Balancing collective action and connective action in new food cooperatives: Fertile ground for transformative change?

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Abstract

Communication that fosters collective action is considered a key driver of transformational change. This study explores the role that cooperatives could play in transforming the current unsustainable food system toward sustainability. The focal point of the study is how communication processes of nonprofit cooperative forms of collective action can optimize their transformative capacity and, in a wider context, contribute to agricultural transformation. The study addresses former research on transformation, in particular on how transformation is triggered at local level. To assess how transformation can be stimulated in practice, the case of a new food cooperative – Farming Communities, a grassroots initiative in the south of the Netherlands – is investigated. Farming Communities serves as an example of an innovative form of food production and illustrates how collective action and connective action come about through interaction. Collective action, depending on the quality and the results of interaction, is fostered by acknowledged vertical and horizontal interdependence and a certain level of trust. Interaction dynamics for collective action can enhance transformative capacity by emergent new ways of doing, knowing, framing, and organizing. Furthermore, the concept of connective action is introduced, which entails interaction dynamics among individuals who share ideas and opinions via networked technologies. Connective action can overcome the fragility of a single local initiative and is suitable for enhancing the transformative capacity of a grassroots initiative. However, a surplus of connection action could hamper the robustness of collective action. Cooperatives are therefore challenged to find a fruitful balance between collective action and connective action.

Introduction

Food is a prerequisite for human existence, as we all experience on a daily basis. Globally, food and agricultural production has increased significantly, but it has also adversely impacted nutrient cycles, biodiversity, and climate change (Springmann et al., 2018). Transformation toward a future-proof, sustainable food system is one of the most significant challenges facing humankind. Understanding transformation processes that lead to sustainability is therefore a key interest in research on food and agriculture. Equally, this topic entails communication, because collectives and individuals shape transformation processes mainly through communication (Moore et al., 2014).

Communication that fosters collective action is indeed considered a key driver of transformational change (Aarts, 2018; Leeuwis & Aarts, 2011; Loorbach et al., 2020; Van Bueren et al., 2003). Furthermore, there is a strand of research that suggests that transformative change is often triggered at local level through collective action or co-construction of local solutions (Avelino et al., 2020; Balvanera et al., 2017; Staggenborg, 2016; Wittmayer et al., 2019). Agricultural transformation is a multifaceted challenge and consists of changing interrelated social, cultural, economic, and ecological processes that together reproduce the current unsustainable food system (Leeuwis et al., 2021). It is therefore paramount to know whether and how people in a local context are able to make sense of this complex issue and mobilize other actors to self-organize around a different viewpoint or a new practice that addresses transformative change (Weick & Sutcliffe, 2011). Moore et al. (2014, p.4) describe this sensemaking process as "building 'collective action frames' in a local context, that contribute to a common story and purpose to motivate action" (building on Staggenborg, 2016; see also Wittmayer, 2019). This chapter aims to explore how insights into interaction dynamics can foster transformation by emergent new ways of doing, knowing, framing, and organizing (Pel et al., 2020). The focal point of the study is how communication processes of nonprofit cooperative forms of collective action (hereafter cooperatives) can optimize their transformative capacity and, in a wider context, foster agricultural transformation.

Before exploring how transformative change in food systems can occur through interactions at local level, we need to understand how collective action comes about in local cultural and policy contexts (Balvanera et al., 2017). For this purpose, the case of Farming Communities – a grassroots initiative in the south of the Netherlands – is investigated. The Farming Communities (in Dutch: *Herenboeren*) case serves as an example of an innovative form of food production. Each Community Farm is a small-scale, sustainably operating mixed farm initiated and supported by a group of local residents. Their local farmlands are no longer used for large-scale intensive farming to produce low-cost export products with polluting production methods; instead, consumers invest collectively in the surrounding farmland. The participants are "prosumers": both producers and consumers, as the local organic products constitute about 50% of their food consumption. This study investigates whether such an initiative can develop into a fertile ground for transformative food-system change.

The chapter unfolds as follows. The next section elaborates on the concepts of transformative change, collective action, and connective action. Then, the Farming Communities case

illustrates comprehensively how collective action and connective action in cooperatives come about through interaction. A discussion completes the study, reflecting on the communicational preconditions that need to be met for cooperatives to be a fertile ground for transformative change.

