Creating value(s) by integrating local and extra-local resources in cereal production in the Swiss Alps

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Abstract.

This paper explores the long-term prospect of alternative, local food initiatives, taking a particular interest in the development of the embedded local values, understood as economic as well as cultural values. Analysing the case of a cooperative of mountain cereal farmers in Switzerland, we show that sustaining local values-based quality is a dynamic process of linking local and extra-local resources. Our results first show the importance of both proximity and place in constructing the 'local' by the cooperative. Second, product flow, knowledge and information exchange, quality control, and innovation are governed by both horizontal and vertical relationships between local and extra-local resources, and these multiple relationships build trust in the network and beyond. This, thirdly, enables the cooperative to continuously reproduce its values by weaving them into a cycle of quality creation. We conclude that we need to understand the characteristic values-based quality of the cooperative's products as the result of a recurring cycle of local and extra-local knowledge creation and resource exchange.

Key words: local; extra-local; value chains; values; proximity; place; rural development;

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INTRODUCTION

Local and alternative food initiatives have been put forward as a way of increasing farmer income and contributing to rural development of marginalized areas, opposing the predominant neoliberal system (Goodman et al., 2012, Meybeck and Redfern, 2016, Schmid et al., 2004, van der Ploeg et al., 2008). Such initiatives often build on particular values that are closely attached to a specific place or mode of production and stand in opposition to the conventional, mainstream food system. Drawing on the work of Rokeach(1979) and Williams Jr. (1979), we understand values as "core conceptions of the desirable within every individual and society […] [that serve as] criteria to guide not only action but also judgement, choice, attitude, evaluation, argument, exhortation, rationalization" (Rokeach, 1979, p.2). Values embedded in alternative food initiatives not only include economic values, such as farm income, but also (socio-) cultural values. Cultural values, as for example traditional products or artisanal ways of producing develop through social relations of sharing values and practices among people in agri-food networks (Hubeau et al., 2019).

When local initiatives grow in size and try to expand to a market outside their immediate environment, requirements and standards of the predominant market structure can potentially challenge the embedded values (Hubeau et al., 2019). E.g. for organic farming, Guthman (1998) started a debate on the so-called conventionalization of the sector, which would, among others, lead to diluting organic values. This debate was not least fuelled by the increasing importance of large retailers selling organic produce. These retailers are nowadays engaging in marketing local food, which also can cause some tension between the embedded values and market requirements (DeLind, 2011). Investigating a local olive oil initiative in Spain, Moragues-Faus and Sonnino (2012) show that the definition of what is "local" became increasingly blurry with the enlargement of the initiative. Bui et al. (2019) have observed that local food sold in large retailers often only supports the dominant agro-industrial system when it is too small a niche (controlled by the retailer) to create a stronger impact. They conclude that an impact or change can only be achieved if established market structures open up to systematically include ethics (Bui et al., 2019).
All the same, there is no simple dualism between ("good") local and ("bad") global food (Brunori et al., 2016). Using socio-economic indicators, Le Velly et al. (2016) could show that when niche innovations grow larger, they do not necessarily show signs of so-called conventionalization, becoming less alternative. Remarkably, there are very few studies that actually look in-depth into long-term development of local alternative food initiatives of farmers. Often, the focus remains on farm-based impacts of short food supply chain developments, which may be positive in terms of value added, but in how far a positive impact on rural development can be sustained and developed over time remains unclear (Marsden et al., 2000).

This paper explores the long-term prospect of alternative, local food initiatives, taking a particular interest in the development of the embedded local values, understood as economic as well as cultural values. Analysing the case of a cooperative of mountain cereal farmers in Switzerland, we will show that sustaining local values-based quality is a dynamic process of linking local and extra-local resources.

LOCAL VALUES AND THEIR RELATIONSHIP WITH THE EXTRA-LOCAL

The recollection of the 'local' is often seen as a response, a countertrend, to the growing globalization of agri-food chains (Winter, 2004). By focussing on endogenous resources attached to a specific territory, added (economic) value is created and maintained, and cultural capital increased in a particular region (Ray, 2006). Local food is assigned some potential for transforming the predominant food system (Cucco and Fonte, 2015), but this potential depends not least on the political interests and power in the processes involved in food systems (Hinrichs, 2015). Bowen and Mutersbaugh (2014) distinguish two main schools of thought and approaches in alternative food research: the franco-mediterranean perspective of local agrifood systems, with a strong focus on territoriality, and the alternative food networks literature looking mainly into distribution systems. Combining both perspectives can lead to a multidimensional understanding of the 'local' as "practice, know-how, governance, and discourse" (Bowen and Mutersbaugh, 2014, p.209). In these discourses and practices we find different understandings of the 'local', which can be grouped into the concepts of proximity and place (Feagan, 2007; Cucco and Fonte, 2015; Hinrichs, 2003). In the following, we disentangle these different meanings to better understand the implications and the potential of the 'local'.

