larger story of this research community existing at least five years before.”

pointing out that many FLEDGE members had been conducting similar work both individually and together over many years. Others noted their own fluidity among past and ongoing research initiatives and civil society organizations, including Nourishing Communities, Community First: Impacts of Community Engagement, and Food Secure Canada.

As Anderson put it, all of these networks intersected, and so FLEDGE became a ‘messy crossing point’ of individuals, teams, practices, and institutions, while nonetheless retaining its own governance structure and focus. Egal suggested that FLEDGE was “like going to a party: you don’t know what’s going to happen, but then you meet people, you learn from these people, and it shapes the way you work and it shapes the way you think.”

The presence of informality or messiness in a research community perhaps epitomizes the ‘latent’ transformation that numerous weak ties across societies can engender. Some interviewees had no immediate sense of how such ties might be activated in future, but knowing that a diffuse network exists was reassuring and empowering—a feeling of having acquired social capital. Mullinix framed it this way:

[It’s] just knowing that there’s this group of very talented, dedicated academics all across this country that share much of my food system thinking and values, and are doing good work to advance that. Working in isolation is no good… I feel like my team was expanded, with people I haven’t even worked with yet, and may never work with, I don’t know.

For Louise Livingstone, who now works in journalism and community organizing, FLEDGE was a means to re-connect with scholarship: “FLEDGE has given me an outlet, it’s been really good being involved in a bigger project… Having been an academic for a long time before in Scotland, and coming here as an immigrant, one doesn’t have connections, one has to build something up.”

DISTRIBUTED LEADERSHIP

The current study did not explicitly examine leadership models within FLEDGE, but in probing individual transformation, the dissemination of leadership emerged as a clear outcome. One catalyst of such dissemination was consistently named: FLEDGE’s principal investigator,
Alison Blay-Palmer. Enormous regard was expressed for the ways in which she created connections, inspired and empowered others, and, in the very simplest of terms, was nice.

The portrait of leadership created by the interviewees is one of negotiation and appreciation, support and sharing, and the valorization of other people’s knowledge. Blay-Palmer was credited as the model of this style, but not its ‘container’. She was described as “a super collaborator… so humble, so appreciative”, “so generous… a strong leadership [that] is notable and remarkable”, “a master networker”, “always happy, ‘Let’s go!’”, “a very key element in this”, and “gracious and grateful”, among other qualifiers. These comments suggest that a cheerful, energetic, and kind management style can extend itself to others. By design or serendipity, it also appears to be the form of leadership that enabled FLEdGE to transition from a centralized network to one that became federated over time. While the network was not explicitly ‘governed’ by Blay-Palmer, its shared governance was inspired by her embodiment of decentralized authority.

FLEdGE’s distributed leadership manifested itself variously. Lowitt noted that it “trickled down, [through] some of the structures that were set up, and [through] trust in the relationships…” Such trust, Lowitt said, was inspired “by listening, creating spaces for engagement, respectful discussion, not feeling that [one person] is setting the agenda… [There was] attentiveness to the work that all the different members of FLEdGE are doing… it set a tone of collaboration and reciprocity and trust.” Overall, said Mullinix, “[Alison] embraced what her colleagues were saying, and packaged it and represented it back to them. She created a dynamic collaboration environment, and the people in the group also embraced that collaborative dynamic.” This appears to have influenced research directions, new network collaborations, and generated outcomes. Noting the flawed belief that community change is led by singular “spark plugs,” Flora pointed out that “we saw things more in context. We concluded that change doesn’t happen by listening, creating spaces for engagement, respectful discussion, not feeling that [one person] is setting the agenda… [There was] attentiveness to the work that all the different members of FLEdGE are doing… it set a tone of collaboration and reciprocity and trust.” Overall, said Mullinix, “[Alison] embraced what her colleagues were saying, and packaged it and represented it back to them. She created a dynamic collaboration environment, and the people in the group also embraced that collaborative dynamic.” This appears to have influenced research directions, new network collaborations, and generated outcomes. Noting the flawed belief that community change is led by singular “spark plugs,” Flora pointed out that “we saw things more in context. We concluded that change doesn’t depend on just one person… it depends on many people working together.”

