


## Article

# The Organic Mindset: Insights from a Mixed Methods Grounded Theory (MM-GT) Study into Organic Food Systems

Sebastian Kretschmer <sup>1,\*</sup>, Bettina Langfeldt <sup>2</sup>, Christian Herzig <sup>3</sup>  and Thomas Krikser <sup>3</sup>

<sup>1</sup> Department of Organic Food Quality and Food Culture (FB 11), University of Kassel, Nordbahnhofstraße 1a, 37213 Witzenhausen, Germany

<sup>2</sup> Department of Empirical Social Research (FB 05), University of Kassel, Nora-Platiel-Straße 5, 34127 Kassel, Germany; b.langfeldt@uni-kassel.de

<sup>3</sup> Department of Management in the International Food Industry (FB 11), University of Kassel, Steinstraße 19, 37213 Witzenhausen, Germany; herzig@uni-kassel.de (C.H.); t.krikser@uni-kassel.de (T.K.)

\* Correspondence: sk@uni-kassel.de; Tel.: +49-151-26319344

**Abstract:** A broad understanding of food systems includes a complex web of activities, outcomes and drivers, encompassing not only the food and agriculture sectors, but also the social norms and cultures in which those activities are embedded. The organic food and farming movement has lately been portrayed as a food system of its own right, since it contains all necessary sub-systems, consisting of food environments, distribution networks, processing, as well as production and supply, all of which are bounded by an organic guarantee system. The underlying hypothesis of this investigation is that drivers in the organic food system operate on a paradigm level that is associated with the codified principles of ecology, health, fairness and care. Personality science suggests that the choice to act in pro-environmental ways is driven by an internalized sense of obligation or personal norms, which justifies our pursuit of seeking key drivers of food systems in the mindset of the actor. Through integrated findings from actor-centered mixed methods grounded theory research involving eleven case territories, this study identified a pattern of global mindset attributes that intuitively drive organic food system actors toward holistic human and sustainable development.

**Keywords:** mindset; drivers; organic food system; intrinsic motivation; ecocentric



**Citation:** Kretschmer, S.; Langfeldt, B.; Herzig, C.; Krikser, T. The Organic Mindset: Insights from a Mixed Methods Grounded Theory (MM-GT) Study into Organic Food Systems. *Sustainability* **2021**, *13*, 4724. <https://doi.org/10.3390/su13094724>

Academic Editors: Carola Strassner, Hamid El Bilali and Tarek Ben Hassen

Received: 8 March 2021

Accepted: 19 April 2021

Published: 23 April 2021

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Organic food systems have lately been portrayed as sustainable food systems [1], since they contain all necessary sub-systems, consisting of food environments, distribution networks, processing, as well as production and supply, with the identified purpose to keep feeding people with sustainably produced and healthy food [2]. There may not be one single system, but many organic food systems around the world, operating at different scales and on different levels, since they are layered hierarchically and nested within one another, with macro- and microsystems, respectively [3]. A key feature of organic food systems (OFS) is the fact that they are bounded by an organic guarantee system, based on the codified principles of ecology, health, fairness and care [4].

A broad understanding of OFS includes a complex web of activities, outcomes and drivers, encompassing not only the food and agriculture sectors along with the environment and natural resources, which they depend upon to function, but also the social norms and cultures in which those activities are embedded [5]. Existing conceptual causal models such as the value-belief-norm theory posit that both intrinsically and extrinsically motivated values are precursors of environmental beliefs. In other words, the choice to act in pro-environmental ways is driven by an internalized sense of obligation or personal norms [6]. Different researchers have characterized essential value aspects using continuum scales that model the relationship between behavior and values. Descriptors used for such value scales typically represent polarized, paradigmatic views to characterize a person's idealized

conception of values. Studies have found a correlation between paradigmatic worldviews and sustainable agricultural practices, linking environmental values with socially and environmentally beneficial practices [7].

There is much debate about food system drivers from a systemic perspective that speaks to the collective outcome areas such as trade expansion, digital connectivity, population growth and climate change [8], yet little discourse exists regarding driving forces from actor-centric levels within transformative milieus such as OFS. The term driver in a food system context still has somewhat of an elusive quality, which warrants a more differentiated look at the qualities of driving forces at play. It makes a big difference, for instance, between taking a systemic or an actor-centric perspective on the food system. From a food system's perspective, everybody's action aggregates and produces certain collective results that no one wants, such as the degradation to the biospherical global commons or widening social inequities [9]. Therefore, breaking the phenomenon down to the smallest unit of analysis shows the role of the individual actor more clearly. This vantage point has been particularly relevant during the COVID-19 pandemic, which has demonstrated the need for an individual sense of responsibility. Further narrowing the scope reveals the importance of the paradigmatic orientation from an actor-centric perspective. Referring to Socrates's famous dictum "the unexamined life is not worth living" [10] (p.39), one could argue that in the epoch of sustainable development goals and planetary boundaries mindset matters more than ever.

### *1.1. Mindset as Key Driver of Food Systems*

Mindset theory suggests a malleability of human attributes, such as personality and intelligence, as well as cultural and social orientation [11]. In that sense, mindset creates a mental framework for judging the meaning of events and making predictions in one's world [12]. On a cultural level, people live their lives based upon a mindset or certain narratives that are both emotionally and conceptually appealing and endorsing, without claiming to be logically consistent. Mindset explains the nature, functions, and variables that make up the characteristics of personality [13].

Mindset as a composite concept describes the lens through which individuals view the world and their place in it, including underlying assumptions, beliefs and values that inform that viewpoint [14]. The mindset of individuals or entire social groups is circumscribed by a set of attitudes, paradigms and narratives forming a more or less coherent worldview. Narratives, on the other hand, are considered reasoned and legitimized stories that convey shared images with strong appeal and provide an opportunity for social orientation [15]. A mindset and its accompanying narratives reflect underlying values, which also shape the way food system actors view and interpret the world, and ultimately drive their decision making [16].

In order to tackle the mindset question regarding the case of OFSs, it will be necessary to understand the underpinnings of intrinsic versus extrinsic motivation as the actual source of mindset creation or cultivation. The "New Ecological Paradigm" scale [17] is a framework of thought that serves as a measure of endorsement of a pro-ecological or ecocentric worldview. It is used extensively in environmental education, and other settings where differences in behavior are believed to be explained by an underlying worldview, or paradigm. The "New Ecological Paradigm" stands in diametric opposition to the "Dominant Social Paradigm" [18], which holds the view that humans are superior to all other species, the earth provides unlimited resources for humans, and that progress is an inherent part of human history [19].

The dilemma of the contemporary technocentric *Zeitgeist* may be described as separatist, in that humanity is considered to be separate or apart from nature, rather than an inseparable part of nature. Nature is seen as a mere collection of resources that can be transformed into things of economic value, rather than being perceived to have inherent value in and of themselves, regardless of their value to humans [20]. Environmental psychologists have confirmed that factors such as environmental knowledge, pro-ecological attitudes

and conservationist motives are predictive of sustainable behaviors [21]. As an underlying mindset quality and inherent motivational driver, certain intrinsic values such as the desire for self-knowledge, experiential openness and community involvement share in common an orientation towards eco-friendly behavior and a conscious lifestyle [22]. Several studies indicate that individuals with an intrinsic value orientation, are less materialistic and more inclined to engage in environmentally friendly behavior than individuals with an extrinsic value orientation [21,22].

The concept of the “growth versus fixed mindset” [23], for example, delineates a person’s or entity’s endeavor to cultivate key competencies through a deliberate alignment toward a set of norms and ideals. Dweck [23] contends that these two kinds of mindset permit grouping human beings on the basis of their behavior, specifically their response to failure and how they cope with challenges. Those with a “Fixed Mindset” (extrinsic motivation) regard their abilities mostly as innate and therefore interpret failure as the lack of necessary basic abilities. Individuals with a “Growth Mindset” (intrinsic motivation) on the other hand believe that they can acquire any given ability by investing effort or study.

This investigation is taking a deeper look at some of the core motivations that lie at the heart of OFS in order to discern their trajectory. As an alternative to unsustainable trends in the food system, organic food and farming movements have matured to a global OFS with its own “corporate identity” and rooted in a comprehensive body of knowledge [24,25]. In other words, what began as a counterculture has emerged as an agent of change transporting a set of sustainability narratives that go beyond the concerns of a mere land use system change [26].

### *1.2. Salutogenesis and the Sense of Coherence*

A key mindset driver that we applied to the food system context can be found in Antonovsky’s positive health framework, called the Salutogenesis approach [27], which contrasts the concept of pathogenesis or the study of disease development. While pathogenesis works backwards from disease as the starting point to determine how individuals can avoid, manage and/or eliminate a disease, Salutogenesis in contrast works prospectively by considering how to create, enhance and improve physical, mental and social well-being [28]. This fundamental insight infers what Antonovsky calls the “Sense of Coherence” [29], which ultimately corresponds with a holistic outlook on life.

The Salutogenesis model is based on the so-called Sense of Coherence scale, which provides a diagnostic framework for researchers and practitioners to help individuals, organizations and society move toward optimal well-being. The Sense of Coherence is based on three fundamental and essential perceptions on life, which include (1) a sense of comprehensibility, (2) a sense of manageability and (3) a sense of meaningfulness. Antonovsky’s Sense of Coherence is essentially a measure of an individual’s resistance in the face of stress. Salutogenesis theory argues that there are essentially no such states as health or illness, but rather an “ease-disease continuum” [30] (p. 1), on which we all move back and forth during our lifecycle. Salutogenesis as a mindset reflects key features of the aforementioned Growth Mindset in that it approaches potential, as opposed to avoiding problems. It is concerned about continuous improvement by generating better health proactively rather than avoiding to get worse. Health and sustainability are viewed as a mutually reinforcing duality [31].

