common practices

on the use of public pastures in highland Kyrgyzstan

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abstracts

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The Kyrgyz mountainscape holds a fascinating example of communal agrarian land tenure: 49% of the country's area are officially designated pasture lands and have remained unalienable property of the state ever since the dissolution of the USSR. At the same time, transhumant animal husbandry continues to be an important livelihood strategy across the post-socialist republic. In 2009 the Kyrgyz government passed a reform that granted the right to manage the grassland to local municipalities: common self-organization was officially decreed by law. Since then, the reform has been ideationally applauded but has also been critiqued as neoliberal transfer of public responsibilities to communities underequipped for the managerial task. However, there has been little empirical investigation on how the legal empowerment of municipalities to regulate their own resources is implemented. How does the coordination of collectively held pastures work in practice? How does the reform transform negotiation conditions and use patterns on the ground? Delving into this gap and based on 2,5 months ethnographic fieldwork conducted in the village of Tamga and on several prior visits, I present a case study on the everyday forms of labor that go into the management of one municipality's public pasture commons in the Kyrgyz Tian Shan. I put forth four bundles of practices that are constitutive for the collective use of Tamga's alps: the decentralized observation of grass, both formal and informal ways of representing and knowing the land, the distribution of resources other than the pasturage itself but deeply entangled with it, and the reproduction of relationships of mutual obligation within the village. On a more abstract level, I argue that from the specificity of Tamga insights can be drawn for a better understanding of viable commons situations in general – namely that commons are made through concrete practices, the recurrent patterns of which can be studied empirically.

pratiques communes

sur l'utilisation des pâturages publics en Kirghizistan montagnard

Le paysage montagneux du Kirghizistan représente un exemple fascinant des relations de propriété commune de terres agricoles: 49% du territoire national est officiellement désigné comme pâturage et est restés dans la propriété inaliénable de l'État depuis la dissolution de l'URSS. En même temps, l'élevage transhumant continue d'être un élément central des moyens de subsistance dans cette république postsocialiste. En 2009, le gouvernement du Kirghizistan a adopté une réforme qui donne aux municipalités le droit de gérer elles-mêmes leurs herbages: l'auto-organisation communautaire est devenue officiellement prescrite par la loi. Depuis lors, la réforme a été idéalement saluée, mais elle a aussi été critiquée en tant que déplacement néolibéral de la responsabilité publique aux municipalités insuffisamment équipées pour cette tâche. Cependant, il y a eu peu de recherches empiriques sur le processus selon lequel l'autorisation légale des collectifs d'utilisateurs des ressources a été mise en œuvre. Comment fonctionne, en pratique, la coordination des pâturages collectifs? Comment la réforme transforme-t-elle les conditions de négociation et les modes d'utilisation dans les faits? En essayant de contribuer à combler cette lacune, je présente une étude de cas sur les formes de travail quotidiennes intrinsèques à la gestion des communs des pâturages publics d'une municipalité kirghize. L'étude est basée sur 2,5 mois de recherche ethnographique et plusieurs visites antérieures à Tamga, un village dans le Tian Shan kirghiz. Je propose quatre faisceaux de pratiques constitutifs de l'usage collectif des alpes de Tamga: l'observation décentralisée de l'herbe, des manières formelles et informelles de représenter et de connaître le territoire, la distribution des ressources autres que le pâturage mais profondément entrelacées avec l'utilisation productive de l'herbe, et finalement la reproduction des relations d'obligation mutuelle au sein du village. À un niveau plus abstrait, je soutiens que la spécificité de Tamga permet une meilleure compréhension des situations viables autour de biens communs en général – à savoir que les biens communs sont établis par des pratiques concrètes dont les patterns récurrents peuvent être étudiés empiriquement.

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Chong rakhmat, for everything I was given the chance to experience and learn.

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In the face of this global pandemic it has suddenly become unclear, when seeing all those dear to me in Tamga will be possible again. It is every day that I hope for their wellbeing and for a reunion that will not be too far away in time.

note on transliteration

Kyrgyz is written in Cyrillic letters, including three characters in addition to the Russian alphabet: Ө (Ö), Ү (Ü), and Ң (Ng). In the following text I mostly rely on one of the standard English-based romanizations for the Cyrillic writing system (translitteration.com/transliteration/en/russian/ala-lc/), but I chose to use also the letters Ö and Ü. English does not contain equivalents for these two vowels and transliterations often put O and U interchangeably for О and Ө, or for У and Ү respectively, even though this distinction matters for the meaning of words in the Kyrgyz language. Additionally, I diverge from the above-mentioned system regarding the letters Ж, Я, Ю, Ё because the transliterations I use here are in common use in Kyrgyzstan. I thus transliterate Kyrgyz and Russian words, as well as all personal and place names, according to the slightly altered table below.

А а	A a	Л л	L l	Ф ф	F f
Б б	B b	М м	M m	Х х	Kh kh
В в	V v	Н н	N n	Ц ц	Ts ts
Г г	G g	Ң ң	Ng ng	Ч ч	Ch ch
Д д	D d	О о	O o	Ш ш	Sh sh
Е е	E e	Ө ө	Ö ö	Щ щ	Shch shch
Ё ё	Jo jo	П п	P p	Ы ы	Y y
Ж ж	Dj dj	Р р	R r	Э э	E e
З з	Z z	С с	S s	Ю ю	Ju ju
И и	I i	Т т	T t	Я я	Ja ja
Й й	J j	У у	U u	ъ	“ (hard sign)
К к	K k	Ү ү	Ü ü	ь	‘ (soft sign)

maps

Kyrgyzstan and Yssyk Köl Oblast (reproduction from google.com/maps, 2020/04/06)

map section marked above: Djeti Ögüz district, south of Lake Yssyk Köl
'djajloo' *and* 'syrt' *indicate the location Tamga's two alpine pasture areas – the former lies on altitudes between 2,500-3,200m ASL, the latter on altitudes between 3,400-4,000m ASL (ibid.)*

1 the introduction: on pastures

> This book is about a subject vital to everyone who eats: the rights to the land on which food is grown.
>
> (Verdery 2018 [2003]: xiii)

This thesis is about a certain type of land on which food is grown, or rather on which food is reared: this thesis is on pastures and on grazing cows, horses, sheep, and goats. It is an exploration of the rights to stretches of the vast alpine grassland in the Tian Shan mountain range, and of the ways in which the inhabitants of Tamga – a village in the northeast of Kyrgyzstan – collectively coordinate their actions and with their animals' movements in order to use it and to live from it.