The local as proximity

Eriksen (2013) interprets local food in terms of proximity, and distinguishes three "domains of proximity": geography, relations, and values. Geographical proximity refers to what perhaps most of the consumers would intuitively define as local, in that it refers to either a defined radius for the provenance of the food or the places of production, or to a clearly delimitated geographical region, defined by administrative borders or a natural physical space (e.g. watershed, valley). Often, such local food is equalled both in colloquial chats as in scientific literature with being better than non-local food (Hinrichs, 2003), although geographical proximity does not tell us anything about particular quality features (Brunori et al., 2016; Ermann, 2006; Schmitt et al., 2017). Food can be produced in a highly unsustainable way in the local environment of the place of consumption, e.g. if the local ecosystem's carrying capacity is exceeded (such as in a region of high intensive livestock production (Stolze et al., 2019)). At the same time, the concept of 'local' can be used defensively to draw borders between the local and the non-local (Hinrichs, 2003). The definition of actually *what* is local becomes critical and Hinrichs calls for some modesty in assessing the potential of localized food for sustainable development. So we should be careful not to fall into the "local trap" (Born and Purcell, 2006), but to address geographical proximity with some caution. However, with no doubt, the geographical domain of proximity is one relevant aspect and the basis for re-territorialization of food (Horlings and Marsden, 2014), as will be discussed in the section on 'local as place' below. The social relations enabled by local food production and close links to the place of consumption are another vital aspect of proximity (Eriksen, 2013). Direct relationships are the basis for trustful and meaningful exchange between producers and consumers, which distinguishes local food from conventional food in an anonymous market (Hinrichs, 2015). Local food opens up spaces where producers and consumers, along with other value chain actors, can meet and experiment with ideas

about production and consumption, and potential transformations of the food system (Cucco and Fonte, 2015). Social relations thus enable social learning, which in this way become part of the definition of the 'local' (Favilli et al., 2015). Reproducing social relations through such learning processes increases trust between individuals, which in turn is the basis for cooperation and collective action. In this way, relationships going beyond market relationships of buying and selling in a value chain to including exchange of ideas and knowledge, contribute to building social capital of a region (Chiffoleau et al., 2019; Ray, 2006).

Fonte (2008) discusses how local knowledge is embedded in local food. She distinguishes between tacit knowledge, which is unconsciously acquired and not codified, and lay knowledge, seen as a more technical knowledge acquired through experience and learning. In contrast to scientific knowledge (which is regarded as non-local), lay knowledge is much less standardized and formalized, and "refers to the technical knowledge utilized by farmers and producers to grow or to prepare food in the specific agri-ecological context in which they operate" (Fonte, 2008). During the process of industrialization of agriculture, such traditional knowledge has increasingly given way to scientific knowledge as the only accepted knowledge base and nowadays tends to be considered inferior to so-called scientific knowledge (Lowe et al., 2019). As part of a countertrend to the conventional food system, local knowledge becomes relevant for creating and defining local food (Fonte, 2008). While local actors will often apply scientific knowledge in their daily business of producing or processing food, learned in established institutions, the point here is that part of the differentiation of local food from conventional food actually lies in the use of local lay knowledge. As an important part of human capital, it can then act as a basis for the (re-)valorization of the patrimony of European rural areas, whereby the challenge remains to mobilize local lay knowledge in farmers and other actors for local food valorization (Fonte, 2008; Šūmane et al., 2018).

In sum, the geographical and relational dimension of proximity refers to the territorial, social and human capital of a particular region as a resource for creating 'the local'. What is more, these forms of capital can be reinforced and further developed by values creation through local products. It is these values that create a particular alterity of local food in comparison to conventional food, with specific unique features. With this understanding of terms, the 'values' domain of proximity (Eriksen, 2013) links to the interpretation of local as 'place', which we will discuss in the following.

The local as place

The perspective of local food as place-based food builds on the concept of a territory, which includes not only a particular biophysical setting, but also socio-economic and cultural specificities of a particular region (Hinrichs, 2015). When marketing such place-based products, proximity to this region is not necessarily involved. Much discussed place-based products include the geographical indications that link a specialty product to a clearly defined region and prescribed production processes (Bowen, 2011). The EU offers a registration of such products under the quality label scheme PDO Protected designation of origin) which allows a strong link to the place

of production; examples are Parmigiano Reggiano cheese or Kalamata olive oil, etc. (Maye et al., 2016). Place-based food is becoming increasingly visible on the market, and is an important asset of alternative food networks. They have developed in response to globalization of the conventional food system with its wide-ranging disconnection between (places of) production and consumption (McMichael, 2009; Wiskerke, 2009). Challenging the predominant food regime, place-based food constructs identities linked to particular rural areas and modes of production, in this way re-territorializing food (Horlings and Marsden, 2014; Ilbery and Maye, 2005). A characteristic of this food is a higher heterogeneity reflecting different places and nature in comparison to the mainstream highly standardized food (Winter, 2004). The underlying qualities of place-based food are thus not only its ingredients or nutritional content, but also a characteristic (multifunctional) agriculture and landscape.

This particular landscape also contributes to and is the result of a high degree of cultural identity (Ray, 1998). Cultural identity and the role of territory have been the main drivers for new approaches to rural development in the 1990s. Ray (1998) explains this by three developments: a growing self-consciousness of regions and regional agents, in particular to capitalize on the values of their region; a particular European policy supporting such development, and even promoting territorial, regional approaches to strengthening rural and remote areas (LEADER); finally, a general trend in Europe to regionalization with a growing focus on smaller territories than nation states. As the core of cultural identity and capital, place provides the basis for endogenous development (Ray, 2006, Bosworth et al., 2015). It is the interplay between people in a particular region and the assets of that region that create values (Hinrichs, 2015). From the perspective of local as place-making, the particular value is created by embedding the social (trust and collective action) in the spatial (Moragues-Faus and Sonnino, 2012;, Renting et al., 2003). A value that is typical and can be marketed as such to consumers in and outside the region, which in turn reinforces cultural identification with the region.

Linking the local with the extra-local

The identification of the local as something place-specific is a prerequisite for marketing local products in particular to distant consumers valuing the specific local quality. This relationship between local and extra-local plays a particular role for rural development and has been framed, among others, with the concept of the 'rural web'. This concept conceives of rural development as an ongoing process involving "interrelations, interactions, exchanges, and mutual externalities within rural societies" (van der Ploeg et al., 2008). It emphasizes the need for locally embedded and rooted resources, which are translated into qualification strategies and economic activities that then span out of the region. The valorization of local resources often happens by linking them to resources outside the particular locality (Moragues-Faus and Sonnino, 2012). These links are on the one hand realized in concrete tangible interactions, such as knowledge exchange and market relations. On the other hand, they can take the form of a political-administrative framework that influences how local resources can be valorized.

