

Herders in Transformation: Exploring Changing Landscapes in the Eastern Italian Alps

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ABSTRACT

Until the structural change in South Tyrolean agriculture in the 1960s, the high pastures were important as essential fodder resources for the subsistence farming of mountain farmers, so it was primarily the farmers who were responsible for negotiating grazing rights. The task of the herder, on the other hand, was essentially to observe these rights strictly. Historically, herders in South Tyrol have played a socially marginal role, their activities focusing exclusively on the summer high pastures. But the current situation is different. Drawing on the example of one particular mountain pasture and one herder, the landscape can be understood as a "total social fact." This landscape as a whole is able to give us a condensed account of the comprehensive changes over the past fifty years, expressed as the return of scrub, and the new embodied practices of the herder as well as the grazing animals.

KEYWORDS

Herder; landscape; body; total social fact; Eastern Alps; Italy.

Jakob the herder then disappeared among the Alpine roses that spread out over the steep mountainside. After trying for a while to make out his figure on the slope, to find my bearings among the bushes, I gave up. I was out of breath, but he climbed like a fleet-footed chamois among the woody over one metre-high Alpine roses. His body seemed to have grown out of the landscape. I stopped halfway up and watched as the man's body moved up the steep slope and finally disappeared behind the edge of the hilltop. His herd of cows was behind the overgrown mountain slopes on a higher, still open pasture.

The philosopher Despret and the ecologist Meurot (2016) remind us that we are all called upon to pay attention to the health of ecosystems from the inside complementing

Kohn's "ecology of thinking" with an "ecology of obligations," which they trace using the example of young French neo-pastoralists. These herders cultivate an aesthetics of practice that, in the sense of an ethos, learns to engage with the world in different ways. They invent ways to live in a world that is being destroyed, while at the same time resisting this destruction locally and actively. Thus, if we understand landscape as the result of relations between humans and more-than-humans and, as Harriet Fraser describes for the Welsh pastures, as a "symphony of work" (2016, 114), the result of the interplay of various actors, is a fine web of relationships between people, animals, and plants but also rock, moss, lichen, soil, water, and weather that express themselves through a moulded landscape. While in Despret and Meurot's reflection



humans come back to care for animals and land, in Fraser's poem, at the end of her article, the protagonist leaves the Welsh pastureland, creating, as a consequence, a large gap that leads to the rejection, loss, decline, and death of an old pastoral cosmology.

Over millennia humans have influenced the shape and functioning of European landscapes (Emanuelsson 2009), and Meuret and Provenza (2014) stress that landscapes are constantly formed by changing relationships. For the two ecologists, landscapes are complex creative systems continuously shaped by the ever-changing relationships between the environment and organisms, including humans. The two researchers look at the role of pastoralists in ecosystem services. For the authors, the knowledge of the herders is valuable, especially when it comes to the increasing prevalence of certain forage, such as coarse grasses, scrub, and invasive species. They suggest that the current challenges facing landscapes can be overcome through this expertise, and they invite for a close exchange between scientists and herders in order for grassland to be managed effectively (for this argument, see also the research of Berkes, Colding, and Folke 2000).

In a similar fashion to south-eastern France, Molnár (2017) uses the example of herders on the Hungarian steppe to show how comprehensive and complex their knowledge is concerning their herd, as well as the ecological situation of grasslands. There are around 300 herders on the Hortobágy puszta, all of whom come from a long tradition of livestock farming, handing down from one generation to another all the necessary knowledge concerning animal breeding. Even more, these herders are able to identify and name around 162 wild plants, a utilitarian competence as Molnár stresses, as the herders know the plants that are useful for their animals.

