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Om, Eugyen Suzanne, Fazey, Ioan, Tyfield, David et al. (8 more authors) (2025) How to Support Synergic Action for Transformation:Insights from Expert Practitioners and the Importance of Intentionality. Sustainability (Switzerland). 7043. ISSN: 2071-1050

https://doi.org/10.3390/su17157043

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Article

How to Support Synergic Action for Transformation: Insights from Expert Practitioners and the Importance of Intentionality

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Abstract

A global poly-crisis of climate change, biodiversity loss, dwindling natural resources, geopolitical instability, among other complex challenges, is on the rise. Societal transformations are therefore imminent, whether intended or unintended. The key question is how to steward and facilitate such changes where fragmentation and siloed ways of working persist. The concept of synergies and the notion of synergic action could help overcome fragmented efforts to steer transformative changes. However, there exists a critical research gap in understanding the conditions needed to enable synergic action. This paper thus explores how synergic action is currently undertaken and the key essentials needed to deliver synergic action. The study uses a case study of the Yorkshire food system transformation to learn from its exemplar practitioners. The study used semi-structured interviews and a thematic analysis process to reach our two key findings. First, we highlight the three types of synergic action: (1) Non-systemic synergic action, (2) Non-systemic synergic action with multiple outcomes, and (3) Systemic synergic action. Differentiating types of synergic action can help identify where synergic action is already underway and guide more explicit efforts towards transformative change. The second key finding is the five essentials for synergic action, which are (1) leadership for synergic action; (2) networking, partnerships, and collaborations; (3) care and understanding; (4) a systems approach; and (5) intentionality for synergic action. This study brings to the fore the importance of intentionality, without which the first four essentials are less likely to coalesce. This is important to inform the reflection and learning of practitioners of systemic change about how they are currently and could be working more synergistically in the future, driven by clear intentionality.

Keywords: fragmentation; siloes; capabilities; collaboration; systems approach; leadership



Academic Editor: Piotr Prus

Received: 2 May 2025 Revised: 23 July 2025 Accepted: 1 August 2025 Published: 3 August 2025

Citation: Om, E.S.; Fazey, I.; Tyfield, D.; Eyre, L.; Cooper, M.; Carmen, E.; Jackson, D.; Fearnley, J.; Ritter, L.; Newman, R.; et al. How to Support Synergic Action for Transformation: Insights from Expert Practitioners and the Importance of Intentionality.

Sustainability 2025, 17, 7043. https://doi.org/10.3390/su17157043

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1. Introduction

We are facing a poly-crisis—that of climate change, biodiversity loss, sea-level rise, poverty, hunger, and pandemics, among many other crises [1]. There is increasing recognition for the need for societal transformations to more sustainable and regenerative

futures [2,3]. Bringing this about in practice requires interconnected ways of working [4,5]. Yet fragmented and siloed ways of working and reductionist approaches to change persist, limiting the potential to steer transformative types of change [6]. Holistic and systemic approaches are vital [7]. One approach holding promise to support holistic ways of working with transformation is through fostering synergic action.

We define synergic action as any deliberate action that, when brought together, leads to outcomes greater than the sum of the individual actions. The notion of synergic action is rooted in the concept of synergies, where interaction or cooperation of parts, elements, or individuals (living or non-living) leads to outcomes greater than the sum of the effects of the individual parts [8]. Synergic action has the potential to focus actions and resources in a more effective way. While there have been conceptual advances about what constitutes synergy [9], very little is still understood about how synergic action is currently carried out in practice and the conditions needed for such practice to be effective.

The aim of the study is therefore to understand what synergic action looks like in practice for those working towards system change and the conditions needed for synergic action to be effective. To achieve this, we draw on insights from expert practitioners actively working towards systemic change by using a case study of Yorkshire food system transformation, embedded in the UKRI-funded FixOurFood program. We first explore the background to synergy, synergic action, and broad enablers for change, and then outline the research methodology. We then present our key findings, followed by a discussion on the implications of the research for supporting transformational change.

2. Background

There are ongoing efforts for change in multiple systems (e.g., transforming health and energy systems) and emerging conceptual and empirical research that looks at understanding how such fundamental and large-scale change can be actualized [6,10]. Many now recognize that a systems approach is key to supporting such large-scale change [11–13]. This has led to a plethora of systems, methods, frameworks, and processes for identifying problems and developing strategies for action. Methods include systems mapping, the three horizons framework, and leverage points, among others [14], as well as those for identifying and enhancing synergies [6,13,15]. Whilst this approach is progressive, much of this research focuses on analyses of "what is" and fails to examine how systemic change might be pursued in practice. There is therefore a need for both conceptual and practical understandings that help inform ways of thinking and acting to support systems change.

There are two important aspects relating to the practice of guiding systemic change that, to date, have received limited attention in the literature. The first is finding the right kind of operational concepts suitable for supporting systemic change. Thus, synergy as a concept is helpful for working with systems change in practice, particularly for four key reasons. The concept explicitly points towards going beyond the idea of additive summation and the need for creative ways of working that bring together specific parts and relationships to generate more superior outcomes and functionality [16,17]. Second, through its application, it emphasizes the need for coherence of action and key resources [9,18]. Third, it can be used to encourage collaboration between silos by providing a coherent concept. An example is identifying synergies between various interventions and across policy objectives to enhance collective action [19–21]. Fourth, it provides a positive framing for change by encouraging engagement and inspiration for collective action compared to approaches focusing primarily on the identification of challenges. The concept therefore usefully provides a gateway into systems thinking and holistic action with a positive and inspiring orientation that actively invites the search for creative ways of working.

