Article

Paving a Way towards Food Democratisation: Mechanisms in Contentious Niche Development

Carolin Holtkamp ^{1,*} and Trix van Mierlo ²

¹ Department of Sociology, University of Innsbruck, 6020 Innsbruck, Austria

² Department of Political Science, University of Innsbruck, 6020 Innsbruck, Austria; trix.van-mierlo@uibk.ac.at

* Correspondence: carolin.holtkamp@uibk.ac.at

Abstract: Transition scholars have argued that the analysis of the agency of local civil society actors in their political struggle to transform the food system is necessary. In response, we complement the multi-level perspective on socio-technical transitions with the mechanism-process approach of contentious politics. This framework guides our qualitative analysis of a local movement called “The Way of Mals” in South Tyrol, Italy. This movement aimed to ban pesticides by developing a niche of food democratisation. We investigate how the local movement strategically mobilised citizens to get actively engaged in the local governance of food. We argue that the creation of political opportunities by the movement was crucial for their claim making. Amongst others, they introduced a legally binding local referendum on the ban on chemical–synthetic pesticides. We call this mechanism “paving”. In combination with meaning-making and networking, paving has led to the democratisation of local food governance. We conclude that the agency of local movements is especially reflected in their capacity to readjust in response to suppression efforts of their opponents in the well-established conventional regime. We suggest comparisons with similar cases for future research.

Keywords: food system transition; food democracy; multi-level perspective; contentious politics; anti-pesticide movement; South Tyrol

Citation: Holtkamp, C.; van Mierlo, T. Paving a Way towards Food Democratisation: Mechanisms in Contentious Niche Development. *Sustainability* **2022**, *14*, 1553. <https://doi.org/10.3390/su14031553>

Academic Editors: Adanella Rossi and Giaime Berti

Received: 23 December 2021

Accepted: 25 January 2022

Published: 28 January 2022

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

Copyright: © 2022 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

Throughout Europe, social movements are criticising formal political institutions for not taking care of social and environmental issues. These movements innovate democratic institutions to initiate profound sustainability transitions [1]. For example, in Iceland, public protests in the aftermath of the financial crisis of 2008 led to the government commissioning a participatory constitution building process through online crowdsourcing [2]. Or, in Italy, social movements organised a referendum against water privatisation [1,3]. Similarly, food-related movements such as the global movement for food sovereignty [4] insist that food systems must become more democratic to enable sustainability transitions [5–8]. They use contentious topics, such as food scandals, health issues, the use of pesticides and the production of highly processed food, to mobilise consumers and small-scale producers and create awareness of the stories behind our food [9–13]. In response, grassroots initiatives develop local solutions for a more democratic food governance [8].

A well-established framework to understand sustainability transitions in food systems is the multi-level perspective on socio-technical transitions [14–17]. In a nutshell, it studies transition as an open-ended process of three interacting analytical levels: local “niches” with social and technological innovations, the conventional “socio-technical regime”, and an exogenous context called “landscape” [14,15,18]. The core idea of the conventional regime accounts for stability and the reproduction of established, dominant social practices, institutions, and technologies [17,19]. Transitions may occur if niche and landscape dynamics mutually reinforce each other and disembody into a new systemic

equilibrium [17]. Sustainability transitions are purposive processes and are driven by social innovations [20–23]. We refer to social innovations in the broadest sense as “changing social relations” [24]. If these changes increase and deepen the participation of citizens in decision-making processes, we call them democratic innovations [25]. They are essential for profound sustainability transitions [26]. However, struggles over power and politics are likely to emerge [27].

The multi-level perspective has been criticised for focusing primarily on technology and market-driven change while it generally downplays the role of social innovations [20] and the agency of niche actors [14,28,29], in particular of grassroots and civil society initiatives [21,30,31]. The field of agriculture and food studies has considerably contributed to advancing the multi-level perspective regarding this criticism. In response to the growing activism of food movements, scholars have started to analyse grassroots initiatives such as food coops, community-supported agriculture, or agroecological farming and the mechanisms they apply in the development of radical social niches and in interaction with the regime [15,16,21,22,32–34]. In this way, they could demonstrate that grassroots initiatives have agency in the sustainability transition of the conventional regime.

Lately, scholars have criticised that the multi-level perspective still downplays agency in terms of the political and power struggles involved in governing sustainability transitions [15,19,27,35,36]. To stress the role of civil society in this regard, agro-food scholars have started to combine the multi-level perspective with concepts from social movement studies [29,37]. Studies focus on the activities of national or global food movements and show that food movements have agency on the landscape level because they exert pressure on regimes by producing alternative discourses, identities, and countercultures [17,29,37–39]. However, agency for transformation is generally more visible at the level of radical niches, where local actors create innovations to challenge established regimes [17,40]. Although grassroots initiatives in the food sector have an increasingly political character because they aim at democratising the food systems [8,41,42], we found that empirical research has underestimated the contention they face in the development of radical social niches.

To fill this gap, we study the political and power struggle of a grassroots initiative in developing a radical local niche. With niche development, we refer to the period in transition processes when innovations stimulate learning processes, powerful actors join the niche, performance improves and a growing share of citizens participate [38,43]. As a case in point, we take the local anti-pesticide movement called “The Way of Mals” in South Tyrol, Italy. Among other steps, this movement initiated a local referendum on the ban on chemical–synthetic pesticides to democratise the local food governance and enable sustainable food practices. At the same time, it provoked strong resistance by actors of the conventional regime in South Tyrol including conventional farmers, the provincial government, extension services, and fruit cooperatives [44]. Using our case study of “The Way of Mals”, we investigate how niche actors strategically mobilise citizens to enhance their claim for food democratisation despite counteractions of conventional regime actors. We use a broad definition of food democratisation, which is any change towards a more active participation of citizens in the governance of food [7,45,46].

We take an interdisciplinary theoretical perspective by complementing our sociological interpretation of the multi-level perspective [17,18] with the mechanism-process approach developed to understand contentious politics [47–49]. The analysis of mechanisms identifies the basic causal relations in transition processes. Mechanisms are “events that produce the same immediate effects over a wide range of circumstances” [48,49] and combine into processes. Following Tilly and Tarrow [49], we understand contentious politics broadly to be coordinated interactions between claimants and their targets, which includes at least one government. This approach allows us to investigate which mechanisms of contentious politics “The Way of Mals” used to mobilise citizens for the claim of food democratisation. We find a crucial mechanism that we call “paving”, whereby food activists initiated a process of political opportunity creation to extend citizenship rights and provide citizens with formal political power in the local governance of food. We argue that the agency

of the niche actor is especially reflected in its capacity to adapt the steps in the paving mechanism according to the resistance of niche actors. To be successful, the niche actors combined the paving mechanism with simultaneous mechanisms of meaning making and networking. The combination finally resulted into a democratisation of the local food governance in Mals.

Below, we first describe the case study and our qualitative methods, then we outline the theoretical concepts that guided our empirical analysis, and present and discuss our results. Finally, we conclude and make recommendations for practice and future research.

2. Theoretical Framework

To interpret our data, we complement the rather broad multi-level perspective with more specific concepts of the mechanism-process approach. The multi-level perspective and the mechanism-process approach combine well because they take the same ontological assumptions. They both aim to bridge the gap between paradigms that emphasise agency and those that emphasise structure [35,49]. The multi-level perspective emerged in the field of science and technology studies. It accommodates assumptions from interpretivism, rational choice, and structuralism to capture the complexity of socio-technical transition processes [35]. The mechanism-process approach to contentious politics is related to social movement studies. Tilly and Tarrow [49] argue for this approach as a way to synthesise the fragmented field of contentious politics, where scholars in the structuralist, rationalist, and constructivist paradigms are waging a “paradigm warfare” [48]. The multi-level perspective and the mechanism-process approach propose a relational or, in Tilly and Tarrow’s [49] words, interactionist ontology which assumes that agency and structure shape and are shaped by each other. Accordingly, agency in (contentious) transition processes is always related to its structured context, to social networks, institutions, or ongoing processes [35]. Actors continuously interact with this context in a “game-like” [50] process. They either reproduce the rules of the game or try to change these rules [50]. To operationalise these ontological assumptions, the multi-level perspective and the mechanism-process approach propose to study causal events and their outcomes in the process of interaction between agency and structure [17,49].