Why pastures? Only about one third of the world's total land surface is suitable for farming, while the bigger part of it is barrens and forests. Of these agrarian areas in turn, only one third is tillable; the remaining two thirds are grasslands (Haiger 2005: 47). In the Kyrgyz republic the trend of these ratios is even more pronounced: 94% of the country's surface are considered mountainous and lie above 1,000m above sea level, merely 7% are arable, whereas 49% are pasturelands (Farrington 2005: 171, Kuehnast & Dudwick 2004: 33, Mestre 2017: 1). Some of these pastures are located at the bottoms of valleys, well-protected from wind and precipitation and livable throughout the seasons. Some expand on alpine plateaus, only accessible via mountain passes higher than 4,000m in altitude, blocked by snow and ice for the larger part of the year. Some are formed by gently rolling slopes of rising mountain ridges, interspersed with patches of forests. Some are lush and watered by many mountain streams, some are more hardy and dry. On the grass plants and herbs that grow on these pastures human organisms cannot subsist, but ruminants – some of which share a history of domestication with humans that reaches back several millennia (Haiger 2005: 20; Scott 2017: 4, Vitebsky 2006: 25ff.) – can. When ruminant mammals move across and feed from grasslands, plants are turned into milk and the meat, hair, and bones of their bodies. The alpine pastures on the territory that now forms the Kyrgyz republic hold a long history of people aligning with and guiding the grazing movements of herds and flocks of animals; this landscape holds a history of mobile pastoralism that goes back centuries and that continues to be a central part of this region's present (Dienes 347ff., Farrington 2005: 171ff., Japarov 2017: 66). On the expansive mountain pastures – higher or lower, wet or dry – herders and herds unabatedly kept and keep moving and

metabolizing grass. Not only following the seasons but also continuously adjusting and changing along the political tides.

photograph 1.1: *rearing cattle on one of Tamga's summer pastures (*djajloo*), August 2015*[1]

Until the advent of Russian imperial presence in the Kyrgyz Tian Shan in the second half of the 19th century, the mountain range's pastures had been used and lived on nomadically with animals and people periodically moving camps according to the availability of grass along the changing seasons (Farrington 2005: 172, Jacquesson 2010: 105). In the course of the following century's political shifts in Central Asia, mobile pastoralism in Kyrgyzstan was profoundly restructured as it became combined with the predominantly sedentary life that both the imperial and later the socialist Russian regimes propagated and eventually enforced: permanent villages were founded and seasonal migration with the livestock became the occupation of commissioned herders, not of society as a whole as it used to be (Boyanin 2011). For six decades, from the 1930s to 1991, the rearing of animals in Kyrgyzstan was integrated into the collectivized command economy of the USSR – producing meat, milk, and wool for the Union (Farrington 2005: 173). And today, nearly thirty years

[1] All photographs were taken by the author.

after Kyrgyzstan's declaration of independence and the privatization of former state farms' herds and fields, more than 60% of the Kyrgyz population live in rural areas (Sagynbekova & Schmidt 2008: 112) where mobile animal husbandry remains one of the main livelihood strategies (Japarov 2017, Liechti 2012: 306f.).

The following text presents an ethnographic case study concerned with the collective use and management of the livelihood-sustaining highland pastures of a particular village in contemporary Kyrgyzstan. In Tamga, too, nearly all households own some sheep and goats – fewer also raise cows and horses – that feed from the regional alpine grasslands. Who owns these pastures? Who oversees their utilization as valuable source of fodder, and thus of more and better nourished animals? Who makes sure the grass vegetation is not overused and retains its capacity to regrow every year? In the case of Kyrgyzstan the abstract answer to the first of these questions is, that the country's vast pastures are all owned by the Kyrgyz nation state (Mestre 2017: 1). What had been the productive pasturelands of the former socialist state farms and collective farms, were passed on to the independent republic in 1991 and became the unalienable and public territory of the federal state's districts and municipalities. The answer to the other two questions – on the coordination of pasture use in practice – is less straight-forward but it will lead me towards the central research question that guides this text. The dismantled socialist farming sector left a vacuum of agrarian administration, including the coordination of highland pasture use (Japarov 2017: 53ff.). Since then Kyrgyzstan has taken an interesting political course concerning the management of its state pastures: after the turbulent (and for much of the Kyrgyz population disastrous) years of transition and a decade of ecologically and socially inadequate attempts to regulate the use of public pastures through private leases, in 2009 a new law on pastures was passed (Crewett 2012: 270ff.). The right, but also the responsibility, to sustainably utilize the grasslands for animal husbandry and to care for them was ceded directly to the country's municipalities (Robinson et al.2012: 247ff., Yu & Kasymov 2020: 3f.). Collectives of villagers across the republic were charged with the task to each devise their own grazing plan and ensure equal access to the land that still belonged to the state in the abstract but had been registered for their respective municipality. Tamga's former state farm once oversaw 33,316ha of grassland. For ten years now, this acreage has been the de facto common property of the village's inhabitants. The objective of this thesis is to explore how the

collective coordination of this pasture commons, decreed by law on a national scale, is implemented in practice. How does the communal utilization of public pastures work out in the particular case of Tamga? What actors and actions are involved? How do the livestock owners and herders of Tamga coordinate their use of the municipality's grassland among themselves? How do they collectively manage the distribution of the valuable grass and herbs and its capacity to continuously regrow – on undivided collective pastures? Drawing on 2,5 months of fieldwork and several prior visits to Tamga in the past years, I argue that the workings of the village's pasture commons can viably be grasped as a set of labor practices that go into collective self-organization. The description of four sets of commons practices form the ethnographic body of this text: 1) the dispersed monitoring of pastures, 2) the intersecting of formal and informal ways of representing the common grassland, 3) the coordination of pasturage with the availability of other resources necessary for animal husbandry, and 4) the work that goes into the reproduction of social relationships of trust and mutual obligation within the collective of pasture users.

The emerging contribution of this thesis is two-fold. On the one hand I offer an ethnographic description of contemporary mobile animal husbandry in Tamga – of how the 2009 legislation on pastures in Kyrgyzstan unfolds empirically on the ground, in concrete people's lives. Furthermore, I believe that while each village across the Kyrgyz republic has its specific history, composition and expanse of pasturage, etc. this case study may still bear partially transferable insights to other municipalities in the Kyrgyz Tian Shan. On the other hand, on a conceptual level, it also speaks to wider commons theory: along the unfolding ethnography I make the case for a practice-based approach to and conceptualization of commons situations more generally. The aim of the following chapters is to evoke both a grasp of the relevance and richness of pastures and mobile pastoral livelihoods in Kyrgyzstan today, and of the potential viability of collective self-organization regarding the custody over common agrarian resources – of nearly half of the land of a whole country.
Without further ado, let us start the ascent to the alps of Tamga.

2 the fabric: setting the scene

2.1 layers of agroecology

There are many ways to describe a village. There are many images, figures, and stories along which I could enter into a description of Tamga: About 3,000 people live here, mostly Kyrgyz, but also some Russians. Two tarmacked roads run through its center at a right angle. The bumpy tracks branching off from the tarmac exude clouds of dust when cars or horses pass over them. Some of the houses are wooden and painted in the tones of white and turquoise that the Russian and thus the wider post-Soviet countryside is unimaginable without. By now the majority of houses are built from concrete. All are surrounded by front and back gardens. Tamga is located by the southern shore of the expansive Lake Yssyk Köl at the foot of a towering mountain range of the Tian Shan in the northeast of Kyrgyzstan, approximately 1,700 meters above sea level, in a district called Djeti Ögüz. At Tamga's outskirts there used to be an airport that linked the village to Kyrgyzstan's biggest cities, Bishkek and Osh, and further to Moscow. With Kyrgyzstan's independence in 1991 it ceased providing service. Mostly strewn along the two main roads there are shops and some guesthouses, there is a school, a kindergarten, a still operating sanatorium, the oldest buildings of which were erected in the 1940s, and a townhall next to the former state farm's club house. Apple trees and poplars. The gurgling sound of water in the irrigation channels. Some stray dogs. Some windows with white net curtains and bunches of common cosmoses swaying in the breeze behind garden fences.

The list of details I could draw on to animate Tamga for those readers who have never been there makes it a pleasant task for me to write a hopefully evocative description, yet, it is an endless one.

The introductory point of view I keep coming back to as better suited for the purpose of this text – to explore collective agrarian practices and livelihoods in Tamga – is one that situates the village in its wider surrounding landscape, spanning hundreds of meters of altitude difference, down from the lake shore up to the glaciered mountain slopes and snow-covered peaks. Standing on the lake's beach facing south and up the rising mountain sides, Tamga can be seen as nested among fuzzy, altitudinal layers of diversely used land.