The way how local products are marketed has been the focus of concepts of 'short food supply chains'. They address "(the interrelations between) actors who are directly involved in the production, processing, distribution, and consumption of new food products" (Renting et al., 2003). Renting et al. (2003) distinguish three different types of interrelations, extending in distance between producers and consumers: from face-to-face marketing, such as farm shops, to proximity marketing, e.g. on farmers markets or via community supported agriculture, to marketing in distant markets that ensure transparency via certification and labels. The strength of this concept is that it shows the continuity between local and extra-local, with the producer (and processor) as the local and the consumer as the extra-local. The concept of 'short food supply chains' also builds on the above discussed variety of definitions of 'the local' in that it covers proximity as well as place-related traceability. These different market configurations lead to new market governance structures, in which new institutions and associations play a major role (Renting et al., 2003). In this line of argument, Moragues-Faus & Sonnino (2012) found that products from a more or less artificially defined region which were marketed in distant markets with high demand, led to a higher production in the area, while the definition of 'local' became more flexible. If this is combined with rather artificial administrative boundaries of some quality label, such as the PDO designation, they argue, the relations and governance models tend to be more hierarchical, and build on requirements of external certification (Moragues-Faus and Sonnino, 2012). Certification is indeed often a prerequisite for marketing local products to consumers in distant places, as a way to secure the local quality and ensure transparency about places and modes of production, thereby reconnecting producers and consumers (Fonte, 2008). However, certification also means a codification of recently uncodified local knowledge, which involves the question of power of who defines what is legitimate knowledge (Tovey, 2008). The relationship between local and extra-local knowledge is thus also a question of power, putting extra-local consumers, certifiers and others in a position to define what is locally produced and how. Yet, combining extra-local and local knowledge can also foster new ideas and approaches to rural problems and thus revitalize endogenous forces (Bock, 2016). The relationship between local and extra-local resources, embodied in market relations and knowledge exchange is thus strongly connected to questions of power, while at the same time representing a large potential for endogenous rural development (Rossi et al., 2019).

The concept of neo-endogenous development sheds light on the role of the political-administrative context for local rural development (Ray, 2006). While there is a strong focus on endogenous potential and resources, the 'neo' part relates to the impact of policy: "*Neo-endogenous development retains a bottom-up core in that local territories and actors are understood as having the potential for (mediated) agency, yet understands that extralocal factors, inevitably and crucially, impact on – and are exploitable by – the local level*" (Ray, 2006). This theory is largely inspired by European rural development policies, such as the LEADER initiative. In such rural development programmes, policy often acts as facilitator or initiator of change by providing incentives for local action. Thus, although some of these programs carry bottom-up elements in them, the fact that they are higher-level policy programs providing financial support

for pre-defined fields of actions clearly represents a top-down approach. The neo-endogenous rural development concept has helped our understanding of the role of the state as a facilitator of local development: it facilitates change by providing positive signals (policy programs, incentives) for local actors to respond to. What is not considered so much in this approach is that local actors might also react to economic pressures and challenging policy signals, and proactively engage in developing alternatives to prevent economic loss. In this sense, policy change can act as an important driver for endogenous development: not only as a facilitator, but as sending out negative signals.

Building on the concepts of 'local', as well as the interrelations between the 'local' and the 'extra-local', this paper explores how an alternative food initiative created values through processes linking local and external resources, and in how far these values can be sustained over time. The remainder of this article first describes the case studied and methods applied, before presenting the results of our analysis, disentangling the different aspects of 'local' and 'extra-local'. We then discuss how the results contribute to answering the research questions, followed by a brief conclusion.

THE CASE STUDY
The case study approach

To address the research questions of how values in an alternative food network develop over time, and what the role of local and non-local resources is in this, we applied an explorative case-study approach (Ridder, 2017). As case, we chose a more than 30 years old farmers' cooperative, with strong statements on local value(s) creation in a clearly defined geographical region, selling local products to consumers outside that region: Gran Alpin, in the canton of Grisons in Eastern Switzerland. Historically grown, the canton is at the same time an administrative unit and a defined region well known across Switzerland for its divers and unique alpine landscapes and culture.

Data was collected and analysed from four different sources: First, we analysed scientific literature available on the topic. We furthermore considered grey literature and information from websites, including the cooperative's website, as well as websites of value chain partners, regional development organizations, and administrative bodies. Third, the movie "Biobergackerbau hat Zukunft" from Wissensmanagement Umwelt GmbH (2013) brings valuable insights into the life and work of four farmers of Gran Alpin, and describes their experiences with growing cereals in the mountains. Finally, we conducted nine interviews with key experts spread across the canton of Grisons: three with current and previous general managers and board members from Gran Alpin, three farmers (of which one is also a board member), one miller, one brewer, and one baker. The interviews were carried out by one or two researchers in March 2016, and lasted between 45 and 90 minutes. The relevant parts were transcribed and the content analyzed for the mentioning of place and proximity, and related values.