Distributed leadership and many-people-working-together can also change how individuals relate to project outcomes. In Knezevic’s words:

I really don’t feel any ownership over any of the work that’s been done. None of that work is mine, it’s ours. It really is… I think it’s really difficult to work on a project like this with a person like Alison at the helm and then have any desire to feel ownership… much more can be done if we don’t get territorial.

Effects Within Other Movements and Networks?

These threads weave an imagined future in which FLEdGE will have contributed to other networks, movements, and initiatives. Several interviewees pointed to this likelihood, noting the numerous communities that FLEdGE participants populate. Santo articulated that communities are always networks of networks, and that ‘network membership’ is invariably linked to both bridging and bonding relationships. Addy compared FLEdGE to a set of waves rolling onto and away from a beach. This ‘tide’ helps different ideas bump up against one another, both rhythmically and randomly. Some of his management colleagues came to understand the value of working with community members, just as community participants grew to appreciate what management studies can offer.

Baker saw that FLEdGE enabled professional and personal values to bump together, noting that FLEdGE was a beacon of valuing everyone’s interests and experience, which breeds the body of knowledge needed for food systems transformation. Baker also witnessed FLEdGE fuel multiple on-the-ground efforts with seed funding and capacity building, a tactical effect she found extraordinary. “FLEdGE is a great example of how you can do both [academic and activist work]. This is why it can be a new model for thinking about research.”

Other interviewees found that the support for reflection, small-scale conversations, larger meetings, collective analysis, and multiple forms of ‘published’ outputs helped engender real change. Knezevic pointed out that FLEdGE outcomes were often very grounded, and sometimes dissociated from its formal objectives, in part because of the autonomy of its participants:

When Hidden Harvest Ottawa, the fruit rescue organization, was pitching for funding with the City of Ottawa, they invited our research assistant, Chloé Poltevin-DesRivières, to come speak before the city council. The organization wanted her to bring that ‘university legitimacy’... So that’s just one example... Did we take credit for what Hidden Harvest was doing? Absolutely not. Are we changing policy? No we’re not. But are we contributing to those changes? For sure.

Because of the heterogeneous, international makeup of FLEdGE, the effects ‘within’ its boundaries extend beyond them as well. Pre-determined outputs and reporting structures were formalized by funding and institutions, but FLEdGE was also amorphous and porous—a network both pre-figured and emergent. While the extent of entanglements and cross-contaminations cannot be represented within this text, it is evident that FLEdGE’s potential for transformation has usefully leaked across networks of networks...
numerous borders, both political and societal, imaginary and practical.

**CHALLENGES**

Community-engaged research partnerships—and indeed all research collaborations—invariably meet challenges. These come in the form of governance issues, unanticipated research circumstances, and realities that may require adjustments to perspectives, practices, and personal-professional boundaries (D’Este & Fontana, 2007; Peacock et al., 2020). Seen as impediments to existing goals, they might be met with frustration and resistance. Yet seen as moments in which agency is translated among mediators, challenges can produce benefits by releasing new opportunities. In what follows, I address challenges foregrounded by interviewees and propose ways to view them as advancing individual and network transformation.

**Alignment of Objectives**

As a backbone organization, FLEdGE operated with a core set of objectives and intended outcomes, established by the initial partnership team and communicated to new members as the network expanded. As a network of networks, however, FLEdGE also comprised numerous, semi-autonomous research groupings, each with their own context and constraints, values and needs. Several interviewees noted that participants didn’t always align with the network’s stated ethos and goals. Others described the objectives as unclear and undefined, or, for those who joined FLEdGE later, pre-established and grounded in social sciences. At the same time, through built-in reflection and feedback meetings, the original themes also evolved.