Beyond the pebbly beach, and beyond the road running around the Yssyk Köl, stretch the village's irrigated and tilled fields and fruit orchards. These are small, privately used plots that were

distributed to all villagers upon the dissolution of Tamga's state farm: In 1993 every person living in Tamga at the time received 0.3 hectares for a 99-year lease from the state. Families subsequently pooled the plots to make for fields between one and two hectares in size. Most fields are used to grow forage crops – barley and wheat, as well as clover, lucerne, and esparcet which also keep replenishing the stony soil with nitrogen. The orchards enclose apple and apricot trees. Other fields are planted with potatoes for self-consumption, and some turn into grazing grounds in winter, when the sheep, goats, horses, and cows are no longer kept on the alpine pastures. Beyond this strip of cultivated crops lies the cluster of wooden and concrete houses that makes up the village itself, and above that, another couple of irrigated, and thus green, orchards are arrayed across the already rising slopes of the yellowish mountain foothills. Apples trees and poplars. Above the last orchards everything that stretches out, up to the high horizon, is not privately-owned tranches of land but is held as unalienable state property: Pastures (*djajyt*) and woods (*tokoj*).

photograph 2.1.1: *view from a back garden up the altitudinal layers, Tamga, May 2019*

The foothills appear yellow because precipitation here is low and the glacial snow-melt streams that traverse the land only water their own canyons and leave the other soil dry and overgrown with hardy shrubs and herbs. Tucked away in the many folds of these hills, among the last and

highest orchards, one finds more winter pastures, stables, hay barns, and some herders' seasonally occupied houses. A little higher up, the foothills' yellow gives way to a dark green strip of forest, where fuel wood is cut under the supervision of Tamga's forester and where the animals graze in spring and autumn. Birches and spruces. It is only above the treeline that the *djajloo* begins: the well-watered summer pastures, the alp. This is where animals feed and fatten from June to September while down below the other pastures replenish, and hay is grown and cut for necessary winter fodder. The village's commissioned transhumant herders camp on the *djajloo* for the same three months of the year each summer. Formerly, camps were composed of yurts, nowadays mostly of tents made from wooden frames and two layers of tarpaulin. In 2019 the *djajloo* is the summer pasture for horses and cows – sheep, goats and the yaks are herded at even higher altitudes. Going further up, the *djajloo*'s green rolling hills eventually give way to rocky terrain and the first glacier-dotted mountain ridge of the Tian Shan south of Lake Yssyk Köl. Beyond these peaks and some passes, and out of sight from the shore, expands the plateau of the *syrt* – a high, dry, and flat area of pasture grounds that stretches all the way towards the Chinese border, at altitudes between 3,400 and 4,000 meters above sea level. This is where Tamga's small livestock and yaks are summered in order not to compete with horses and cattle on the more limited strip of grassland that the *djajloo* offers. The *syrt* is vast. It is shared as summer pasture not only by herders from Tamga, but with the herders and herds from all the other twelve municipalities that compose Djeti Ögüz. Each municipality had its *syrt* pastures allocated in the mid-1950s. Tamga's portion is and has remained the largest in the whole district, Tamga's former tax official explained to me, because the village's *djajloo* is small, because it's *sovkhoz* (state farm) was big and the sanatorium needed additional provisions of meat and dairy products. The *syrt* is harder to reach, though, than the *djajloo*. Two passes have to be crossed and the migration with the animals takes up to three days – despite a well-kept road that leads up to these pastures from the neighboring village Barskoon. The road is well-kept because it leads not only to pasture grounds but also to an open-pit gold mine: Kumtor, opened in 1997, and run by the Canadian-based mining company Centerra (kumtor.kg). The mining company even sends water sprinkling vehicles up and down the road's serpentines to reduce its abrasion.

Higher than the *syrt*'s grass, and its mining pit, the only layer of landscape left to be evoked on these pages are snowy mountain peaks and water-shedding glaciers.

These interrelated layers compile Tamga's contemporary agro-pastoral landscape. This is a landscape that accommodates and is crafted by a composite of agrarian, but also non-agrarian activities that typically make up families' livelihoods. The latter namely are well-paid but demanding wage jobs in the mining industry, some low paying jobs as teachers and civil servants, and seasonal earnings from providing services for summer tourists – in the sanatorium, in the guest houses, in restaurants, or in vending stalls by the beach. The former are a mix of cultivating vegetables and potatoes, of growing fruit in orchards, and of keeping some small and large livestock which entails producing sufficient winter forage and ensuring one's animals' access to grazing grounds in spring, summer, and autumn. Nearly every household[2] in Tamga owns at least some sheep, about half of all households also keeps cows and horses. The yak herd belongs to the village as a whole. Apart from the animals destined for slaughter or milking during the summer, all livestock is taken on seasonal migration routes onto the layers of mountain pastures I just delineated above. The approximately 15,000 sheep and goats, 1,500 cows, 900 horses, and 300 yaks are looked after and driven to various pastures by seven to ten appointed herding households each year. This is a textbook example of what is called transhumant mobile pastoralism in the technical language of animal husbandry: village life is predominantly sedentary, but the animals and a small fraction of the villagers move with the seasons to make better use of changing grass availability. The animals are pooled not just between June and September but already in April, when spring pastures become sufficiently nutritious. The herders receive fixed fees for each head of livestock they care for – 50 KGS[3] per small livestock per month, and 250 KGS per large livestock per month. As herding seasons usually comprise six months, having one's sheep herded amounts to 300 KGS, having one's cow or horse herded to 1,500 KGS per year. A herding household that takes on 200 cows or 800 sheep and goats makes a seasonal earning of 3-4,000 USD (minus expenses and pasture fees, which I will address in chapter four). During the times of the state farm, of Tamga's *sovkhoz*, all agrarian labor that was not spent on people's limited private backyard plots was remunerated in cash wages or

[2] A household is usually made up by a nuclear family, or a nuclear family and the husband's parents as the youngest son of a couple traditionally stays in his parental home with his wife and children. Households of brothers are connected closely through frequent visits, but also pooling herds and land plots and sharing agrarian labor. When I subsequently speak of families in Tamga, I mean sets of thus related households.

[3] In 2019 50 KGS exchanged for about 0.7 USD.

in kind. In 2019, herding is one of the few agrarian wage jobs left.[4] Families all over Kyrgyzstan have become private smallholders since the end of the USSR and its institutions and mostly get by on a combination of subsistence farming, small-scaled market production, and remittances from labor migration, predominantly to the capital Bishkek, to Russia, and to Turkey (Howell 1996: 60, Isabaeva 2011, Kerven et al. 2012: 372, Reeves 2014: 101ff., Reeves 2012, Sagynbekova & Schmidt 2008: 120ff.).

photograph 2.1.2.: *a herding camp on the* djajloo *with a view down onto Lake Yssyk Kul, August 2017*

The yields from the vegetable gardens and from most domestic animals are destined for self-consumption, but most apples and apricots from the orchards and some head of yearly replenishing livestock are sold off and become a source of seasonal cash income: Fruit is sold to driving-through middlemen, animals at the bazaar in Karakol. Milk is sold sometimes, but as the majority of cows spend their lactation period in remote pastures without access for collecting vehicles from dairy plants, this is not wide-spread in Tamga. Households produce for their self-subsistence – meat, potatoes, jams, fresh greens in summer, pickled cucumbers, tomatoes, peppers, and carrots in