Cereal production in Grisons and the role of Gran Alpin

Until the mid-1980s, many farmers in the mountain zone₁ of the canton of Grisons produced cereals, at least in small quantities. When federal subsidies for the cereal market expired in the late 1980s, cereal production declined considerably, and farmers turned to livestock (mainly dairy) production. To address the increasingly narrow focus of farmers on grassland and dairy production, in 1987, a group of two organic farmers and one veterinarian founded a cooperative for farmers producing cereals in mountainous areas in the canton: Gran Alpin. 15-20 farmers joined immediately, although nobody knew where to mill and sell the product(s). The first years were marked by a learning-by-doing attitude, using whatever local resources were available for transport, milling and further processing of the cereals, produced in small quantities of heterogeneous quality. The general managers of this period combined multiple roles on themselves, including management, milling, transport, as well as farm advice.
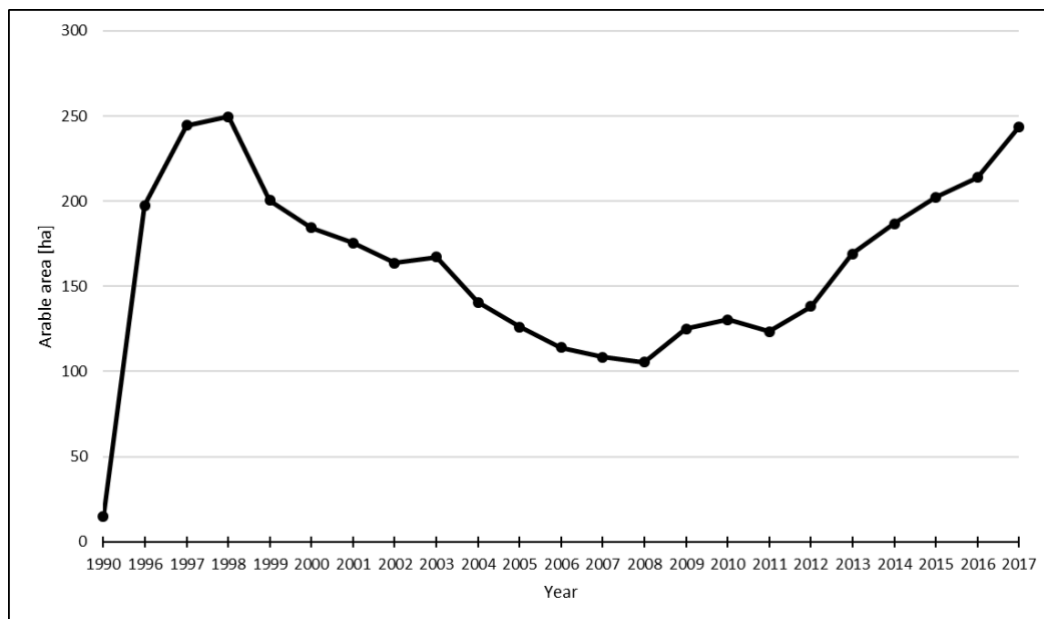

Figure 1: Production of organic cereal in the mountain zones of Grisons 1990-2017

In 2008, the cooperative decided to employ a new general manager, who had not been involved so far, and who is still in place today. She focussed on the core function of management: organising and controlling production quantities and qualities, building up relationships with downstream partners in the value chain, caring for overall communication and financial security. As a further step in professionalizing the cooperative, the general manager established close links with the

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₁ The mountain zone is one of the production zones defined by the government, which takes into account altitude, inclination of slopes, and accessibility; the other production zones are the valley zone, and the hilly zone. 93% of the agricultural land in the canton of Grisons are assigned to the mountain zone (Landwirtschaftliche Strukturerhebung 2015)

cantonal advisory service and the cantonal department of agriculture, to ensure high-quality farm advice. This professionalization is reflected in the development of cereal production in the mountain zone of Grisons, as shown in figure 1: after a lean period, the area on which cereal is produced grew from 2008 and in 2017 reached the level of 1997.

Organization and value statements of Gran Alpin

At the time of research (2018), the cooperative consists of 95 mountain-zone farmers spread across different valleys of the canton, producing around 500t of cereal on a total surface of around 160ha. The main products are flours from wheat, rye, and barley; brewing barley, and rolled barley, and the turnover is more than 1Mio Swiss Francs. While producer guidelines had always prohibited the use of pesticides, the cooperative converted to certified organic production in 1996. Today, Gran Alpin products are multiply certified and labelled: as Gran Alpin; as organic; as mountain product; and partly as originating "from Grisons", or from a regional nature park (Park Ela). Gran Alpin's core values are laid down in its statutes – unchanged since the beginnings:

- Support of mountain arable farming
- Maintaining the cultural/traditional landscape
- Reasonable prices for farmers – better than normal organic prices
- Additional income for farmers, contribution to farm resilience
- Supply the region with products

Downstream value chain actors are closely linked to the cooperative via contracts and product flows (see figure 2). They include: the regional grain store for collecting cereals; a local mill in a small village in the canton (milling about one third of the cooperative's cereal) and a large mill outside the canton (processing about two thirds); two bakers using a relevant amount of flour and several using small quantities; a mid-size brewery outside the canton, as well as two local micro-breweries in the region. The general manager of Gran Alpin organizes the logistics of Figure 2: Value
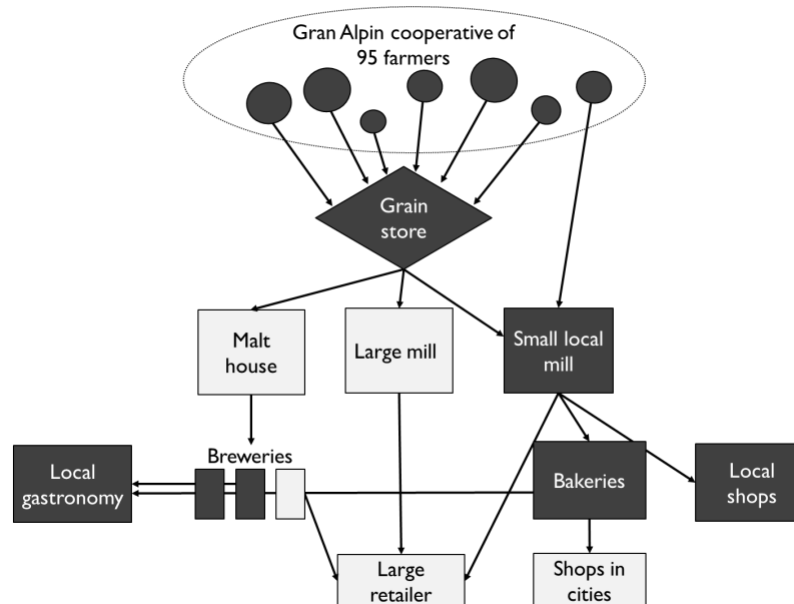
chain and product flow of Gran Alpin, showing the main actors. Dark shaded boxes represent local actors, light boxes extra-local actors; of the three breweries, the largest is extra-local, two are local