We use the multi-level perspective to theoretically frame sustainability transition as an interaction of three analytical levels, the landscape, the regime, and the niche level [18]. In our study, the landscape refers to global norms, rules, and discourses that shape food practices in the regime and the niche. This may happen in a contradictory way, like the dominant neoliberal market paradigm and the discourse on food sovereignty [15,19]. We are aware that all transition processes are shaped by this structuring context [18]. However, our study focuses on the development of radical social niches in interaction with the regime. The niche refers to the local anti-pesticide movement in Mals. It is a grassroots network with local actors that act against agricultural intensification and in favour of a transition towards a more sustainable food system in the community of Mals. It promotes organic, localised food practices, political institutions that privilege participatory forms of decision making, and agroecological technologies [15,18]. The conventional regime refers to those actors in the South Tyrolian food system who promote agricultural intensification and related conventional food practices, established political institutions that privilege top-down decision-making processes, and intensive farming technologies [18,24]. Regime actors may perceive the development of radical niches as a threat to stability, causing them to engage in niche containment strategies [36]. In conclusion, the actions of niche actors are directed to empowering new configurations of practices, institutions, and technologies, while regime actors try to reproduce existing configurations by disempowering local niches [19].

We apply the mechanism-process approach to the multi-level perspective [38,43] and identify the mechanisms of contentious politics that niche actors applied to democratise the food governance on the local level of the municipality of Mals. The mechanism-process approach dismantles streams of contention into episodes, wherein causal mechanisms explain how a cause leads to an outcome in the interaction of political and non-political

actors and related policies [49]. We know from the contentious politics literature that collective actors can mobilise people when they (a) perceive or create a favourable balance of political opportunities and threats [49], (b) network to mobilise resources [51], and (c) frame the issue of contention [52]. Transition scholars have studied how food movements put pressure on socio-technical regimes by applying networking mechanisms [21,23] and meaning-making mechanisms [29,37,39]. We also know that political opportunities are needed for social movements to emerge [37]. Transition scholars have not yet investigated how movements create a favourable political opportunity structure to enhance their claims, which is the analytic focus of this study.

According to Tarrow [53], political opportunities are shifts in relatively permanent relations between established political and non-political actors, which facilitate or inhibit collective action because people expect success or failure accordingly. These shifts include, amongst others, the delegation or centralisation of power, relations between political actors becoming increasingly stable or unstable, or governments supporting or counteracting the claim making of collective actors [49]. Tarrow [53] emphasised that political opportunities are not only a condition for collective action to emerge. Collective actors may also create new opportunities once they are mobilised: “People join in social movements in response to political opportunities and then, through collective action, create new ones” [53] (pp. 17–18). Democratic innovations may be both a political opportunity leading to mobilisation and a means of activists to establish new political opportunities [54]. Accordingly, we expect that niche actors in Mals create political opportunities to enhance their claims for food democratisation. We refer to this kind of mechanism as “paving”.

3. Case Study and Methods

We studied the movement “The Way of Mals” and analysed which causal mechanisms of contentious politics local actors applied to develop a local niche of democratic food governance. The case serves our research interest because the local movement innovated democratic institutions to stop a process of agricultural intensification and to promote alternative food practices instead. The movement was developed in 2010 in the rural community of Mals, located at the head of the Alpine Vinschgau valley in the Autonomous Province of Bolzano—South Tyrol, Italy. Agriculture is small-scale throughout the whole valley. While farmers at the head of the valley mainly engage in dairy farming and relatively extensive grassland management, the majority of farmers in the lower parts of the valley have turned to intensive forms of apple and vine growing [55]. In 2009, landowners in Mals built a new irrigation system with sprinklers that introduced apple growing in the municipality. Since then, more and more farmers from the lower parts of the valley bought land in Mals to expand their apple orchards. To take advantage of the trend, some dairy farmers from Mals also turned their grassland into apple orchards [44,56].

As agricultural intensification emerged, the use of chemical–synthetic pesticides increased. The application of pesticides is usually high in orchards and vineyards compared to grassland management [57,58]. South Tyrol is one of the most intensive apple-growing regions in Europe. The province makes up approximately 10 percent of the total annual European apple production with South Tyrolian fruit cooperatives exporting apples worldwide [59,60]. While the average use of pesticides in Italy is among the highest in Europe [61], the use of pesticides in South Tyrol is even higher than the Italian average [62]. Due to the Alpine topography, fruit-growing areas and human settlements are largely limited to the main valley floor along the river Etsch. This implies the high spatial proximity of plots, whereby pesticides drift from orchards and vineyards to non-target areas, such as organic land and children’s playgrounds [63].

When fruit orchards expanded into the municipality of Mals, organic farmers and consumers allied. They organised a campaign to stop agricultural intensification in Mals and promoted a more democratic food governance and alternative and localised food practices instead. The movement raised international awareness and was praised for its strategy to enforce a legally binding referendum on banning chemical–synthetic pesticides

in the municipality. In response, actors of the conventional regime organised counteractions to prevent the referendum and the ban on pesticides [44,56,64]. The case highlights the contentious development of the radical niche (local anti-pesticide movement introducing democratic innovations) in interaction with the conventional regime (farmers and their supporters promoting agricultural intensification) in the context of the global landscape (neoliberal production paradigm versus global discourse on food sovereignty).

We applied the mechanism-process approach to identify which mechanisms of contentious politics “The Way of Mals” used to mobilise citizens for its claim of food democratisation. The approach involves eight steps that guide the researcher to break the stream of contention under study into episodes, analyse every episode in terms of causal mechanisms, and recombine them into processes [49] (see Appendix A). To collect the necessary data, we carried out different forms of fieldwork and a review of the local media. The main data collection took place in 2018 and 2019.

Field research started with a four-week participatory observation in Mals, which we conducted according to the method by Thierbach and Grit [65]. The main author worked part-time on an organic farm, visited meetings of the movement, and held informal conversations with activists, citizens, and visitors in Mals. In addition, she visited six events organised by the local movement. She documented her experiences in a field diary and in event protocols (see Appendices B and C). The aim was to understand the relations between actors involved in contention. Towards the end of the observation period, the main author held semi-structured interviews with 17 leading niche activists and with three local conventional farmers opposed to the niche movement. Interviewees were male ($n = 14$) and female ($n = 6$) and aged between 27 and 80 years. The semi-structured interviews were conducted according to the method by Helfferich [66]. Because the relations between the local movement and conventional regime actors were very tense at the time of data collection, it was not possible to gain further conventional regime interviewees (see Appendix D). Interviewees were selected by snowball sampling, and interviews were protocolled and partially transcribed.

All interviewees and the main interlocutors of the participatory observation gave their informed consent and participated voluntarily without monetary incentives. All interviews were anonymised. The interviews were held in German, the mother tongue of both the interviewer and the interviewees. To minimise biased interpretation, all interviewees from Mals were invited to a focus group discussion [67]. The aim was to validate the data analysis and the course of events in the stream of contention under study (see Appendix D).

We complemented the fieldwork with a media analysis based on 195 local newspaper articles and blogs related to the case in the period from 2004 to 2019 (see Appendix E). Because contention is still ongoing, we added data on single events that happened after 2019, which we retrieved from the media. For the same reason, we conducted an additional interview with an expert from the Provincial Bureau of Agricultural Affairs in 2021 (see Appendix D).

We analysed the data of the fieldwork with the qualitative content analysis method by Mayring [68], and the media review with the method of actors’ analysis by Reed et al. [69]. The main aim of the actors’ analysis was to get an overview on all niche and regime actors involved in contention, their general interests, and the actions they took during the stream of contention. The fieldwork aimed to understand the stream of contention from the perspective of the actors. We generated (a) a timeline of events, with the main turning points breaking the stream of contention into episodes, (b) the niche actors’ strategic considerations in terms of their paving, networking, and meaning-making activities, (c) the strategic considerations of regime actors in terms of their resistance, and (d) the outcomes. In the following section, we outline the main findings of our data analysis.

4. Results: Mobilising for Food Democratisation

A combination of circumstances in 2009 caused niche actors in Mals to initiate a mobilising process that led to the democratisation of food governance in the municipality.

We found three simultaneous mechanisms that characterised the mobilising process (see Figure 1). The first mechanism was paving, the second was networking, and the third was meaning making. The paving mechanism involved three underlying steps which we analyse in more detail because it is empirically less understood than networking and meaning-making mechanisms. Niche actors took these steps in response to the counteraction of the regime. Local niche actors in Mals included organic farmers, civil society groups, the mayor, and municipal councillors, as well as some local businesses. These local actors were supported by the organic farmers' associations, civil society organisations, and organic businesses in the province of South Tyrol, as well as by international activists, scientists, and politicians (F1–F37). Regime actors include conventional farmers from Mals and the lower parts of the Vinschgau valley, the main farmers' association, the government of South Tyrol, agricultural extension services, and fruit cooperatives in the province (F38–F54). First, we describe the initiation and then turn to the process of mobilisation.

Figure 1. Niche actors (NA) apply mechanisms that combine into a mobilising process leading to food democratisation.