[4] Others are 1) as sporadically hired tractor driver, and 2) working for the *podkhoz* – an uninterruptedly collective farm directly under the control of Kyrgyzstan's defense ministry that was not dismantled after 1991 – at the outskirts of Tamga.

winter, cabbage nearly all year round. But this provision remains only partial as cash, and thus other livelihood strategies, remain indispensable. Cash is necessary for full social participation in village life, hospitality, and lifecycle rituals; for education; for agrarian production itself as land use taxes and fees for water and herding services apply; for commodities like clothes, tea, sugar, tools, building material, or medicine. The cash income from smallholders' agrarian production is hardly ever sufficient to meet all these expenses, be it from sales or from a herder's received fees. In Tamga, as elsewhere in Kyrgyzstan (Isabaeva 2011, Reeves 2012, Sagynbekova & Schmidt 2008, Schoch et al. 2010), families combine animal husbandry and agriculture with wages earned by some of their members. Local jobs tend to be scarce. Labor migration and flows of remittances are ubiquitous. Public statistics say so, too: According to the World Bank's data personal remittances made up 33.2% of Kyrgyzstan's GDP, which secures the republic a rank among the five-top remittance-dependent nations worldwide.[5]

And yet, mobile pastoralism, nested between tillage fields and salaries from afar, has undoubtedly remained a crucial economic and symbolic component of rural lives and livelihoods in Kyrgyzstan (Farrington 2005: 191, Japarov 2017: 53ff., Piersall & Halvorson 2014: 694, Schoch et al. 2010, Steimann 2010). As everyday practice, with again increasing livestock numbers over the past twenty years, and as continuation of the region's nomadic history.

2.2 layers of history

The mine and the tourists have only become part of Tamga's landscape quite recently. Kumtor and backpackers arrived in the 1990s; tourists from all over the socialist world started to visit a couple of decades earlier. The fields, the orchards, and the houses are newcomers, too. The presence of tillage agriculture, gardens and sedentism only dates back 150 years. Pastoralism, migration, the *djajloo,* and the *syrt* by contrast, have been part of this landscape for centuries, even millennia (Dienes 1975: 347ff., Kerven et al. 2012: 368, Piersall & Halvorson 2014: 696, Rahimov 2012: 54). Similar to other parts of Central and Inner Asia[6], the topography and climate of the Tian Shan ranges favor mobile animal husbandry – making use of the changing availability of pasturage across

[5] https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS?locations=KG&view=chart (2020/03/26)

[6] The two terms Central and Inner Asia are not unambiguous. Sometimes in the literature they are used interchangeably to describe the vast landmass than encompasses Siberia, Mongolia, the Turko-Iranian post-socialist republics, and parts of the PRC; sometimes Inner Asia is used to encompass Central Asia which then denotes only the

altitudes by moving with the seasons. This landscape is high and continentally dry. 94% of the area that makes up the territory of the Kyrgyz republic is mountainous (Farrington 2005: 171, Mestre 2017: 1), and only 7% of the country is arable (Kuehnast & Dudwick 2004: 33). Thus, permanent agriculture is only possible to a limited extent and large numbers of animals can only be sustained through spatial mobility (Boyanin 2011: 280).

Tamga's landscape is a pastoral landscape, that is, a landscape with a deep pastoral socioecological history. Uncounted generations of moving animals, humans, yurts, and working lives have shaped its texture, given it names, inscribed its stones, and changed the composition of its vegetation (Paul 2012: 93ff.; see also Humphrey & Sneath 1999: 10, Lorimer 2006: 497f., Vitebsky 2006: 17ff). While the political constellations in which these lives in the Tian Shan were embedded over time have been and keep on shifting, mobile pastoralism always continued to be practiced; at least as long as people and their stories can remember and, vitally so, up until this very day. What did change, was how it was coordinated. This *how* in its contemporary shape is precisely what this text is about. As the past is an irreducible part of the ethnographic present, let me attempt to outline some of the changing political tides that Kyrgyz pastoral livelihoods have navigated in.

Before the arrival of tsarist Russian troops in the second half of the 19th century, people and animals moved up and down these mountains in nomadic clusters of yurts (*ajyl, aul*), collectively using pastures the access to which was organized along the spheres of influence of kin-groups and their leaders. These leaders – *batyrs, bijs, datkas*, *manaps* – are recounted by historians and popular discourse in Kyrgyzstan today to have been powerful, well-connected men that could secure the respect of their entourage and forge diplomatic links to neighbouring political entities like the khanates to the west, the area that has become Uzbekistan (Beyer 2016: 21ff., Jacquesson 2010: 106, Prior 2013). Along one of Tamga's tarmacked roads reproductions of old portraits that commemorate the region's former *datkas* are adjusted to the mostly reliable light poles.

In 1876 the Kyrgyz Tian Shan was incorporated into the Russian empire and the gradual shift towards sedentism and transhumance began to unfold in a series of turbulent political

Turko-Iranian parts. Here, following Humphrey & Sneath in their deployment of the terms, I use Central Asia to denote the post-socialist republics of Kyrgyzstan, Kazakhstan, Uzbekistan, Tajikistan, and Turkmenistan, as well as Afghanistan – Inner Asia refers to southern Siberia, and regions further east: Mongolia, Xinjian and Inner Mongolia (Humphrey & Sneath 1999, Paul 2012)

reorganizations – namely, after 1917, into state-socialism and after 1991 out of it again – that have taken place since then (Boyanin 2011, Jacquesson 2010). I will use the remainder of this chapter to sketch these 150 years, focusing especially on the wider networks of political power, administration, and economic circulation into which pastoralism and pasture access in Tamga were respectively integrated. I am aware of the analytical pitfall, that this choice of timeframe may produce an impression of 'traditional nomadic timelessness' before the appearance of the European colonizers on Kyrgyzstan's mountainous stage. I am aware that this fosters a wrong impression of pre-colonial Kyrgyz pastoralists as, very much in Eric Wolf's ironic terms, an unchanging people without history (Wolf 2010 [1982]; see also Prior 2013). I will stay with it nonetheless for two reasons: On the one hand, because literature on older times is scant, or accessible only in Russian – a language I do not speak and that always already is part of Central Asia's colonial history (Jacquesson 2010: 104ff.). On the other, because it is the more recent history – especially the legacy the USSR's socialist regime as it bears on contemporary mobile pasture use in Kyrgyzstan, as well as post-independence reform policies – that will feature dominantly in the subsequent chapters.

The integration of the Tian Shan ranges into the Tsarist Empire brought with it significant changes not only in terms of political authority, but also in terms of land use patterns. Along with Russian colonial administration and the establishment of cities and villages, trading posts, and roads came the attempt to control pasture allocation and nomadic movement by creating permanent territorial divisions, and the introduction of tillage agriculture in low-lying and sheltered valleys around the newly erected villages (Jacquesson 2010: 105, 110, Sagynbekova & Schmidt 2008: 112). The empire strategically encouraged the immigration of Russian peasant settlers into its newly incorporated peripheries; as they had recently been released from serfdom in 1861, free and landless peasants were plentiful, and many followed the call (Piersall & Halvorson 2014: 697, Rahimov 2012: 59, Sagynbekova & Schmidt 2008: 112). Collective land use of the Kyrgyz *ajyldar* was not recognized by the colonial authority in the settlement process. The valleys – or the slim stretch of even land around the shores of the Yssyk Köl – suitable for agriculture, however, include pasture grounds indispensable during the winter months. The storage of winter fodder had not been part of pastoral strategies in the Kyrgyz Tian Shan, yet with necessary winter pastures substantially reduced this fully nomadic way of life and living became unfeasible (Dienes 1975: 351, Piersall &

Halvorson 2014: 697). Gradually, over the following decades, and promoted by the colonial administration, Kyrgyz pastoralists incorporated sedentary patterns of work into their livelihoods: Some settled in villages and started to partake in irrigated tillage and producing winter feed, fully or for part of the year. Richer livestock owners benefited from the new marketing channels that had opened up with the Russians, and, evading the hardship of seasonal migration themselves, made use of their accumulated wealth to enlist stockless or poor pastoralists to herd their animals for them (Boyanin 2011: 286, Dienes 1975: 351ff.). The movement of animals had begun to shift from an activity that involved the whole of Kyrgyz society towards a transhumant, agro-pastoral, and specialized division of labor. Sweeping sedentarization that came with coercive collectivization of the Soviet economy was only to be enforced in the early 1930s under Stalinist rule, but by then pastoralism in the Tian Shan was already partially sedentarized.