the product flow through the value chain. Almost all farmers deliver the cereal to the central grain store, where it is cleaned and packaged, and then supplied to the other partners in the value chain. Malting barley is malted outside the region, and then partly brought back in again to two microbreweries. The largest share of Gran Alpin products reaches the consumers via shops of one large retailer in major cities of Switzerland. Other points of sale include local bakeries, gastronomy, and specialty shops across the whole country.

As the focus of this study is on the 'local', figure 2 highlights the local value chain actors. We will later discuss how they contribute to building the 'local' values of Gran Alpin on the basis of proximity and place. As a longstanding initiative deliberately bridging the dichotomy of local and global food supply chains while strongly building on values of localness and culture, Gran Alpin represents an interesting case to study how values are created locally and develop over time in interaction with the non-local.

RESULTS - CONSTRUCTING 'THE LOCAL' AND RELATIONSHIP WITH THE EXTRA-LOCAL

Our analysis of Gran Alpin revealed several qualities and ways of enacting the local and the relationships to the extra-local, which we present in the following. We analyse how the cooperative constructs the 'local', by the concepts of proximity and place.

How Gran Alpin contructs the local 1: aspects of proximity

The geographical dimension of proximity is highly visible in the value chain of Gran Alpin, aiming at keeping as much value as possible within in the canton of Grisons. The interviewees identified both the provenance from the alpine region and from Grisons to be relevant when marketing the cereal products outside the region. They emphasized the importance of keeping production and processing as far as possible within the canton, as this quote from the miller shows, when he explains how he joined Gran Alpin: *"By chance, I read a newspaper article [about Gran Alpin] 20 years ago. And then I wrote to the president that we also have a mill here. Because it said that they [Gran Alpin] have their cereal processed in another mill, not even a mill in Grisons. And so we slowly came into contact..."*

Regarding economic value creation, the interviewed farmers estimated the share of income generated from cereal production between 15 and 30% of their total agricultural income, including indirect income in the form of state subsidies for cereal production. Besides generating a new source of income, cereal production and marketing is an opportunity to diversify farming activities, increasing resilience of the farms in the region. In what concerns processors, Gran Alpin is the most important customer of the local mill in economic terms: cereal processed for Gran Alpin

makes up about 70% of the mill's yearly processed quantity. The miller concluded that they could survive in the peripheral valley as a very small mill, because offering and filling a niche (whereas medium-sized mills in more central valleys lost to large mills). With Gran Alpin products, the miller enlarged his market: "*We mainly supplied the Bergell [the local valley], in former times exclusively. [...] And now with Gran Alpin, we also cross the Julier2.*" Further users of Gran Alpin cereal products are bakers and local breweries. Out of 15 local bakers using Gran Alpin flour, only two hold an important role in the network. One of them runs a local bakery and coffee shop/restaurant with 23 employees, and thus is a relevant employer in the small village in which it is situated. This baker established a strong link to the locality of production, e.g. explicitly looking for naked oats grown in the vicinity of the village to avoid transports to a dehusking mill outside the region. He emphasized *"[...] in the [local cookies], there is also honey from the valley, and the oats are also from the valley."*, and in another part of the interview went on

> "[…] *We can present this here. If it's about the oat flakes or the eggs – I can show*
> *you. We can tell you from which farmer. We know where the raw products come from*."

Here, the short geographical distance to input suppliers overlaps with social relations, the second important dimension of proximity.

Much of the general manager's work in Gran Alpin focuses on building and maintaining relationships, going beyond market relations to information and knowledge exchange. As one farmer said: "*And the general manager you know, you have the most to do with her. [...] She usually comes to the farm once a year. Mostly not alone, sometimes one of the board members joins her, or [the breeding expert].*" By organizing yearly field days, the manager facilitates direct encounters between farmers, and thus enables effective knowledge exchange. These regular exchange meetings build up trust in the cooperative, which in turn supports collective decisions on its further development, including the specific quality requirements of the entire value chain. An example is the decision in 1996 to convert from pesticide free to organic production. This was widely discussed and finally agreed with all Gran Alpin members, with only a few dropouts of farmers who did not want to convert to organic. Today, the organic mode of production and processing is generally accepted and no longer part of the negotiation processes in the local network. Moreover, the cooperative continuously invested in the development of product quality, and the local network successfully ensures maintenance of this quality, which in turn is crucial for marketing the product (as will be shown below). The baker summarizes the importance of the function of the network around Gran Alpin as quality assurance:

> "*Primarily it's that we are happy that we can use a local raw material at all, in a way*
> *that it complies with the norms. So we are of course happy that Gran Alpin exists.*
> *[...]*
> *Yes, that's why. That's why Gran Alpin. 'Cause we don't have a mill here. We don't*
> *have a mill here [...]. In the situation that we're in, we're of course happy that it*

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2 "*cross the Julier*" means that the products leave the region via the mountain pass of the Julier (the fastest way to the cities in the lowlands of Switzerland).