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Given its relevance to practice, it is then perhaps not surprising that the concept of synergy has been applied across many disciplines such as ecology, psychology, organizational studies, business management, and medicine [22–25]. This has led to diverse ways in which synergy is understood, with each having implications for the practice of synergic action. When synergy is, for example, understood as a whole—and where it cannot be approached by disaggregating different actions—it invites practitioners to find new ways of understanding and perceiving challenges and the system in which they seek to intervene (Om et al. In review). This can then lead to new ways of understanding problems and the identification of new possibilities and creative solutions. Overall, how synergy is practiced depends on the way the concept is understood.

The second aspect that often receives limited attention when approaching system change is the lack of understanding of how to apply concepts in practice. Systems concepts such as leverage points, systems dynamics, and reinforcing loops are often difficult to apply practically [26]. The dominant patterns of existing systems, such as governance approaches, profit-driven mindsets, among others, often complicate and challenge the way in which systems concepts are successfully applied for systemic change [27]. The concept of synergy has the potential to orient actors towards more effective ways of working that can deliver outcomes that are greater than the summation of parts.

The key question is, what are actors actually doing on the ground that makes synergic action for transformative change possible? Although numerous endeavors focus on using systems approaches to understand current challenges or focus on what needs to be transformed, there is much less focus on how actors are actively working in synergic ways to support systemic action for change. Yet this is important for supporting and expanding such efforts in the future. We therefore aim to answer this question by looking at exemplar practitioners of the Yorkshire food system as a case study.

3. Methodology, Methods, and Materials

3.1. Approach

Ontologically, we recognize that systems are complex and highly interrelated [2,5,28]. The study is also founded on constructionism, based on Bryman, where meanings are socially constructed and shaped by constant interactions and relationships [29]. Furthermore, particular perspectives of synergy were applied where outcomes are shaped by synergic processes and a holistic understanding of the system [9].

Our epistemology is loosely based on grounded theory, where the theory emerges from the data and usually does not have pre-conceived questions that can influence what emerges from the data [30,31]. This led to an inductive research strategy to examine how strategic actors are currently engaging in synergic action.

Therefore, the overall approach that was taken was one that recognized the need for exploration that looked for aspects of synergy whilst also not influencing what we would find, allowing space for new insights to be identified.

3.2. Case Study

Our global food system may no longer be considered "fit for purpose", evidenced by unsustainable agriculture, fragile supply chains, unhealthy diets, nutrition-related diseases, and major contributions to global greenhouse gas emissions [32], signaling an urgent need for transformation. These issues are further exacerbated by global events such as war, pandemics, and climate change that greatly disrupt global supply chains, causing increases in food prices and highlighting the interdependent nature of systems [33,34].

This study uses the transformation of the food system in the county of Yorkshire in the UK as a case study to explore how actors within the Yorkshire food system are approaching

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synergic action and understanding the key conditions needed for synergic action to support transformation. The case study is embedded into the FixOurFood program, funded by the United Kingdom Research and Innovation (UKRI), which aims to transform the Yorkshire food system to a regenerative system [35]. The transformation of the Yorkshire food system is relevant within the current food system paradigm of the global food crisis.

Yorkshire, England's largest county, includes major cities such as Leeds, Bradford, and Sheffield. It has one of the UK's largest concentrations of food and drinks businesses [35] and is home to 13–17% of UK crop production and 10–14% of UK livestock, consisting of multiple farming systems [36]. More than 20% of Yorkshire's population was reported to experience food insecurity in 2022, in addition to high mono-culture farming leading to less resilient farms [36]. Current land management practices, production, and consumption patterns are leading to biodiversity degradation and GHG emissions. There is an urgent need to transform the Yorkshire food system such that everyone has healthy and sustainable food, where farms are sustainable, profitable, and resilient to climate change [36].

3.3. Methods and Materials

3.3.1. Data Collection

The primary data collection method was semi-structured interviews, which allowed in-depth exploration and space to follow trajectories of the interviewees' experience and subconscious work patterns [37]. The sampling technique employed was opportunity sampling to maximize participation and ensure diversity [38]. This sampling approach also suited the exploratory nature of the study.

Interviewees were stakeholders of the Yorkshire food system who were already engaged with the FixOurFood program. Interviewees were chosen to cover a diversity of professions within the Yorkshire food system, and the focus of the program on a systems approach to change increased the likelihood of diversity of participants. Diversity was further ensured by conducting interviews in three rounds. Each round assessed the roles of participants, which allowed the inclusion of participants with varying roles in further rounds. These included community leads, representatives of regional food groups and religious centers, researchers, educators, health professionals such as nutritionists, and civil servants working in public health, local businesses, and farmers, as shown by Table 1. This resulted in 22 semi-structured in-depth online interviews, each lasting an hour. All interviews were conducted within a period of 6 months from January to June 2023.