As valuable as these suggestions are for the integration of practical and scientific knowledge into grassland management, they do not place this knowledge in a historical, economic and political context that makes it

possible to understand the complexity of the interrelationships between individual actors and the shaping of, and knowledge about, semi-natural pastures. In order to understand the changing tacit knowledge and embodied practices of herders, it is therefore vital to consider the historical and political context in which these practices are expressed as situated knowledge. Though understanding landscapes as a "total social fact," as recently proposed by Bubandt, Andersen, and Cypher (2022, 20), herders become part of a whole in which human and more-than-human actors come together in different ways. In this understanding, also landscapes as a whole are shaped by the relationships conditioned by historical, economic, ecological and political processes. This approach links the history of high-Alpine landscapes, as well as their transformation (Cole and Wolf 1974, Viazzo and Zanini 2014; Krauß 2018; Zanini and Viazzo 2021), to agricultural changes in the valleys (Schneider 2022, 2024) and urban centres in and around the Alps as well as on a European and global level. (Tauber 2024)

In order to gain a comprehensive and historically profound understanding of change on high alpine pastures, I have methodically orientated myself towards a multi-sited ethnography, which is primarily characterised by walking over pastures, talking to those involved, and examining archival material (*Ibid.*). While talks, interviews and following the public debate take place throughout the year, since 2018 I have started to visit high pastures ethnographically, during summer months. The selection of the alp where Jakob works as a herder and the analysis of the historical processes that led to the current practices and expressions in the landscape (Mathews 2018; Hoag 2022, 69) was made possible by the comparison with other alpine pastures in South Tyrol, which in most cases are undergoing very similar processes of change, even if the specific local details may be different.²

In the following, thus, I will take a look at the formation of pastures since the 1960s



in order to direct my ethnographic gaze towards the embodied and situated practices of an individual herder. I will argue that these pastures and herders are both a part and an expression of the historical, political, ecological and economic reality of high alpine grasslands in the Italian Alps, particularly in South Tyrol. For if we understand the *total social fact* in Marcel Mauss's sense as something that manifests itself as being condensed in specific situations in which different relationships intersect, it makes ethnographically sense to refer both to the historical depth of the landscape that manifests itself in high-Alpine pastoral contexts and to consider the contemporary realities of industrial agriculture as well as tourism. This article then deals with the historical absence and return of actors, the changing form of the high pastures, the past, and current importance of grass for agriculture, as well as the question of how and why these high pastures could or should be "kept open." Thus, I propose that, in understanding a landscape as a *total social fact*, all the mentioned aspects can be ethnographically found in a condensed form in the transforming embodied knowledge of a single actor, in this case Jakob the herder.



Absences and returns—open and closed Alpine pastures

Many pastoral landscapes and their herders in South Tyrol are currently characterised by a new tension between presence and absence. This situation is caused by the return, as well as the death and disappearance, of various actors. Unlike semi-natural grasslands in Romania, which are still traditionally managed (see Janišová et al. 2021), the semi-natural grasslands in the Italian Alps are undergoing changes that are leading to a comprehensive transformation of grasslands into shrub, scrub, and forest landscapes. Ecologists have been pointing out the resulting loss of biodiversity

for more than two decades (Motta et al. 2006; Koch et al. 2013), and, at the same time, some climate modelling finds that adaptive grazing management on Alpine pastures can do more to counteract the impact of climate change on their biodiversity than new forests and shrublands (Peringer et al. 2022). Pastoralists are therefore considered by ecologists and climate modellers, as well as by geologists, the real key players in these new scenarios.

However, in a similar way to the case study of Welsh pastureland, the pasture cosmologies in the Alps have changed due to the transformation of important actors. There are fewer herders, fewer grazing animals, and fewer farmers mowing the grass on steep slopes. While there are more tourists, more shrub and bush, and returning predators. The causes and reasons for the new movements, presence, absence and resulting reshaping of relationships on the Alpine high pastures are primarily related to the changes in agriculture (Schneider 2022), (mass) tourism in the valley and EU-habitat regulations. The question of whether herders play a role at all in these new contexts therefore becomes relevant. How are they currently part of these changing systems for which we recognise the relationships between plants, animals and humans? To discuss this, I present the example of a South-Tyrolean mountain pasture where pastures themselves (the grass), grazing animals, predators, a herder, full-time and part-time farmers, tourists and tourism managers, woody plants and eroding soil can be found. When we look at the overlapping and intimate relationships between these actors, we get a sense that herding practices are part of situated contexts, shaped by historical processes, economic changes, political decisions and ecological adaptations, and thus part of the form of the landscape.