> *works with Gran Alpin. […] Thanks to them, we can continue to purchase the raw material that we [want to] sell to [our] customers. Well, for us, it would be a disaster if this would not work anymore"*

Closely linked to quality are the particular skills, the experience and local knowledge needed to grow cereals in mountain areas and to use the raw material in the further production process – the third dimension of proximity. The interviewees emphasized that these experiences, skills and knowledge are not available everywhere, but are a particularity of Gran Alpin members and the wider network. The local knowledge cannot only be found in the ways of cereal production, but also in processing – be it as miller dealing with non-standardized specialty produce or as a baker dealing with raw material in varying qualities, and not pre-prepared baking mixtures. As the miller reckoned:

> "*As far as Gran Alpin products are concerned, they have a biologist. […] He can inform us about the varieties of the different cereals...with technical problems, we are experts ourselves, we have learned that."*

Combining different local knowledges and skills leads to creating socio-technical innovations, involving both new technologies (e.g. processing techniques or new varieties) and new forms of organization or exchange between market partners. For example, bakers work with farmers to develop new products based on special cereals, which first have to be tested in cultivation, and the breeding expert is experimenting with new varieties together with farmers. Many of the interviewed persons referred to the innovative nature of cultivating and processing mountain cereals. While one farmer emphasized that thanks to his training as a conventional farmer he was open to *"modern production techniques"*, and thus also to new varieties, the miller and the baker referred to the family history as innovative companies.

The relations between value chain actors created through Gran Alpin and facilitated by the proximity to each other are thus constantly used to jointly innovate products and production processes and to create a distinct quality. And while producing, the value chain actors weave the particularities of the region into the products, thus creating a product strongly linked to a defined place. We therefore now turn to the aspects of place-making in our case.

How Gran Alpin constructs the local 2: aspects of place-making

The geographical territory in which Gran Alpin operates is the canton of Grisons; so it coincides with a politically-administratively defined region in Switzerland. Yet, the canton presents itself as a culturally distinct region in Switzerland, and emphasizes its uniqueness in combining different cultures on its territory; cultural diversity indeed functions as a unifying identification of the canton (https://www.gr.ch/EN/grisons). This diversity is created by the topography dividing the canton into a number of different valleys and regions, in which two different languages (German and Italian) and five Rhaeto-Romanic idioms are spoken.

The cooperative's clear reference to the canton is the basis for place-making, visible already in its name: "Gran Alpin". This name carries the notion of mountain origin ("alpin"), but

also the relation to the canton of Grisons: "Gran" is an artificial word, derived from the different idioms of Rhaeto-Romanic language, meaning cereal. This illustrates the strong identification with the region and its characteristics of mountains, tradition, and heritage. Thereby, "tradition" goes beyond the place of production to also include landscape and production and processing methods. In fact, we can follow place-making in Gran Alpin through the whole value chain. It starts with the varieties used, which build on traditional knowledge and in that way contribute to cultural value and identity. The breeding expert of the cooperative, who had been working as its general manager for some time in the 1980s/90s had tested several different cereal varieties for their use in mountainous environment, and finally a traditional breed of rye was selected as most suitable; it is still cultivated today. Resuming the cultivation of old arable land preserves and in part redesigns the traditional historical cultural landscape (in German: "Kulturlandschaft"). As one producer in the film "Bergackerbau" summarized: "*We're not here to produce as much as possible, but to practice agriculture and take care that the landscape stays intact*". So aesthetics is important to them, connected to a diverse landscape as a counterpart to the "*grassland monoculture*" (an interviewed expert). At the processing stage, place-making as the interlinkage of people and territorial assets (Hinrichs, 2015) becomes apparent in the use of traditional milling and baking technologies. They are closely linked to the actual place of production, which can be seen at the example of the mill that operates in the 9th and 10th generation of a family, and has been using the power from the local river ever since. Moreover, all interviewed processors established a clear connection between their processing activities and the effects of cereal production on the landscape. Responding to the question whether the local brewery had used Gran Alpin barley from the beginning, the manager of the brewery replied that:

> *"Yes, that was quite clear... Now, of course, this has the additional aspect that the old terraced fields here are revived a bit. These were really terraces in [the villages here], which had practically no more cereal cultivation, and through Gran Alpin there was more cereal again, and the brewery certainly helped a bit that there [are] still some [farmers] who produce cereal now."*

Our analysis showed that place and proximity are interlinked: the identification with and construction of place in Gran Alpin is continuously re-produced through personal ties between different market partners, and in that way place-based innovation is the result of collaboration between proximate value chain actors. This is illustrated by one farmer explaining:

> *"Rye production of course started also because the baker here makes rye bread. [... This] valley used to be a rye growing area. And then there were perhaps 10 to 20 years, in which no more rye was cultivated. And the baker then bought rye from anywhere. And then it was him who came up to me for the rye, that's how it was."*

Also when selling the product within the region, proximity and place are intertwined. One farmer explained that the flour's quality, which is not as refined as the mainstream products in supermarkets, is appreciated by elder local people as being *"as it used to be"* in former times. So, according to the interviewees, local consumers are not so much interested in whether the locally

produced cereal is organic or not, but appreciate the close link of the product with their place (and landscape) of living.