Up until Stalin's brutal collectivization campaign the regime transformation from tsarist to socialist Russian rule had meant little change for everyday lives; after political upheavals in 1916, the 1920s can be characterized as a calm period in which the coexistence of peasant farming and semi-nomadic animal husbandry was further normalized (Alimaev & Behnke 2008: 159, Boyanin 2011: 280, 282). The expropriation of all livestock and means of production and the establishment of collective farms (*kolkhoz*) and state farms (*sovkhoz*)[7], however, constituted a devastating and lasting rupture for both human and animal lives. Animals were pooled in places with insufficient forage and perished in high numbers. Others were slaughtered rather than to be handed over to the Soviet state. Livestock owners who refused to comply or were too loud in voicing their critique had to face the threat of death or deportation (Boyanin 2011: 286ff., Isakov 2016: 56; see also Alimaev & Behnke 2008: 160, Vitebsky 2006: 34). Many fled over the border into Xinjian (Boyanin 2011: 287).

In theory the socialist ideology of civilizational progress saw nomadic pastoralism as a backward lifeform from the past to be overcome by rational agronomic planning, modern and collective economies of scale, and full sedentism in proper villages with schools and post offices and town-halls (Khazanov 1994 [1983]: xliii, Vitebsky 2006: 46, 186ff.; see also Scott 1998: 193-222). In practice, however, the environment of the Tian Shan ridges – much like the Kazakh and Mongolian

[7] *Kolkhozes* belonged to the collective of its workers, often the former owners of the land (or other assets) that had been pooled to make up the farms; *kolkhoz* members were remunerated in shares of the joint production, in cash or in kind. *Sovkhozes* belonged directly to the state and workers received salaries as employees of state-owned agrarian enterprises regardless of a season's specific yield or profit margin (Steimann 2010, Verdery 2018).

steppes, or the Siberian taiga – did not allow for the abandonment of mobility. Organized pastoral migration had already been taken up again in the Kyrgyz Soviet Socialist Republic during the 1930s and practiced from then on as part of a collective, state-planned form of agro-pastoralism (Alimaev & Behnke 2008: 163ff., Boyanin 2011: 293, Dienes 1975: 358, Humphrey & Sneath 1999, Isakov 2016: 62ff., Steimann 2010: 99ff.; see also Aitmatov 1998: 24). *Sovkhozes* and *kolkhozes* set up herding and animal breeding brigades (work teams) just as they set up specialized brigades in other sectors of agrarian production. The allocation of *djajloo* and *syrt* grounds and the timing and routes of cattle drives came to be coordinated by the heads of collective and state farms, by appointed agents of the state. For nearly sixty years this 'industrial nomadism' (Vitebsky 2006: 43) was going to be a node in the USSR's command economy, and the form of pastoral mobility practiced not only in Kyrgyzstan, but across the vast lands of socialist Inner and Central Asia.

The early decades of the *sovkhoz* is where Tamga's living memory starts. One day in early August 2019 Tolgonaj[8] and I are busy destalking a bucket full of black currants from her garden. Tolgonaj is in her late 70s and for nearly twenty years used to be a horse breeder for the village's state farm. I have known her since my first visit to Kyrgyzstan in 2015, I have lived in her house many times, and she is one of my closest and dearest relations in Tamga. That day in 2019 she already knows, of course, about my interest in *mal charba* and *ajyl charba* (pastoralism and agriculture), in history and in the times of the *sovkhoz*. She begins to tell me about the many hard years after the big war – the Second World War in which so many Kyrgyz died. She tells me about the labor pursued in the fields when many people had no shoes, and when there were only horses to draw the plough. During some of her barefoot teenage years she worked for Tamga's *podkhoz* (another type of collective farm directly subject to the ministry of defense), before she got married to one of the *sovkhoz*'s herders and started to accompany him to the mountains – driving sheep, milking mares, bearing children. 'It was hard then, work was hard, this is how we lived.'

[8] All interlocutors' names have been changed apart from those mentioned in the acknowledgements upon request and as a form of deep appreciation, and apart from Dinara Musaeva-Gallant – the friend I accompanied on my first visit to Kyrgyzstan.

In the subsequent decades it got easier, as did agrarian lives all over the socialist world (Humphrey & Sneath 1999: 35ff., Steimann 2010: 100ff., Wegren 1998: 109). When Stalin died, fear of arbitrary state repression subsided somewhat, and Kyrgyz who had fled twenty years before returned from China. Tractors arrived, Tamga's hydropower plant was built, veterinary service became available across the region, many jobs were offered – not only in agriculture, but also in village administration, as drivers, in the kindergarten, for the sanatorium, as foresters. Agro-pastoral production was intensified through breeding programs, increased fodder production, and the mechanization of ploughing, harvesting, transport, and of the processing of produce. The fields and pastures of Tamga were integrated into the wider economic network that constituted the USSR's command economy – a centrally controlled metabolism of things and people circulating all across Eurasia. The herders and the herds had their place in the socialist 'interregional division of labor' (Khazanov 1995: 115) as producers of meat, wool, and milk which the state procured and distributed, and as recipients of commodities and subsidized machinery and fuel. As for other farms and enterprises of the Union this meant that they were never really required to operate at a profit. Other rationales were at play apart from rates of return. Weak *sovkhozes* and *kolkhozes* would be kept running, for example, because they also acted as providers of welfare services and secured sources of income for the rural population (Alexander 2004: 260, Dunn 2004: 14ff., Humphrey & Sneath 1999: 78f., Verdery 2004: 142f., Wegren 1998: 108ff.).

Across the USSR this tended to result in the partial decoupling of agrarian production from local ecological limitations (Humphrey 1998: 453, Liechti 2012: 305).[9] Tamga's stocking rates kept increasing throughout the socialist years and eventually led to the overuse of summer pastures (Farrington 2005: 174). These animal numbers – up to 60,000 sheep, rather than 15,000 – could only be sustained by the cheap, subsidized inputs of benzine, fertilizers, and fodder grown in other places and trucked across the union. At the time when the Soviet Union eventually dissolved, animal husbandry in Tamga was highly dependent on supportive flows and the interregional circulation of goods organized by Moscow; as well as on the *sovkhoz* administration for the coordination of herd movement and feed distribution (Farrington 2005: 173, Japarov 2017: 53, Khazanov 1995, Sneath 2004: 163f., Steimann 2010: 116ff.).

[9] This kind of decoupling happens in capitalist and globalized agro-industry, too, of course. But it comes about through different economic mechanisms.