Pastures in transformation

How pastures are kept open varies depending on the location and ownership (private,³ public, commons) of the approximately 1,525 active Alpine pastures.⁴ In general, however, it can be said that until 40 to 100 years ago, Alpine pastures were kept open by clearing (ger, *Schwenden*). This entailed the removal from Alpine pastures of natural deciduous and coniferous trees that occupy space and light, of woody plants, such as Alpine roses (*Rhododendron ferrugineum*), juniper (*Juniperus*), and of “Alpine weeds,” such as cypress spurge (*Euphorbium cyparissias*), autumn crocus (*Colchicum autumnale*) or aconite (*Aconitum*).

Ideally, clearing is a regular practice that is carried out every year in spring. It takes into account the basic division of forest and grassland, of open Alpine pasture and grazed meadows, and is traditionally supervised by the head of the alp (ger, *Almmeister*). This requires a thorough knowledge of the Alpine pasture, every detail of its soil and climatic conditions, as well as an understanding of the community of forest and grassland. This is especially true if the mountain pasture is close to the upper treeline. This practice takes into account that the Alpine forest, the individual groups of trees, in some locations also the individual tree, the *Krummholz* (Scots pine, green alder), is both wind and soil protection, protection against avalanches, mudflows and mountain torrents, a water reservoir, soil humidifier, and, finally, a supply of wood.

At certain times, unskilled clearing has led to some plants being particularly affected, with the rusty-leaved Alpine rose (*Rhododendron ferrugineum*) having to be temporarily placed under protection in the 1980s. Currently, only a very few plants are affected, and the Alpine rose has recovered and is spreading widely. What is described as the maintenance of Alpine pastures is currently supported by the public sector and takes place on relatively small areas.⁵ Compared to

the 1960s and 1970s, most existing mountain pastures are now only grazed by two thirds to half of the number of grazing animals. In addition, they now only employ a single herder, and the content of their work has changed significantly, as their assistants, such as herdsman’s children, other herdsman, and, if necessary, farmhands, are no longer available.⁶

Through the different actors and their new relationships with each other, the historical changes in the landscapes can be described. For example, as scrubland, forest are returning, this takes away the light for grassland’s plant communities experiencing a silent death (Tauber 2024). Domestic grazing animals have been reduced in number as they stay the whole year in the cowbarn for milk production. Old breeds of cattle, which are suitable for these pastures due to their weight as well as their resistance to walking on steep terrain, have become fewer as they deliver less milk, and former poor pastures and hay meadows turn into rich grasslands due to the slurry brought up in the mountains. On some pasture landscapes there are many local and tourist hikers present in their millions attracted by the beauty of the landscape, while other areas are unaffected. As red deer and large carnivores, such as the wolf (Tauber 2022) and bear, return, herders and farmers lack embodied knowledge how to face this. What almost all alpine pastures where herding is still practiced have in common is that, in contrast to cows, sheep are let loose on the mountain pastures at the beginning of the summer and are only collected again at the end of the grazing season. Farmers currently refer to this practice as “free grazing,” which leads to wolf attacks and public outrage on the impossibility to co-exist with big predators.



Owned pastures and mowed areas

Here, I take a look at a typical South-Tyrolean Alpine pasture in terms of its ownership. This pasture is historically run communally with

several private owners. Until a few decades ago, each farmer in the Alpine-pasture association had a proportionate right to access the pasture and quantity of grass/hay to be mown, in relation to the number of their cattle, which they had to bring through the winter on their own feed down in the valley. This led to a ban on supplementary feeding with bought-in fodder. In order to get as many animals through the winter as possible, the fodder for the cattle was therefore calculated very tightly, which sometimes led to emaciated and starving animals in the spring. However, farmers were then able to claim larger areas of summer pasture and more grass to mown, which was stored for the next winter. Even though one of the basic ideas behind this was to regulate the pressure on grass and pasture resources, the competition over grazing rights and management of this land often led to cruel consequences for the animals.