An interview guide was developed, and written consent was gained prior to the interview for audio recording and use of data in the research process. The word "synergy" was deliberately not used in the interview to allow space to understand the unconscious working patterns of change makers when dealing with complex systems, in addition to avoiding confusion of the definition. A range of topics was explored with interviewees, such as examples that led to multiple benefits when combining different forms of actions, enablers, and challenges of successful partnerships, and most importantly, action for facilitating transformations for the Yorkshire food system. A conversational interview style was adopted to foster an atmosphere of active engagement, beginning with warm-up questions [39].

Table 1. Interviewee and their roles within the Yorkshire food system.

Interviewee Identifier	Interviewee Role	Key Focus of Their Work
P1	Chair	Local and sustainable food
P2	Vice chair	Enables connectivity across food, farming and rural communities

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Table 1. Cont.

Interviewee Identifier	Interviewee Role	Key Focus of Their Work
P3	Farming in protected landscapes officer	Help funds farmers and land managers that benefit both people and environment
P4	Education Coordinator	Support schools to set up their own social enterprise and food education
P5	Communications manager	Communication with government for better outcomes for farmers and landowners
P6	Policy team	Local nature recovery strategy
P7	Director	Support food access, bringing together partners, sharing good practice and resources Support clinicians in GP surgeries, provide training
P8	PCN Dietician	to care homes, community response teams and therapy teams
P9	Consultant	Work with NGO's, charities and local council to help understand policy practice issues on childhood nutrition
P10	Chair	Brings together food partnerships from towns and cities across the UK for sustainable food
P11	Head of Science, Evidence and Research	Food risk assessment, research and evidence
P12	Public health manager	Health and wellbeing for children and local communities
P13	Managing director	Supporting early stage business growth
P14	Managing director	Business owner, focused on food manufacturing technologies
P15	Consultant/farmer	Promotes regenerative agriculture
P16	Public health senior officer	Healthy nutrition and lifestyle with a strong focus on children's food standards
P17	Senior role in diocese	Leads on the ecological agenda and is part of the environmental working group for net zero. Also focused on rural and urban life and the impacts of food
P18	Business development manager	Regional food group that supports businesses and individuals involved in food and drink in Yorkshire
P19	Senior role in diocese	Leading the cathedral, engaging with individuals and communities across North Yorkshire
P20	Coordinator	Bringing people together to network to support sustainable and local food
P21	Farmer and business	Provides certification for regenerative farming
P22	Research Fellow	Focus on the relations between food, land and governance

3.3.2. Data Analysis

A transcription software, Otter.ai 3.0, was used to transcribe all interviews, after which all transcripts were printed for a paper-based approach to coding that allowed ease of access and flexibility for coding and developing memos [40]. All paper-based coding was then transferred to an electronic document. Thematic analysis was used in the first part of the analysis to inductively elicit themes relating to enablers for synergic action. This was an iterative process that involved "immersion in the data, reading, reflecting, questioning, imagining, wondering, writing, retreating, returning" [41]. Analytical memos were used to explore, reflect, and refine emerging themes and insights. This led to the identification of the five essentials for synergic action.

Concurrently, the second part of the analysis included the exploration of examples that lead to multiple benefits when combining different forms of actions. This was important

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to identify the types of synergic action and understand how actors were taking synergic action on the ground. The analysis was done in three key steps. Examples were first extracted from the transcripts of all interviewees. Second, examples were grouped together, inductively developing a set of categories. These categories reflected three forms of synergy: (a) Actors acting towards the same outcomes, (b) Actors achieved one goal, which led to multiple benefits, and (c) Actors with systems knowledge that mobilized other actors and resources. Third, the three categories were then named, resulting in the three types of synergic action.

4. Results

The inductive analysis resulted in two key findings. The first key finding shows the different patterns of how synergic action was implicitly approached by actors of the Yorkshire food system. The second key finding presents the key essentials needed for effective delivery of synergic action.

4.1. Types of Synergic Action

Three types of synergic action were identified. These are: (1) Type 1, non-systemic synergic action, (2) Type 2, non-systemic synergic action for multiple outcomes, (3) Type 3, systemic synergic action. The following section explains each of these in turn.

4.1.1. Type 1: Non-Systemic Synergic Action

This type of synergic action refers to actions where two or more actors come together in a synergic relationship to achieve a common goal. This is illustrated by Figure 1, where "actor A" and "actor B" come together to reach their goal of "outcome C". An example is a non-profit organization such as Rethink Food (actor A) working with a business such as ASDA (actor B), to deliver synergic outcomes of setting up new social enterprises in schools and reducing food waste. Interviewee P4 stated, "the Asda project they physically get a market stall that is on wheels as well so they get this weekly delivery of food surplus food from Rethink or another organization and that is a mixture of ambient products such as tins, pasta, rice, cereals, bread, but also they get fresh produce as well" (P4). Various examples of this type of synergic action are shown in Table 2.

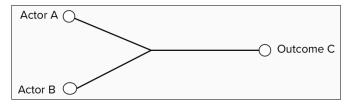


Figure 1. Illustrates Type 1 synergic action, non-systemic synergic action, where two or more actors come together to achieve a common goal.

Table 2. Examples of type 1 synergic action in the Yorkshire food system.