4.1. Initiation

The initiation involved three circumstances that combined during the years 2009 and 2010 (see Figure 1, blue box “initiation”). First, niche actors in Mals perceived “favourable political opportunities” [49] due to a shift in local political elites. In our case, a new political actor won the mayoral elections. In the words of a local activist (D1):

The environmental protection group had been fighting against the new irrigation system since 1992. Ever since we have also been thinking about direct democracy and a referendum. But we knew we would first need a new mayor. When [the mayor] came in in 2009, we had already lost the fight against the irrigation system. Our only chance back then was to prohibit pesticides.

This indicates that members of an environmental protection group in Mals had been concerned about the intensification of land use but had not identified any political opportunity to exert influence because the former mayor, a conventional farmer, supported intensification (F40). In contrast, the new mayor was closely related to the civil society group, disagreed with agricultural intensification, and had the idea of strengthening direct democracy in the municipality (F6, D15). Niche actors therefore perceived the switch in elite allies as a political opportunity to participate in the decision making on land use (D1, D8).

Second, niche actors “attributed similarity” to other actors in terms of their political claims [49]. An organic farmer in Mals found high residues of pesticides that had drifted from newly created apple orchards onto his hay meadows. The drifts caused high costs for the farmer because he had to get rid of his contaminated hay and buy new organic hay to keep his organic certification (D10). The farmer realised that the new mayor, the environmental protection group, other organic farmers, and the organic farming organisations in South Tyrol had an interest in solving the problem of drifting pesticides, and therefore he brokered new relations (D6, D10, F6, F9, F10, F18–F20).

Third, local niche actors commonly interpreted the emerging conflict by applying “injustice framing”. The term refers to a collection of ideas and symbols that activists apply to publicly identify victims of a given problem and present solutions to it [52]. In the

case of Mals, activists framed it as an injustice that organic farmers were paying the price for pesticide drifts and might be forced to give up farming, because they could lose their organic certification (D2, F2). Furthermore, they claimed that niche and regime actors had developed measures to reduce pesticide drifts in various mediation meetings; however, conventional farmers did not apply them in practice (F6). Niche actors therefore demanded that: “changes in land use should be discussed by the citizenry before putting them into practice!” (D5). To reach this goal, they decided to launch a broader mobilising campaign based on the three mechanisms below (D6, D18–D20).

4.2. Paving Mechanism

The paving mechanism allowed niche actors to create political opportunities to pursue food democratisation despite counteractions of the conventional regime (see Figure 1, green box “paving”). The first step was to create the opportunity to hold legally binding local referenda in the municipality. In cooperation with civil society, the mayor commissioned the draft of a corresponding bylaw. By passing the bylaw, the council gave citizens of Mals the formal right to initiate referenda on issues concerning the municipality. The council was thereby legally bound to implement the outcome of future referenda.

Meanwhile, the problematic issue of pesticide drifts led to an impasse in the council. Some councillors were in favour of the intensification of land use through apple orchards and the use of pesticides, while others were not. A councillor noticed “The inability of the council to resolve the problem became more and more obvious . . . Citizens must push the issue of pesticides, as the local council was not able to do so for power reasons.” (D8). Frustrated by the deadlock, local civil society groups used their new citizens’ rights to organise a local referendum on the prohibition of chemical–synthetic pesticides in the municipality of Mals (D1, D8, D15). It was successful, with 68% participation and 76% voting in favour of the prohibition [70]. However, conventional regime actors blocked the ban: the provincial minister for agricultural affairs ruled the question of the referendum to be illegal. Municipal councillors with a background in apple growing therefore did not agree to implement the ban on chemical–synthetic pesticides. Additionally, conventional farmers filed a suit against the question of the local referendum, claiming it was illegal to locally sharpen regulations on the use of pesticides because this would harm their livelihood (F38, F46, F52).

In response, niche actors launched a second step, a shift in local elites. They perceived the upcoming municipal elections as a favourable opportunity to defend the newly gained citizens’ rights, because it allowed them to nominate new candidates for the local council. A member of a local civil society group (D11) explained her strategic consideration:

Then we had to wait for the next local council election and elect people who would support “The Way of Mals”. We reasoned, instead of strengthening a green party, we would work with the SVP [South Tyrolian People’s Party; conservative, the party of the governing mayor]. We wanted to bring in capable people. [. . .] The activists did not want a new list, so that people knew exactly who they wanted to vote for [. . .] So people voted SVP who otherwise would vote green.

Local niche actors supported the governing mayor in his search for candidates who committed themselves to implementing the results of the referendum if they were elected. In addition, civil society groups set up an electoral campaign with video messages and information stands (D9, D11). Finally, a great majority of 72% confirmed the mayor and his list of candidates for the municipal council [71]. A municipal councillor (D8) noticed: “This was a clear mandate to implement the outcome [of the referendum]!” Therefore, the new council agreed to include the ban on chemical–synthetic pesticides into the municipal statutes in the form of an implementing provision. The provision effectively prohibited the use of chemical–synthetic pesticides in the municipality after a transition period of two years (F7). Again, conventional farmers resisted by filing an emergency appeal against the implementing provision (F38). This appeal led to the tentative repeal of the implementing provision and to a long-lasting judicial struggle on the question of whether the municipality

of Mals had the right to sharpen regulations on the use of pesticides to protect the health of its citizens (F55–F58).

In response to the increasing legislative pressure, local niche actors initiated a new, less radical step toward democratisation [45]. They introduced a citizens' budget that allowed citizens to decide on a portion of the municipal budget. Once a year, all citizens are invited to propose projects aimed at the development of the municipality and to choose by democratic vote which projects should be implemented (D8, D15). A newly founded citizens' cooperative used this tool to finance projects aimed at sustainable and self-governed regional development, including an organic valley in a part of the municipality (C3, D3, D5). Additional self-governed civic food networks developed without the support of the budget, for example, a social cooperative providing labour for disadvantaged people on an organic farm (B, C1, C4, C6, D8). To this day, niche actors (F6, F3, F20) and the conventional regime are in a legal dispute over whether the municipality may ban chemical-synthetic pesticides and if citizens are allowed to vote on it (F38, F52, F55–F58). At the same time, transformation towards food democratisation has happened in the form of these self-governed practical initiatives, which have empowered citizens to co-govern local food practices (B), and also in a general capacity of citizens to act upon existing rules:

We [the niche actors] are often criticised that our actions have not led to anything. But the truth is that a lot is happening. The sense of citizenship has been strengthened a lot. [...] you notice that people are grateful and encouraged to take their fate into their own hands. (D6)

4.3. Networking Mechanism

Alongside the paving mechanism, niche actors in Mals engaged in networking activities (see Figure 1, green box “networking”). They initiated an “upward scale shift” [49], which is when local actors coordinate their action on a higher level. In Mals, networking started locally when an organic farmer brokered new relations with other organic farmers, the organic farmers' associations, an environmental protection group, and the mayor (D6, D7), and extended to further civil society groups and local businesses opposed to pesticides. They formed an official committee, the “promoters committee”, which involved one representative of every actor in the emerging movement (D1, F3). The committee aimed to initiate the local referendum and coordinate the strategic actions of its members (D1). Over time, local actors gradually extended their network to include more citizens and civil society groups. These include regional actors (F13–F26), such as a South Tyrolian movie maker, European actors (F27–F23) such as an advocacy NGO in Germany, and even globally recognised activists and scientists (F34–F37) such as Right Livelihood Award laureates Vandana Shiva and Hans Herren. These networks provided the local niche in Mals with new members, knowledge, and financial resources.

The scale shift caused a “boomerang effect”, as regional and international actors supported local niche actors by putting pressure on national or local governments [48,72]. In the case of Mals, the supporters prepared documentary films and movies, a poster campaign, and media articles, which were published by German-speaking TV channels and the international press (F27, F33). They also visited Mals to provide the local niche with scientific knowledge on the potential harm of pesticides and to publicly express their support for the movement (F35). Through these activities, they created an international discourse that put pressure on conventional regime actors (D6) who finally reacted by engaging in “bargaining”. This means that the regime actors built relations with local actors to negotiate a shared understanding of the contested issue and agree on less radical innovations to solve the conflict [73]. Organic and conventional farmers' associations and marketing cooperatives agreed on a private legal framework for the “Conflict free co-existence of organic and integrated orchard management” [74,75]. The provincial government amended the law on the sustainable use of pesticides [76,77]. Both regulations oblige conventional farmers to use improved spraying techniques and technologies, and to observe a greater distance to non-targeting areas when spraying. In addition, the provincial minister for

agricultural affairs discussed the creation of an organic model region with local civil society groups, organic farmers, and the mayor of Mals (F52). Networking within the local niche and with international supporters thus increased the strength of the local niche and the pressure on conventional regime actors to change food practices.