### *1.3. Self-Determination and Intrinsic Motivation*

A further macro-concept of human motivation and personality that concerns people’s inherent growth tendencies and innate psychological needs is “Self-Determination Theory” [32]. SDT centers around the belief that human nature shows persistent positive features and inherent growth tendencies, with people repeatedly showing effort, agency and commitment in their lives. As it is becoming more important for individuals to find within themselves the “why” behind desired goals, personality science is seeking to unravel what it takes to become a fully functioning person [33].

The state of self-determination results from developing a sense of Autonomy, social Relatedness, and a feeling of Competence [32], which has become popularized as the “ARC of happiness.” Being able to fulfill these foundational human needs fosters intrinsic motivation, which in turn infers a number of correlates acting as additional mindset drivers.

Happiness and sustainable behavior, for example, are considered correlates of intrinsic motivation [22,34,35]. The positive association between ecological sustainability and personal well-being occurs because living sustainably creates environments and supports behaviors that satisfy psychological needs. Ecologically sustainable behaviors and the corresponding environments are conducive for experiencing greater feelings of competence than what can be derived from engaging in technologically heavy and often environmentally degrading behaviors [34].

Sustainable happiness has been defined as the pursuit of happiness that does not exploit other people, the environment, or future generations. According to the happiness model by Dambrun [35], self-centered psychological functioning induces fluctuating happiness, while sustainable happiness results from selflessness. Egocentrism, extrinsic motivation and self-centered materialism are positively and significantly related to fluctuating happiness, mediating afflictive affects. Selflessness assessed through ecocentrism, intrinsic motivation and social connectedness, on the other hand, is positively and significantly related to authentic–durable happiness, emotional stability and feeling of being in harmony.

Against this background, the aim of this paper is to identify the mental drivers along with their social, environmental and economic norms and narratives that propel OFS actors. The underlying hypotheses that inspired this investigation are (1) drivers in OFS operate on a paradigm level, enveloped by a coherent ecocentric mindset, conveying narratives that appeal to the human need for self-actualization and evoking intrinsic motivation and personal responsibility and (2) Organic Food Systems and their key actors display patterns of sustainable development, irrespective of geographical-climatic, political-economic and socio-cultural conditions of territorial contexts.

Concurring with Kjaergard and Hancock, we perceive the concept of sustainable development as “a process towards a new normative horizon” [36] (p. 559) that coincides with a shift of focus from economic development to human development [36,37]. This implies a paradigm shift from predominantly inequitable and excessive forms of exploitation of global commons to a development that demands “new forms of responsibility, solidarity and accountability” [36] (p. 559). Therefore we see OFS economic wellbeing as a function that emerges from a context of social and environmental sustainability.

In the pursuit of finding a driver pattern within OFS our study employs a “mixed methods” approach with strong elements of grounded theory (GT), abbreviated in the following by MM-GT [38,39]. We applied this cascade of aligned methods, conducting a micro-level analysis of OFS actors from around the world in order to discern whether tenets derived from each methodical step will aggregate to a global Organic Mindset pattern. In particular, we were interested to what extent OFS driver patterns match up with the International Federation of Organic Agriculture Movement’s core principles of “Health, Ecology, Fairness and Care” [4] and to gauge the adherence to these principles by OFS communities and the degree of their dissemination across continents. Our methodological approach is described next.

## 2. Materials and Approach

We conducted a complex mixed methods study, conceptualizing the qualitative strands as a grounded theory approach. The MM concept combines the major research paradigms of quantitative and qualitative research within the same study by collecting and analyzing both closed-ended and open-ended data in an integrated fashion [40,41]. As an open, non-comparative study without a control group empirical findings from an MM-GT research design were integrated along with literature providing a contextualized approach to social science methodology [42].

As far as the arrangement of inductive versus deductive research strands within our design is concerned the authors of this paper chose an “exploratory-confirmatory” sequence, as advanced by Shim et al. [38]. Both the exploratory and confirmatory stage of our investigation consist of three phases containing sequential as well as concurrent design elements. The results of one type of data were used to inform data collection of the other, linking qualitative and quantitative strands sequentially [43]. However, instead of deriving the meta-model solely from the exploratory stage, our theoretical model became more granular during the confirmatory stage of the investigation, which facilitated an interpretive ontology known as creative abduction that allowed for a so-called antecedent to emerge that explains the detected phenomena, thereby inferring “the case.”

Grounded theory, proposed by Glaser and Strauss [44], was originally conceptualized as a research approach with the purpose of generating a theory by applying a general method of comparative analysis using both quantitative and qualitative data for developing analytic categories or themes anchored in the data [45]. Especially in the 1990s, GT has become differentiated with the consequences that nowadays many versions and transformations of the original GT exist, mostly using qualitative methods. The same holds true regarding the ever growing use of MM designs, facilitating the analysis of complex phenomena via a cascade of aligned methods [40]. Johnson et al. [46] coined the term mixed methods-grounded theory (MM-GT), describing it as a distinctive equal-status blended approach. According to Shim et al. [38] (p. 2), MM-GT is “a research methodology that relies on the use of qualitative, quantitative, and mixed methods data, approaches, logics, and strategies.” Contrary to Guetterman et al. [39], we follow the understanding of Shim et al. [38] that generating an exploratory theory represents a necessary requirement of a MM-GT study.

The following framework, displayed below (Figure 1) illustrates the exploratory-confirmatory sequence employed by our research design. The overarching grounded theory construct, viewed clockwise starting from the bottom, is supported via initial pattern and tentative theory building, and undergoes a transition from explorative to confirmatory at the point of theoretical saturation. From there on out the emerging theory was undergoing methods of validation.

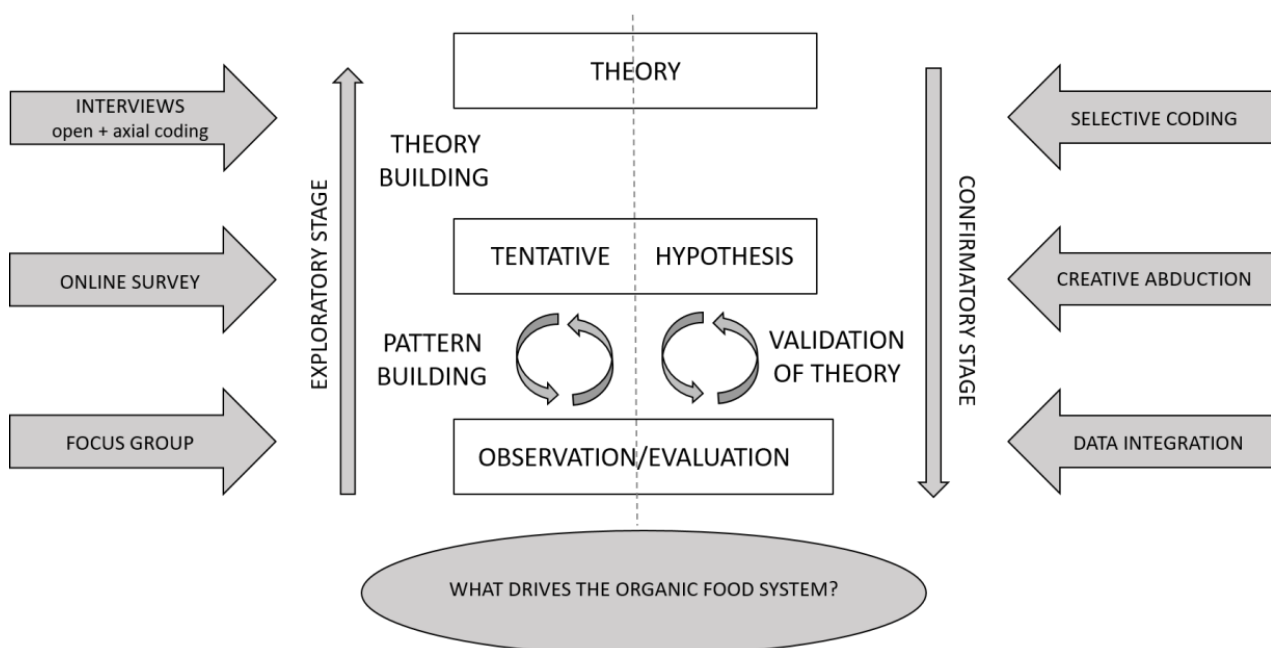


Figure 1. Mixed methods grounded theory research design.



### 2.1. Exploratory Stage: Focus Group

The first phase of the exploratory stage was comprised of sharing knowledge and experiences among experts that were recruited according to judgemental sampling. The focus group consisted of a group of seven OFS experts from Asia (China, India, South Korea and the Philippines), the United States and Europe (Germany and Sweden), representing both the Organic Food System Program [47] as well as the International Federation of Organic Farming Movement Asia [48] who gathered at the University of Kassel, Germany, in October 2018. We were particularly interested in eliciting the perception by these leaders of the underlying drivers of the organic food and farming movements around the world. The focus group was meant to generate a working hypothesis or heuristic medium to identify driver patterns within OFS. The focus group provided an implicit model for the subsequent conceptualization of an online survey.

### 2.2. Exploratory Stage: Online Survey

As the second phase within the exploratory stage an online survey consisting of four closed questions was developed with the aim of initial pattern and theory building. It was intended for foodshed researchers around the world with the purpose of probing the practicality of the implicit model, which was derived from the focus group to serve as an explanatory phenomenon or the explicit model [38]. The development of the questionnaire was informed by the Growth Mindset theory, coupled with the main insights derived from the Focus Group. The questionnaire was aiming at cognitive parameters to test the viability of mindset as a driver concept for OFS. This online survey was purposively circulated to 84 foodshed researchers associated with a research network called the “Organic Food System Program” with the request for further dissemination among peers. This mix of judgmental and snowball sampling yielded a sample size of 150. The survey was employed, not with the aim of statistical representativeness, but rather as a quantitative method for exploration. The first two phases of the exploratory stage combined resulted in a first formative model toward theory building.