These themes—scaling up (of food system initiatives), integration (across policy spheres, political jurisdictions, and sectors), and appropriate governance (structures and institutions)—eventually intersected with and informed three focal areas of international work: innovative governance, food system metrics and tools, and agroecology. Later, over a year-long internal consultation process, FLEdGE established six “Good Food Principles”, emerging from the original objectives while acknowledging perspectival changes. The Good Food Principles also provided researchers with a set of thematic channels through which to disseminate research outcomes meaningfully (see fledgeresearch.ca).

Since a diverse network encompasses diverse perspectives and generates diverse outcomes, the ‘challenge’ of aligning everyone with a common set of objectives became an occasion for collective reflection and discussion. This helped transform network structures and values, as well as those of the nodes. Through the performative nature of giving and receiving relational feedback, individual researchers also experienced a shift, both to their perspectives and sense of agency.

**Internalized Conflict**

Some interviewees had feelings of personal, internalized conflict at various moments. Because FLEdGE surfaced so many opportunities for collaboration, and because each member had limited time and capacity, many projects, relationships, and methods could not be pursued. This meant choosing one over another, creating a sense of missed opportunity. While part of normal human experience, it points to the tensions in ‘making the cut’ in doing research, but also to the optimistic reality that there is always more work to do.

Andrée noted that, because of his investment in work at the Canadian national food policy level, he was not able to maintain some relationships with the civil society organizations that had originally been part of his FLEdGE engagement. Over a longer temporal window, those organizations might well benefit from his shift to policy work, but in the shorter term such value was not as evident. Similarly, as Knezevic pointed out, there can be disconnects between community expectations and academic rhetoric. While publishing academic journal articles can contribute to longer-term change, in the immediate experience of a community practitioner, a publication may appear to contribute more to the scholar’s professional transformation than to making an on-the-ground difference. Compounding this, there are multiple institutional pressures on funded researchers to publish. This funder-scholar-publisher network is one of many within which FLEdGE intersected, creating both challenges/opportunities and accelerants/restrictions to systemic and individual transformation.

The challenge of internalized conflict was also manifest in the ways interviewees shifted their research interests and methods. Some noted that they had become saturated with community-based research and, while appreciating its value, also had to set it aside, in part because of the energy and time that such relationships demand. Others wanted to engage more with alternate outputs, such as participative video, blogging, and public scholarship—forms that FLEdGE made feasible, yet which were not always appropriate to a given initiative. That such outputs were ‘out of reach’ in these cases seems also to have increased the appetite to engage with them in future.

**Power**

Perhaps the most frequently noted challenge was the myriad ways in which power relations and differential power became evident during cross-sector interaction. While this often related to financial control, it was also about privileged access to time and other resources—such as peer support and overall well-being—which some individuals had and some did not.

Built in to a SSHRC-funded partnership grant are directives that determine how money can and cannot be spent. While the FLEdGE leadership were diligent...
in providing community partners with honoraria, travel/accommodation funding, and other support, financial imbalances remained present. In decision-making processes, economics can also translate into time and impact values, as Andrée observed. While FLEdGE researchers did take guidance from civil society organizations, “when there are choices to be made, it often does come down to the researcher saying ‘Where can I spend my time, where does my university feel— and my colleagues feel—that I should be spending my time? What has more profile or more prominence?’” Nonetheless, Andrée also recognized that community partners are not exclusively resource-dependent on academia—by casting a large net across multiple sectors, they can diversify their sources of support. Like all FLEdGE actors, community organizations also exist within their own network of networks, and are able to respond to restrictions by directing attention toward other relationships.

Biscaia de Lacerda, through his work with farmers in Brazil, identified a challenge based in distrust, largely for government officials who create top-down policies. That disconnect nonetheless became an opportunity for his organization Embrapa to take a grounded approach with farmers and to grow policy recommendations that were ‘bottom-up’ (i.e., based in existing agroecological practices). By inverting the power-related challenge that pre-existed his work, he was able to form trusting community relationships, transforming resistance into an accelerator of change.