It is necessary to know about these connections to understand what kind of relations were dissolved along with the USSR and their impact on the newly independent Kyrgyz economy and on everyday lives therein. When the Soviet regionally interdependent 'economies of scale' (Humphrey & Sneath 1999: 73) collapsed, when administration lost its links to distributive power and thus its legitimacy, when the collective means of production were disassembled in privatization campaigns, when Moscow became the capital of another nation state, animal numbers collapsed hand-in-hand with the socialist empire (Alimaev and Behnke 2008: 169f., Japarov 2017: 54, Kerven et al. 2012: 370). No fodder, no platform for coordination, no other source of income except of sales, yet also no marketing channel were available after the abrupt end of reliable state procurement. Tamga's airport ceased its service.

The early years of the Kyrgyz republic's independence[10] were years of economic freefall and the messy reordering of property rights (Khazanov 1995: 118ff.; see also Hann 2003: 9ff., Verdery 2018). In 1993 the arable and irrigated lands of Tamga's *sovkhoz* were split up for lease into equal parcels for each villager, and animals, too, were distributed across all households. By 1993, however, only a fraction of the 60,000 sheep were left and every *tamgalyk* (person from Tamga) received merely three head; cows and horses were even fewer. Some animals had been slaughtered because of the lack of fodder, some had been consumed, many had been trucked towards Russia before privatization and were never heard of again. Only the yaks did not diminish, because they feed off the *syrt's* grass all year round and because they could not be transported out of the mountains without perishing. The yaks became the collective property of the village.

Like in other parts of the dissolving socialist world, families abruptly found themselves in the atomized position of having to operate as small-scale, entrepreneurial private farms for the first time in their lives – without managerial and marketing experience and with means of production that had been designed for much larger enterprises and that were thus hard to split and privatize (Humphrey & Sneath 1999: 83, Verdery 2018: 98f.). This is when Tamga's layered composition of livelihood strategies between subsistence farming, eventually some sales, and labor migration began to emerge and stabilize.

[10] Independence from the USSR was officially declared on August 31st 1991.

What remained unprivatized and undivided were, on the one hand, the forested lands which stayed under the supervision of district-wide forest bureaus (*leskhoz*), and on the other, the mountainous pastures. Nearly half of the country's entire area is state-owned, unalienable pasture land (Farrington 2005: 176, Japarov 2017: 71, Kerven et al. 2012: 369, Mestre 2017: 1, Rahimov 2012: 65)[11]. How did people in Tamga make use of these lands and its water and sweet grass after the brigades no longer existed? How did people feed and move their animals after the *sovkhoz*'s large, collective herd had been parceled out? Who would tend the many private miniature herds, and whose animals would be allowed to be fattened on which particular pasture? The fora to coordinate animal movement and the legal setup in which public pasture allocation takes place have changed several times over the past three decades of post-socialism (Crewett 2012: 267, Jacquesson 2010: 115, Kerven et al. 2012: 372, Yu & Kasymov 2020: 3ff., Zhumanova et al. 2016: 506).

All over the republic herd mobility decreased markedly in the 1990s (Crewett 2012: 268). Remote summer pastures like the *syrt* of Djeti Ögüz were completely abandoned without the pressure of 60,000 sheep to be fed and without the mechanized support that the *sovkhoz* had provided to alleviate the hardship of the move. On the one hand, this meant that the vast pastures that had suffered from overstocking in the 1980s were left to recover their vegetation for nearly thirty years. On the other, grazing grounds and hay meadows more accessible from village settlements became a competed for source of value and were used beyond their seasonal capacity (Dörre 2015: 6, Mestre 2017: 8, Yu & Kasymov 2020: 8).

In Tamga there always were some herders and some pooled herds of the village's sheep, goats, cows and horses; but no one made it all the way up to the *syrt* after 1991. Until recently, that is, and apart from the one household of yak herders (*topozchular*). From the early 1990s onward, taxes had to be paid for the utilization of state pastures by commissioned herders as by stockowners who drove their animals themselves. Momentous legislative interventions into the coordination of pasture distribution took place in 2002 and 2009 as two quite different reactions to recovering livestock numbers – and thus grazing pressure – after the worst years of economic crises had subsided. The 2002 reform allowed for individual pasture leases that granted exclusive access to specific grazing areas (Crewett 2012: 270, Kerven et al. 2012: 372, Steimann 2010: 186, Yu &

[11] Kerven et al. 2012: 92,663 km^2, Mestre 2017: 49%, Rahimov 2012: 9.1 Mio ha. The total area of the Kyrgyz republic is 199,951 km^2 (https://www.cia.gov/library/publications/the-world-factbook/geos/kg.html, 2020/03/26).

Kasymov 2020: 3). Under this arrangement, however, there was no lever to control stocking numbers on the leased pasture areas. In order to change this another reform in 2009 introduced a new type of institution on the village level that would oversee the common use of public pastures: more than 450 associations of pasture users with pasture committees (*djajyt komitet)*, made up of elected representatives, as their executive bodies, were installed all across the country (Crewett 2012: 272, Dörre 2015, Jacquesson 2010: 115, Japarov 2017: 72, Mestre 2017: 1, Robinson et al. 2012: 250). Exclusive leases were no longer permitted. This effectively initiated a formal system of community-based pasture management: pasture committees were entrusted with the task of preserving the productive potential of state pastures under the condition of growing herds, of distributing access to them equally, of collecting but also of locally reinvesting pasture use taxes, and of eventually making herders move to more distant places again – after many years of fallow (Farrington 2005: 191). As for Tamga the commissioned *kojchular* (sheep and goat herders) started to drive the villagers' 15,000 head of small livestock up onto the *syrt* again in 2018.

photograph 2.2.1: *herding sheep on the* syrt *again, close to Djaman Tam on 3,600m ASL, July 2019*

The story about how the *syrt* came to be reincorporated into Tamga's pastoral cycles of mobility is the content of the first ethnographic subchapter, *chöp*. Addressing the question of how the collective organization of Tamga's common pastures is actually performed in practice, on the ground – in the formal confines of the pasture committee and beyond – is the purpose of this entire text.

After all these layers of history we have finally arrived at the present, among the already familiar layers of an agrarian landscape, and at the core of these pages' ethnographic and theoretical concern: exploring the shared practices that feed into the viable common use of open public pastures, in Tamga, in the Kyrgyz Tian Shan, today. In the following chapter (the framework: from the commons as black box to practices of commoning), I will situate this endeavor within the wider theoretical literature and discourse on property and the trope of the commons; the ethnographic accounts that comprise chapter four (the ethnography: four pieces of a grassy mosaic) take on the 'commons practices' themselves.

methodology I: positionality

> A reader may ask: What is the writer's relationship with the place and the people he writes about? One afternoon this summer I was haymaking […] and the sun was heating the slope like a grill. […] I cursed the heat. The heat was no longer a condition, it had become a punishment. […] My anger that afternoon joined me to the field, the slope, the hay. At other times my relationship to the place and the people who live here is less simple. I am not a peasant. I am a writer: my writing is both a link and a barrier. (Berger 1979: 5f.)