It is interesting for us to see how this regulation is expressed in the landscape. Old records of each farm's grazing rights show geometrically arranged patches with the farm's name on them. This goes back to an old land-use system, which is now largely only of symbolic significance, as the situation has been virtually reversed. Now there are no farmers to mow the mountain meadows and no animals to graze the pastures. However, as there is a great deal of interest in "keeping these landscapes open" (as requested by ecologists, climate researchers, tourism experts, and geologists), it is now mainly part-time farmers with their few animals from neighbouring valleys who come to borrow grazing rights. Part-time farmers are those who earn a wage in addition to their agricultural work in order to maintain their small farms. These small farmers currently ensure the continuation of grazing on the mountain pastures and thus contribute to what ecologists call landscape management.

The pastures which I will discuss in more detail here comprise one low-Alpine pasture (at 1,750 metres above sea level) and three high-Alpine pastures (between 2,000 and 2,500 metres above sea level). The area

covers around 850 hectares, of which around 34 percent is pasture and the rest consists of mountain heights. Between 320 and 350 cattle are currently grazed on this land during the summer, which is around 150 cattle less than 50 years ago. Non-dairy cattle and sheep are also sent to the Alpine pastures by full-time farmers, while the dairy cows that graze around the Alpine hut and its modern dairy currently come mainly from the part-time farmers. For the latter, the stay of their animals on the Alpine pastures during summer means a break from the double burden of farming and wage labour. In contrast, the full-time farmers keep their cows in a barn, as they regularly deliver the milk to the farmers' dairy co-operatives (Schneider 2022, 2024).



Bushland, bodies, and pastures

The herder Jakob moves around this Alpine pasture with around eighty to ninety dairy cows, two hundred and twenty non-dairy cattle and between one hundred and three hundred sheep, which he lets loose at the beginning of the summer. The sheep quickly retreat into the high mountains, and Jakob only keeps an eye on them with a monocular. He leads the cattle, following the growth of the grass, from the lower pasture at the beginning of the summer to the three high-mountain pastures in midsummer and back to the lower at the end of the grazing season in August.

When I meet Jakob in the building at the lower pasture at the beginning of summer 2021, he says: "If you want to come with me, all you have to do is follow me. I have to go up to check on the cattle." And this meeting led to the situation that I have described at the beginning of the article. Without further explanation, he led the way, turning round to look at me from time to time and then disappeared among the Alpine roses that spread out over the steep mountainside. I didn't see him again that day. A few days later, when I was talking to the



dairyman down below, he came by briefly and asked where I'd got to.

I had, then, one of my first ethnographic experiences with the new reality of the disappearance of the mountain pastureland, something that has been familiar to me since my childhood. Instead of finding the grassy mountainside where we had played with the shepherd children and the grazing animals, I laboured through waist-high Alpine roses. The woody, richly branched bushes grow very densely and don't allow you a view of the ground. So, with scratched legs and exhausted from the unsteady steps—as I couldn't see where I was stepping—I only reached my destination after three hours, for a route that you can normally do in an hour.

Alpine roses (*Rhododendron ferrugineum*) are an evergreen shrub that blooms at the beginning of summer. It can grow up to 130 cm tall and live up to 100 years and have been a protected species in the Alps for decades. It is a woody plant that takes 167 days to form wood and can therefore grow up to the tree line of 2,800 metres.⁷ For urban dwellers, they still symbolise an intact world in the Alps. For farmers, however, they are an annoying plant that grows over pastureland and is poisonous to ruminants. Until a few decades ago, Alpine roses were cut down to just above the roots to keep the pasture and mowing areas clear, as described above. This work was carried out by all members of the Alpine-pasture association before the cattle were driven up to the pastures. After this clearance, grazing animals could be brought to the Alpine pasture in June without any major obstacles. As a shepherd boy, Jakob had often followed the animals for ten or more hours a day on these cleared pastures. He had a long shepherd's crook, a rucksack with some provisions and, together with the other children, he made sure that the animals stayed together as a herd and observed the limits of the grazing rights that were defined each year. In the evening, he drove the dairy cows back to the mountain hut, helped with milking and, if necessary, assisted the dairyman.