The link between place-making and proximity is furthermore established by the general manager summarizing that

> *"... fields belong to a mountain landscape in the same way as do meadows. 50 to 100 years ago, there were umpteen times more fields here. Well, the old terraced landscapes still are witnesses of that. [...] And Gran Alpin has set itself the goal of promoting mountain cereal production; that cereal is cultivated, that knowledge doesn't get lost, also that infrastructure is not totally lost; that this can continue to exist."*

She sees the marketing of Gran Alpin products as instrumental to reaching these goals. In this sense, place-making and local knowledge are closely interlinked and place-based marketing outside the local region is used to reproduce traditional quality and knowledge, as well as cultural identity and values – an observation that we will look into in more depth in the discussion section.

How Gran Alpin links local to extra-local

The visible link between the local and the extra-local is in marketing: the large majority of the locally produced products of Gran Alpin are marketed outside the canton in supermarkets and specialty shops, certified as organic and as mountain product. In addition, products sold by the retailer COOP carry the retailer's private label "Pro Montagna", indicating products from mountains[3]. Attached to this is a specific idea of consumers about tradition and preserving original culture. Producers and processors are clear about the selective range of consumers interested in their products, but they are happy with working and marketing in this niche, preserving the local value(s) of the product:

> *"We target customers that value [our particular quality]. [...] If you explain that this comes from our valley, and this is regional, then... they really want to buy that. If someone comes and tells us 'that's too expensive' then we say 'well then you have to go to [a retailer] and buy the cheap [...] cake'."* (baker)

These market relationships involving standards and certification carry some characteristics of hierarchical structure (Moragues-Faus and Sonnino, 2012). The labels are used as a way for communicating the local characteristics to consumers outside the region, in distant markets in larger cities of Switzerland. In this sense, the retailer holds some power in defining the 'local' values of Gran Alpin, implemented by sales relationships and certification, potentially affecting the cooperative's autonomy. Yet, this seems a deliberate choice, and producers and processors were realistic about the interest of the retailer to include these products in their offer for marketing

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[3] Pro Montagna is a label of COOP indicating products from Swiss mountain regions. For each item bought, a small amount of money goes to the so-called "COOP sponsorship for mountain regions", which supports mountain farmers and other value chain actors in need, e.g. supporting investments into infrastructure.

reasons, as they tend to attract certain customers, who then continue shopping at this point of sale. At the same time, all mentioned that they felt that COOP was not engaging in these specialty products merely out of marketing reasons, but felt a good partnership and real interest in supporting mountain farming. The importance of a trust-based relationship with the retailer (i.e. with the relevant persons in charge) is illustrated by the description of the brewer how he first met the responsible person from COOP:

> *"...It took a while until I found the right building, it was so huge. Then I entered, and then Mr. [the responsible person from COOP] came to greet me, and when I saw that he wore this [typical traditional] belt, I knew that I would get along with him. And that's how it was..."*

Apart from pure market relations, our analysis shows that the links between the local and the extra-local in Gran Alpin are also visible in the recurring innovation processes. In this way, our observation goes beyond the argument made by Moragues-Faus and Sonnino (2012) and Fonte (2008) that the relationship between the local and extra-local is predominantly defined by the mechanisms of certification, and in that way highly institutionalized and influenced by the power of certifiers. Our analysis revealed other aspects how knowledge sources outside the local perimeter are important for and impact on the development of the 'local' product: In the founding period, the initiators got inspired by the example of a successful local specialty food production (in this case, herbs) in another region and transferred that to their own project idea. At the same time, one of the founders reported on his longstanding professional relationship with state research institutions, for which he would carry out field experiments and testing of new varieties. This enabled him to build up a network with research much beyond the local region. Another early link to extra-local knowledge was with a breeding expert coming from outside who became the general manager of the cooperative for a while, and now acts as an expert and advisor. He brought in-depth knowledge about the characteristics of cereal varieties, including old varieties, and he still conducts several experiments searching for varieties that are best suited to the harsh conditions in the mountains. All these sources of production-oriented knowledge stemming from outside the particular locality have helped (and still help) the continuous development of the local product(s). In sum, the relationship between the local and the extra-local includes market-based relationships as well as knowledge exchange, and both build on trust. From the perspective of power relationships, we could say that strong horizontal ties built on trust, knowledge and common values counterbalance the hierarchical relationships of certification and marketing by a large retailer.

DISCUSSION

Based on the results of our case study analysis, we will now discuss how the values embedded in an alternative food network are created and develop over time. The cooperative Gran Alpin builds upon the core values of 'local', interpreted as support of agriculture in a clearly defined region (mountain areas of the canton of Grisons), producing according to organic standards, maintaining local (cultural) landscape, and generating (additional) income for local farmers, processors and

local points of sale. The cooperative thus creates 'local values' in a broad sense, including economic, ecological and cultural values. Looking into the underlying processes of values creation leads to three observations: First, their foundations are close proximity-based relationships that enable place-making. Second, the values creation processes are supported by the hybrid governance structure of horizontal and hierarchical relations within Gran Alpin, and between the cooperative and its value chain partners. Finally, the cooperative continuously reproduces its values by weaving them into a cycle of quality creation that integrates local and extra-local resources. Let us now look deeper into these arguments.