Theoretical considerations

Transformative change

Transformative change can be defined as "a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values" (IPBES, 2019, p.14). A sustainable food system entails a global food production that maintains "favorable conditions for human and non-human flourishing across generations" (Pickering et al., 2022, p.3).

Various schools of thought have different understandings of how transformative change toward sustainability happens. For example, the multilevel perspective describes how sustainable transformation can be brought about by "alternative 'niche' practices that manage to overthrow the dominance of 'mainstream' regime practices" (Hebinck et al., 2021, p.1; Geels, 2020; Loorbach et al., 2020). Others consider sustainable transformation a merely technical issue: a synonym for a carbon-reduction strategy (Moragues-Faus & Morgan, 2015; Shove & Walker, 2010). In this approach, which emphasizes technological tools and innovations, there is a tendency to overlook the relevance of context-specific social and political dynamics (Labanca et al., 2020; Leeuwis & Aarts, 2011; Loorbach et al., 2020; Stacey, 2007;). We, however, follow those who alternatively work with grassroots interpretations, which have "a more capacious and multi-dimensional conception of sustainability transformation, embracing social, economic, and environmental values" (Moragues-Faus & Morgan, 2015, p.1564; see also Van Bueren et al., 2003; Shove & Walker, 2010). Although we incorporate the multilevel perspective in this study, we delve further mainly into the above mentioned grassroots interpretation, as this conception of transformation relates to the Farming Communities case elaborated on in the case analysis.

In this vein, Seyfang and Smith (2007, p.585) emphasize the transformative role of grassroots initiatives, considering them "networks of activists and organizations generating novel bottom-up solutions for sustainable development; solutions that respond to the local situation and the interests and values of the communities involved". Transformative capacity then entails the embedding of these novelties in local structures, practices, and discourses. It also includes the resources to motivate wider acceptance and replication in order to challenge a dominant regime, such as an unsustainable food system (Hölscher et al., 2019).

This finding is in line with the transformation theory of 'small wins' coined by organizational theorist Karl Weick (1984), who argues that changes cannot be simultaneously in depth, large, and quick, "given cognitive limitations regarding complex problems and widespread conflict over values" (Termeer & Dewulf, 2019, p.203; see also Weick & Quinn, 1999). Termeer et al. (2017, 2019) elaborate on the fact that, although small-win changes have a limited scope, this does not prevent them from amplifying and accumulating into large-scale transformative change (Termeer & Dewulf, 2019; Weick & Quinn, 1999). They contend that a sequence of

small, deep changes may also accomplish a radical alteration in the status quo (Lindblom, 1979). The establishment of Farming Communities cooperatives may very well serve as an example of a small win, as explained in the forthcoming case analysis.

Following Aarts (2018), Moragues-Faus and Morgan (2015), and Termeer et al. (2017), this small-win approach emphasizes the importance of the analysis of discourse, interaction, and networks to gain insight into sensemaking and decision-making processes toward transformation (Hovelynck et al., 2020; Weick & Quinn, 1999). Such analysis highlights the pivotal role played by communicating actors in a network or a cooperative in "generating, sustaining and overthrowing everyday practices" by social interaction and by the building and breaking of stories, using language as a vehicle (Shove & Walker, 2010, p.476; see also Gray & Purdy, 2018; Leeuwis & Aarts, 2011). In other words, interactions for transformative change may be viewed as a "form of interchange that succeeds in transforming a relationship between those committed to otherwise separate realities (and their related practices) to one in which common and solidifying realities are under construction" (Gergen et al., 2001, p.682). As these realities and their related practices are negotiated in social interaction, we take a closer look at interaction processes in cooperative forms of collective action, alias cooperatives.

Interaction for collective action

Collective action refers to settings where individual decisions are made independently but affect collective outcomes, generally in the hope that these decisions will impact the common good positively (Ostrom, 2010). Collective action is regarded as a challenging process because "actors involved in dealing with environmental problems often hold divergent perspectives on the issue at stake and related solutions" (De Vries, 2019, p.3). Non-cooperative behaviors like free-riding or powerplay may impact the effectiveness of the collective action process. Although collective action has the potential to produce strong cooperatives, not all collaborations realize this potential: many fail to produce innovative solutions or to balance the concerns of community members, and some even fail to generate any collective action whatsoever (Gray, 2004).