At the point in time when Jakob was

herding on the mountain pasture as a child, the wolf had disappeared from this region. And in the valleys of South Tyrol (see Cole and Wolf 1974 for context), a comprehensive structural change from small-scale subsistence farming to modern, monocultural dairy farming was taking place.⁸ Farming families became smaller. Many members of the large farming family structures began to seek wage labour in the valley or abroad, and people began to import feed for the dairy cows. This additional purchase of hay and concentrated feed—which the historical Alpine-pasture communities had prohibited to regulate the distribution of resources and the allocation of grazing rights—had a direct effect on the change in the high-Alpine pasture landscapes (Tauber 2024).

Unlike many of his friends from childhood, Jakob has stuck with herding. He currently herds in summer and works at the ski lifts in winter. He is highly valued for his reliability, experience and skill by the head herdsman, the farmers, and the managers of the mountain huts who prepare food and drink for tourists.

A few weeks later, in the same summer of 2021 when I had lost him among the Alpine roses, I saw him on the next highest mountain side, leading about 150 cattle from a high pasture down a steep slope to take them to the next. From a distance, you could hear his short, sharp, pointed whistles as he called the escaping calves back. He was assisted by two men who flanked the herd at the sides to prevent the calves from drifting off. The herd of high-spirited young calves and agitated older cows formed an amorphous mass that only frayed slightly at the edges. From a distance, it looked like a part of the mountain was on the move. Jakob led them along extensive areas of Alpine roses and juniper bushes (*Juniperus*), another woody plant that is coming back. He led them down over stony and slippery terrain, which is no longer grazed and is therefore increasingly at risk of erosion. He kept an eye on the young animals to make sure they didn't get tangled up in the Alpine roses and junipers and watched



the heavy cows anxiously to see if they could keep their balance. So that the herd could descend this steep slope in an orderly fashion, he used his whistles and long shepherd's crook to control the animals' pace.

The heavy animals challenged him, because in addition to the changes in the landscape, the soil, and the vegetation, the breeds of grazing animals have also changed. Tyrolean grey cattle, for example, which are physically adapted to the mountains, have become less attractive for monoculture dairy farming because they are not as efficient as Fleckvieh breeds, which were bred for milk production. Fleckvieh breeds are often brought to the mountain pastures as non-dairy cattle, but their weight⁹ and limited manoeuvrability make them a challenge for the safety of the animals themselves, for the ground, which is burdened with their weight, and for the herdsman, who have to lead the animals over terrain that is far too steep for them. When Jakob leads his animals down this terrain, he can no longer rely on their sure-footedness and agility. But Jakob's own body and herding techniques have adapted to the new terrain, which consists of patches of pasture and bushes, as well as larger areas of erosion.



We no longer have to turn over every blade of grass: Agricultural change in the valley

When I asked Jakob what has changed for him in the decades since he started working as a herder, his first response was: "Not much! My work is always the same." But then, after pondering for a while, he said:

Of course, there used to be several of us, but there was no other way, because the grazing rights were strictly observed and we herders had to stop the animals from entering the farmers' allotted mowing areas. We often had to run quickly to stop them. And if animals escaped, we were scolded and sometimes

even beaten. Today it's not so strict, there are only a few people mowing, and there's enough land for grazing. But if you look up there, the mountain is sliding, I don't like going over it with the animals, but it's the only place where I can lead the large herd. And yes, there are already a lot of Alpine roses. I have to be careful that they don't eat them.¹⁰

Jakob's grazing technique as such has not changed, just as 40 years ago he pays attention to the growth of the grass (the higher up he goes with the animals, the slower the grass grows, which is why the animals only come to the last part of the high pastures in midsummer). He makes sure that there is enough grass for grazing and moves on as soon as the area has been grazed. He assesses the quality of the grass based on its location and growth. We still know very little about the herders' knowledge of grass varieties in the Alps. An in-depth study on this, such as the ones carried out by Molnár (2017) and Babai and Molnár (2016), is not available for the Italian Alps.