4.4. Meaning-Making Mechanism

In parallel, local niche actors engaged in meaning-making activities (see Figure 1, green box “meaning making”), such as “frame alignment by extension”. This allows movements to incorporate the views, interests, and sentiments of additional participants. Movements need to find the right frames to construct a collective identity that can keep participants from within the movement motivated and that can simultaneously mobilise new participants [78]. In the beginning, the promoters committee agreed on the main frame of the referendum campaign: pesticides are harmful to health. The committee chose this topic because the EU directive 2009/128/EC on the sustainable use of pesticides [79] and the corresponding national action plan for the sustainable use of pesticides [80] refer to the precautionary principle (D1, D14). It says that “if it is possible that a given policy or action might cause harm to the public or the environment and if there is still no scientific agreement on the issue, the policy or action in question should not be carried out” [81]. By organising scientific talks, public debates, and protest actions, niche actors pointed to the potential health effects of pesticides used in apple orchards (D1, F3) and urged the mayor to take care of it (F1). Next, local niche actors introduced the frame of democratic citizens’ rights to raise awareness for the suppression of the referendum by conventional regime actors (D5). By claiming that not only Mals but the whole province had a problem with pesticides, they reached a wider audience, including tourists (F27, F33, D6, D17).

“Narratives” are meaning-making activities that are more open to interpretation compared to frames [82]. They contribute to the mobilising process by addressing emotions which facilitate collective sense making [83,84]. In our case, local and international civil society groups launched the narrative of David against Goliath. They produced a movie featuring the rebellious citizens of Mals that try to establish sustainable food practices against the will of the profit-seeking South Tyrolian fruit lobby, which sprays pesticides all over the province (F27, F33). They reinforced this narrative by organising emotion-raising protest actions. For example, protestors who demonstrated in the apple orchards wore protection overalls and gas masks, to symbolise the toxicity of intensive apple growing (D2, D8). The polarising nature of the narrative led to “boundary formation”, which implies that movements create a sharp distinction between two political actors: us, the movement, and them, the conventional regime actors [49]. By polarising the situation, international activists increased the pressure on the regime, but it also created division within the local niche actors. While some local actors participated in boundary formation (D2), others disagreed with it (D3, D10). The latter chose to create positive narratives, referring to the good life in the valley. They used the newly created, self-governed food networks as a liveable, everyday experience of the good life (D3, D5). Regular practices, such as going to the farmers’ market every Wednesday, became another form of addressing emotions that contributed to mobilise citizens [83]. In conclusion, all these meaning-making activities helped to create a strong collective identity amongst niche actors and legitimacy for their activities.

4.5. Food Democratisation

The combination of all mechanisms led to a democratisation of food governance in the municipality of Mals. Paving empowered citizens in Mals to co-govern the local food practices through democratic innovations. Networking activities generated knowledge and financial resources, from within the municipality and from international supporters, which increased the pressure on the conventional regime. Meaning making created a collective identity and legitimacy for the movement and its collective action for a more democratic food governance with sustainable food practices.

The first outcomes of the food democratisation process are visible because food practices are transforming towards sustainability. On the local level, the expansion of intensively managed apple orchards slowed down considerably (D6). At the same time, the movement contributed to an increasing share of organically managed land in Mals, which is among the highest in the province [85]. In a radio interview in 2021, an organic farmer from Mals proudly reported [F9]:

We are leading in [organic] milk, we are leading in organic corn, we are probably leading in organic herbs too, and we should be leading in organic vegetable, too. I think we lead in all categories except for apples, [. . .] there, we are almost on a par with Schlanders [a community in middle Vinschgau]. We have about 20 percent organic [land use] here in Mals [. . .]. So we are on the right track.

In addition, members of the movement reported that the share of organic food in supermarkets had increased [B], newly founded, self-governed food networks in Mals help farmers with direct marketing (C1), hotels started buying more local organic food (B, F9), and there is additional funding for dairy farmers that implement measures to protect the biodiversity in grassland areas on the valley floor (F9).

On the provincial level, drifts decreased through new regulations that promote improved spraying techniques and technologies, but they have not been fully eliminated yet (D10). Organic land use in the province has experienced a significant growth of 82 percent between 2015 and 2020, leading to an average share of 7 to 8 percent organic land use [72]. To what extent the “The Way of Mals” has contributed to this development, along with subsidies and good market prices, is unclear. However, an expert in the provincial Bureau of Agricultural Affairs suggests that the movement did have an influence on the awareness of young farmers in the province, who tend to switch to organic farming when taking over the farm from their parents (D21).

5. Discussion

Complementing the multi-level perspective with the mechanism-process approach allowed us to highlight how the agency of niche actors led to the development of a local niche of food democratisation. We identified a paving mechanism that refers to the active creation of political opportunities by civil society actors to enhance their claims. Local niche actors combine paving with networking and meaning-making mechanisms to initiate a process that mobilises citizens to actively engage in the governance of food. The case shows that niche actors adapt the steps they take in the paving mechanism according to the counteractions of the conventional regime. In line with Jasper [86], we argue that the capacity to adapt the choice of strategy against the niche containment efforts of regime actors indicates that the movement “The Way of Mals” has agency in the contested process of developing a niche of food democratisation.

By applying the paving mechanism, niche actors updated the formal institutions of democracy in the municipality of Mals. They gained formal political power in decision-making processes on the governance of food (and potentially other fields) for all local citizens, extending citizenship rights beyond electing representatives. These political opportunities crucially empowered local citizens to promote localised and alternative forms of food production and consumption. It shows that local democratic innovations play an important role in the sustainability transition of food systems [1,41,46]. At the same time, the case reveals that chemical–synthetic pesticides are crucial for the stability of conventional regimes, who continue to make claims against the local referendum [41]. This is in line with Avelino [19], who argued that radical niches can introduce a profound transition of socio-technical regimes by exerting transformative power. Transformative power is “the capacity to invent and develop new institutions and structures” [19]. The regime, in turn, exerts “reinforcive” power to reproduce exiting political institutions and structures to maintain the status quo [19].

The combination of paving, networking, and meaning making facilitated local niche actors to achieve a democratisation of food governance in the municipality of Mals. Previ-

ous research on technological niches showed that niche actors protect emerging innovations against resistance in the regime by “empowering”, “nurturing”, and “shielding” activities [87]. Our case indicates that radical social niches provide this kind of protection too. Paving activities formally “empowered” citizens to promote alternative food practices. Networking activities earned the movement resources to “nurture” innovations financially, with knowledge, and with the power of global allies (see also [88]). Meaning making “shielded” democratic innovations and alternative food practices from conventional discourses by creating identity and legitimacy for the ideas and activities of the movement (see also [41]). These activities finally brought conventional regime actors to the bargaining table. As shown in other cases [73], bargaining processes lead to the deconstruction of previously distinct boundaries between local niches and the regime and contribute to slowly dampening the contention.

The case of Mals teaches food activists that paving, meaning making, and networking are the main pillars of mobilising campaigns to promote the democratisation of local food governance. Introducing democratic innovations may be key to paving the way towards participatory food governance. However, such innovations may not be available in every country due to differences in political structures. Therefore, activists not only need to adapt the steps in the paving mechanism according to the counteractions of conventional regime actors, but they also need to tailor it according to the existing political institutional structure.

We identified several data limitations. Although the snowball sampling method allowed us to reach interviewees that are hard to find, the sampling method does not guarantee full representation of all groups represented by the social movement [67]. In the focus group discussion (E), we created an atmosphere which allowed all participants to communicate their thoughts. However, power asymmetries might have fostered bias [67]. We triangulated our different methods of data collection to minimise our bias [67].

We cannot generalise the conclusion because this is a single case study. To generalise the findings, future research should engage in a systematic comparison. In the neighbouring provinces of Trentino, Belluno, and Treviso, where anti-pesticide movements are emerging in response to an expansion of intensive apple and wine growing [41,62]. These movements often refer to the case of Mals in their campaign against the intensive use of chemical–synthetic pesticides in their region [41]. Initiatives in the municipality of Conegliano Veneto (province of Treviso) [89] and in the province of Trentino [90] are currently preparing referenda on the ban of chemical–synthetic pesticides. In both cases, the state council has already approved the proposal for holding the referenda despite strong resistance from conventional food regime actors. Once matured, these are potentially comparable cases. Other municipalities have developed different democratic innovations that facilitate citizens’ participation in food governance [41]. It is essential that future research examines and compares these mechanisms for food democratisation and their effects on the meta-claim for sustainability transition.

6. Conclusions

In this paper, we analysed how the local anti-pesticide movement “The Way of Mals” democratised local food governance in the municipality of Mals in northern Italy. We found that, in the case of Mals, a paving mechanism was crucial for mobilising citizens to actively engage in the local governance of food. “Paving” refers to the active creation of political opportunities by civil society actors for enhancing their claims.