A final issue raised was that of time, and the knock-on effects that limits on time have to both professional activity and personal well-being. Martorell noted that, in his observations, many community practitioners working in food security have challenges themselves with food access and personal health. Often underpaid—or working multiple jobs to make ends meet—they are caught in a double bind by the very issues on which they work. Similarly, as Mah pointed out, the “ticking budget” and timelines of research initiatives don’t always line up with the “practical time clock” that community organizations have to deal with. While co-designing partnership objectives and frameworks can partially address this, sometimes scholarly and civil actors are simply operating on two very different trajectories. Though Mah was confident that FLEdGE members were aware of these differences, she also expressed that her own understanding of time had been transformed, and that she would continue to attend to this differential in future research relationships.

Egal summarized the challenge succinctly: “The problem is that it’s very difficult to have [a broad] perspective when you are within a particular institutional landscape. You have a tendency to think that other landscapes are similar, and to engage with people as if they are doing the same work that you’re doing...” Usefully, however, and as expressed in the interviewees’ commentaries, FLEdGE provided the crossings and re-crossings of experience that nurtured pluralistic perspectives. When it comes to power and preconceptions of privilege, this seems to have broken through the institutional myopia that can impede effective, productive, cross-sector collaboration.

**CONCLUSION**

Hybrid, intersectoral, community-engaged, pluralistic, a networked network: many terms describe FLEdGE and its heterogenous, high-frequency interactions. FLEdGE has been an ecology of people, institutions, processes, and objectives, interacting over several years and producing outputs, occasions for exchange, and actionable ideas for years to come. It was centralized and distributed. It was a backbone structure and a self-performing system. It was characterized by a set of conditions that were initially established and then allowed to evolve, as well as by collaborators who enabled this and other kinds of transformation through ongoing, relational feedback.

Among individual participants, transformation took place to their personal and professional practices, mindsets, and future ambitions. Through both strong and weak social ties, careers were enhanced and directions shifted. Through emergent contexts, new relationships were activated, trust built, and common goals pursued. At the same time, because the translation of agency is productively agnostic, some connections among individuals and organizations were broken, and the culture of university-community inequity was both perpetuated and confronted.

These transformations may be attributed to the social capital that FLEdGE helped grow, and to the knowledge that was both formalized in research publications, and loosely exchanged over coffee breaks and in transit. The porosity of boundaries between the part-time societies of FLEdGE enabled scholars, community researchers, and food practitioners to move relatively freely among contexts, learning, self-empowering, and taking the lead as a moment required. My interviewees largely expressed a willingness—indeed an enthusiasm—to allow themselves to be changed by the experience of research and collaboration. In so doing, benefits accrued for themselves and the foci of their work. Over time, these benefits may continue to build on each other, producing the more extended forms of food systems transformation for which FLEdGE was originally conceived.

Future research that looks at the systemic and individual transformation that community-engaged research partnerships can create might follow the threads I have laid out here, considering the pluralistic nature of networks as a contributor to such change. This includes a network’s relative size and looseness, and the latent
sense of credibility, resources, and ‘not feeling alone’ that can empower collaborators and support risk-taking. Similarly, structures should be examined that enable large partnerships to maintain fluidity between disciplinary and non-disciplinary practice, including facilitated meetings for reflecting on and bridging disconnects. Ongoing work towards distributing human and financial resources—as well as the critically underavailable resource of time—will be necessary, mitigating inequities across sectors and resistances to transformation.

A final challenge to engendering individual change within large networks, and one that FLEdGE seems to have addressed, is the decentralization and dissemination of leadership. While partnership grants necessitate a principal investigator or core research team, FLEdGE’s ‘de-containment’ of leadership appears to have supported broad-based empowerment, individual growth, and collective productivity. This was accompanied by the modeling of enthusiasm, generosity, and gratitude by Blay-Palmer, which has, as one interviewee framed it, produced a “next-generation” of leaders who owe her a debt of inheritance. If indeed these research and community leaders continue to bring about the thousand cuts that will eventually refigur[e] our food systems as more sustainable, just, and enjoyable, then it is all of us who might want to offer our thanks.