### 2.3. Exploratory Stage—GT Based on Semi-Structured Interviews with OFS Key Actors

Launched concurrently with the on-line survey, but eventually surpassing it, an independently constructed traditional GT using interview data spanned a one-year time period. Findings from the on-line survey naturally flowed into the theoretical sampling calculus, which along with its subsequent coding approach adhered to the GT philosophy advanced by Strauss and Corbin [49].

Over the course of the year 2019, a total of 241 key actor interviews within the context of eleven localized OFS from Ecuador, France, India, Italy, New Zealand, Nigeria, the Philippines, South Korea, Sweden, Tanzania and the US were carried out. We define key actors as those who directly or indirectly influence outcomes of the respective local food systems. Per OFS case, an average of 22 semi-structured half-hour interviews were conducted, with an evolving interview guide centered on various iterations around the core question: “What drives/motivates you as an OFS actor?” The selection of the eleven OFS cases followed the iterative-pragmatic approach of theoretical sampling [50], in order to facilitate a broad perspective of key actor insights until theoretical saturation was achieved, while the relations between categories remained developed [49].

Apart from the objective of enhancing differentiation and consolidation of the cases additional criteria also were applied in terms of the cases’ interrelations, dimensions and properties [51]. Those criteria included global coverage, spatial scale of the OFS cases, type of organic certification, value chain levels, degree of market share, type of funding, involvement of local administration and type of food system governance.

Access to the interview partners was provided by case informants or so-called gatekeepers, who all held instrumental positions within the respective OFS. These local figures helped to nominate key actors within each case territory, aiming for equal representation via quota sampling among the categories production, processing, distribution/marketing/retail and consumption, as well as waste management/input suppliers. Nominated key actors then were able to recommend additional actors to be interviewed, as long as they were mentioned by at least two of the initial pool of key actors [52]. The identified key actors defined OFSs as intentional, locally bounded foodsheds, ranging from municipalities, districts to entire provinces and facilitated by either public, third sector or civil society bodies with more or less explicitly stated goals to promote local organic value chains [53].

The coding philosophy applied by the authors followed the classic sequence of open, axial and selective coding after Strauss and Corbin [49] with attention given to constant comparison in order to derive categories broad enough to capture convergent statements but still sufficiently specific to transport the underlying concepts [54]. Open coding occurred in an alternating and iterative process of data collection and data analysis, in an attempt to identify concepts representing important categories, which were formed successively and were then related to each other. As opposed to open coding, which facilitates the emergence of initial themes, the process of axial coding then identified relationships between themes until thematically stable categories were built via a combination of inductive and deductive thinking. This point also marked the end of the explorative stage and the beginning of the confirmatory stage, which was structured again into three phases with the aim of rendering the formative model from the exploratory phase into a final meta-model.

#### *2.4. Confirmatory Stage: Selective Coding*

As a first phase after completion of open and axial coding, the process of selective coding integrated the mutually related different themes that had been developed during the exploratory stage into a more cohesive tentative theory. This helped to enhance the expressiveness of the categories and facilitated the construction of meaning [55].

#### *2.5. Confirmatory Stage—Data Integration*

In order to contextualize the combined findings, we then proceeded to juxtapose and cross-reference our theoretical model with existing mindset concepts as well as other related ecological worldview traditions in the discussion section of this paper. To facilitate the discussion of the results, the individual strands were tied together, integrating the data in an attempt to validate the coherence of all findings [39].

#### *2.6. Confirmatory Stage: Creative Abduction*

During the theory building process it became evident that the relationship between master codes and the inner cohesion detectable in “the case” could no longer be explained through the sum of the individual categories but amounted to a degree of coherence that warranted the introduction of a novel antecedent or major premise. This “leap of faith” represents an abductive conclusion, known as “creative abduction,” which can help researchers in introducing new discoveries in the form of a major premise, capable of inferring the theoretical model from all prior results [56] and to lend weight to the grounded theory [57]. While in other forms of abduction “the general rule is taken from current knowledge, in creative abduction, the law must be created, invented” [57] (p. 11). Hence, this antecedent represents a sort of nexus that all findings are converging towards. In order to deliver justification for the identified phenomena, the aforementioned juxtaposition of the final GT’s master codes against existing mindset theories revealed certain overarching principles that condense into the major premise of our theory building endeavor. This antecedent would then become the phenomenon of the highest order, illuminating the intrinsic relationships between findings and around which all other concepts are integrated hierarchically [51].

Rather than discussing our Organic Mindset phenomena from a world-historical systems perspective as a potential result of the misaligned political economy and political ecology of “food regimes” [58] (p. 139) we chose a psycho-social, paradigmatic and actor-centric approach for delivering on our hypotheses and elaborating a theoretical model. Hence, we placed the emphasis on validating the comprehensiveness, relevance, polycentricity and coherence of the underlying mindset by discussing its multiple tenets using transdisciplinary literature. The chosen actor-centric perspective of this study provides granular insights into the roles of actors and agency in sustainability transitions [59].

### 3. Results

#### 3.1. Focus Group

Through our focus group we have accessed the opinions of a specific target group by providing concrete talking points or stimuli, which were then discussed in the group [60]. The outcome of this focus group is illustrated below (Table 1).

**Table 1.** Exploratory stage—findings from a focus group with international OFS experts elaborating the heuristic concept of mindset as a suitable medium to convey driver patterns within OFS.

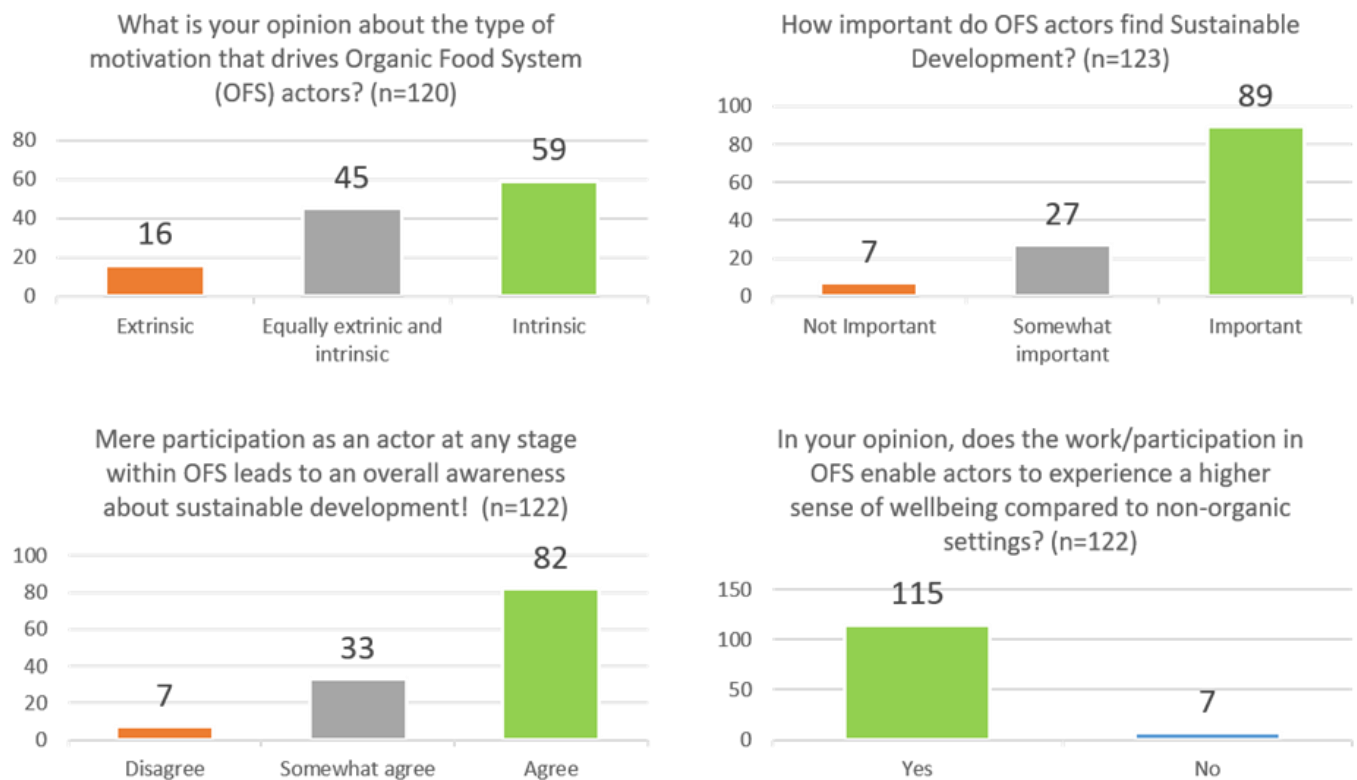
<b>Proposed Talking Points and Stimuli for the Focus Group:</b>
How can we better understand the elusive driver concept behind food systems? What about drivers in organic food systems? Are all food system actors affected equally by global trends such as urbanization, climate change or digital connectivity? How do OFS actors respond to the threats and weaknesses of the global food system? Is there a specific form of social capital within OFS?
<b>Conclusions from Focus Group:</b>
There seems to be somewhat of a running theme of motivations among OFS actors worldwide.
OFS actors are often open-minded and interested in learning.
Their motivation is often inspired by values.
The four principles (Health, Ecology, Fairness, Care) by IFOAM reflect this motivational orientation.
There seems to be connection between these organic principles and actors’ own values.
A sense of satisfaction is derived from feeling part of a global movement.
Responsibility seems to be a motivational factor.
OFS actors feel empowered about being part of meaningful change.
Actors generally have an awareness of their impact on the environment.
This awareness undergoes a growth process.
OFS actors often choose a different response to overall trends.

The focus group discussion resulted in a shared impression that OFS environments might in fact promote the synchronization of values and behavior among its actors, which is a phenomenon that might best be approximated via the heuristic concept of cultivating a mindset collectively. It suggested mindset as a potential frame of reference for grasping the driver behind OFS. At this point, mindset served as an implicit model, the content of which had not yet been determined.