Although the rights of usage are agreed annually with the farmers, the pressure on forage resources has shifted. In a joint discussion, the head of the Alpine pasture (*Almmeister*) complains, among other things, about the effort involved in negotiating with the many part-time farmers. And Jakob feels this in his work. Herding can be managed alone, even if an animal escapes. The fight "for every blade of grass," as several of the people I spoke to repeatedly emphasised when reminiscing about the past, no longer takes place. And although Jakob's techniques have not changed significantly, the landscape has. Adapting to the new conditions on the mountain pasture, he now pays particular attention to areas of erosion, which he tries to avoid, to bushy areas (Alpine roses and junipers), which he also avoids if possible, and he keeps an eye on the not easily manoeuvrable Fleckvieh, in particular when he has to lead the herd on.

In the chapter "The Ecology of Mountain Agriculture," Cole and Wolf (1974, 121ff) describe how the fortunes of farmers in the

1960s depended on their ability to assess the land, resources, tools, and so on, correctly and utilise them most efficiently to get the family and cattle through the winter. They had to deal with complex considerations of the location of the land, the climate, sunny and shady areas, the ecology, the terrain, and the yield of the soil. During this period, there was a tendency to extend cultivation to ever higher altitudes (*Ibid.*, 126). Without the hay from the mountain pastures, farmers would have been forced to expand the meadows in the villages, which would have brought into play a number of other factors, such as existing claims to the land from other communities. However, at the time Cole and Wolf did their research, it was essential for farmers to consider the calculation of the amount of labour required in relation to the expected yield: The higher the expected yield, the more labour could be invested. Areas that were difficult to cultivate due to their steep slopes or unfavourable locations were, therefore, often left to grazing animals (*Ibid.*, 125).

In the decades since Cole and Wolf's description, the amount of farmland in South Tyrol has not increased. However, the shift from subsistence farming to industrial dairy farming that began at that point has influenced the farmers' view of resources. They buy feed grain and currently specialise in cost calculations: how the price of feed grain changes, how much can be covered by the sale of milk (Schneider 2024). And in recent decades they have begun to fertilise the soil intensively and invest in mechanical aids.

Their new consideration of the calculation of costs does not appear in the advertising of dairy cooperatives, whose organisation enables farmers to have secure customers for their raw milk. Dairy cooperatives advertise their products by stressing that "genetically modified organisms [may] be used neither in the feeding of the animals nor in the processing of the milk." It is also stated that "the daily work of mountain farmers also strongly shapes the landscape of South Tyrol, especially the meadows and Alpine pastures,

because the quality of the milk originates in the meadows."¹¹

Along with this advertising policy, it is also stressed that public support for small farmers is essential because they are responsible for maintaining the cultural landscape (Ger: Kulturlandschaft).



Practices for keeping mountain pastures open

After this consideration of the historical changes in the valley, we return to the lower pasture, where Jakob grazes his herd of non-dairy cattle at the beginning and end of the summer. For some years now, very green rich pastures, which are atypical at this altitude, have been spreading around the Alpine hut and the modern dairy building in a geometric pattern. Their area grows every year. These rich meadows on the high-Alpine pastures are created by the spreading of liquid manure from the valley, where intensive dairy farming has recently led to an increasing surplus of this substance that the farmers have to dispose of. Jakob is only indirectly affected by this situation, as these green areas are not available for grazing. This rich grass is mown and fed into the troughs of those animals which remain in the valley. On the one hand, agricultural change in the valley has reduced pressure on the pastures and mountain meadows as sources of grass and hay; on the other hand, intensive farming is putting new pressure on the pastures, mainly due to the disposal of nitrate-containing slurry. High-alpine pasture grasses, herbs and clover are suffocating as a result.

Jakob looks at the green areas with indecision. The woody plants give him more trouble and the landslide-prone ground worries him, as does the fact that most of the time he is solely responsible for the animals. His body has adapted to this changed land, but if he has to fear for the safety of the animals, then somehow this also has to do with the green patches that are spreading around the



mountain hut. This is because Jakob knows first-hand that these large Fleckvieh breeds feed differently and produce different amounts of manure.