So far, the transition literature has underestimated political contention in niche development and the capacity of niche actors to create political opportunities to enhance their claims. The case study showed that niche actors in Mals introduced democratic innovations to provide citizens with the political opportunity to participate in the local governance of food. In combination with meaning-making and networking mechanisms, paving empowered citizens to develop a local niche with a more democratic food governance which, in turn, resulted in a transition towards organic and localised food practices in

the municipality. However, conventional regime actors took strong counteractions against the paving activities to prevent a destabilisation of the conventional regime in South Tyrol. The agency of the niche actors is strongly reflected in their capacity to adapt the steps in the paving mechanism according to these counteractions. For future research, we recommend refining this theoretical conclusion by systematic comparisons of this case with similar movements that are currently emerging in the neighbouring provinces of Belluno, Trentino, and Treviso.

Author Contributions: Conceptualisation, C.H. and T.v.M.; methodology, C.H.; investigation, C.H.; formal analysis, C.H.; validation T.v.M.; writing—original draft preparation, C.H.; writing—review and editing, T.v.M.; visualisation, C.H. and T.v.M.; project administration, C.H. All authors have read and agreed to the published version of the manuscript.

Funding: This research received funding (#355435) by the Vice Rectorate for Research and the Faculty of Social and Political Sciences, both from the University of Innsbruck, 6020 Innsbruck, Austria.

Institutional Review Board Statement: The study was conducted according to the European Commission guidelines for “Ethics in Social Science and Humanities”. Official ethical approval was waived because it was not mandatory for the affiliated institution at the time of the study, and no Ethics Committee was officially in charge.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the field research of this study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to their containing information that could compromise the privacy of research participants.

Acknowledgments: We thank Markus Schermer and our colleagues for valuable discussions and guidance in the research process. We would like to express our great gratitude to the citizens of the municipality of Mals, 39024 Italy, for their time and participation in our study. We greatly appreciate the funding for this publication from the University of Innsbruck, 6020 Innsbruck, Austria.

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

Appendix A The Mechanism-Process Approach

Steps in the Mechanism-Process Approach according to Tilly and Tarrow [49]:

1. Specify the site of contention under study.
2. Describe relevant conditions when contention begins.
3. Describe the stream of contention under study.
4. Identify the outcomes of contention.
5. Organise the stream of contention into single episodes.
6. Search the episodes for mechanisms.
7. Recombine the mechanisms into processes.
8. Compare with similar processes at different sites of contention.

Appendix B

Table A1. Field Diary.

Id	Categories of Observation	Days	No. of Pages
B	space, actors, actions, artefacts, aims, emotions, statements, relations	26	41

Appendix C

Table A2. Event Protocols.

Id	Occasion	Content of Event	Date	No. of Participants
C1	Board meeting of citizens' cooperative "DA"	Report about ongoing projects	5 September 2018	5
C2	Meeting with board members of citizens' cooperative "DA"	Draft concept for a guided tour on "The Way of Mals"	25 September 2018	3
C3	Public meeting on citizens' budget	Inform citizens about citizens' budget	21 September 2018	12
C4	Seed festival	Facilitate exchange of seeds	23 February 2019	app. 100
C5	General assembly of citizens' cooperative "DA"	Annual report, discharge executive board members and elections	23 February 2019	app. 30
C6	Festival on regional development "Hier&Da Obervinschgau"	Networking between civil society groups and awareness building for transformation	11–14 April 2019	app. 250
C7	Workshop on holding a guided tour	Hand over responsibility for operating the guided tour on "The Way of Mals"	22 July 2019	app. 4

Appendix D

Table A3. Interviews.

Id	Organisation/Profession	Date	Length
D1	Chairman of promoters' committee	8 September 2018	01:06:42
D2	Member of civil society group "Hollawint"	26 November 2018	01:30:05
D3	Director of citizens' cooperative "DA"	12 September 2018	00:26:57
D4	Member of civil society group "Hollawint"	12 September 2018	01:15:31
D5	Chairman of citizens' cooperative "DA" and member of civil society group "Adam & Epfl"	13 September 2018	00:32:29
D6	Chairman of environmental protection group "Umweltschutzgruppe Vinschgau"	13 September 2018	00:54:53
D7	Member of organic farmers' association "Bund Alternativer Anbauer"; organic farmer	18 September 2018	00:27:22
D8	Director of social cooperative "Vinterra" and member of civil society group "Direkte Demokratie"; organic farmer; municipal councilor	18 September 2018	00:35:50
D9	Member of civil society group "Hollawint"	19 September 2018	00:27:28
D10	Board member of organic farmers' association "Bioland"; organic farmer	19 September 2018	00:46:41
D11	Member of environmental protection group and of "Hollawint"	20 September 2018	00:42:38
D12	Operator of agroecological show garden in Mals	20 September 2018	01:19:41
D13	Organic farmer	20 September 2018	01:26:29
D14	Member of civil society group "Heimatschutzverein"	24 September 2018	01:20:54
D15	Mayor	25 November 2018	00:48:04
D16	Member of civil society group "Adam & Epfl"	25 September 2018	00:57:16
D17	Member of environmental protection group	25 September 2018	00:52:41
D18	Conventional dairy farmer; member of civil society group "Bäuerliche Zukunft"	26 September 2018	01:26:01
D19	Conventional fruit grower; member of civil society group "Bäuerliche Zukunft"	20 October 2018	00:28:19
D20	Conventional fruit grower; member of civil society group "Bäuerliche Zukunft"	21 October 2018	01:58:36
D21	Expert for organic farming, Provincial Bureau of Agricultural Affairs	26 August 2021	00:20:21

Appendix E

Table A4. Focus Group.

Id	Aim	Date	No. of Participants	Length
E	Validation of the timeline of events and how it was arranged into episodes.	15 December 2018	21	app. 3 h

Appendix F

Table A5. Actors' Analysis.

Id	Actor	Interests	Foundation	Area of Influence
Local niche actors acting against agricultural intensification, and regional, national, and international supporters				
F1	Civil society group "Hollawint"	Raise awareness against pesticides and for alternatives	June 2013	Mals
F2	Civil society group "Adam & Epfl"	Create public awareness for the expansion of intensive orchards	2011	Mals
F3	Promoters committee	Initiate a local referendum on the prohibition of pesticides	February 2013	Mals
F4	Civil society group "Heimatpflegeverein Mals"	Care for the environment and natural monuments in Mals	2009	Mals
F5	Civil society group "Kornkammer Vinschgau"	Promote local life cycles by growing crops locally	2010	Mals
F6	New mayor Ulrich Veith (2009–2020)	Represent the interests of the majority of citizens	2009–2020	Mals
F7	The municipal council of Mals (2009–2014/2015–2020)	Decide on changes in municipal statutes		Mals
F8	Civil society group of physicians, pharmacists, and biologists	Create awareness for negative health effects of pesticides in agriculture	2013	Mals
F9	Group of organic farmers in Mals	Protect livelihood and biodiversity	2010	Mals
F10	Civil society group "Umweltschutzgruppe Vinschgau"	Promote the protection of the environment and quality of life	1981	Mals and Upper Vinschgau
F11	Konrad Messner regional development office	Promote the sustainable regional development	before 2010	Mals and Upper Vinschgau
F12	Citizens' cooperative "Bürgergenossenschaft Obervinschgau"	Cooperative to promote a sustainable regional development based on regional life cycles	2016	Mals and Upper Vinschgau
F13	Local businesses supporting the movement	Establish a market for alternative local products and services, e.g., organic hotel	Before 2010	Mals and Upper Vinschgau
F14	Artists, e.g., Gianni Bodini	Create awareness for the case of Mals	Before 2010	Mals and internationally
F15	Organic farm "Kräuterschlössl"	Produce organic herbs, fights against pesticide drifts in Middle Vinschgau	1979	Middle Vinschgau
F16	Civil Society Organisation "Dachverband für Natur- und Umweltschutz"	Promote environmental protection	1982	South Tyrol
F17	Organic box scheme organisation "Biokistl Südtirol"	Establish niche market for organic food	before 2010	South Tyrol
F18	Organic farmers' association "Bund Alternativer Anbauer"	Establish niche market for organic food, represent interests of members farmers	1987	South Tyrol
F19	Organic farmers' association "Arbeitsgruppe biodynamischer Bauern Südtirol"	Establish niche market for organic food, represent interests of member farmers	before 2010	South Tyrol
F20	Organic farmers' association "Bioland Südtirol"	Establish niche market for organic food, represent interests of member farmers	1991	South Tyrol
F21	Initiative dirkete Demokratie Südtirol	Promote direct democracy in South Tyrol	1994	South Tyrol
F22	Verbraucherzentrale Südtirol	Promote interests of consumers	before 2010	South Tyrol
F23	Green party	Promote a policy that stands for environmental protection	before 2010	South Tyrol

Table A5. Cont.