The first time I visited Kyrgyzstan and Tamga was in August 2015. Some months before, I had become friends with Dinara in Munich, my own native city. Dinara is from Tamga: she was born on the *djajloo* and grew up as the second daughter of one of the *sovkhoz*'s herders. She had studied German at school and at university in Bishkek, and in the 1990s she worked as translator for the first incoming visitors – including some anthropologists – who started to travel to Central Asia after the dissolution of the Soviet Union and the end of the Cold War before she moved to Germany. That summer of 2015 I accompanied Dinara to visit her parents, siblings, nephews and nieces, and in-laws. I came to Tamga as a friend, as a guest overwhelmed by hospitality and generosity, and as only an aspiring anthropology student, not yet with the intention to become a researcher in Kyrgyzstan. After about twenty days Dinara left for Munich again. I stayed in Tamga for some more weeks, started to pick up Kyrgyz, happily accompanied new-found friends to the summer pasture, and upon leaving in September promised to be back soon. I have gone to see Dinara's family and Tamga annually ever since. Without the emerging personal relationships with Dinara's family members, their neighbors, and eventually more and more *tamgalyktar* this text could and would not have been written.

In the course of the ensuing years I became more familiar with the Kyrgyz language as well as with everyday life, politics, and history in Kyrgyzstan through successive visits and follow-up reading. At the same time I increasingly got involved in peasant rights activism back in Europe, became interested in the globally connected political economy of agrarian production, and became engaged in the role of small-scale, diversified agriculture and animal husbandry therein. I joined the international peasant's movement La Via Campesina (viacampesina.org), took courses in agrarian sciences, read up on the demise of viable smallholder farming vis-à-vis large agroindustrial corporations both in Europe and elsewhere. I learned more about the ecological impact of intensive, input-high, monocultural agriculture, about the role of state-subsidies and international trade-

agreements in shaping the price of food products, and about the capacity to generate value from agrarian production shifting from those who work the land to firms selling seeds, agrochemicals, and machinery or to the processing industry (e.g. Edelman 2005, Franquesa 2018, Patel & Moore 2017: 138-160, Verdery 2018: 1-32). All this influenced what I paid attention to on my subsequent trips to Kyrgyzstan. New questions were on my mind: Who owns the fields and the pastures? Who used to own them before 1991? How did animal breeding programs work during the time of the *sovkhoz*? What social services were available back then, and for whom? How much does it cost to have one's field ploughed by tractor? Where will the animals sold at Karakol's cattle bazaar most likely end up? I became fascinated by the retold experience of being part of the USSR's huge redistributive machinery, as well as by the fact that contemporary agropastoralism in Kyrgyzstan is predominantly extensive, household-based, and small-scale – though also highly dependent on remittances. Yet still, it largely supplies the country with animal products (fao.org/faostat): not only the animals raised for self-consumption in villages, but also the cattle and sheep that end up in slaughter houses and supermarkets in cities like Bishkek, are largely fed and grown on mountain pastures, neither in feedlots, nor on a diet highly based on concentrate feed. When I learned that these livestock-sustaining pasture grounds had remained undivided state-property and were now managed by the local collectives of herders and livestock owners across Kyrgyzstan, the question of how this common resource was shared in the context of Tamga and the people I knew there became a new focus of my interest in agrarian politics. Eventually it turned into the idea for this anthropological research project.

Since 2015 I have spent seven months in Kyrgyzstan, in total, only two and a half of which made up my designated research stay between May and August 2019. For this research period I arrived some weeks before the livestock was driven up to the *djajloo* and the *syrt* and accompanied the herding season until the first shepherds started to prepare their migration downhill again: I conducted interviews, I systematically got to know Tamga's herding households beyond already accumulated acquaintances, actively joined work teams related to animal husbandry, arranged meetings with village government and pasture committee representatives, etc. What I present on these pages is based on stories, conversations, copied documents, notes, sketches, photographs, and observations collected in 2019, but it is also informed by all my prior visits. It takes time and

engagement to learn how to pose more relevant questions about any specific empirical setting, for example, in a herder's tent or vis-à-vis a pasture committee accountant. It takes time and some serendipity (and sweat shed in the summer's heat, like John Berger wisely pointed out) to learn to read landscapes better and to learn to see what matters in somebody else's life and why. I think that the care and relationships that feed into the formulation of research questions and resulting texts in anthropology – and that only come with shared time – are precisely what distinguishes the insights that the discipline can contribute to our understanding of social phenomena. In this case I attempt to contribute some personally positioned and carefully assembled ethnographic insights on the workings of a particular pasture commons.

This text is one possible outcome of my encounter with Dinara and her family, my subsequent and open-ended growing familiarity with Tamga, an invested political interest in small-scaled agropastoralism, and the social scientific literature I draw on in order to correlate my findings and interpretations with those of related and existing work. To give readers a general tendency of how I combine these resources, it can be said that the preceding historical overview as well as the following theory chapter largely build on comparative reading, while the description of Tamga's agropastoral landscape-layers and the main ethnographic part are predominantly based on empirical experience and collected narratives. Yet, as experience and inspiring texts tend to cross-pollinate each other in any author's head and in terms of the questions she asks, this distinction must remain an approximation.

The descriptions and arguments I can offer are made possible through my own positionality, yet they are also limited by it in particular ways. On a conceptual level I am interested in the practices of collective self-organization that go into the sustainable sharing of common goods. Readers may notice that in the ensuing ethnography I concentrate on procedures of negotiation and instances in which coordination does work out: the reincorporation of the *syrt* into herders' migration (chapter 4.1), the reliable distribution of irrigation water (chapter 4.3), elected representatives whose commitment to use their positions to provide social services for the community is watched over by the collective of villagers (chapter 4.4), etc. There is less discussion – only some hints – of conflicts, of power-differentials, of exclusions from political participation to be found in this piece of writing. This should by no means be read as an indicator of the absence or unimportance of

quarrels and inequalities along lines of gender, wealth, or age among Tamga's pastures; I cannot imagine any social collective without political friction and thus neither is Tamga. Rather, I have three pragmatic reasons for my choice of focus. First of all, it is a matter of access. It is easier to talk about successes than it is to share information about disputes and past management problems – especially when one's conversational partner comes with a notebook and in the position of a writer. Seven months across five years is not sufficient to gain a firm enough grasp of divisions and structures of exclusions in order to feel comfortable presenting them in a text. Perhaps this will change with more time, perhaps it will not; it is hard to really un-become a stranger to a place where one is a person who only ever comes and goes but never has to stay. Second, it is to do justice to the indeed functional coordination of pastures, animals, and herders in Tamga. The fact that herders return to the high-plateau of the *syrt* after nearly thirty years of fallow and are supported in this with infrastructural input by a committee of elected representatives is noteworthy. Comparing Tamga with other case-studies from Kyrgyzstan (e.g. Crewett 2012, Dörre 2015, Isabaeva 2011, Kerven et al. 2012, Mestre 2017), the functioning (or malfunctioning) of communal pasture management since 2009 cannot be generalized but must be looked at in the diverse specificity of concrete municipalities. This makes it all the more relevant to appreciate and analyze cases of working pasture commons and what adds to their effectiveness. Third, it is a politically inclined intervention in the public discourse on Kyrgyzstan's common pastures: the very day I arrived in Kyrgyzstan for my fieldwork in May 2019, waiting for my luggage to materialize on the conveyor belt at Manas Airport and chatting with a co-passenger, she made a comment that I would encounter many more times when explaining my research interest in Bishkek. 'Oh, that is so important. You know, there is no plan on pasture management in Kyrgyzstan. *Plan djok bizde*.' The erroneous – and politically efficacious – presumption that collective self-organization without official supervision signifies planlessness is a recurrent topic in commons literature (Ostrom 1990; see also chapter 3), as it is a recurrent topic in conversations and in the press in urban Kyrgyzstan. Such remarks markedly clash with my experience of pasture management in Tamga, which I see as made up of diverse forms of labor, competence, and informed planning. My choice of focus, thus, also is an attempt to counterbalance available descriptions of Kyrgyzstan's pasture commons with the aid of an ethnographic case-study. I want to demonstrate through empirical material that communal self-management is possible and viable. Not automatically so, not necessarily – but through certain

practices of negotiation and living together, some of which fill the pages of this thesis. This is the contribution I am able and choose to propose – not more, but also not less.