Jakob is not one of those herders who want to do things differently. Unlike his French counterparts described in Despret and Meurot (2016), and unlike some pioneers in South Tyrol (Tauber 2024), he has neither a university degree, nor is he an artist who is concerned about saving the high pastures through new practices of care. But a herder's ethos can be discerned in his concern for his animals, which have to find their way in this changed landscape, and he undoubtedly prioritises the welfare of the animals which have been entrusted to his care. For him, the green patches that alarm ecologists are a sign of how the animals in the valley have changed. The loss of biodiversity does not bother him so much, but the fact that his animals have become immobile and heavy certainly does.

Like other valleys in South Tyrol, the one of this Alpine-pasture association has undergone a comprehensive agricultural and touristic transformation. Within fifty years, a poor mountain valley has become prosperous with several exclusive luxury hotels and a tourism industry that is active in both summer and winter.¹² The grasslands of the Alpine-pasture association are used extensively for tourism in summer: for short hikes, long tours, trail running, and mountain biking. Thousands of people are out and about. In winter, the hiking route ends at the Alpine hut, as the areas towards the high-Alpine pastures are prone to avalanches. When I ask the head of the Alpine pasture (*Almmeister*) how he sees its future, he is pragmatic. Grazing is not worthwhile, the organisational effort is enormous and “if it were only about the few animals, we would have given up long ago.” However, the increasing encroachment of bushes and the risk of erosion on the mountain pasture are detrimental to tourism. The head of the Alpine pasture himself is a full-time farmer (Ger: *Haupterwerbsbauer*). Only a handful of animals come from his barn to the mountain

pasture. However, the urgency of keeping the pastures open motivates him year after year to commission the herdsman, the dairyman, and the many small farmers from the neighbouring valleys to coordinate and organise the driving of the animals up to the pastures.

If it were based on a purely rural logic of the efficient use of resources, as described by Cole and Wolf (1974), the mountain pasture would no longer be of interest to farmers. However, many farmers—both full-time and part-time—depend on tourism, as the quantity of milk supplied to the co-operatives primarily feeds the national Italian milk market and the tourist demand for dairy products. And high-Alpine landscapes are one of the most important tourist attractions shown on every advertising brochure. Nobody can buy this land, historical grazing rights are retained on most Alpine pastures, and the Alpine huts associated with the farms may not be sold either. It is, therefore, not land that has been bought or sold, but land that has become a commodity for the tourism industry. So, Jakob and his animals find themselves on pastures that is not valued because of its gifts to the animals, but because tourists want to hike there. And for the land to remain open as a hiking area, it needs the grazing animals.



Concluding remarks

In his consideration of an alternative common future for the Alps, Werner Krauß states that herding is a multi-species activity:

cows, sheep and cattle can here be regarded as actors, in the herding assemblage, with a different perspective of the world; herders necessarily have to become multi-species and multi-lingual specialists to keep them alive in these dangerously composed assemblies of meteorological, geological, and other non-human actors. (2018, 9)



Cows without herder. Photo credit: Elisabeth Tauber.

From Jakob's perspective, however, we must incorporate further elements such as industrialised agriculture and tourism, which we recognise from the social change in the high-Alpine multi-species world of which he is a part. It is also Werner Krauss (2018) who reminds us that eco-governance as a form of regulating the relationship between humans and their environment is still largely based on the modernist separation of nature and culture, leading to the compartmentalisation of landscapes: some serve as recreational parks for mass tourism, others are set aside for nature conservation or degenerate into precarious landscapes on the brink of desolation (Krauss 2013).

Thus, Jakob plays an important role for part-time farmers and tourism professionals, primarily because he leads the non-dairy cattle across overgrown pastures of the high-Alpine association which are used intensively by tourism.

However, during Jakob's lifetime, i.e., over the past fifty years, herders have only been used for cattle, while small livestock such as sheep and goats have been allowed to graze freely on most of the high mountain pastures. And this was only possible because large predators had been wiped out in this part of

the Alps, and the herding of animals that were economically unimportant for farmers was not a priority. If some sheep and goats were missing during the autumn round-up (some speak of 20 percent losses), this was seen as part of the risk. Yet, since sheep have started to be attacked by wolves in South Tyrol, there has been an insistence that the "traditional free-grazing culture" as claimed by the farmers' lobby is not compatible with the presence of wolves, and farmers are actively campaigning for wolves to be shot.