NOTES

1 FLEdGE researchers’ contributions to food system change have been documented extensively elsewhere in the literature. See Canadian Food Studies 8(2) and flegderesearch.ca.

2 It is clear that transformation to food systems at the broad scale is dependent on change within many more spheres than academia—including activist, producer, consumer, and policy communities. Nonetheless, because research networks such as FLEdGE enable intersubjective relationships among these groups, they have the potential to play important roles in large-scale transformation.

3 For transparency, I note here that I have known and respected Alison Blay-Palmer since 2012, serving as vice president of the Canadian Association for Food Studies when she was president. Because of my first-hand experience with her leadership style, I did not raise it myself during the interviews. It was nonetheless frequently mentioned.

ACKNOWLEDGEMENTS

I am very indebted to Irena Knezevic, for her scholarly support and keen editorial eye, as well as the School of Journalism and Communication at Carleton University.

FUNDING INFORMATION

This research and writing was in part funded by the Social Sciences and Humanities Research Council of Canada.

COMPETING INTERESTS

The author has no competing interests to declare.

AUTHOR AFFILIATIONS

David Szanto orcid.org/0000-0002-5838-7717
School of Journalism and Communication, Carleton University, CA; Faculty of Fine Arts, University of Ottawa, CA

REFERENCES

Adams, K., & Faulkhead, S. (2012). This Is Not a Guide to Indigenous Research Partnerships: But It Could Help. Information, Communication & Society 15 (7): 1016–36. https://doi.org/10.1080/1369118x.2012.709260

Anderson, C., Brady, J., & Levkoe, C. Z. (Eds.). (2016). Conversations in Food Studies. University of Manitoba Press. https://doi.org/10.15353/cfs-reca.v4i2.244

Andrée, P., Clark, J. K., Levkoe, C. Z., & Lowitt, K. (2019). Civil Society and Social Movements in Food System Governance. Taylor & Francis. https://doi-org.proxy.bib.uottawa.ca/10.4324/9780429503597

Andrée, P., Kepkiewicz, L., Levkoe, C., Brynne, A., & Kneen, C. (2016). Learning, Food, and Sustainability in Community-Campus Engagement: Teaching and Research Partnerships That Strengthen the Food Sovereignty Movement. In J. Sumner (Ed.), Learning, Food, and Sustainability: Sites for Resistance and Change (pp. 133–153). Palgrave Macmillan US. https://doi.org/10.1057/978-1-137-53904-5_8

Baker, E. A., Homan, S., Schanoff, S. R., & Kreuter, M. (1999). Principles of practice for academic/practice/community research partnerships. American Journal of Preventive Medicine, 16(3), 86–93. https://doi.org/10.1016/s0749-3797(98)00149-4

Bartlett, C., Marshall, M., & Marshall, A. (2012). Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledge and ways of knowing. Journal of Environmental Studies and Sciences, 2(4), 331–340. https://doi.org/10.1007/s13412-012-0086-8

Blay-Palmer, A. (2010). Imagining Sustainable Food Systems: Theory and Practice. Ashgate. https://doi.org/10.4324/9781315587905

Bonabeau, E., Dorigo, M., & Theraulaz, G. (1999). Swarm Intelligence: From Natural to Artificial Systems. Oxford University Press. https://doi.org/10.1093/osao/9780195131581.001.0001

Bortolin, K. (2011). Serving ourselves: How the discourse on community engagement privileges the university over the community. Michigan Journal of Community Service Learning, 18(1), 49–58. http://hdl.handle.net/2027/spo.3239521.0018.104
Bourdieu, P. (1986). The Forms of Capital. In J. G. Richardson (Ed.), Handbook of Theory and Research for the Sociology of Education (pp. 241–58). Greenwood Press. https://doi.org/10.2307/2069964

Bradley, K., & Herrera, H. (2016). Decolonizing Food Justice: Naming, Resisting, and Reshaping Colonial Forces in the Movement. Antipode, 48(1), 97–114. https://doi.org/10.1111/anti.12165

Brass, D. J. (2002). Social Capital and Organizational Leadership. In S. J. Zaccaro & R. J. Kilmers (Eds.), The Nature of Organizational Leadership: Understanding the Performance Imperatives Confronting Today’s Leaders (pp. 132–152). John Wiley & Sons.