Actors	Synergic Outcome	Quotes
Cathedrals working with food banks	Feeding communities and disadvantaged people	"So we are at the Cathedral quite a lot as being a sort of center where people with food can bring it so we act as a sort of collection point. And then we disperse that to local food banks" (P19)
Food education organizations working with bakery chains	Helping highly deprived areas and enabling quality education on healthy eating, planet	"it is all about healthy eating, and the impact on the planet, it is a combination of everything through a systems approach, and that is actually they are funding it to go out to their Greg's Foundation funded breakfast clubs" (P4)

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Table 2. Cont.

Actors	Synergic Outcome	Quotes
Dieticians working with schools	Working with schools to reduce anxiety, improved mental health or better sleep	"some new programs for early years, sort of reading programs and people sort of preschool families, to support them with healthy eating messages for their children, and then hopefully the work that I am doing in the school will reinforce that and
Consultants working with NGOs and charities	Focus on childhood nutrition	then eventually we will be moving into senior school" (P8) "we work with NGOs and charities and local councils, help and look at policy and practice issues around childhood nutrition and getting better food on children's lates." (P9)
Supermarkets working with farmers	Celebrates British farmers and local food	"you have got Morrison's, who were quite actively plugged into the supply chain, and makes great advertising PR out of only sourcing British grown produce locally reared meat and that sort of thing, and high standards. So it celebrates British farmers, which is a good start, because moving away from or reducing the number of food imports into the country" (P5)

4.1.2. Type 2: Non-Systemic Synergic Action with Multiple Outcomes

This pattern of synergic action refers to two or more actors coming together for a common goal, but the initial effort for synergic action not only leads to "outcome C" as shown by Figure 1, but also leads to further recognized outcomes, either intended or unintended, as shown by Figure 2.

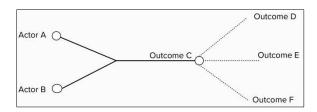


Figure 2. Illustrates type 2 synergic action, non-systemic synergic action with multiple outcomes.

The Incredible Edible project is one such example where a group of people, actors A and B, came together to manage unused plots of small land to grow food (Outcome C), which led to multiple outcomes connecting communities, growing food that brought people closer to their source of food, and becoming a global movement among many others. Table 3 illustrates further examples of multiple outcomes achieved by multi-actor interventions.

Table 3. Illustrates examples of type 2 synergic action.

Multi Actor-Interventions	Synergic Outcomes
Village hall weeks	Primary objective is to feed people but there are added outcomes of increased community spirit, cultural integration etc.
Farming in Protected Landscape grant scheme	Funding to support farmers, leading to positive outcomes of building and strengthening farming communities, networking, delivery of public goods
Local nature recovery strategy	Balancing nature and food production, linking towns and cities, nature recovery
Regenerative farming	Improving organic carbon in the soil and maintaining biodiversity on the farm leads to healthy land, nutritious food, profit, mental wellbeing etc.

4.1.3. Type 3: Systemic Synergic Action

This type of synergic action refers to actors who understand key players in the system, including those who have more agency, resources, and power to support a goal, and then

bring relevant actors together (Figure 3). Although all interviewees had the knowledge that a systems approach to change is necessary, we found that certain actors tended to wear various "hats" and network extensively. The multiplicity of roles by one actor enabled them to understand key actors in the system that, if brought together, could lead to better synergic outcomes. For example, interviewee P2 had roles across Yorkshire Food Farming and Rural Network, North Yorkshire Local Enterprise Partnership board, and Grow Yorkshire project, enabling the interviewee to deliver better synergic outcomes in supporting farmers and the agriculture sector. Such actors from various parts of the Yorkshire food system were identified to better catalyze synergic action (see Table 4).

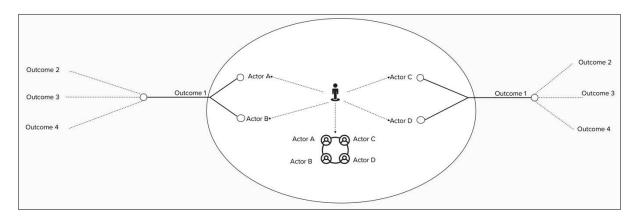


Figure 3. Illustrates type 3 synergic action, where certain actors have a better understanding of the system and facilitate the bringing together of relevant actors and resources for change.

Table 4. Actors in the Yorkshire food system that have the potential to catalyze synergic action.

Actors	Synergic Outcomes	Example Quotes
Religious leaders	Encouraging communal eating, helping homeless individuals, reducing food waste, supporting framers, engaging regionally	"The cathedrals connects with community, so very important that we are working with other partners to come together" (P19) "I think another way in which churches are wedded in is I say we have chaplains and we have connection on the ground with farming communities and other people because of a lot of stuff which people never see" (P17)
Researchers	Cohering diverse actors together, co-creation of processes with stakeholders, knowledge exchange	"I think stakeholder engagement is key. And I think in terms of the university as a sort of anchor institution within that food system. I think they have a huge responsibility" (P13)
Food advocacy workers	Cohering diverse actors, educating young people, encourage local and seasonal food	"So if anybody says to me, what do you think is your USP or what do you bring to the table? That I would say it is about the synergies is that I sit on quite a lot of different groups. And I can network people or put people in touch with people and all of those things together" (P2)
Farmers	Engagement with other knowledge institutions, sharing of best practice	"we are seeing more farming groups coming together. So and those farming groups are bringing in people who are not necessarily farmers, talk about the systems and we are prepared to access more information and advice on how to better or how they may access different options to the way in which they can farm" (P3)
Educators	Education in schools about the source of food, nutrition, sustainable food	"I think there needs to be more information about, about where your food comes from, from a very young age, and, and, and how much it costs to produce. I think information about the fact that you go and buy a chicken for four quid, you need to know how much that costs to produce" (P3) "it is children and schools, we have got to start with how young people work" (P2)
Local councilors	Food strategies, voicing the need for healthy and affordable food	"political will again, if you knew that there was a leader of a council or a particular MP that would bang your drum for you, then you you are hanging your hat on that" (P9)