Although Jakob is able to lead the animals skilfully over steep terrain and judge very well when the pasture needs to be changed, the animals only remain relatively stable on certain ground, and are led to the next pastures via the safest possible routes. For Jakob, the challenge of his current herding work lies above all in the new heavy bodies of the high-performance cattle and the change in the landscape from a formerly extensive "cleared" pasture to increasing areas of scrub. As a herder, Jakob's body has absorbed this increasingly scrubby terrain, and he now knows how to assess the slippery, ungrazed ground. His physical and sensory body has adapted to the changing landscape, and with him all the other actors. This means that the



tacit knowledge and embodied practice of Jakob, the herder, has been reshaped over the decades of his work. And we can understand his transformed practices as a condensed expression of historical, economic, ecological and political realities, which are reflected in his high-performance grazing animals, scrub encroachment, erosion, as well as in the bright green patches and thousands of tourists on the mountain pasture.

Thus, in recent years, he has had to learn how to lead the heavy animals over changing grassland without risking the movement and weight of the animals triggering landslides, and his animals being swept down the steep slopes. In the ethnographic micro-context, it is important to take a close look at this practice. Understanding the landscape as a *total social fact*, as proposed by Andersen, Bubandt, and

Cypher (2022, 20), however, we see here in Jakob's transformed practices, the change from subsistence farming to industrialised (mountain) agriculture in the valley and the appropriation of high pastures, at least in this case for tourist interests. The practice of leading heavy cattle over erosion-prone steep slopes, for example, is but part of a whole that is linked to historical grazing rights, contemporary industrialised agriculture in the valley, the decline of pasture grass as a resource and the importance of open high pastures for flourishing tourism. In other words, the changing pastoral practices are a contemporary expression of the landscape as a whole. A multi-species specialist, Jakob is still part of this landscape, just as the landscape is part of Jakob, albeit in a changed form.



NOTES

1. I would like to thank Anamaria Iuga and the anonymous reviewers for the helpful feedback that contributed to the improvement of this article. Many people were involved in this research. However, they are anonymised throughout this article. This is because the decline in mountain pasture farming and the overgrowth of pastures has become a political topic and is for many political actors exclusively associated with the return of the wolf. This subject is highly charged and full of emotional tension in the public debate. Despite this, my conversational partners granted me access to their homes, barns, and pastures, opened their mountain pasture archives, shared old documents, and activated their informal networks for me. I am deeply grateful for the generous hospitality of private mountain huts owners and for the availability of former and current actors in these landscapes to dedicate their time and share their knowledge with me.

2. Because of the ethnographic and critical nature of the study, the place and the people have been anonymised. And, as I have to include some technical and historical data for my argument, the sources remain anonymous.

3. 72 percent of high pastures in South Tyrol are in private hands: <https://www.provinz.bz.it/land-forstwirtschaft/wald-holz-almen/almen-suedtirol.asp>; see also (Wopfner 1995 [1960]).

4. *Ibid.* The size of high-Alpine pastures varies greatly. They range from small pastures of about 100 hectares to bigger one of 1.800 or more.

5. A resolution of the province of South Tyrol from 2015 regulates improvements to Alpine pastures and defines three different categories: infrastructure, soil melioration, and greening.

6. I am not dealing here with more recent situations in which herders lead the flocks with the help of herding and livestock guarding dogs.

7. As temperatures rise due to climate change, the current timber and tree line in the Alps is moving upwards.

8. And in the favourable location of the valleys, apple-orchard and vine monocultures.

9. Tyrolean grey cattle weigh up to 350 kg, Fleckvieh breeds for milk production reach a weight of up to 700 kg and more.

10. Koch et al (2013) associate the encroachment of scrub with fewer animals in particular, but above all with fewer Alpine-pasture workers.

11. See <https://www.raiffeisenverband.it/de/genossenschaften/landwirtschaft/milch-vieh-wirtschaft> [accessed: January 27, 2024].

12. Lucie Varga has described this phenomenon for another valley in South Tyrol (2023 [1936]).