D’Este, P., & Fontana, R. (2007). What drives the emergence of entrepreneurial academics? A study on collaborative research partnerships in the UK. Research Evaluation, 16(4), 257–270. https://doi.org/10.1111/j.1475-2866.2007.00702.x

Dempsey, S. E. (2010). Critiquing Community Engagement. Management Communication Quarterly, 24(3), 359–390. https://doi.org/10.1177/0893318909352247

Denis, J.-L., Langley, A., & Dempsey, S. E. (2015). What drives the emergence of entrepreneurial academics? A study on collaborative research partnerships in the UK. Research Evaluation, 16(4), 257–270. https://doi.org/10.1111/j.1475-2866.2007.00702.x

FLEdGE. (2016, January 27). About us. https://fledgeresearch.ca/about/

Franz, N. K. (2005). Transformative Learning in Organizational Partnerships: Facilitating Personal, Joint, and Organizational Change. In Transformative Education (3(3)), 254–270. https://doi.org/10.105714660527509

Geertz, C. (1973). The Interpretation of Cultures. Basic Books. https://doi.org/10.1126/science.186.4162.435

Gibson-Graham, J. K. (2008). Diverse Economies: Performative practices for “other worlds.” Progress in Human Geography, 32(5), 613–632. https://doi.org/10.1177/0309132508090821

Gibson-Graham, J. K. (2014). Rethinking the Economy with Thick Description and Weak Theory. Current Anthropology, 55(59), S147–S153. https://doi.org/10.1177/0309132508090821

Gloor, P. A. (2006). Swarm Creativity: Competitive Advantage Through Collaborative Innovation Networks. Oxford University Press. https://doi.org/10.1093/9780195304121.001.0001

Granovetter, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. Sociological Theory, 1, 201–233. https://doi.org/10.2307/202051

Jackson, M. O. (2005). A Survey of Network Formation Models: Stability and Efficiency. In G. Demange & M. Woorders (Eds.), Group Formation in Economics (pp. 11–57). Cambridge University Press. https://doi.org/10.1017/cbo978051164385.002

Jagosh, J., Bush, P. L., Salsberg, J., Maccayla, A. C., Greenhalgh, T., Wong, G., Cargo, M., Green, L. W., Herbert, C. P., & Pluye, P. (2015). A realist evaluation of community-based participatory research: Partnership synergy, trust building and related ripple effects. BMC Public Health, 15(1), 725. https://doi.org/10.1186/s12889-015-1949-1

Kania, J., & Kramer, M. (2011). Collective Impact. Stanford Social Innovation Review, Winter. http://leveragingourstrengths.ca/reading/collective_impact.pdf

Knezevic, I., Blay-Palmer, A., Levkoe, C., Mount, P., & Nelson, E. (Eds.). (2017). Nourishing Communities: From Fractured Food Systems to Transformative Pathways. Springer International Publishing. https://doi.org/10.1007/978-3-319-57000-6

Lang, T., & Heasman, M. (2004). Food Wars: The Global Battle for Mouths, Minds and Markets. Earthscan. https://doi.org/10.4324/9781849776011

Latour, B. (2005). Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford University Press. https://doi.org/10.1108/eoi.2008.27.3.3072

Law, J. (2004). After Method: Mess in Social Science Research. Routledge. https://doi-org.proxy.bib.uottawa.ca/10.4324/9780203481141

Law, J., & Hassard, J. (1999). Actor Network Theory and After. Wiley-Blackwell. https://doi.org/10.2307/2654376