Recent work on collective action emphasizes that cooperatives are social and natural relationships "imbued with inequities and power relations that impact whether and how individuals choose to participate" (Zhang & Barr, 2019, p.772). Collaboration processes typically involve power struggles and value conflicts (Patterson et al., 2016). However, interdependencies make it impossible for any one participant to resolve these struggles and achieve transformation by him/herself. Hence, the adoption of a new behavior is linked with the performance of others' behaviors (Aarts, 2018; Leeuwis & Aarts, 2020).

The notion of people being faced with interdependencies when considering a change in behavior can in part be captured by the concept of trust (De Vries et al., 2019) – or more precisely, the expectation that others are trustworthy in terms of their legitimacy and credibility, and that they are willing to perform the necessary complementary behaviors (Baldassarri, 2015). Several types of interdependence can be distinguished, such as *vertical* and *horizontal* interdependence (Leeuwis & Aarts, 2020). In a pandemic context for example, *vertical trust* relates to whether citizens expect the national government to behave in a conducive manner. *Horizontal trust* then consists of the extent to which someone believes that

fellow citizens will demonstrate the complementary behaviors on which the adoption of a new behavior depends ("if they don't keep their distance, why should I?"). Thus, the perceived experimental space to perform new framings or new doings is related to the extent to which participants accept their interdependencies and can expect other actors to be trustworthy. In sum, we can conclude that a certain level of trust and the recognition of interdependence are considered pivotal to collaboration and to the transformative potential of a cooperative (Leeuwis & Aarts, 2020).

Throughout the life of a cooperative, these mutual relationships are negotiated on a permanent basis. Hardy et al. (2005) state that, consequently, collaboration represents a complex set of ongoing communicative processes among the members of the cooperative. Successful collective action is strongly dependent on the nature, quality, and results of interaction, information, and communication (Cieslik et al., 2018; Ostrom, 1990, 2009). It involves "acknowledging differences, accepting that all actors have legitimate interests, and attempting to construct a complementarity of differences" (Hovelynck et al., 2020, p.260). In order to examine how effective collaboration can be stimulated, Nobel laureate Elinor Ostrom (1990, 2009) identified communicational features that influence whether or not civil society organizations succeed in fostering effective cooperation while managing commons or creating public goods. Face-to-face communication, stable membership, and small groups facilitate commitment to collective action (Ostrom, 2010). In the same vein, Baldassarri (2015) adds that reciprocity, sustained interaction, and verbal commitment make cooperation more convenient and discourage free-riding.

In sum, creating a sort of discursive space where interdependencies are acknowledged, is considered vital to both transformative potential and fruitful collective action. Deep change asks for the opportunity to discuss and negotiate strategies in order to create common ground and mutual trust (Damtew et al., 2021; Leeuwis & Aarts, 2011). Transformative capacity thus depends on sustained "interaction where the actors with a stake in the problem must manage to coordinate their perceptions, activities and institutional arrangements" (Koppenjan & Klijn, 2004, p.9).

Connective action and transformative capacity

In recent years, numerous cooperatives that pursue collective action have also demonstrated an alternative communication style with distinctive features, called connective action. The concept was elaborated upon by Bennett and Segerberg (2012), following Castells (2007) in his analysis that the group ties of formal organizations are less attractive to individuals as understood in 'late modernity', who tend to choose fluid social networks. Emergent network-based communities, which are merely self-organized, foster opportunities for communicative ways of organizing that are less reliant on formal organizational coordination (Bennett & Segerberg, 2012; Cieslik et al., 2018). Such communities use network technologies as important organizational agents, marking connective action. For example, the mass farmer protests in the Netherlands in 2019 – with tractors that blocked the capital's main roads – started with just one social media message that went viral (Van Vuuren-Verkerk et al., 2021). The social movement Agractie, which was formed as a consequence, is now considered a committed sparring partner of the government, but it is still mainly organized as an online network.