Id	Actor	Interests	Foundation	Area of Influence
F24	Imkerbund	Protect health and habitat of bees, represent interests of beekeepers	before 2010	South Tyrol
F25	Heimatspflegeverband Südtirol	Care for the environment and natural monuments in Mals	1905	South Tyrol
F26	Alpenverein Südtirol	Promote tourism and environmental protection in the alps	before 2010	South Tyrol
F27	Schiebel Movieproduction	Create awareness for the case of Mals	2015	South Tyrol/EU
F28	Genussgemeinschaft München	Direct marketing of local products	before 2010	Munich and surroundings
F29	Vollkorn München	Marketing of organic products	before 2010	Munich and surroundings
F30	WWF Trient/Alto Adige	Promotes protection of nature and habitat of wild animals	before 2010	region of Tretino-Alto Adige/EU
F31	Ackergifte nein Danke!	Campaign against pesticides in agriculture	before 2010	Germany/EU
F32	Pesticide action network	Promote agriculture without pesticides	2013	Italy/EU
F33	Umweltinstitut München	Promote environmental protection in Europe	1905	Germany/Europe
F34	International scientists, e.g., toxicologist Irene Witte	Create knowledge for campaign	Before 2010	Internationally
F35	Right Livelihood laureates, Vandana Shiva, Hans Herren, Monika Hauser	Promote food sovereignty globally	Before 2010	Internationally
F36	Bioland International	Promote interests of organic farmers internationally	before 2010	Internationally
F37	International politicians, e.g., Martin Schmidt, EU parliamentarian)	Promote green agricultural policy on the national and international levels	/	EU and Internationally
Regime actors in South Tyrol promoting agricultural intensification and judicial actors in South Tyrol and Italy				
F38	Civil society group “Peasants Future”	Promote interests of the conventional farmer	2014	Mals
F39	Local group of main farmers’ association “Südtiroler Bauernbund”	Promote interest and connect local farmers	before 2010	Mals
F40	Former mayor, Josef Noggler	Promotes intensification of agriculture in Mals, e.g., by building modern sprinklers	1991–2009	Mals
F41	Local group of fruit farmers “Landwirtschaftlicher Förderverein St. Veith”	Promote agricultural change in the Upper Vinschgau	2009	Upper Vinschgau
F42	Fruit production cooperative “Obervinschgauer Produktionsgenossenschaft”	Cooperative storage and marketing of fruit	1963	Upper Vinschgau
F43	Regional group of Main farmers’ association “Südtiroler Bauernbund”	Promote interests and connect local farmers	before 2010	Vinschgau
F44	Consortium for water rights, Vinschgau	Administer water concessions	Before 2010	Vinschgau
F45	Association of Raiffeisen cooperatives “Raiffeisenverband Südtirol”	Controls cooperatives	1960	South Tyrol
F46	Farmers’ association “Südtiroler Bauernbund”	Promote interests of farmers in South Tyrol	1904	South Tyrol
F47	Fruit marketing cooperative Vinschgau, “V.I.P Vinschgau Südtirol”	Marketing of fruit produces in South Tyrol	1990	Vinschgau and internationally

Table A5. Cont.

Id	Actor	Interests	Foundation	Area of Influence
F48	Fruit marketing cooperatives from other valleys, “VOG”, “FOS” and “Fruitunion”	Other marketing cooperatives in South Tyrol	Before 2010	South Tyrol and internationally
F49	Fruit export cooperative for South Tyrol and Trentino “From”	Export cooperative for apples from South Tyrol and Trentino	2009	Region of Trentino-South Tyrol and internationally
F50	Extension service für orchards and vine: “Beratungsring Obst- und Weinbau”	Privately organised extension service in the sector of fruit and wine	1957	South Tyrol
F51	Agricultural research institute and extension service “Versuchszentrum Laimburg”	Applied research on agriculture in South Tyrol	1975	South Tyrol
F52	Government of South Tyrol	Promote intensive farming, prevent ban on pesticides	/	South Tyrol
F53	Parliament of South Tyrol	Rejects law that regulates the monitoring of pesticide drifts	/	South Tyrol
F54	Renewable energy association, Seledision AG/Alperia AG	Promotes new sprinkler system	Before 2010	South Tyrol
F55	Administrative court Bozen	Decides if the question of banning pesticides is legal in a local referendum	Before 2010	South Tyrol
F56	Higher regional court Trient	Decides if it was legal that the promoters committee organised the referendum	Before 2010	South Tyrol
F57	Court of auditors Bozen	Controls the financial actions of municipalities and the province	Before 2010	South Tyrol
F58	Court of cassation Rome	Decides if it was legal that the promoters committee organised the referendum	Before 2010	Italy

References

- Della Porta, D. *How Social Movements Can Save Democracy: Democratic Innovations from Below*; Polity: Cambridge, UK; Medford, MA, USA, 2020; ISBN 9781509541263.
- Hudson, A. When Does Public Participation Make a Difference? Evidence From Iceland’s Crowdsourced Constitution. *Policy Internet* **2018**, *10*, 185–217. [CrossRef]
- Muehlebach, A. Commonwealth: On democracy and dispossession in Italy. *Hist. Anthropol.* **2018**, *29*, 342–358. [CrossRef]
- Food Sovereignty Now! A Guide to Food Sovereignty*; European Coordination Via Campesina: Bruxelles, Belgium, 2018. Available online: <https://viacampesina.org/en/wp-content/uploads/sites/2/2018/02/Food-Sovereignty-A-guide-Low-Res-Vresion.pdf> (accessed on 27 October 2021).
- Welsh, J.; MacRae, R. Food Citizenship and Community Food Security: Lessons from Toronto, Canada. *Can. J. Dev. Stud. Rev. Can. D’études Du Développement* **1998**, *19*, 237–255. [CrossRef]
- Wilkins, J.L. Eating Right Here: Moving from Consumer to Food Citizen. *Agric. Hum. Values* **2005**, *22*, 269–273. [CrossRef]
- Hassanein, N. Locating Food Democracy: Theoretical and Practical Ingredients. *J. Hunger. Environ. Nutr.* **2008**, *3*, 286–308. [CrossRef]
- Renting, H.; Schermer, M.; Rossi, A. Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship. *Int. J. Sociol. Agric. Food* **2012**, *19*, 289–307.
- Friedmann, H. Feeding the Empire: The Pathologies of Globalized Agriculture. *Soc. Regist.* **2005**, *41*, 125–143.
- van der Ploeg, J.D. The Food Crisis, Industrialized Farming and the Imperial Regime. *J. Agrar. Chang.* **2010**, *10*, 98–106. [CrossRef]
- Lang, T.; Heasman, M. *Food Wars: The Global Battle for Mouths, Minds and Markets*, 2nd ed.; Routledge: London, UK, 2015; ISBN 9781138802629.
- Alkon, A.; Guthman, J. *The New Food Activism: Opposition, Cooperation, and Collective Action*; University of California Press: Oakland, CA, USA, 2017; ISBN 9780520292147.
- Clapp, J. *Food*, 3rd ed.; Polity: Cambridge, UK; Medford, MA, USA, 2020; ISBN 9781509541768.
- Geels, F.W. The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environ. Innov. Soc. Transit.* **2011**, *1*, 24–40. [CrossRef]
- El Bilali, H. The Multi-Level Perspective in Research on Sustainability Transitions in Agriculture and Food Systems: A Systematic Review. *Agriculture* **2019**, *9*, 74. [CrossRef]