#### 3.2. Online Survey

Respondents of the survey confirmed the growth mindset qualities and other positive side effects of intrinsic motivation as prevailing among OFS actors. Interestingly, respondents also believe that mere engagement in OFS leads to enhanced happiness as well as an increased awareness about sustainable development in general (Figure 2).





**Figure 2.** Exploratory stage—inquiring into “intrinsic motivation” as a driving OFS actor mindset quality. Findings from an online survey engaging 150 foodshed researchers around the world.

These quantitative findings gave weight to the notion of a mindset pattern as a key OFS driver. Here, the idea began to arise that the main principle causing this worldview could have to do with the phenomenon of intrinsic motivation together with its manifold correlates. The online survey as the second phase within the exploratory stage hereby succeeded in “vetting” the implicit model established by the focus group and taking it further via the methodological application of “New Ecological Paradigm” and “Growth Mindset” logic as a sort of diagnostic tool to test its viability as an explicit model. Hence, these results permitted further steps in tentative theory building toward a formative model.

### 3.3. GT Semi-Structured Interviews with OFS Key Actors

A documentation project of eleven OFS across eleven case territories on five continents [53] has yielded the interview material for the GT strand of this study. Cases had been selected iteratively based on their potential contribution toward the further development and refinement of an evolving mindset theory, until additional data no longer was able to produce new categories [51] and the point of theoretical saturation was reached.

Open coding began with the interview material from India and Tanzania as the first two cases that entered the analysis. Open codes were initially developed in vivo and constantly compared against incoming additional cases. The conceptualization and categorization of phenomena was built on paired incidences in the data such as OFS actors’ transformative learning and education experiences from their respective networks, coupled with a sense of collective impact and inclusive governance. A systems perspective gained through training and knowledge transfer regarding the organic principles also led to enhanced networking and the pursuit of joint goals. Another set of conjunct phenomena emerging from the interview data consisted of a sense of satisfaction about equitable livelihoods, self-reliance and community empowerment from the engagement with OFS. This socio-economic dimension was marked by a sense of solidarity and social justice, including motivation for both personal, but also communal gain, via collaborative relationships

and emotional and social awareness. A further tandem of phenomena comprised the appreciation for resilient technologies, including the organic farming method arising from the OFS context, fostering ecosystem services as well as the actors' own eco-literacy. This sentiment combined the passion of OFS actors to pursue their vocation, while contributing to nature protection and "being part of the solution." Finally, the fourth set of paired incidences derived from interview transcripts consisted of the continuum between moderate consumption and healthful lifestyle, which integrates the desire for both personal and planetary health as a function of an overall sense of mindfulness as well as an organic diet, free of pesticides. Farmers stressed how banning pesticides from their fields as a result of transitioning to organic allowed both their own and their soil's health to flourish. This code category also involved numerous concepts and ideas of spirituality in conjunction with lifestyle and health.

All the described notions, which became the master codes for circumscribing the phenomena have an intimate relationship with the regenerative and socially rewarding quality of the organic food system because they represent mutually enabling and constraining elements of a continuum, thereby presenting an integrated whole [36,61].

Upon the granular analysis of the raw data from more and more cases the essence of these motivational driver qualities began to emerge. Interview material from further case territories on the Philippines, in Nigeria, Ecuador and the US already started to confirm the initial open code concepts that had been created. While the case specific proportion of coded segments varied among the different countries, the main categories of motivation remained the same throughout all case territories (Table 2). At that point, references to literature relating to the relevant characteristics of the converging concepts were made and tentative codes to describe the phenomena were developed [62].

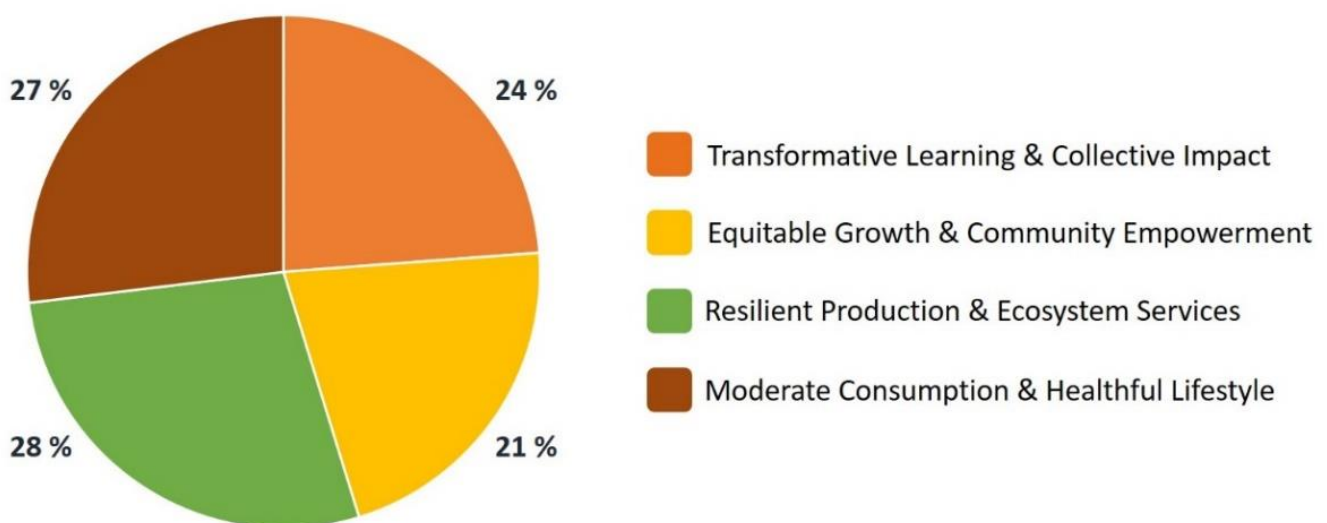
**Table 2.** Per country distribution of the OFS mindset categories, showing no signs of any global "North–South" divide among case territories.

	<b>Transformative Learning and Collective Impact</b>	<b>Equitable Growth and Community Empowerment</b>	<b>Resilient Production and Ecosystem Services</b>	<b>Moderate Consumption and Healthful Lifestyle</b>
South Korea	28%	19%	28%	25%
New Zealand	21%	27%	30%	22%
India	22%	17%	28%	33%
Philippines	24%	25%	29%	22%
Tanzania	17%	21%	31%	31%
Nigeria	29%	21%	22%	28%
Ecuador	25%	24%	25%	26%
USA	19%	23%	30%	28%
Sweden	28%	13%	29%	30%
Italy	21%	37%	21%	21%
France	25%	19%	29%	27%

The final cases from South Korea and New Zealand did not yield additional insights anymore, except for validating the core dimensions of this overall mindset phenomenon. OFS key actors from every region seemed to embrace the same social and environmental norms that seemed intrinsically related to or rather resulting from the actors' engagement with the codified principles of organic food and farming. In conclusion, open coding of both literature and the professional experience of the researcher was utilized [49] in order to describe the interpretation found [51].

In order to test the unfolding theory, the categories then were examined according to the case context as well as potential causal and intervening conditions in terms of action or interaction strategies [49]. In the ensuing process of axial coding, the mature concepts were consolidated into codes that displayed inherent relationships with each other, which justified the theme of sustainable development, demarcating an overarching framework. The OFS context of most case territories provided a supportive environment, consisting of training programs, the facilitation of associative economic relations among actors and adaptive governance by the municipalities. The collaborative interaction within these intentional foodsheds, along with convincing results from the organic farming methods, generated conducive contexts for fostering a mindset based on an ecological paradigm. Certain maxims within OFS such as “working with nature, rather than against it” or analogies drawn between biologically active soils and healthy microbiomes support notions like the Gaia Principle [63] or narratives such as “food is medicine” or “you are what you eat.” When farmers, chefs, wholesalers, educators and representatives of local government convene at round tables and form food system alliances, an atmosphere of trust and a sense of individual responsibility can be fostered [64].

Selective coding as a last fine-tuning produced the pairing of motivational attributes into sets of two (Figure 3), which resulted from the amount of overlaps between codes indicating the natural continuum and co-evolutionary interrelation that exists between the descriptors. The following master codes circumscribing the Organic Mindset revolve around an intuitively ethical agenda, including the following motivational arenas: (1) Transformative Learning and Collective Impact, (2) Equitable Growth and Community Empowerment, (3) Resilient Production and Ecosystem Services and (4) Moderate Consumption and Healthful Lifestyle.



**Figure 3.** Average distribution of master categories (T-E-R-M) across all cases after selective coding of OFS key actor interviews—asking the question “What drives you?”.

The quality and the specific constellation of these driver categories aggregate into a mindset model that conforms with core principles of sustainable development. The quality of the Organic Mindset hence spans the entire spectrum of what are commonly described as the three pillars of sustainability [65,66].

The four core principles by IFOAM (health, ecology, fairness and care) are fully reflected in the Organic Mindset. Our findings go even further in elaborating on the vigorous underlying paradigm that has the potential of empowering communities around the world, thereby debunking any myths of elitarianism. The notion that organic somehow is a “boutique” item of the global north has been refuted by these findings. Instead, organic food and farming are being celebrated by actors as a “lifestyle of health and

sustainability,” irrespective of the geographical-climatic, political-economic and socio-cultural backgrounds of the case territories.

Human behavior plays a paramount role in the exacerbation of environmental problems. Materialism, waste and depredation of resources, contamination, and egoistic and inequitable behaviors ought to be replaced by sustainable behaviors. The practice of sustainable conduct indicated by pro-ecological, altruistic behaviors and modest consumption, such as demonstrated by OFS actors is postulated to enhance levels of happiness and conduces to a state of satisfaction and intrinsic motivation. As a connecting thread, the theme of intrinsic motivation weaves throughout this entire study. It connects with several related attributes such as well-being, responsible conduct, conscious lifestyle, a growth-oriented mindset and an affinity towards the New Ecological Paradigm. The core driver themes and master codes synthesized from 241 interviewed key actors (Figure 3) comprise an intrinsically motivated, ecocentric and rather coherent mindset, including correlates of “Sustainable Happiness” [35] and “Deep Sustainability” [20].