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The three types of synergic action show how synergic action is implicitly carried out in the Yorkshire Food system. This has implications for learning how to intentionally implement synergic action in the future.

4.2. Essentials for Synergic Action

Our second key finding highlights the five key essentials needed for synergic action that together have the potential to drive synergic action. The five essentials, as shown by Figure 4, are (1) leadership for synergic action; (2) networking, partnerships, and collaborations; (3) care and understanding; (4) a systems approach; (5) intentionality for synergic action. In this section, we broadly describe each essential.

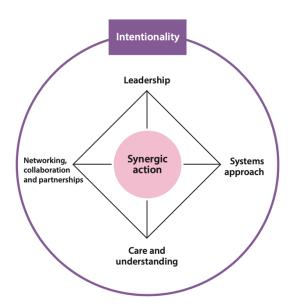


Figure 4. The five essentials for synergic action. The inner "diamond" shows the first four essentials for synergic action. The circle outside the diamond represents the overall importance and the need for intentionality for synergic action. The circle also represents the intention needed to bring the first four essentials together.

4.2.1. Leadership for Synergic Action

Particular forms of leadership are needed for synergic action. Interviewees highlighted the need for trusted leaders who have a wide reach, influence, and commitment to change. Leaders who were also respected and trusted in the community were identified as important: "you have got to have a leader who is respected and kind of commands a bit of gravitas" (P9). The credibility and influence of these leaders were identified as crucial for bringing people together to initiate action and foster conversations, "conversations are happening by people who are trusted speakers" (P17).

Further, interviewees emphasized the ability of leaders to encourage and engage diverse people and perspectives, creating spaces for people to gather and foster creative collaboration. Interviewees also saw leadership as supporting the creation of multidisciplinary roles that allowed for experimentation without constraints, therefore taking a "multidisciplinary team approach" (P8). Such teams might then have the capacity to adopt agile methods and experimental approaches to change. Credible, respected, and trusted leaders thus helped instill confidence and promote growth in creative ideas in communities and those who worked towards change. For instance, a newly created role of a primary care network (PCN) dietitian is working for a collective of GP surgeries, leading to more effective resource use and patient journeys. Interviewee (P8) states, "What I am doing at the moment is I am scoping out my role, and to find out what the population needs, how I can support

the clinicians in the GP surgeries, and how I can use my time most effectively". The new role gave multiple opportunities to explore what is needed.

Furthermore, interviewees highlighted the importance of leaders as the driving force of creating and carrying a shared vision forward for collective action. They emphasized leaders who were explicit about their agendas and explained "why it is important" (P21), and particularly valued leaders who had "clear and articulated" (P20) agendas and were able to persuade others. It further included sending the right messages and framing conversations. This underlined the importance of leaders having clarity on how change is going to happen, therefore enabling others to have confidence in a shared vision and collective agendas. Additionally, leaders who were systems thinkers were also highlighted to be crucial.

4.2.2. Effective Networking, Partnerships, and Collaboration

The second essential for synergic action was a co-creative and participatory process to support effective networking and the creation of successful collaborations. Interviewees highlighted that a diversity of engagement strategies is needed to encourage conversation and learn about solutions and barriers to change across different scales. Interviewees further emphasized the need to design processes that gave stakeholders more voice and power to influence change. This was emphasized in using networking as a strategy to enhance power for certain groups, creating opportunities for them to "impact the rules of the game" (P22). This included designing workshops and processes that gave a platform to engage and hear the voices of the marginalized. For instance, in the process of developing the Sheffield local food action plan, interviewee P22 said, "We went really out of our way to make sure that marginalized voices were included in this process. We included travel funds, et cetera, to ensure that people could participate from all areas of the city and from all backgrounds".

Findings indicated that participatory processes were enhanced by local and place-based collaboration. Interviewees emphasized the importance of taking more local approaches for collaboration and partnerships, which may result in "supportive local partners that understand the benefit of the work and ultimately want to protect it" (P13). Some examples of successes included the "Incredible Edible project", "village hall weeks", and various food banks run by local communities. Creating a community spirit through regular local events supported by a local facilitator was seen as important, "by bringing people together on a regular basis, basically monthly, we strengthen the sort of community working and cooperation within the city" (P19).