Network-based cooperatives, which combine collective action with connective action, differ from traditional cooperatives in four aspects: 1) the adoption of networked technologies, 2) the creation of loosely connected communities, 3) a typical "focus on individualized expressions of engagement" (Rosenbaum, 2020, p.120), and 4) the strengthening of translocal linkages that enable cooperatives to exchange and create shared ideas, objects, and activities with distant like-minded people or initiatives (Loorbach et al., 2020). Cooperatives that look for empowerment or attempt to enhance their transformative capacity are not dependent only on a well-organized structure that shapes collaboration or on mainstream media to motivate people into action. The use of digital technologies has partially changed how people organize communication and collaboration. For instance, social media offers the opportunity to enlarge cooperatives' networks with new (loosely coupled) audiences. Networked technologies enable cooperatives to share ideas and opinions directly with known and unknown peers all over the world. In fact, sharing personal experiences in network-based cooperatives is a substantial factor in working toward a collective goal that contributes to the creation of a shared narrative (Rosenbaum, 2020). Wittmayer et al. (2019, p.2) underline the transformative potential of connective action, as they state:

> The impact and reach of the narratives … [are] not to be underestimated, as modern information and communication technologies enable collaborative construction and broad sharing across networked individuals and initiatives at a global scale. Their stories, ideas and metaphors frame current problems, promise alternative futures and propose ways to get there.

Translocal linkages can also empower participants in the local initiative because the broader network reinforces self-efficacy, creativity, and adaptivity (Avelino et al., 2020). Moreover, the collectivity of loosely coupled networks enables cooperatives to expand their impact and increase their access to resources like funding (Avelino et al., 2020). This development can overcome the fragility of a single local initiative and includes the chance of similar initiatives spreading translocally: diffusion of philosophies and practices (new framings and new doings). Overall, connective action is particularly suitable for enhancing a cooperative's transformative capacity. It could facilitate wider acceptance of ideas and replication of practices in order to challenge, alter, or replace a mainstream system (Avelino et al., 2019).

Case analysis

In the following paragraphs, abovementioned concepts such as the interactional dimensions of collective action and connective action are applied to the Farming Communities case. An illustrative case can be a useful gateway toward understanding how these actions materialize in practice. The empirical material used was collected from websites of various local Herenboeren farms, from the national Herenboeren website (Herenboeren.nl), and from the international website (Farmingcommunities.org). Furthermore, webinars concerning the Farming Communities' activities and issues, posts on social media (Twitter, Facebook, YouTube), and monthly newsletters were consulted. The lively discussions and updates on YouTube (more than 60 short videos) were highly informative because both participants and farmers appeared in these videos and reported on developments, issues, and daily business. Most of these contributions were vlogs made by one of the farmers and targeted at his local Herenboeren farm community, shedding light on internal affairs, interactions and local

cultural practices ("please close the door when you leave the greenhouse", "the fifth calf was born Sunday night in good health, it's a heifer!"). The analysis presented is based on a content analysis (local, national, and international websites and monthly newsletters), a social media analysis (Twitter, Facebook, and YouTube), and the transcripts of three one-hour webinars on the collaboration goals and practicalities of farming in accord with the Herenboeren concept.

Farming Communities – an introduction

Farming Communities (*Herenboeren*) started in Boxtel in the Dutch province of Brabant in 2015. The main principles of the new food cooperative are to work in a nature-driven, socially connected, and economically supported way. A group of local residents buys farmland and employs a professional farmer who produces their food. The residents participate in the farming activities and consult and cooperate on matters like the cropping plan. A Herenboeren farm feeds 500 people sustainably on an area of 20 hectares and provides the farmer with a fair, stable income paid by the participants. The farmer produces organic food for the cooperative's participants and aims to regenerate the ecosystem, including water, soil, flora, fauna and other natural values. The movement has matured over the past years, and, at time of writing (2022), there are 14 more farms and 10 initiatives to start a Herenboeren farm in various parts of the Netherlands, making Herenboeren a network of farming communities.