16. Sutherland, L.-A.; Wilson, G.A.; Zagata, L. Introduction. In *Transition Pathways towards Sustainability in Agriculture: Case studies from Europe*; Sutherland, L.-A., Darnhofer, I., Wilson, G.A., Zagata, L., Eds.; CABI: Wallingford, UK, 2015; pp. 1–16, ISBN 9781780642192.
17. Geels, F.; Schot, J. The Dynamics of Transitions: A Socio-Technical Perspective. In *Transitions to Sustainable Development: New Directions in the Study of Long Term Transformative Change*; Grin, J., Rotmans, J., Schot, J., Eds.; Routledge: London, UK, 2010; pp. 11–104, ISBN 0-415-87675-3.
18. Darnhofer, I. Socio-technical transitions in farming: Key concepts. In *Transition Pathways towards Sustainability in Agriculture: Case Studies from Europe*; Sutherland, L.-A., Darnhofer, I., Wilson, G.A., Zagata, L., Eds.; CABI: Wallingford, UK, 2015; pp. 17–32, ISBN 9781780642192.
19. Avelino, F. Power in Sustainability Transitions: Analysing power and (dis)empowerment in transformative change towards sustainability. *Environ. Policy Gov.* **2017**, *27*, 505–520. [\[CrossRef\]](#)
20. Hinrichs, C.C. Transitions to sustainability: A change in thinking about food systems change? *Agric. Hum. Values* **2014**, *31*, 143–155. [\[CrossRef\]](#)
21. Seyfang, G.; Smith, A. Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environ. Politics* **2007**, *16*, 584–603. [\[CrossRef\]](#)
22. Maye, D. Examining Innovation for Sustainability from the Bottom Up: An Analysis of the Permaculture Community in England. *Sociol. Rural.* **2018**, *58*, 331–350. [\[CrossRef\]](#)
23. Loorbach, D.; Wittmayer, J.; Avelino, F.; von Wirth, T.; Frantzeskaki, N. Transformative innovation and translocal diffusion. *Environ. Innov. Soc. Transit.* **2020**, *35*, 251–260. [\[CrossRef\]](#)
24. Pel, B.; Haxeltine, A.; Avelino, F.; Dumitru, A.; Kemp, R.; Bauler, T.; Kunze, I.; Dorland, J.; Wittmayer, J.; Jørgensen, M.S. Towards a theory of transformative social innovation: A relational framework and 12 propositions. *Res. Policy* **2020**, *49*, 104080. [\[CrossRef\]](#)
25. Smith, G. *Democratic Innovations*; Cambridge University Press: Cambridge, UK, 2009; ISBN 9780511609848.
26. Smith, A.; Stirling, A. Innovation, sustainability and democracy: An analysis of grassroots contributions. *J. Self-Gov. Manag. Econ.* **2018**, *6*, 64. [\[CrossRef\]](#)
27. Kern, F.; Markard, J. Analysing Energy Transitions: Combining Insights from Transition Studies and International Political Economy. In *The Palgrave Handbook of the International Political Economy of Energy*; van de Graaf, T., Sovacool, B.K., Ghosh, A., Kern, F., Klare, M.T., Eds.; Palgrave Macmillan UK: London, UK, 2016; pp. 291–318, ISBN 978-1-137-55630-1.
28. Smith, A.; Stirling, A.; Berkhout, F. The governance of sustainable socio-technical transitions. *Res. Policy* **2005**, *34*, 1491–1510. [\[CrossRef\]](#)
29. Hassink, J.; Grin, J.; Hulsink, W. Enriching the multi-level perspective by better understanding agency and challenges associated with interactions across system boundaries. The case of care farming in the Netherlands: Multifunctional agriculture meets health care. *J. Rural. Stud.* **2018**, *57*, 186–196. [\[CrossRef\]](#)
30. Hargreaves, T.; Longhurst, N.; Seyfang, G. Up, Down, round and round: Connecting Regimes and Practices in Innovation for Sustainability. *Environ. Plan. A* **2013**, *45*, 402–420. [\[CrossRef\]](#)
31. Isgren, E.; Ness, B. Agroecology to Promote Just Sustainability Transitions: Analysis of a Civil Society Network in the Rwenzori Region, Western Uganda. *Sustainability* **2017**, *9*, 1357. [\[CrossRef\]](#)
32. Chiffolleau, Y.; Loconto, A.M. Social Innovation in Agriculture and Food. *Int. J. Sociol. Agric. Food* **2018**, *24*, 306–317.
33. Grin, J.; Rotmans, J.; Schot, J. Conclusion: How to Understand Transitions? How to Influence them? In *Transitions to Sustainable Development: New Directions in the Study of Long Term Transformative Change*; Grin, J., Rotmans, J., Schot, J., Eds.; Routledge: London, UK, 2010; pp. 320–338, ISBN 0-415-87675-3.
34. Bui, S.; Cardona, A.; Lamine, C.; Cerf, M. Sustainability transitions: Insights on processes of niche-regime interaction and regime reconfiguration in agri-food systems. *J. Rural. Stud.* **2016**, *48*, 92–103. [\[CrossRef\]](#)
35. Geels, F.W. Micro-foundations of the multi-level perspective on socio-technical transitions: Developing a multi-dimensional model of agency through crossovers between social constructivism, evolutionary economics and neo-institutional theory. *Technol. Forecast. Soc. Chang.* **2020**, *152*, 1–17. [\[CrossRef\]](#)
36. Hess, D.J. The politics of niche-regime conflicts: Distributed solar energy in the United States. *Environ. Innov. Soc. Transit.* **2016**, *19*, 42–50. [\[CrossRef\]](#)
37. Elzen, B.; Geels, F.W.; Leeuwis, C.; van Mierlo, B. Normative contestation in transitions ‘in the making’: Animal welfare concerns and system innovation in pig husbandry. *Res. Policy* **2011**, *40*, 263–275. [\[CrossRef\]](#)
38. Geels, F.W.; Schot, J. Typology of sociotechnical transition pathways. *Res. Policy* **2007**, *36*, 399–417. [\[CrossRef\]](#)
39. Geels, F.W.; Verhees, B. Cultural legitimacy and framing struggles in innovation journeys: A cultural-performative perspective and a case study of Dutch nuclear energy (1945–1986). *Technol. Forecast. Soc. Chang.* **2011**, *78*, 910–930. [\[CrossRef\]](#)
40. Geels, F.W. Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Res. Policy* **2010**, *39*, 495–510. [\[CrossRef\]](#)
41. Zollet, S.; Maharjan, K.L. Resisting the vineyard invasion: Anti-pesticide movements as a vehicle for territorial food democracy and just sustainability transitions. *J. Rural. Stud.* **2021**. [\[CrossRef\]](#)
42. André, P.; Clark, J.K.; Levkoe, C.Z.; Lowitt, K. Traversing theory and practice: Social movement engagement in food system governance for sustainability, justice, and democracy. In *Civil Society and Social Movements in Food System Governance*; André, P., Clark, J.K., Levkoe, C.Z., Eds.; Routledge Taylor & Francis Group: London, UK, 2019; pp. 1–18.