The community spirit, collaborations, and partnerships were thought to be strengthened by having transparency and integrity with partners. Communication over a period of time and ensuring consistency and quality of work were identified as enabling successful partnerships. Interviewees emphasized the importance of being honest and upfront about one's values, "we try and be upfront about our values and our politics and things like that. So rather than pretend that we are objective, or impartial about these things, you know, we wear on our sleeve" (P22). It therefore helped clarify that all are operating from the same understanding of what the goal is and its particular processes. On the contrary, it can also deter actors from working with actors that do not align with their values and can therefore seek out alternative actors to work with. Thus, building relationships and credibility through collaboration was critical to enable effective partnerships.

4.2.3. Care and Understanding

Interviewees emphasized the importance of care and understanding towards one another as the third essential for synergic action. For example, the value of listening to different viewpoints and particular needs to enhance care and understanding, "you would have to listen more than you talk" (P18). It was about "listening to all the competing, sort of

convictions and requirements" (P19). Interviewees further highlighted listening without being immediately reactive: "We really think it is important to listen to other organizations and reflect on that, and we are not immediately reactive" (P4). Moreover, interviewees stressed the significance of helping people feel their value and "recognizing how everybody contributes" (P12), which was important so that "they feel that it is worth their while" (P20). Deep listening and valuing individuals was then enhanced by responding with empathy and respect.

Responding with empathy and respect was identified as complementing deep listening values. Interviewees highlighted that showing respect and care for others' opinions and circumstances is important to foster collaboration and strong partnerships. For example, "figuring out how to engage with farmers at a human level to undergo a major shift in mindset is required" (P21). An important aspect here was responding with care and helping others respond, "there is still the need to respond and effectively respond in a charitable way to human need" (P19). Further, interviewees highlighted dealing with tensions with much empathy and care, which included understanding barriers for different groups. Additionally, understanding the limits of "willingness to change" (P18) and creating positive environments to facilitate challenging conversations was cited as crucial by interviewees to enable synergic action.

Personal inquiry for change was also identified as crucial for demonstrating care and understanding. Interviewees highlighted the importance of questioning our own values and "principles by which we make a decision" (P19). Further, acknowledging and perceiving the subjective nature of change and how that influences processes and outcomes was highlighted as crucial. For instance, in creating the Sheffield local food action plan, interviewee P22 acknowledged that "I have my politics and values and things like that. And inevitably, those shaped the process, as all my co-authors on the plan, and we try and be upfront about our values and our politics and things like that". Interviewees further recognized the importance of deeper inquiry within individuals in relation to the role they play in larger communities, a recognition of the need for deeper evaluation of our relationship to others, as well as the planet.

4.2.4. A Systems Approach to Change

A systems approach to change was highlighted as a fourth key essential for synergic action. Interviewees emphasized the need to "look at a problem holistically" (P2), exemplified by the "healthy weight healthy lives strategy" to tackle obesity, which was further emphasized by the need for a "holistic approach to incorporate all the different players" (P5). Understanding "interdependency and relationality" (P17) was identified as critical to move away from the problem of "atomistic individualism" (P17) and silo ways of working.

Furthermore, identifying gaps in information and using current knowledge to support a systems approach was identified as important. Having knowledge about the current state of affairs, such as how land is currently managed, was highlighted as important to get a holistic picture of the system. Interviewee P22 states, "There is a lack of transparency in terms of who owns land". Interviewees highlighted that having organizations that could connect people, such as Deliciously Yorkshire, universities, and religious centers, were critical in building networks and gaining knowledge about the system. This was seen as supporting a systems approach to change through fostering a holistic understanding of the system and inclusion of diverse actors to strategize for potential interventions. Thus, a systems approach to change, guided by holistic thinking, filling gaps in information, was considered a crucial enabler of synergic action.

4.2.5. Intentionality for Synergic Action

Underlying the first four essentials was a fifth key essential: the intentionality for synergic action, where intention is understood as "an attitude that drives behavior" that

sustains, guides, and coordinates behavior [42]. Although all interviewees acknowledged the need for a systems and holistic approach to change to support the transformation of the Yorkshire food system, very few interviewees were found to be explicitly trying to take synergic action. Intention for synergic action generally tended to be overlooked in most studies and was also overlooked by most interviewees in this study. However, few interviewees tended to fall within type 3 synergic action (systemic synergy), which was not common. These interviewees had a deeper understanding of the system and were intentional in their efforts to bring actors together for collective action and actively pursued synergic outcomes.

Intentionality for synergic action made a difference to synergic outcomes in two ways. First, actors were able to bring various actors together to achieve multiple goals for the food system, as shown by pattern 3 of synergic action in Figure 3. Interviewees further emphasized the importance of their unique roles. For example, P9 emphasized, "I work as a consultant, so you have to pay people like me to try and coalesce people around a problem and move them". Second, other actors in the food system greatly benefited from these intentional actors, such that they were able to direct relevant actors towards each other. Interviewee P2 mentions her active role, "I sit on quite a lot of different groups. And I can network people or put people in touch with people and all of those things together". Interviewee P18 states, "So one of the key cornerstones is around... collaboration and around community and around kind of helping, spread, spread, best practice or helping individuals understand how they can network better really". These actors understood the importance and value of someone like themselves who was able to see connections within different parts of the system using systems approaches and intentionally achieve outcomes greater than the sum of the parts by bringing people together for change.