The Organic Mindset also entertains an altered time horizon, which has switched from a wide view of knowledge informing current circumstance to a deeper perspective that draws lessons from the past and uses the state of the future, even generations ahead, as one of the most important considerations in decision-making [14].

#### 4. Discussion

For a critical look at our model and to show that the Organic Mindset, as coherent and whole as it may seem, is not devoid of any hypocrisy or diverging interests, we would like to preface the following discussion with some nuance, drawing from food sovereignty discourses. Certain arguments in favor of food sovereignty are premised on two kinds of emblematic instances that define the opposition to what would be conceived of as the “food industrial complex” [67]. According to Bernstein, this particular discourse tends to, on the one hand, portray peasant farmers from the global south as non-surplus producers, committed to subsistence agriculture and, on the other hand, small to medium size agro-ecological operations or “new peasantries” [68] who are negotiating their position as commodity producers. In Bernstein’s eyes, both types of emblematic instances give cause that such actors may not necessarily qualify to make claims toward solving food system weaknesses. According to Bernstein, this is because the subsistence farmer is not in a position to effectively contribute toward feeding the world and small to medium size organic operations are often adopting the same kinds of aggressive ways to seek advantages in markets as corporate industrialized food system actors do [67]. Moreover, the idealization of food sovereignty by some post-development scholars implies a kind of essentialism regarding the “peasant way,” which is problematic because many existing small farmers in fact are practicing monocrop and export oriented agriculture without inherent support of sustainable local food [69].

On the other hand, local food systems are increasingly modeled as conducive networks for sustainability, resilience and equity by promoting community-driven socio-economic development, human welfare and environmental services [70]. The emergence of modern local food systems that sympathize with the social vision of “deep organic” also reveals a set of adaptive governance arrangements fostering a food system approach and transformative capacity that involve boundary-spanning structures, inclusiveness and systemic problem framing [71].

Well aware of the numerous tradeoffs, which local food systems pose, including the dilemma of the “local trap” [72], we are not arguing for food sovereignty, or local food systems for that matter, as the silver bullet to end hunger in the world, but rather for the codified principles that circumscribe organic agriculture to be a helpful guide in inspiring a new food system paradigm. In defense of our research design, all eleven OFS case territories and their respective key actors under investigation do represent all food system stages, not just production. This study’s theoretical sampling requirements for the selection of case territories included bot compliance with organic certification standards

via a “participatory guarantee system” or third-party certification in every case as well as sub-national governance programs, officially promoting the enhancement of local organic value chains in ten out of eleven case territories, therefore safeguarding a critical set of transformation criteria.

For the purpose of illustrating the substance and relevance of the Organic Mindset model and in an attempt to give weight to our theory this following section is interspersed with original OFS actor quotes from each of the identified Organic Mindset categories (Figure 3) that were juxtaposed to existing ontological paradigms and mindset models. The framework for the discussion below is provided by the four content areas of the Sustainability Mindset model by Kassel and Rimanoczy [14], including (1) Systems Perspective, (2) Emotional Intelligence, (3) Ecoliteracy and (4) Spiritual Intelligence. A “systems perspective” is informed by the understanding that every individual, organization and industry represent subsystems, while interlocked and inextricably embedded in larger interconnected systems. “Spiritual intelligence” is driven by a continued alignment of purpose, principles, and outcomes. “Ecoliteracy” comprises a proactive “glocal” sensitivity or the understanding of the interconnectedness between local and global levels as the actual competency or doing dimension of “emotional intelligence” [14].

#### 4.1. Transformative Learning and Collective Impact

The master category “Transformative Learning and Collective Impact” matches the content area “Systems Perspective” of the Sustainability Mindset (Table 3), which stands for the ability of actors to detect equivalencies between symbiotic relationships in nature and business alike or seeing parallels between sentient human beings and the earth, or between agriculture and culture [14].

**Table 3.** Direct statements by OFS actors exemplifying the analogy between the mindset dimensions “Systems Perspective” (Sustainability Mindset) and “Transformative Learning and Collective Impact” (OFS Mindset).

<b>What Drives You? Responses from the Category “Transformative Learning and Collective Impact”</b>
1. “We speak of a holistic form of consumption, always protecting the autonomy of the family, then we talk about the right to food, the right to healthy production. However, it goes beyond that, organic is an integral logic, the principles are multiple” (Ecuador).
2. “The multi-stakeholder platform “Quito Agri-food Pact” has been the starting point and driver for urban subsistence agriculture” (Ecuador).
3. “Organic Agriculture is the culture of life, culture of health” (Nigeria).
4. “The change in the community was the biggest motivation to go organic” (India).
5. “We want symbiotic relationships in our business, the same as the earth has symbiotic relationships” (US).

Drawing the analogy between the Organic Mindset and the Sustainability Mindset shows how both approaches employ a systemic view to understanding the world, one which goes beyond technical knowledge, addressing the flaws of a purely technocentric orientation. Both mindset models therefore promote a “Systems View of Life,” which is a way of thinking and being that results from a broad understanding of the ecosystem’s manifestations, meaning the different components of our ecosystem, and the complexity of impacts our human behaviors have on the system [73].



Strong resemblance can be detected also between the Organic Mindset and the world-view of “Deep Sustainability,” which addresses the ethical, philosophical, and spiritual roots of human well-being that must be enabled to sustain the ecological, social and economic integrity of human relationships with each other and with nature [20].

#### 4.2. Equitable Growth and Community Empowerment

The next section lists archetypal statements from the category “Equitable Growth and Community Empowerment” (Table 4). The theme of intrinsic motivation for communal causes such as seeking solidarity with agrarian communities or the notion of social entrepreneurship persists and speaks to the content area “Emotional Intelligence” of the Sustainability Mindset model by Kassel and Rimanoczy [14], which may be seen as a kind of prerequisite for engaging in ethical production and inclusive value chains.

**Table 4.** Direct statements by OFS actors exemplifying the analogy between the mindset dimensions “Emotional Intelligence” (Sustainability Mindset) and “Equitable Growth and Community Empowerment” (OFS Mindset).

---

#### What Drives You? Responses from the Category “Equitable Growth and Community Empowerment”

---

1. “This is one of my main motivations, to keep extending our stores to extend the access for organic producers to have a family space to sell their products” (US).
  2. “The organic food system will give the farmers a healthy living and at the same time they gain recognition” (Nigeria).
  3. “Now the farmers are even forming cooperatives on their own” (Nigeria).
  4. “One of the key elements in building local food systems is community, and that’s how we’re going to survive climate change. There, too, it’s about love. It’s about loving our planet, each other, nature and the animals. That’s the driver, that’s where the power is. Love is the greatest power” (Ecuador).
  5. “My primary motivation always is the empowerment of farmers and communities” (Sweden).
- 

There seems to be an overall compatibility between the T-E-R-M motivational arenas of the Organic Mindset (Figure 3) as they create a coherent ontology and worldview in combination, which makes the whole greater than the sum of its parts. The economist Paul Collier would call these mindset characteristics a combination of compassion and enlightened self-interest [74], which he regards as a “recipe” for saving the planet. The mindset quality of “enlightened self-interest” states that an individual, group, or even a commercial entity who acts to further the interests of others, ultimately serves their own self-interest. This quality is also embedded in the economic paradigm of the so-called “triple bottom line” or the narrative of “doing well by doing good” within the wider framework of social entrepreneurship. This business philosophy states that profits must not only be defined by an economic bottom line, but also by accompanying positive social and environmental externalities [75,76].

#### 4.3. Resilient Production and Ecosystem Services

The motivational driver “Resilient Production and Ecosystem Services” is portrayed here based on typical statements generated by key OFS actors from around the world (Table 5). These quotes and the implicit mindset gesture represents the content area “Ecoliteracy” of the Sustainability Mindset by Kassel and Rimanoczy [14].

**Table 5.** Direct statements by OFS actors exemplifying the analogy between the mindset dimensions “Ecoliteracy” (Sustainability Mindset) and “Resilient Production and Ecosystem Services” (OFS Mindset).

<b>What Drives You? Responses from the Category “Resilient Production and Ecosystem Services”</b>
1. “The heart of organic agriculture is a whole system perspective and ensuring that when we do farming, we leave the land better than we found it” (US).
2. “Our activity is not really affecting or destabilizing the ecosystem rather it is complementing it” (Nigeria).
3. “The main motivation for going organic was the awareness of the harmful effects of the chemicals used in conventional farming. It really poisons the soil and makes it lose the characteristics as soil” (India).
4. “The change in the soil was drastic over the years, the soil was much cooler and it absorbed and retained more water” (India).
5. “I love it because I do not buy chemicals, which I know needs a lot of money to buy” (Tanzania).

The “Ecological Mindset” portrayed by Stubbings [77], analogous to the Organic Mindset stands for ecological altruism and advances a holistic and integrative, long-term, sensitive, adaptable and mindful vision of life. Thinking holistically produces a shift from being a detached observer to becoming a “participant enquirer” and means having an “exquisite sensitivity to feedback” [77] (pp. 7–8). These skills come about through a heightened awareness of the complex web of interconnections within our ecosystems, so that instead of reductive, linear cause and effect explanations, we comprehend patterns and relationship, value and quality as well as the nonlinear dynamics of life. The emerging consensus about the “oneness” of the universe is suggesting to human beings that we cannot decompose the world into independently existing smallest particles but rather perceive it as a complicated web of relations between the various parts of the whole. Nature does not show us any isolated building blocks, but instead we are beginning to understand that everything is connected [78]. Hence, taking an ecological holistic perspective also requires questioning dominant paradigms, transforming existing approaches and ultimately to “change the way we change” [77] (p. 10).

#### 4.4. Moderate Consumption and Healthful Lifestyle

The category “Moderate Consumption and Healthful Lifestyle” reflects the content area “Spiritual Intelligence” of the Sustainability Mindset (Table 6) by Kassel and Rimanoczy [14]. The ability of actors to transfer the concept of healing to the planet earth, or the sensitivity to food as an agent to induce happiness, or the responsibility and commitment to a healthy socio-ecological relationship indicates the altruistic and self-transcending disposition of these actors.