43. Kemp, R.; Schot, J.; Hoogma, R. Regime shifts to sustainability through processes of niche formation: The approach of strategic niche management. *Technol. Anal. Strateg. Manag.* **1998**, *10*, 175–198. [CrossRef]
44. Holtkamp, C.; Staffler, J. Ernährungssouveränität in Südtirol: Lokale Kontrolle und die Rolle der Konsumentinnen und Konsumenten. *Austrian J. Agric. Econ. Rural. Stud.* **2020**, *29*, 251–258. [CrossRef]
45. Bogaards, M. Measures of Democratization: From Degree to Type to War. *Political Res. Q.* **2010**, *63*, 475–488. [CrossRef]
46. Hassanein, N. Practicing food democracy: A pragmatic politics of transformation. *J. Rural. Stud.* **2003**, *19*, 77–86. [CrossRef]
47. McAdam, D.; McCarthy, J.D.; Zald, M.N. *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*; Cambridge University Press: Cambridge, UK, 1996; ISBN 9780511803987.
48. McAdam, D.; Tarrow, S.; Tilly, C. Comparative Perspectives on Contentious Politics. In *Comparative Politics*; Lichbach, M.I., Zuckerman, A.S., Eds.; Cambridge University Press: Cambridge, UK, 2009; pp. 260–290, ISBN 9780511804007.
49. Tilly, C.; Tarrow, S.G. *Contentious Politics*, 2nd ed.; Oxford University Press: Oxford, UK, 2015; ISBN 9780190255053.
50. Emirbayer, M. Manifesto for a Relational Sociology. *Am. J. Sociol.* **1997**, *103*, 281–317. [CrossRef]
51. McCarthy, J.D.; Zald, M.N. Resource Mobilization and Social Movements: A Partial Theory. *Am. J. Sociol.* **1977**, *82*, 1212–1241. [CrossRef]
52. Benford, R.D.; Snow, D.A. Framing Processes and Social Movements: An Overview and Assessment. *Annu. Rev. Sociol.* **2000**, *26*, 611–639. [CrossRef]
53. Tarrow, S. *Power in Movement: Social Movements, Collective Action and Politics*; Cambridge University Press: Cambridge, UK, 1994; ISBN 9780521422710.
54. Talpin, J. Democratic Innovations. In *The Oxford Handbook of Social Movements*; Della Porta, D., Diani, M., Eds.; Oxford University Press: Oxford, UK, 2015; ISBN 9780199678402.
55. Autonome Provinz Bozen-Südtirol. Agrar- und Forstbericht. 2019. Available online: https://issuu.com/landsuedtirol-provinciabolzano/docs/535096_agrar-forstbericht_2019_web?fr=sZjkzMzczMDk3Nw (accessed on 10 May 2021).
56. Ackerman-Leist, P. *A Precautionary Tale: How One Small Town Banned Pesticides, Preserved Its Food Heritage, and Inspired a Movement*; Chelsea Green Publishing: Windsor County, VT, USA, 2017; ISBN 1603587055.
57. Antier, C.; Kudsk, P.; Reboud, X.; Ulber, L.; Baret, P.V.; Messéan, A. Glyphosate Use in the European Agricultural Sector and a Framework for Its Further Monitoring. *Sustainability* **2020**, *12*, 5682. [CrossRef]
58. Zubrod, J.P.; Bundschuh, M.; Arts, G.; Brühl, C.A.; Imfeld, G.; Knäbel, A.; Payraudeau, S.; Rasmussen, J.J.; Rohr, J.; Scharmüller, A.; et al. Fungicides: An Overlooked Pesticide Class? *Environ. Sci. Technol.* **2019**, *53*, 3347–3365. [CrossRef]
59. Dalla Via, J.; Mantinger, H.; Baric, S. Die Entwicklung des Obstbaus in Südtirol: I. Die landwirtschaftliche Aus- und Weiterbildung. *Erwerbsobstbau* **2013**, *55*, 109–119. [CrossRef]
60. Südtiroler Apfel g.g.A. South Tyrol as an Apple-Growing Zone. Available online: <https://www.southtyroleanapple.com/en/south-tyrol-and-apple-growing/cultivation-zone.html> (accessed on 20 August 2021).
61. FAOSTAT: Data on Pesticide Use. Available online: <http://www.fao.org/faostat/en/?#data> (accessed on 20 August 2021).
62. Istat. Fitosanitari: Quantità di Principi Attivi Contenuti nei Prodotti Fitosanitari per Ettaro di Superficie Trattabile (kg). Available online: <http://dati.istat.it> (accessed on 13 August 2020).
63. Linhart, C.; Niedrist, G.H.; Nagler, M.; Nagrani, R.; Temml, V.; Bardelli, T.; Wilhalm, T.; Riedl, A.; Zaller, J.G.; Clausing, P.; et al. Pesticide contamination and associated risk factors at public playgrounds near intensively managed apple and wine orchards. *Environ. Sci. Eur.* **2019**, *31*, 120. [CrossRef]
64. Holtkamp, C. *Der Malser Weg: Geschichte einer sozialen Bewegung für Demokratie und nachhaltige Regionalentwicklung*; Kassel University Press: Kassel, Germany, 2020; ISBN 9783737609128.
65. Thierbach, C.; Grit, P. Beobachtung. In *Handbuch Methoden der empirischen Sozialforschung*; Baur, N., Blasius, J., Eds.; Springer VS: Wiesbaden, Germany, 2014; pp. 855–865, ISBN 978-3-531-17809-7.
66. Helfferich, C. Leitfaden- und Experteninterviews. In *Handbuch Methoden der empirischen Sozialforschung*; Baur, N., Blasius, J., Eds.; Springer VS: Wiesbaden, Germany, 2014; pp. 559–574, ISBN 978-3-531-17809-7.
67. Neuman, W.L. *Social Research Methods: Qualitative and Quantitative Approaches*, 7th ed.; Pearson: Harlow, UK, 2014; ISBN 1292020237.
68. Mayring, P. Qualitative Content Analysis: Demarcation, Varieties, Developments. *Forum Qual. Soc. Res.* **2019**, *20*, 15. [CrossRef]
69. Reed, M.S.; Graves, A.; Dandy, N.; Posthumus, H.; Hubacek, K.; Morris, J.; Prell, C.; Quinn, C.H.; Stringer, L.C. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *J. Environ. Manag.* **2009**, *90*, 1933–1949. [CrossRef] [PubMed]
70. Gemeinde Mals. Verkündung des Ergebnisses der Volksabstimmung auf Gemeindeebene vom 22.08. bis 05.09.2014: Akt-Nr./atto n. 3037. Available online: http://www.hollawint.com/files/wahlausgang_kundmachung_ergebnis_-_c000042826_.pdf (accessed on 15 December 2021).
71. Gemeinde Mals. Veröffentlichung der Ergebnisse der Wahl des Bürgermeister und des Gemeinderates. 2015. Available online: <https://www.gemeinde.mals.bz.it/de/Gemeinde-Verwaltung/Abteilungen> (accessed on 11 August 2021).
72. Keck, M.E.; Sikkink, K. *Activists beyond Borders: Advocacy Networks in International Politics*; Cornell University Press: Ithaca, NY, USA, 1998; ISBN 978-0801484568.
73. McAdam, D.; Tarrow, S.; Tilly, C. Methods for Measuring Mechanisms of Contention. *Qual. Sociol.* **2008**, *31*, 307–331. [CrossRef]

74. Rahmenvereinbarung für ein konfliktfreies Nebeneinander von Biologisch und Integriert Bewirtschafteten Obstflächen. Available online: https://www.bioland.de/fileadmin/LV_Suedtirol/Dokumente/Rahmenvereinbarung_Obst_IP-Bio.pdf (accessed on 27 August 2021).
75. Zusatzvereinbarung zur Rahmenvereinbarung für ein Konfliktfreies Nebeneinander von Biologisch und Integriert Bewirtschafteten Obstbauflächen. Available online: https://www.bioland.de/fileadmin/LV_Suedtirol/Dokumente/Sondervereinbarung_Phosphonate.pdf (accessed on 27 August 2021).
76. Autonome Provinz Bozen-Südtirol. Beschluss der Landesregierung Nr. 141 2020, Zusätzliche Bestimmung zur Nachhaltiger Verwendung von Pflanzenschutzmitteln. Available online: https://www.provinz.bz.it/land-forstwirtschaft/landwirtschaft/downloads/BLR_141_03-03-2020.pdf (accessed on 27 August 2021).
77. Autonome Provinz Bozen-Südtirol. Beschluss der Landesregierung Nr. 29, 2021, Abänderung des Eigenen Beschlusses vom 3. März 2020, Nr. 141, Betreffend die Zusätzlichen Bestimmungen zur Nachhaltigen Verwendung von Pflanzenschutzmitteln. Available online: https://www.provinz.bz.it/land-forstwirtschaft/landwirtschaft/downloads/beglaubigte_Kopie_BLR_29-1-21.pdf (accessed on 27 August 2021).
78. Snow, D.A.; Rochford, E.B.; Worden, S.K.; Benford, R.D. Frame Alignment Processes, Micromobilization, and Movement Participation. *Am. Sociol. Rev.* **1986**, *51*, 464. [CrossRef]
79. European Union. Richtlinie über Einen Aktionsrahmen der Gemeinschaft für Die Nachhaltige Verwendung von Pestiziden: 2009/128/EG. Available online: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:309:0071:0086:de:PDF> (accessed on 15 December 2021).
80. Ministro delle Politiche Agricole Alimentari e Forestali Decreta. Piano di azione nazionale per l'uso sostenibile dei prodotti fitofitosanitari. *Gazzetta Ufficiale Della Repubblica Italiana*, 12 February 2014; 59–105.
81. EUR-Lex. Glossary of Summaries: Precautionary Principle. Available online: https://eur-lex.europa.eu/summary/glossary/precautionary_principle.html (accessed on 9 August 2021).
82. Polletta, F. "It Was like a Fever . . ." Narrative and Identity in Social Protest. *Soc. Probl.* **1998**, *45*, 137–159. [CrossRef]
83. Daphi, P. Soziale Bewegungen und kollektive Identität. *Forsch. Soz. Beweg.* **2011**, *24*, 13–26. [CrossRef]
84. Goodwin, J.; Jasper, J.M. *Rethinking Social Movements: Structure, Meaning, and Emotion*; Rowman & Littlefield: Lanham, MD, USA, 2004; ISBN 0742525961.
85. Autonome Provinz Bozen-Südtirol. Agrar- und Forstbericht 2020. Available online: https://issuu.com/landsuedtirol-provinciabolzano/docs/forst-_agrар-katalog_deutsch_internet_2020?fr=sYjhiODczMDk3Nw (accessed on 27 August 2021).
86. Jasper, J.M. A Strategic Approach to Collective Action: Looking For Agency in Social-Movement Choices. *Mobilization Int. J.* **2014**, *9*, 1–16. [CrossRef]
87. Smith, A. Translating Sustainability between Green Niches and Socio-Technical Regimes. *Technol. Anal. Strateg. Manag.* **2007**, *19*, 427–450. [CrossRef]
88. Sbicare, J.; Luxton, I.; Hale, J.; Roeser, K. Collaborative Concession in Food Movement Networks: The Uneven Relations of Resource Mobilization. *Sustainability* **2019**, *11*, 2881. [CrossRef]
89. Bortolotto, D. Conegliano, via Libera al referendum Contro i Pesticidi. Available online: <https://tribunatreviso.gelocal.it/treviso/cronaca/2021/05/20/news/conegliano-via-libera-al-referendum-contro-i-pesticidi-1.40293593> (accessed on 16 July 2021).
90. Vita Trentina. Distretto Biologico Trentino: Si Presentano i Promotori del Referendum—Vita Trentina. Available online: <https://www.vitatrentina.it/2021/06/06/distretto-biologico-trentino-si-presentano-i-promotori-del-referendum/> (accessed on 16 July 2021).