5. Discussion

The study aimed to understand how synergic action was carried out in practice and the key conditions needed to enable synergic action using a case study of the Yorkshire food system transformation. We thus identified three types of synergic action and five key essentials that together increase the potential for synergic action.

5.1. Implications for the Types of Synergic Action

The three types of synergic action have implications for how interventions are approached for systemic change in the Yorkshire food system. It brings awareness to actors on how they are already implicitly doing synergic action and therefore enhances the potential for deliberate synergic action. Types 1 and 2 are dominant patterns of how actors currently engage in systemic change. However, type 3 provides a different way of thinking and doing for systemic change. In sustainability transition literature, type 3 actors are often called systemic transition intermediaries [43,44]. The role of the intermediaries is to connect and link individuals, groups, organizations, and institutions and their related resources to create a momentum for change [44]. Although type 1 and 2 have their own merits in doing synergic action, type 3 provides a much more systemic approach to change and therefore enhances the likelihood of a much more effective synergic action. Therefore, it is imperative to develop individual and collective capabilities to shift from type 1 to type 3 synergic action to drive large-scale systems change. This includes developing leadership skills, systems thinking, and facilitation capabilities among others. Type 3 synergic action thus helps actors orient towards the application of the concept of synergy into practice for supporting widespread, fundamental change. This application of synergy into practice is supported by the five essentials for synergic action.

5.2. Interrelationships Between the Five Essentails

The five key essentials show the importance of how each essential reinforces each other and how they are held together by an intentionality for synergic action, as shown by Figure 4. The first four essentials for synergic action (the inner "diamond" of Figure 4) have often been discussed as broad enablers for change in climate discourses and sustainability transitions [7,45–47]. Enablers of change, such as leadership [48–50], understanding power [51–53], transcending current thinking, worldviews, and beliefs, among others [51–53], are already part of the mainstream narrative. There are also emerging new ways of organizing and working with people and knowledge for collective action [54–56]. For example, "organizational process work" is used for better collaboration for change within organizations [57]. Further, it is no longer about one person leading the masses but about creating networks and collective action for change [50,58]. Our study, however, presents a fifth essential, intentionality (represented by the circle outside the "diamond" in Figure 4), as critical in bringing together the first four essentials for synergic action. Without the intention for synergic action and the deliberate integration of the four essentials, i.e., leadership, a systems approach, care and understanding, networks, partnerships, and collaborations, individual enablers tended to only provide a narrow focus of action. Further, understanding how the essentials relate to each other is also crucial to enable synergic action, which is discussed in the following.

Particular kinds of leadership and systems approaches to change are key for systemic change. A key role leaders have is to set intentions for their group [59]. Setting intentions guides action and norms of how a group collaborates, which is critical for synergic action. It further influences the type of partners for collaboration that will lead to outcomes that are greater than the sum of their individual parts. Effective leadership can then be supported by taking a systems approach to change. Systems approaches raise greater understanding of interactions within the system, reducing blind spots and identifying negative patterns [60]. It therefore enables leaders to be more effective in understanding the problem and more deliberate in their approach to working with others outside their domain. It further enables leaders and other actors to collectively be more aware of blind spots and negative patterns and become more resilient to uncertain outcomes.

Taking a systems approach is also key for multi-stakeholder engagement, where diverse perspectives and voices are heard and can further support the creation of new patterns of relationships through new collaboration and partnerships. The same actors and the same actions cannot keep solving entrenched challenges, so networking and forming new partnerships are essential to foster new synergies. Networking further creates room for spontaneous synergy, enabling unique partnerships to form and new innovations to take place [61]. Thus, a systems approach to change supports collaboration and partnerships, and successful collaborations have the potential to create momentum for systemic change.

Furthermore, successful collaboration and partnerships seem to be based on deep trust and respect for one another and enhance the potential to build long-term relationships [62,63]. For collective action, deeply considering the differences of others and finding a pathway of action appears critical [64,65]. Therefore, showing deep care and understanding towards others with the same goals, and also towards those with contrasting goals, strengthens and enhances collaborative efforts. Care and understanding further help reinforce positive leadership and build trust. However, without the intention for change and such integration of the essentials, the potential to deliver synergic action will remain limited. These findings provide an important focus for the development of capabilities for synergic action, with implications likely to be generalizable beyond the case study examined in this research.

5.3. Importance of Intentionality for Synergic Action

A key, and novel finding, was the importance of intentionality for enabling synergic action to support systemic transformations. This included intentionality as a core characteristic that held the other four essentials together, which was key to enabling support for more complex synergic approaches. Research on intentionality in the fields of sustainability transitions and transformations is limited. Emerging literature in sustainability transitions and transformations highlights the need for "systems-level intentionality" where future visioning, transdisciplinary collaboration, policy coherence, other forms of governance models, and maintaining transformational intent, among others, are critical if intentional change is desired [66–69]. There is also little literature that highlights the importance of intentionality for collective climate action [70,71]. Further, intention is also a critical component of design research in sustainability to encourage sustainable behavior choices through intentional design [72,73].

Intentionality, however, is widely and deeply discussed in the field of psychology. The theory of planned behavior posits that "behavior is an outcome of individual beliefs", with intention as the most important factor driving behavior [74,75]. Intention is also emphasized as a key phase in therapy to achieve personal growth and goals [73,74]. Research in behavioral change further shows that setting intentions helps progress through different stages of change [76,77].