The extensive explorations of the relationships between science and spirituality since the 1960s have made it evident that the sense of “oneness” which is a key characteristic of the spiritual experience is fully confirmed by the understanding of reality and contemporary science [78]. “When the concept of the human spirit is understood as the mode of consciousness in which the individual feels a sense of belonging, of connectedness, to the cosmos as a whole, it becomes clear that ecological awareness is spiritual in its deepest essence” [73] (p. 89). The authors Kassel and Rimanoczy [14] contend that a Sustainability Mindset might very well comprise some degree of spiritual awareness and practice, involving systemic elements such as connectivity, inclusiveness, equity, self-organization and natural capital as well as mindfulness and deeper questions about purpose.

**Table 6.** Direct statements by OFS actors exemplifying the analogy between the mindset dimensions “Spiritual Intelligence” (Sustainability Mindset) and “Moderate Consumption and Healthful Lifestyle” (OFS Mindset).

What Drives You? Responses from the Category “Moderate Consumption and Healthful Lifestyle”
1. “The chemical based agricultural system that is causing havoc in the human body is not only adding toxins, it’s also causing the nutritional deficiencies in the soil, in the crops and therefore the consumers” (Nigeria).
2. “I like it because the product I eat is fresh and I know it is organic and it has no chemicals, so it is healthy and it is the greatest happiness that I have when consuming this product” (Ecuador).
3. “The main reason to change to organic was the deterioration in one’s health and the health of the soil” (India).
4. “When I am giving customers food I know I am not adding harm to that person” (Nigeria).
5. “When you look at what needs to heal this world today, it’s food” (US).

#### 4.5. Creative Abduction

From a food systems perspective many arguments can be brought forth as to what may evoke this rather polycentric mindset phenomenon that OFS around the world are displaying. The phenomena clearly reflect alternative and also opposing views vis-à-vis the global industrial food complex, but we believe that such opposing or resisting attitudes by OFS actors merely represent a secondary explanation for the actual mindset at hand. We see its antecedent in something originating from deeper sources of the human experience.

In analyzing OFS key actor behavior through a politicized, world-historical lens one can identify numerous counter-movements striving for the transformation of food systems or pioneering new ways of living and being as a result of adverse food regimes and stifling neoliberal agendas, or what McMichaels calls the “agrofood dimension of geopolitics” [58] (p. 140). However, for the purpose of theorizing a major premise that would infer the phenomena discovered in our case, we focused on identifying actor-centric sources as opposed to the unsustainable driving forces originating from misaligned food politics [68].

In this vein we wanted to explore a more universal, superordinate, proactive/intrinsic cause that propels human beings toward optimal wellbeing or “self-transcendence”, as Maslow has it in the later model of his “Hierarchy of Needs” [79]. In his revised version, Maslow paints a trajectory of fundamental human needs, beginning with the need for safety, love and belonging, esteem, self-actualization and ultimately the drive toward self-transcendence [79]. This intrinsic desire for self-transcendence, as a personality trait that involves the overcoming of the limits of the individual self and the expansion of personal boundaries includes, potentially, the spiritual experience of considering oneself an integral part of the universe [80].

New conceptual evolutionary models on the debated mechanism of speciation may also shed some light on this case. They are suggesting that competition driven survival of the fittest is not actually found in real nature [81]. Instead, cooperation and not the struggle for survival may in fact be driving evolution [81–83]. Darwin’s compassion argument that ties the success of human evolution to the evolution of compassion is fully supported by the scientific community. Darwin postulates that compassion is a natural instinct shared by all. Imparting Darwin’s ideas exclusively via the striking label of the “survival of the fittest” not only is misguided but misses his notion entirely, namely that actual success of humankind is contingent on its capacity for cooperation and compassion [84].

The biologist and theorist Edward O. Wilson [85] contends that selfishness should be regarded as innately dysfunctional in our highly interconnected societies and world. The driving force of social evolution, Wilson argues, is the group selection that has engendered social intelligence and social environments even at the cost of individual genetic selection. Just as the material world is viewed as an inseparable network of relationship, evolution

is no longer regarded as a competitive struggle for existence but rather as some kind of “cooperative dance, in which creativity and the constant emergence of novelty are the driving forces” [78] (p. 6).

The economic scientist Otto Scharmer describes mindset in his “Theory U” as a kind of operating system, which is constantly updating and evolving. The different stages are always present but can also be seen as a temporal evolutionary dynamic, beginning with a 1.0 input and authority-centric belief system to a 2.0 output and efficiency-centric worldview to a 3.0 outcome and user-centric mentality to a 4.0 co-creative and ecosystem-centric mindset [9].

The Organic Mindset, much like the Sustainability Mindset [14], encompasses “a way of thinking and being that results from a broad understanding of the ecosystem’s manifestations, from social sensitivity, as well as an introspective focus on one’s personal values and higher self, and finds its expression in actions for the greater good of the whole” [14] (p. 7), or as the Japanese organic farmer and author Fukuoka [86] (p. 65) puts it “the ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings.”

The antecedent resolving the question why OFS are conducive to producing this kind of mindset connects findings to a “possible remote cause” [57] (p. 11), thus connecting “two sets of elements already present in the semantic universe of available knowledge” [57] (p. 14). Hence, the two sets of elements becoming connected in our antecedent consist of two compatible theories that have been alluded to in the introduction of this paper, namely “Self-Determination Theory” [32] with its correlates of intrinsic motivation, ecocentricity and sustainable happiness on the one hand and the Salutogenesis/Sense of Coherence theory by Antonovsky [29] on the other.

The antecedent thereby is rooted in the framework conditions of OFS that provide the perfect synergy between these two laws, which enable human beings to align their motivational drive with an ecocentric and therefore future bearing trajectory. Obviously, the Organic Mindset qualities express a sense of eco-altruism [87], which transcends the kinds of selfish considerations that have been perpetuated under the neo-liberal “Homo Economicus” perception of human nature [88,89]. Therefore, the antecedent infers the case (Organic Mindset) from the results (phenomena). The particular combination of these two converging laws seem to provide the grammar for cultivating a mindset that can lead to sustainable behavioral outcomes and for a better human nature to unfold.

## 5. Conclusions

In summary, it can be said that the Organic Mindset by and large is circumscribed by convergent narratives of enlightened self-interest that display an unequivocal conformity with the principles of sustainable development. Actors from all different levels of the organic value chain within OFS worldwide seem to share a mindset that is made up of a powerful set of sustainability paradigms. This implies that OFSs are “loaded” with an enabling content that is capable of empowering people regarding sustainability as a real driver in their lives. The Organic Mindset seems to be capable of “leveling the playing field,” empowering food system actors from all walks of life in their pursuit toward wellbeing, transformative learning and transcendence, which involves a change in perception of the human condition. The OFS paradigm with its rootedness in the conservation movement transports a “theory of change” that goes far beyond the concerns of a mere land use system, thereby fostering a culture of sustainability. The sheer participation in Organic Food Systems, be it as a consumer, producer, processor, retailer, networker, administrator or educator seems to be conducive for generating a heightened awareness of core sustainability dimensions. Engagement in OFS could thus serve as a catalyst for engendering awareness for sustainable development.

Unlike the conceptual Sustainability Mindset framework or other analogous world views that were referenced here, the Organic Mindset highlighted in this paper conversely is not an aggregated model, artefact or desirable state but rather an existing phenomenon made up of naturally compatible sustainability characteristics across multiple dimensions, inspired by an organic agriculture and food system paradigm. In this way, OFS convey orientation for the healthy psychological development of human beings, actively advancing objectives promoted by renowned frameworks such as the “New Ecological Paradigm,” the “Systems View of Life,” the “Growth Mindset” or “Sustainable Happiness” to name a few, and as such distinguishes itself strongly from the “Dominant Social Paradigm” or what may be phrased “business as usual” attitudes.

A limitation of the study may be the judgmental sampling techniques employed for the composition of the focus group and the combination with snowball sampling for the online survey, which do not necessarily safeguard equal representation of all stakeholders nor include all critical viewpoints. Clearly, the online sampling also did not go into any depth but instead focused on some essential markers as part of building a formative model. A further limiting factor is that we treated the key actors from the GT portion of this investigation as a homogenous group without further differentiation, other than the fact that they are bounded by their joint commitment to the principles of organic certification. These weaknesses could, however, be overcome by the high number of interviewed subjects as well as the extensive theoretical considerations regarding the interpretation of results.

Our proposed holistic Organic Mindset model could be interesting for a further investigative effort with geographic differentiation. Another interesting aspect for prospective further research would be a more politicized analysis of the kinds of systemic constraints and conditions enabling the emergence of new food system paradigms. Analyzing and interpreting the affinity of OFS communities towards a “New Ecological Paradigm” from a food systems perspective and in relation to discourses from the disciplines of rural sociology and political economy would add valuable layers to continuing research in this field.

Lastly, the selected OFS environments for the iterative case study work are all still in a process of transformation themselves. The degree of organic farming, food processing and consumption practiced in these settings by far does not saturate the respective local market. About half of the OFS cases portrayed here are still in a fledgling state with varying degrees of political support and economic success.

**Author Contributions:** Conceptualization, S.K.; methodology, S.K., B.L. and C.H.; validation, B.L.; formal analysis, B.L. and T.K.; investigation, S.K.; resources, C.H. and T.K.; writing—original draft preparation, S.K.; writing—review and editing, S.K., B.L., C.H. and T.K.; visualization, S.K.; supervision, B.L. and C.H.; project administration, S.K. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

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

**Data Availability Statement:** Not applicable.

**Acknowledgments:** I would like to thank all interview partners, the Organic Food System Program and all other foodshed researchers and experts who provided the data for this study. I am thankful for the collaborative team effort within the Department of Organic Food Quality and Food Culture of the University of Kassel. My heart goes out to Johannes Kahl who pioneered the research agenda on Organic Food Systems.