Collective action

New ways of knowing and framing. The instantiation of the new Herenboeren farming concept was also a new framing. Founder Geert van der Veer recounts that he aspired to design a novel communal food production format that would bypass the global food market and connect urban citizens to their surrounding farmland. Ownership as a citizen and as a consumer, taking responsibility for the local living environment, gives new meaning to the concept of citizenship. Furthermore, after the establishment of the farm, participants shaped and reshaped shared meanings about being a new community of prosumers and what it meant consequently for collaborating style, rules, and chores, for example regarding cooperative farming and collective decision making. One of the cooperative's frames is: to bio or not to bio is not the question. The cooperative's aim is to produce nature-inclusively. Although it might be tempting to go for the biological farmer quality label, the community decided not to engage in the application process because it serves as its own internal market: it does not need the label to attract customers. Nonetheless, it complies with the rules for biological production.

New ways of doing and organizing. The investment rules demonstrate a new way of doing: land is secured for seven generations and its financial value is separated from the enterprise. This shows how frames and doings are intertwined: a central frame is to make land a common good again, and this how it is done. Another example involves buildings: often a Herenboeren community is a farm without a farmhouse. Farming Communities can function effectively with only a large shed or a compact building to store some essential equipment. This innovative way of farming has made a farmhouse superfluous.

Vertical and horizontal interdependence. A supermarket consumer does not need to rely heavily on other customers. In the prosumers' case, this is different. Is everybody receiving an

equal share of food? Is there transparency about the way the cropping plan comes about? Do we all have equal power in the decision-making process? Building trust slowly but surely is an essential process for a Herenboeren cooperative's future. Participants choose to be mutually interdependent. What makes it easier in this case is the professional farmer who bears final responsibility for the food production process. With regard to vertical interdependence, Farming Communities are hindered by the functional division that exists in land use. Current laws and regulations leave little or no room for hybrid, plural, or co-creative methods. Herenboeren works to tackle these issues organizationally and economically.

Discursive space. The community needs to decide about all kinds of agricultural and organizational aspects, for example what crops to cultivate the next year, how much produce each member can take home, and so on. This means that this group of 500 people, in order to be successful as a farm, needs to negotiate on all kinds of financial, organizational, and agricultural issues. In regular meetings, participants discuss the cropping plan for the next season. Meat production is a common theme: people differ in their opinions about meat eating and animal welfare. Vegetarians and meat lovers decide together how to tackle this issue. As a possible compromise solution, the participants were negotiating the placing of a mobile slaughterhouse on the farm to prevent the animals suffering from transport stress. Another discursive space is Herenboerenstek, the Farming Communities' intranet. Thirdly, the farm's central place also functions as a discursive space: community members stop by every week to collect their share of food and engage in informal conversations.

Connective action

Networked technologies. The Farming Communities make use of networked technologies such as podcasts, a local website for each farming community, webinars on land management, a forum to exchange Herenboeren recipes, crowdfunding initiatives, and an online knowledge center. From the start, but even more since Herenboeren has developed into a nationwide network with interest even from abroad, networked technologies are a common means of organizing.

Loosely connected communities. Farming Communities connect in numerous ways to diverse audiences and communities. Together with other organizations and 21 nature-conscious cooks, they initiated the launch of a manifesto called: *Samen voor Grond* (Let's go for healthy soil together). Also, the Farming Communities network uses crowdfunding to collect money from society with the aim of acquiring land for new Farming Communities. Farming Community members were invited to participate in the Climate Walks social movement in the run-up to COP26. Whereas the connective action feature that entails the individual expression of engagement (see the theory section) is not emphasized, is the collective vibe is all the more present. However, on the different Farming Communities' websites, the board members introduce themselves with quite detailed stories, and via social media channels members express their engagement with the cooperative via personal statements and pictures.

Translocal linkages. The initiators of Farming Communities are extremely competent in building alliances and networked partnerships. The established crowdfunding organization

consists of a bank and another nature-driven land foundation. Conversations are held with local and national governments about adapting laws and regulations. Researchers and students work on projects with Herenboeren, farming experts participate in the knowledge center, and the Farming Communities' founder is a member of the Farmers' Council, a group of influential farmers who aspire to reroute the Dutch foodsystem toward sustainability. One last example out of many is Herenboeren's linkage with the Community Supported Agriculture (CSA) network: an empowering network of various forms of food collectives.