Levkoe, C. Z. (2014). The food movement in Canada: A social movement network perspective. The Journal of Peasant Studies, 41(3), 385–403. https://doi.org/10.1080/03066150.2014.910766

Levkoe, C. Z., Blay-Palmer, A., Knezevic, I., Szanto, D., & Addy, N. (2021). A Modular Approach to Intersectoral Research Collaborations for Foods Systems Transformation: Lessons from the FLEdGE Community-Engaged Research Collaborative. Canadian Food Studies, 8(2), 18–47. https://doi.org/10.15353/cfs-rcea.v8i2.431

Li, P., Xie, E. (2019). The Unique Research on the Informal Ties and Social Networks in East Asia: Diverse Perspectives and New Research Agenda. Asia Pacific Journal of management, 36(2): 305–19. https://doi.org/10.1007/s10490-019-09652-6

Lien, M. E. (1997). Marketing and Modernity. Berg. https://doi.org/10.5040/9781350044876

Loxley, J. (2007). Performativity. Routledge. https://doi.org/10.4324/9780203391280

Marin, A., & Wellman, B. (2011). Social Network Analysis: An Introduction. In The SAGE Handbook of Social Network Analysis. SAGE Publications. https://doi.org/10.4135/9781446294413

Mezirow, J. (2000). Learning as Transformation: Critical perspectives on a theory in progress. Jossey-Bass.

Mouzelis, N. P. (2008). Modern and Postmodern Social Theorizing: Bridging the Divide. Cambridge University Press. https://doi.org/10.1017/CBO9780511811418

Peacock, D., Andrée, P., Levkoe, C. Z., Geomans, M., Changfoot, N., & Kim, I. (2020). Accounting for Community Impact. Michigan Journal of Community Service Learning, 26(1). https://doi.org/10.3998/mjcsloa.3239521.0026.111

Putnam, R. D. (1994). Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press. https://doi.org/10.1515/9781400820740
Putnam, R. D. (2000). Bowling Alone: The Collapse and Revival of American Community. Simon and Schuster. https://doi.org/10.1016/s0362-3319(02)00190-8

Ramos-Pinto, P. (2006). Social Capital as a Capacity for Collective Action. In R. Edwards, J. Franklin, & J. Holland (Eds.), Assessing Social Capital: Concept, Policy, Practice (pp. 53–69). Cambridge Scholars Press. https://doi.org/10.5848/csp.0479.00004

Reynolds, K., Block, D., & Bradley, K. (2018). Food Justice Scholar-Activism and Activist-Scholarship. ACME: An International Journal for Critical Geographies, 17(4), 988–998.

Salter, C. (2014). Alien Agency: Ethnographies of Nonhuman Performance. MIT Press. https://doi.org/10.7551/mitpress/9356.001.0001

Southworth, D., He, X.-H., Swenson, W., Bledsoe, C. S., & Horwath, W. R. (2005). Application of network theory to potential mycorrhizal networks. Mycorrhiza, 15(8), 589–595. https://doi.org/10.1007/s00572-005-0368-z

Tremblay, C., & Hall, B. L. (2014). Learning from community-university research partnerships: A Canadian study on community impact and conditions for success. International Journal of Action Research, 10(3), 376–404. https://doi.org/10.1668/IJAR-2014-03-Tremblay

Tsing, A. (2012). Unruly Edges: Mushrooms as Companion Species: for Donna Haraway. Environmental Humanities, 1(1), 141–154. https://doi.org/10.1215/22011919-3610012

Wallerstein, N., Oetzel, J. G., Sanchez-Youngman, S., Boursaw, B., Dickson, E., Kastelic, S., Koegel, P., Lucero, J. E., Magarati, M., Ortiz, K., Parker, M., Peña, J., Richmond, A., & Duran, B. (2020). Engage for Equity: A Long-Term Study of Community-Based Participatory Research and Community-Engaged Research Practices and Outcomes. Health Education & Behavior, 47(3), 380–390. https://doi.org/10.1177/109019811989707