**Conflicts of Interest:** The authors declare no conflict of interest. Additionally, the funders (self-funded by University) had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



## References

1. Auerbach, R. *Organic Food Systems: Meeting the Needs of Southern Africa*; CABI: Boston, MA, USA, 2020; ISBN 9781786399601.
2. HLPE. *Nutrition and Food Systems: A Report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food*; HLPE: Rome, Italy, 2017. Available online: <http://www.fao.org/3/i7846e/i7846e.pdf> (accessed on 26 April 2020).
3. Strassner, C.; Cavoski, I.; Di Cagno, R.; Kahl, J.; Kesse-Guyot, E.; Lairon, D.; Lampkin, N.; Løes, A.-K.; Matt, D.; Niggli, U.; et al. How the Organic Food System Supports Sustainable Diets and Translates These into Practice. *Front. Nutr.* **2015**, *2*, 19. [CrossRef]
4. Luttkikholt, L.W.M. Principles of organic agriculture as formulated by the International Federation of Organic Agriculture Movements. *NJAS—Wagening. J. Life Sci.* **2007**, *54*, 347–360. [CrossRef]
5. Bortoletti, M.; Lomax, J. *Collaborative Framework for Food Systems Transformation: A Multi-Stakeholder Pathway for Sustainable Food Systems*; One Planet Network Sustainable Food Systems Programme: 2019. Available online: [https://www.oneplanetnetwork.org/sites/default/files/un-e\\_collaborative\\_framework\\_for\\_food\\_systems\\_transformation\\_final.pdf](https://www.oneplanetnetwork.org/sites/default/files/un-e_collaborative_framework_for_food_systems_transformation_final.pdf) (accessed on 28 June 2020).
6. Stern, P.C. Toward a Coherent Theory of Environmentally Significant Behavior. *J. Soc. Issues* **2000**, *56*, 407–424. [CrossRef]
7. Lincoln, N.K.; Ardoin, N.M. Cultivating values: Environmental values and sense of place as correlates of sustainable agricultural practices. *Agric. Hum. Values* **2016**, *33*, 389–401. [CrossRef]
8. Béné, C.; Fanzo, J.; Prager, S.D.; Achicanoy, H.A.; Mapes, B.R.; Alvarez Toro, P.; Bonilla Cedrez, C. Global drivers of food system (un)sustainability: A multi-country correlation analysis. *PLoS ONE* **2020**, *15*, e0231071. [CrossRef] [PubMed]
9. Scharmer, C.O. *Theory U: Leading from the Future as It Emerges: The Social Technology of Presencing*, 2nd ed.; Berrett-Koehler Publishers: San Francisco, CA, USA, 2016; ISBN 9781626567986.
10. Grube, G.M.A.; Cooper, J.M. *The Trial and Death of SOCRATES: Euthyphro, Apology, Crito, Death Scene from Phaedo*, 3rd ed.; Hackett Pub.: Indianapolis, IN, USA, 2000; ISBN 978-0872205543.
11. Bernecker, K.; Job, V. Mindset Theory. In *Social Psychology in Action*; Sassenberg, K., Vliek, M.L.W., Eds.; Springer International Publishing: Cham, Switzerland, 2019; pp. 179–191, ISBN 978-3-030-13787-8.
12. Yeager, D.S.; Dweck, C.S. Mindsets That Promote Resilience: When Students Believe That Personal Characteristics Can Be Developed. *Educ. Psychol.* **2012**, *47*, 302–314. [CrossRef]
13. Yolles, M. Maruyama Mindscapes, Myers-Briggs Type Indicators and Cultural Agency Mindset Types. *SSRN Electron. J.* **2016**. [CrossRef]
14. Kassel, K.; Rimanoczy, I. *Developing a Sustainability Mindset in Management Education*; Routledge: Abingdon, UK, 2018; ISBN 9781351063340.
15. Turowski, J.; Mikfeld, B. *Gesellschaftlicher Wandel und Politische Diskurse: Überlegungen für eine Strategieorientierte Diskursanalyse*; Werkbericht Nr. 3.; Denkwerk Demokratie: Berlin, Germany, 2013.
16. Béné, C.; Oosterveer, P.; Lamotte, L.; Brouwer, I.D.; de Haan, S.; Prager, S.D.; Talsma, E.F.; Khoury, C.K. When food systems meet sustainability—Current narratives and implications for actions. *World Dev.* **2019**, *113*, 116–130. [CrossRef]
17. Dunlap, R.E.; Van Liere, K.D. The “New Environmental Paradigm”. *J. Environ. Educ.* **2008**, *40*, 19–28. [CrossRef]
18. Pirages, D.C.; Ehrlich, P.R. *Ark II: Social Response to Environmental Imperatives*; W.H. Freeman & Co.: San Francisco, CA, USA, 1974; ISBN 0716708477.
19. Anderson, R.C. *Berkshire Encyclopedia of Sustainability*; Berkshire Publishing: Great Barrington, MA, USA, 2016; ISBN 9780190622664.
20. Ikerd, J. Soul of the Local Food Movement. *J. Agric. Food Syst. Community Dev.* **2017**, *7*, 1–3. [CrossRef]
21. Corral-Verdugo, V.; Mireles-Acosta, J.; Tapia-Fonllem, C.; Fraijo-Sing, B. Happiness as Correlate of Sustainable Behavior: A Study of Pro-Ecological, Frugal, Equitable and Altruistic Actions That Promote Subjective Wellbeing. *Hum. Ecol. Rev.* **2011**, *18*, 95–104.
22. Sheldon, K.M.; McGregor, H.A. Extrinsic value orientation and “the tragedy of the commons”. *J. Pers.* **2000**, *68*, 383–411. [CrossRef]
23. Dweck, C.S. *Mindset: The New Psychology of Success*; Ballantine Books: New York, NY, USA, 2008; ISBN 978-0-345-47232-8.
24. Barton, G. *The Global History of Organic Farming*; Oxford University Press: Oxford, UK, 2018; ISBN 978-0-19-964253-3.
25. Heckman, J. A history of organic farming: Transitions from Sir Albert Howar’s War in the Soil to USDA National Organic Program. *Renew. Agric. Food Syst.* **2006**, *21*, 143–150. [CrossRef]
26. Wynen, E. Research Implications of a Paradigm Shift in Agriculture: The Case of Organic Farming. Organic Eprints 2004. Available online: <https://orgprints.org/id/eprint/3053/> (accessed on 10 October 2020).
27. Antonovsky, A. *Health, Stress and Coping*; Jossey-Bass: San Francisco, CA, USA; London, UK, 1979; ISBN 9780875894126.
28. Becker, C.; Glascoff, M.; Felts, W.M. Salutogenesis 30 Years Later: Where do we go from here? *Int. Electron. J. Health Educ.* **2010**, *12*, 25–32.
29. Antonovsky, A. *Unraveling the Mystery of Health: How People Manage Stress and Stay Well*; Jossey-Bass: San Francisco, CA, USA, 1987.
30. Schnyder, U.; Büchi, S.; Sensky, T.; Klaghofer, R. Antonovsky’s sense of coherence: Trait or state? *Psychother. Psychosom.* **2000**, *69*, 296–302. [CrossRef]
31. Kickbusch, I. *Triggering Debate—White Paper—The Food System*; Health Promotion Switzerland: Bern, Switzerland, 2010; pp. 1–49. Available online: <https://www.ilonakickbusch.com/kickbusch-wAssets/docs/White-Paper---The-Food-System.pdf> (accessed on 17 March 2021).
32. Deci, E.L.; Ryan, R.M. The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychol. Inq.* **2000**, *11*, 227–268. [CrossRef]