In sum, Farming Communities cooperatives appear to be strong in both collective action and connective action. The way in which the initiative flourishes, the spreading of cooperatives around the country, and the abundance of translocal linkages makes Herenboeren a shining example of applying collective action and connective action both substantially and fruitfully.

Discussion and Conclusion

Having started with a thought experiment, Farming Communities has developed from a concept, into a practice, and finally into a movement that is currently spreading out over the Netherlands. The key question in this study is whether such a food cooperative – or, to extend the topic, whether any grassroots initiative – has the power to contribute to transformative change toward a sustainable food system. Given that we define transformative capacity as the extent to which an organization challenges, alters, or replaces dominant regimes (Avelino et al., 2019), we must assess the findings of the Farming Communities case in terms of transformative potential.

The Farming Communities approach aims to offer an alternative to the dominant unsustainable food system: an innovative, sustainable way of food production – innovative because it alters social relations and financial and economic structures (urban prosumers buy the surrounding farmlands for a Farming Community for seven generations, barely dependent on world markets); sustainable in the sense that the production and transport footprints are low and soil is regenerated without polluting methods. Everything needed for collective action seems to be in place: a discursive space is available where interdependent relationships are acknowledged and negotiated. New frames and narratives have come into being, as well as new ways of doing and organizing; and, with the abundance of connective action, this Farming Community tucked away in the Dutch countryside has gained traction in the Netherlands and beyond. Connective action in this case serves as a highway to expand the narrative, raise funds, and replicate the cooperatives' practices throughout the Netherlands. These developments, specifically the diffusion of new framings and doings via translocal linkages suggest a transformative capacity that at least challenges the regime.

However, Herenboeren cooperatives have so far not replaced the current food system right away. Although in crisis, on the lookout for new revenue models and aspiring towards circular agriculture, the regime predominantly holds on to the status quo while some elements are moving slowly. Some scientists who adopt the multilevel perspective argue that the expectation that niche initiatives can change a dominant regime is somewhat naive and

idealistic, although according to Geels, leading author on the multilevel perspective, (networks of) niche initiatives can make the regime slightly move or incrementally change the landscape in which the regime and the niches are embedded (Geels, 2011, 2020). Furthermore, transformation expert Loorbach does not refrain from emphasizing that the transformative capacity of bottom-up initiatives is underrated. Loorbach (2020, p. 252) argues that the focus on policy-driven innovations "ignores other types of innovations that emerge more organically within society in which technology is a less dominant element such as novel lifestyles, business models or organizational forms". In this vein, Avelino et al. (2019) suggest speaking of 'shades of change' brought about by social innovations, on the understanding that these diffuse transformational processes are too complex to indicate (short term) causal relations. Lastly, the 'small wins' approach emphasizes that this kind of small, in-depth changes, whilst easily overlooked, over the long run may appear the micro-level continuous change that shaped the emergence of a recognizable shift in the process of transformative change (Termeer et al., 2017, 2019; Weick, 1984).

Although the Farming Communities case displays an exemplary interplay between the bonding and converging features of collective action and the connecting and diverging characteristics of connective action, the intricate balancing of both is a matter of concern. A risk exists that the two forms of action could undermine each other if an imbalance occurred. Robust collective action requires face-to-face communication, stable membership, and small groups. Connective action can hinder these bonding processes for collective action. Although loosely coupled audiences and linkages with distant peers can be beneficial to the cooperative (as discussed in the theory section), connective action also carries a risk of superficial commitments and shifting and messy relationships (Rosenbaum, 2020). Furthermore, sharing ideas and opinions via networked technologies can, as already discussed, lead to dissemination of a narrative, but it can also induce polarization (Stevens et al., 2021). Finally, a surplus of connective action could lead to disempowerment instead of empowerment, because prevalent superficial relationships with relative strangers can make actors lose commitment to the common goals or can make them feel less self-determined (Avelino et al., 2020); this counteracts the preconditions for collective action. Given the benefits of connective action, the challenge for actors (for instance communication practitioners) is to carefully balance cooperatives' communication processes between collective action and connective action. The reward for this balancing act can be – as the Dutch Farming Communities vibrantly demonstrate – an empowered network with optimal transformative capacity. Or, to use an image from the agricultural field, the reward can be a fertile ground for transformative change.

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