Our first observation is that in Gran Alpin both perspectives and aspects of 'the local' are important and intertwined: the local resources, created and reproduced through proximity relations, form the basis for place-making. Place, in turn, enables successful marketing of the Gran Alpin products outside the region. Proximity lies at the core of Gran Alpin's business model; already its statutes include the goal of keeping as much value added in the region as possible. In fact, the cooperative of *local* farmers is the basic condition for the miller, the baker and the brewer(s) to create *local* products strongly linked to the actual place of production. The local economic value creation thus expands to value chain actors beyond the cooperative, and enables place-making by all actors connected to Gran Alpin. This relevance of local (and organic) production is confirmed by Bardsley & Bardsley (2014), who found in a survey among Gran Alpin farmers that their main motivations to participate in the cooperative were "to sell ecological products", and "supporting the local community". Economic value creation is linked with the (re-)production of cultural values, in that the economic activity maintains the cultural techniques of cereal growing and processing, and shapes the cultural landscape. We can therefore conclude that founding Gran Alpin maintained and partly brought back cereal production in the alpine regions of the canton Grisons. The local (proximity) market relations continuously reproduce culture and tradition, which are truly embodied by the different actors in the value chain and network around Gran Alpin. The case of Gran Alpin thus spans across dichotomies of proximity and place (Hinrichs, 2015), and of territorial and distributional foci (Bowen, 2011), and illustrates how place-making based on proximate relationships is used when distributing a local product in a (partly) extra-local market. Economic and cultural values creation within and outside the region are intertwined and reinforce each other.

Our second observation addresses how the relationships within the cooperative and between Gran Alpin and its extra-local partners are governed. This is linked to questions of power of who knows and who decides, in other words, what is relevant and legitimate knowledge and how (local) products are produced (Ray, 2006; Tovey, 2008; van der Ploeg et al., 2008; Bock, 2016, Rossi et al., 2019). When certification is involved, retailers, certifiers or label organizations hold this power, and often hierarchical governance models, involving new institutions, develop (Fonte, 2008; Moragues-Faus and Sonnino, 2012; Renting et al., 2003). Studying cases of olive oil cooperatives in Spain, Moragues-Faus & Sonnino (2012) observed that the relations between the local (production) and the extra-local (consumers) were driven by requirements of external certification, leading to vertical or hierarchical relationships of the market. By contrast, while Gran

Alpin built up new institutions to organize local cereal production and the marketing in distant markets, this did not lead to a hierarchical governance model. Instead, Gran Alpin operates in a market characterized by a hybrid governance model, combining vertical and horizontal relations: Contracts and certification (as organic and mountain product) play a role as formal relationship and enable marketing to distant consumers in large retailers. Yet, these hierarchical (vertical) relationships are counterbalanced by strong trust-based horizontal relationships of knowledge exchange and innovation, based on common values within the cooperative (and with its local value chain partners). An example for this is the decision process to produce according to organic standards: this was collectively decided by the cooperative's members, and not dictated by some external market partner. Although market demand influenced the decision, autonomy, local values and identity were maintained despite the admittedly strong dependency on one large retailer. Gran Alpin's strong horizontal relationships allow a flow of knowledge, advice, and quality control within the cooperative. We can thus confirm the observation of Bowen (2011) that social relations are strengthened by formal rules and institutions. Indeed, formal and informal relationships overlap, and are enacted in the general manager's way of working . For example, when she visits the farms once a year, it is not only to give advice and plan production, but this regular interaction and exchange of expertise between all people involved is crucial for trust building. The hybrid governance of the multiple horizontal and vertical relationships of product flow, knowledge and information exchange, quality control, and innovation build trust. This is the foundation for a longstanding network beyond pure value chain relations; a network reproducing local territorial and cultural identity and values.

Thirdly, we zoom into the process of how the multiple relationships actually 'produce' the specific quality in Gran Alpin. In line with Bock (2016) who stressed how extra-local resources can foster new ideas and revitalize endogenous forces, we found that these relationships evolve around recurring combinations of local and extra-local knowledge. In Gran Alpin, production and market, knowledge, skills and infrastructure relationships are intertwined: Figure 3 illustrates how local values are preserved in a cycle of production and marketing, spanning across the local and the extra-local. Local knowledge and infrastructure foster cereal production, this enables innovations in artisanal processing, and preserves the local traditional cultural landscape. The place-based quality of Gran Alpin products develop on the basis of proximity-based production and processing, and it is this place-based quality that is sold to consumers. Links to them and other external actors open the local cooperative for extra-local knowledge, which in turn supports local production.

Figure 3 The values-based cycle of quality creation through combining local and extra-local resources

In contrast to Fonte (2008), we found that not only local knowledge contributes to 'localizing' a product, i.e. producing the 'local' quality, but extra-local knowledge makes an important contribution. The case of Gran Alpin shows that while local knowledge is the basic condition for a place-based product, integrating extra-local knowledge into the system widens and strengthens this basis. Knowledge exchange with external actors (such as research, breeding experts, and market actors) contributes to improving organic mountain cereal cultivation, experimenting with new varieties and techniques and developing new products. It is the combination of local and external knowledge, artisanship and the preservation of the cultural landscape that together constitute the particular quality of Gran Alpin products, which can then be marketed to consumers. And by marketing the products to consumers the local economic, ecological and cultural values are continuously reproduced and innovation encouraged.

CONCLUSION

Our research has shown how relations to institutions and people outside a particular region can enlarge the knowledge base available for further development of a local product or a whole region. By disentangling the various roles of local and extra-local resources, as well as of the relevance of proximity and place, the in-depth analysis of this case has deepened our understanding of the potential for (economic and cultural) value(s) creation in rural areas, and for sustaining these values over time. Gran Alpin follows a strategy of reinforcing local values and resources through recurring interaction and exchange with extra-local resources. Thereby they do not perceive of the extra-local 'other' as an enemy against which to defend local 'own' values, but work with them in a synergistic way. In view of possible generalizations and transfer to other cases, we found that the role of the general manager is pivotal. All actors involved in producing a local product or giving advice need to be open to share experience and values, but the general manager is the person to keep the process running: building trust, integrating different local resources, linking

production, processing, and marketing, as well as networking beyond the boundaries of the local. While this case shows that economics and good marketing opportunities are crucial, they are more than an end in itself. Only when they are concurrently used to reproduce cultural and ecologic values, local alternative food initiatives remain viable in the long term.

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