33. Koole, S.L.; Schlinkert, C.; Maldei, T.; Baumann, N. Becoming who you are: An integrative review of self-determination theory and personality systems interactions theory. *J. Pers.* **2019**, *87*, 15–36. [CrossRef]
34. Kasser, T. Psychological Need Satisfaction, Personal Well-Being, and Ecological Sustainability. *Ecopsychology* **2009**, *1*, 175–180. [CrossRef]
35. Dambrun, M. Self-centeredness and selflessness: Happiness correlates and mediating psychological processes. *PeerJ* **2017**, *5*, e3306. [CrossRef] [PubMed]
36. Kjærgård, B.; Land, B.; Bransholm Pedersen, K. Health and sustainability. *Health Promot. Int.* **2014**, *29*, 558–568. [CrossRef] [PubMed]
37. Hancock, T. Health, human development and the community ecosystem: Three ecological models. *Health Promot. Int.* **1993**, *8*, 41–47. [CrossRef]
38. Shim, M.; Johnson, B.; Bradt, J.; Gasson, S. A Mixed Methods–Grounded Theory Design for Producing More Refined Theoretical Models. *J. Mix. Methods Res.* **2021**, *15*, 61–86. [CrossRef]
39. Guetterman, T.C.; Babchuk, W.A.; Howell Smith, M.C.; Stevens, J. Contemporary Approaches to Mixed Methods–Grounded Theory Research: A Field-Based Analysis. *J. Mix. Methods Res.* **2019**, *13*, 179–195. [CrossRef]
40. Hollstein, B.; Greshoff, R.; Schimank, U.; Weiß, A. *Soziologie—Sociology in the German-Speaking World*; De Gruyter Oldenbourg: Berlin, Germany, 2021; ISBN 9783110627275.
41. Johnson, R.B.; Onwuegbuzie, A.J.; Turner, L.A. Toward a Definition of Mixed Methods Research. *J. Mix. Methods Res.* **2007**, *1*, 112–133. [CrossRef]
42. Byrne, D.; Ragin, C. (Eds.) *The Contextualist Approach to Social Science Methodology*; SAGE: Thousand Oaks, CA, USA, 2009; ISBN 978-1-4129-3051-2.
43. Fetters, M.D.; Curry, L.A.; Creswell, J.W. Achieving integration in mixed methods designs—principles and practices. *Health Serv. Res.* **2013**, *48*, 2134–2156. [CrossRef] [PubMed]
44. Glaser, B.G. *The Discovery of Grounded Theory: Strategies for Qualitative Research*; Aldine de Gruyter: New York, NY, USA, 1967; ISBN 0-202-30260-1.
45. Walsh, I. Using quantitative data in mixed-design grounded theory studies: An enhanced path to formal grounded theory in information systems. *Eur. J. Inf. Syst.* **2015**, *24*, 531–557. [CrossRef]
46. Johnson, R.B.; McGowan, M.W.; Turner, L. Grounded theory in practice: Is it inherently a mixed method? *Psychol. Res. Sch.* **2010**, *17*, 65–78.
47. One Planet Network. The Organic Food System Program (OFSP): Organic Food Systems as Models and Living Laboratories for Transformation Processes towards Sustainable Food Systems. 10 Year Framework of Programmes on Sustainable Consumption and Production. Available online: [https://www.oneplanetnetwork.org/initiative/organic-food-system-program-ofsp-organic-food-systems-models-and-living-laboratories#:~:text=food%20systems%20%5BCORE%5D-,The%20Organic%20Food%20System%20Program%20\(OFSP\)%3A%20Organic%20food%20systems,to%20production%20and%20consumption%20patterns](https://www.oneplanetnetwork.org/initiative/organic-food-system-program-ofsp-organic-food-systems-models-and-living-laboratories#:~:text=food%20systems%20%5BCORE%5D-,The%20Organic%20Food%20System%20Program%20(OFSP)%3A%20Organic%20food%20systems,to%20production%20and%20consumption%20patterns) (accessed on 21 April 2021).
48. IFOAM Organics Asia. IFOAM Asia. Available online: <https://asia.ifoam.bio/jennifer-chang/#:~:text=Jennifer%20Chang%20has%20been%20working,speaks%20English%2C%20Korean%20and%20Malaysian> (accessed on 21 April 2021).
49. Strauss, A.L.; Corbin, J.M. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*; Sage Publications: Newbury Park, CA, USA, 1990; ISBN 978-0803932517.
50. Steenhuis, H.J. *Iterative-Pragmatic Case Study Method and Comparisons with Other Case Study Method Ideologies*; Palgrave Macmillan: New York, NY, USA, 2015; ISBN 978-1-349-47906-1.
51. Vollstedt, M.; Rezat, S. An Introduction to Grounded Theory with a Special Focus on Axial Coding and the Coding Paradigm. In *Compendium for Early Career Researchers in Mathematics Education*; Kaiser, G., Presmeg, N., Eds.; Springer International Publishing: Cham, Switzerland, 2019; pp. 81–100, ISBN 978-3-030-15635-0.
52. Briggs, A.; Coleman, M.; Morrison, M. *Research Methods in Educational Leadership & Management*; SAGE Publications Ltd.: London, UK, 2012; ISBN 9781446200445.
53. Romo Cardenas, M.; Umarishavu, F.; Rajan, R.; Mensah, O.; Ibrahim, C.; Ajekola, O.; Lopez Gallo, P.; Kim, M.; Khaliq, U.; Abucca, E.; et al. *Organic Food System Cases around the World: A Documentation Project*; Jamil, T., Stefanovic, L., Kretschmer, S., Strassner, C., Eds.; Kassel University Press: Kassel, Germany, 2021; ISBN 978-3-7376-0938-8.
54. Birks, M.; Mills, J. *Grounded Theory: A Practical Guide*; SAGE: Los Angeles, CA, USA; London, UK, 2011; ISBN 978-1848609938.
55. Williams, M.; Moser, T. The Art of Coding and Thematic Exploration in Qualitative Research. *Int. Manag. Rev.* **2019**, *15*, 45–55.
56. Reichertz, J. *Abduction: The Logic of Discovery of Grounded Theory*; Sage: London, UK, 2007; pp. 214–228. [CrossRef]
57. Bruscaaglioni, L. Theorizing in Grounded Theory and creative abduction. *Qual. Quant.* **2016**, *50*, 2009–2024. [CrossRef]
58. McMichael, P. A food regime genealogy. *J. Peasant. Stud.* **2009**, *36*, 139–169. [CrossRef]
59. Fischer, L.-B.; Newig, J. Importance of Actors and Agency in Sustainability Transitions: A Systematic Exploration of the Literature. *Sustainability* **2016**, *8*, 476. [CrossRef]
60. Morgan, D.L. Focus Groups. *Annu. Rev. Sociol.* **1996**, *22*, 129–152. [CrossRef]
61. Niggli, U. Mäßigung als Alleinstellungsmerkmal. *Ökologie Landbau* **2017**, *2*, 12–13.
62. Mey, G.N.; Mruck, K. *Grounded Theory Reader*; Springer Fachmedien: Wiesbaden, Germany, 2011; ISBN 978-3-531-93318-4.
63. Lovelock, J. Gaia: The living Earth. *JWTIntelligence* **2003**, *426*, 769–770. [CrossRef] [PubMed]

64. Pugliese, P.; Antonelli, A.; Basile, S. Bio—Distretto Cilento—Italy. 2015. Available online: <https://orgprints.org/29274/7/29274.pdf> (accessed on 3 January 2021).
65. Robert, K.W.; Parris, T.M.; Leiserowitz, A.A. What is Sustainable Development? Goals, Indicators, Values, and Practice. *Environ. Sci. Policy Sustain. Dev.* **2005**, *47*, 8–21. [[CrossRef](#)]
66. Dvořáková, L.; Zborková, J. Integration of Sustainable Development at Enterprise Level. *Procedia Eng.* **2014**, *69*, 686–695. [[CrossRef](#)]
67. Bernstein, H. Food sovereignty via the ‘peasant way’: A sceptical view. *J. Peasant Stud.* **2014**, *41*, 1031–1063. [[CrossRef](#)]
68. Mollinga, P. The New Peasantries. Struggles for Autonomy and Sustainability in an Era of Empire and Globalization—By Jan Douwe van der Ploeg. *J. Agrar. Chang.* **2011**, *11*, 612–616. [[CrossRef](#)]
69. Soper, R. From protecting peasant livelihoods to essentializing peasant agriculture: Problematic trends in food sovereignty discourse. *J. Peasant Stud.* **2020**, *47*, 265–285. [[CrossRef](#)]
70. Ruben, R.; Verhagen, J.; Plaisier, C. The Challenge of Food Systems Research: What Difference Does It Make? *Sustainability* **2019**, *11*, 171. [[CrossRef](#)]
71. Termeer, C.J.A.M.; Drimie, S.; Ingram, J.; Pereira, L.; Whittingham, M.J. A diagnostic framework for food system governance arrangements: The case of South Africa. *NJAS—Wagening. J. Life Sci.* **2018**, *84*, 85–93. [[CrossRef](#)]
72. Born, B.; Purcell, M. Avoiding the Local Trap. *J. Plan. Educ. Res.* **2006**, *26*, 195–197. [[CrossRef](#)]
73. Capra, F. *The Web of Life: A New Scientific Understanding of Living Things*; Anchor Books: New York, NY, USA, 1996; ISBN 978-0385476768.
74. Collier, P. The “Bottom Billion” 2008. Available online: [https://www.ted.com/talks/paul\\_collier\\_the\\_bottom\\_billion/transcript?language=it&source=tumblr](https://www.ted.com/talks/paul_collier_the_bottom_billion/transcript?language=it&source=tumblr) (accessed on 28 July 2020).
75. Walkiewicz, J.; Lay-Kumar, J.; Herzig, C. The integration of sustainability and externalities into the “corporate DNA”: A practice-oriented approach. *Corp. Gov. Int. J. Bus. Soc.* **2021**. [[CrossRef](#)]
76. Collier, P. *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done about It*; Oxford University Press: Oxford, UK, 2007; ISBN 0195311450.
77. Faruk, A.; Ceasar, N.; Kasozi, A.; Stubbings, A. *Thoughts on Sustainability*; Ashridge: Berkhamsted, UK, 2009; ISBN 978-0-903542-74-6.
78. Capra, F.; Luisi, P.L. *The Systems View of Life: A Unifying Vision*; Cambridge University Press: Cambridge, UK, 2018; ISBN 9781316616437.
79. Maslow, A.H. The farther reaches of human nature. *J. Transpers. Psychol.* **1969**, *1*, 1.
80. Frankl, V.E. Self-Transcendence as a Human Phenomenon. *J. Humanist. Psychol.* **1966**, *6*, 97–106. [[CrossRef](#)]
81. Gatti, R.C. A conceptual model of new hypothesis on the evolution of biodiversity. *Biologia* **2016**, *71*. [[CrossRef](#)]
82. Bregman, R. *Im Grunde Gut*; Rowohlt: Hamburg, Germany, 2020.
83. Christakis, N. *Blueprint: The Evolutionary Origins of a Good Society*; Hachette Book Group: New York, NY, USA, 2019.
84. Kukk, C.L. *The Compassionate Achiever: How Helping Others Fuels Success*; Harper One: San Francisco, CA, USA, 2017.
85. Wilson, E.O. *The Meaning of Human Existence*; Liveright Publishing Corporation, a Division of W.W. Norton & Company: New York, NY, USA, 2014; ISBN 978-1631491146.
86. Fukuoka, M. *The One-Straw Revolution: An Introduction to Natural Farming*; New York Review Books: New York, NY, USA, 2009; ISBN 978-1-59017-313-8.
87. López, A.; Amerigo, M. Relationship among values, beliefs, norms and ecological behaviour. *Psicothema* **2008**, *20*, 623–629.
88. Persky, J. Retrospectives: The Ethology of Homo Economicus. *J. Econ. Perspect.* **1995**, *9*, 221–231. [[CrossRef](#)]
89. Thaler, R.H. From Homo Economicus to Homo Sapiens. *J. Econ. Perspect.* **2000**, *14*, 133–141. [[CrossRef](#)]