To apply these psychological findings to the field of sustainability transitions and transformations is not to say that actors working towards systemic change are not already intentional in achieving synergies. Instead, actors are naturally inclined to seek actors who can create win-win situations, albeit often implicitly. The problem with implicit synergic action is that it makes assumptions as to what might be good or needed for one another. For example, in couples therapy, it is found that explicit and intentional communication delivers better results [78]. This does not mean that implicit assumptions of what might be good for one's partner do not, also, lead to positive results, but that intentionality can enhance the magnitude or scale of synergic outcomes. The more complex a situation is, the more deliberate and intentional processes have been found to be most helpful [79].

In our case study, actors that demonstrated the third type of synergic action were deliberate in their approach to change and had an immediate positive impact in identifying and bringing different actors of the Yorkshire food system together. In systemic change processes, intentionality has the potential to deliberately enhance clarity of vision and direction, creating shared understanding among stakeholders and fostering effective collaboration [13,69]. Setting clear intentions also creates a benchmark for evaluation and associated iterative learning during the process and therefore prepares actors to adapt to changes within the system [80]. Intentionality is, therefore, crucial to supporting systemic transformations. Thus, if there is intention for synergic action, one can start asking the following questions: In what ways can we organize? What resources can we bring in and share? Who are the right people? What is our shared purpose and vision? What is our individual purpose? What approach do we take? Intentionality for synergic action has great potential in making explicit, clear goals and processes to support systemic change.

This study thus highlights that careful and deliberate action with explicit intention is needed for synergic action to emerge. Although intentionality is already apparent in systemic change, it is about how we begin to shift intentions and towards intentional synergic action. While the five essentials are unlikely to be the only requirements, they—and the way they reinforce one another—seem critical for the delivery of synergic action to support transformation. Thus, the practice of synergic action is rooted in intentionality and how this supports the integration of the other four essentials. The practice of synergic action, therefore, entails fostering intention and primarily building the capabilities for

leadership, systems thinking, successful partnerships, and skills that cultivate care and understanding for others.

5.4. Limitations and Further Research

There are two key limitations to this study. First, whilst this study engaged with actors who were actively engaged with the FixOurFood program, which provided insightful findings, it is also a limitation of this study. Engaging actors outside the program might be useful for future studies, as it could either confirm our findings or further enhance our understanding of synergic action by providing scope for future studies. Second, although the food system case study provided valuable insights, it will be useful to study other complex systems for a more comprehensive understanding of synergic action.

There is scope for further research in the following areas. First, a greater understanding is needed of what kinds of leadership will be most helpful, what kinds of capabilities and competencies are needed, and what methods and processes can most effectively deliver synergic action. Second, more research is needed to better understand how actors involved in Type 3 synergic processes relate and intervene, and how the essentials can more effectively support such relations and interactions. Additionally, there is also a need to examine if and how actors shifted from type 1 to type 3 synergic action. Third, there is a need to delve deeper into the aspects of intention and how more explicit intentionality for synergic action can be enhanced and supported. Finally, greater understanding is needed on barriers and enabling conditions to support actors to engage with synergic action. Actors may be genuinely aiming for systems change, but may be hampered when this is not the norm or the approach is poorly understood within the institutions they may be working through. Therefore, it will be important to further address institutional resistance and resource constraints, among others, limiting synergic action.

6. Conclusions

The aim of the study was to understand what synergic action looked like on the ground and the key conditions needed to deliver synergic action. This study found the three types of synergic action and the five key essentials needed to deliver synergic action. To support synergic action building capabilities that integrate the five essentials, and also enabling type 3 synergic action, will be critical. Further, intentionality for synergic action will be key to really hold together the essentials and enhance the potential for synergic action. The first four essentials have broadly been suggested elsewhere in different system change-related studies. This study explicitly links these to the pursuit of synergic action. However, the fifth essential, intentionality for synergic action, is the key contribution of this study. We foreground intentionality for synergic action as crucial in aligning and holding together the first four essentials for synergic action. We therefore draw particular attention to the fifth essential for synergic action, without which synergic action is much less likely to unfold.

Whilst there is a wide consensus for the need for systemic approaches to change and the importance of identifying synergies, there are very few who deliver synergic action in practice to support systemic change. Thus, this study has provided essentials that will better enable the practice of synergic action for system transformation. Our findings will have implications for practitioners of systems change in orienting their intentions and actions towards deliberate synergic action.

Author Contributions: Conceptualization, E.S.O., I.F., D.T. and M.C.; methodology: E.S.O., I.F., L.E. and E.C.; Visualization: E.S.O., L.E. and I.F.; formal analysis: E.S.O., I.F., L.E. and E.C.; investigation, E.S.O.; writing—original draft preparation, E.S.O.; writing—reviewing and editing: E.S.O., I.F., D.T.,

M.C., E.C., D.J., J.F., L.R., R.N. and S.C.; supervision: I.F. and E.C. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of the University of York (DEGERC/Res/19122022/1, 23 December 2022).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data will be made available on request.

Acknowledgments: We wish to thank Belinda Morris and Dave Gledhill for helping with the design of the figures.

Conflicts of Interest: The authors declare no conflicts of interest.

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