3 the framework: from the commons as black box to practices of commoning

Let's recapitulate. We find ourselves in a mountainous region with a nomadic past and transhumant animal husbandry as integral part of the present. The alpine pastures necessary and valuable to sustain and grow animals are in shared use across Tamga. Legally they are the property of the Kyrgyz state as a whole, yet since 2009 practical management responsibility has rested at the village level. The borders that separate the village's pasture lands from those of neighboring communities are clearly defined and codified in maps and documents stored at municipal and district-wide state offices. Internally, there are no formalized divisions, no visible demarcations. And yet, commissioned herders set up camp with a certain number and type of animals on certain named spots – without overlapping with the grazing grounds of others. There are no fences, but there are place names. *Djorgo, Djaman Tam, Kara Suu, Djaman Echki, Sary Köl, Ajgyr Bulak, Djygach Üj.*

Some *tamgalyktar* own just a handful, less than 10, sheep. Others own a hundred, plus twenty cows and horses. Those with many animals might consider taking them to the *djajloo* themselves. For those with only few, the laborious move is not worth the gains; they depend on herders (*chaban*, or *malchy*) to pool poorer livestock owners' stock. The herders in turn depend on the earnings made from their months on the alp. All animals, be they pooled or not, be they owned by the relatively rich or the relatively poor, need to be fed well. Everybody has an interest in their ruminant animals having access to the mountains' nutritious – and public – grass and herbs: How are these interests negotiated and brought to bear on the grassland? How to ensure everyone's fair share, and a distribution of hooves and grazing mouths that does not deplete pastures' capacity to regrow its valued vegetation? How are animals, people, and tents allocated on the *djajloo* and the *syrt*? How does the respective collective coordination of collectively held pastures work?

These questions are the kind of stuff property theory is made of and concerned with: Who gets what, by what means and for which reasons? They especially speak to analyses of the influence of land tenure regimes on mobile pastoralism, to theories of the commons, and to approaches that conceptualize property as established through concrete practices – which I will respectively address in due course.

Property is an elusive concept, because it comprises and denotes so many different things once one starts to unpack it. The term property can be used to describe things themselves, the relations

between things and people, and binding relationships between people (Verdery 2018: 14ff.). Property is about the distribution of rights to claim value that may spring from things like grassland or water through use (Bromley 1992: 2, Ostrom 1990: 30, Sneath 2004: 170ff.). Following the established typology in property theory across the social sciences, property regimes may take the form of private property, that is exclusive rights of control upheld by individuals, families or other corporate groups; state property regimes in which control resides with large-scaled bureaucratic institutions representing the public; common property which means that a group of people, usually in the form of a community, collectively coordinates its shared rights of control and use over a valued resource or thing; and open access in which no social convention organizing who gets what and how is effective at all (Alimaev & Behnke 2008: 151, Bromley 1992: 10ff., Galaty 2016: 4, Ostrom 1990: 1-28). Just as much as property is about the distribution of value, it is about the distribution of risks, obligations, and responsibilities (Federici 2019: 94, Sneath 2004: 172, Verdery 2004). Property can take the shape of a legal title – which speaks about authoritative, formal institutions backing those titles – at the same time as it takes the shape of governing and appropriating practices actualizing differentiated access and excluding claims (Bromley 1992: 10ff., Galaty 2016: 1ff.). Property is also about the making of boundaries and forms of belonging: to a former *sovkhoz*, to a village, to the livestock owners of Tamga, to the pasture committee. It is a constitutive part of and embedded in cultural systems of meaning; it is a constitutive part of and embedded in the organization of power (Verdery 2018: 19).

Property can be manifested and articulated in a plethora of ways. I see no need to reduce this complexity and to present a narrower definition. Rather, attentive to the shapeshifting answer as to what property may be, I will return to the concrete context of the Tian Shan pastures and let this text follow those aspects, common forms, and practices of property in land and other means of production that I see as situationally emerging as relevant there. Shedding light on these aspects and pointing towards how specifically common property theory could be furthered in order to grasp them better is the purpose of this chapter. I will enter into this endeavor with a tale of two reforms concerned with pasture tenure and pastoral mobility.

3.1 on common property made law

The making and re-making of the social relationships of specified access to flows of value, of responsibility, and of bureaucratic managerial authority over pastures, fields, orchards, or forests shapes who makes use of that land, and how. In the context of transhumant pastoralism this means that the setup of pasture tenure influences the mobility of livestock and herders. This, in turn, bears ecological consequences for the growth of grass and socioeconomic consequences in terms of how many head of stock each household can sustain (Alimaev & Behnke 2008: 167f., Crewett 2012: 267, Robinson et al. 2012: 258, Yu & Kasymov 2020: 3). As we already know, in Tamga's arid landscape with a vast range of vegetation patterns across altitude levels, mobility with the seasons and the eventualities of the weather is the most effective, sustainable, and reliable measure to keep one's animals sated. When access to seasonal pastures, and thus movement, becomes fragmented through changing property claims and settlement patterns, or limited because no institution has effectively taken over the responsibility to maintain transport infrastructure from the *sovkhoz*, this affects people, livestock, and grass jointly.

Post-Soviet Kyrgyzstan's two legislative reforms on pasture property of 2002 and 2009 were interventions that aimed to enhance the rural population's productive use of the country's expansive grasslands, after it had declined with the end of socialist administrative planning. Both sought to entice herders and livestock owners to manage the grass around them efficiently by means of restructuring access procedures and rights. In that endeavor, however, the reforms followed two quite different strategies according to two corresponding paradigms of property rights theory wide-spread in development policy discourse (Crewett 2012: 267, Dörre 2015: 2ff., Robinson et al. 2012: 241).

The 'Law on Procedures of Allocating Pastures for Lease and Use' (Crewett 2012: 270) passed in 2002 was in line with the classical neoliberal property model according to which private property arrangements are the most likely to lead to effective resource management, while communal tenure will inevitably result in the overexploitation of pastures (Crewett 2012: 267; for a seminal article for this paradigm see Hardin 1968). In that respect the law can be seen as being part of a much broader trend in policy making that swept formerly socialist countries after the end of the USSR. The swift and thorough decollectivization and privatization of state assets – a 'shock therapy'

(Humphrey & Mandel 2002: 1) – was promoted as an indispensable structural adjustment in the transition process from socialist command to liberal market economy advocated by powerful international organizations (and donors) like the World Bank, USAID, and the IMF (Dörre 2015: 2, Dunn 2004: 28ff., Humphrey 2002: xvii, Verdery 2018: 4ff.). The 2002 reform did not change the legal title of Kyrgyz pastures as property of the republic. However, it institutionalized the purchasing of private leases for specific pasture grounds; leases were issued for periods of five years, plus possible extensions (Crewett 2012: 271f., Robinson et al. 2012: 248, Steimann 2010: 186ff.).

This arrangement lasted for only seven years. The reasons for this may be found in the many critiques voiced against its practical outcomes: First, the exclusive lease contracts fragmented the pasturage and made it harder for everyone to have access to grazing grounds for all seasons, and to move flexibly within a landscape with correspondingly established prohibitions on trespassing. In this manner privatization tends to impair herd mobility and resilience in the face of weather extremes, as has been observed in Central Asia as well as in other mobile pastoral settings like Mongolia and East Africa (Galaty 2016: 8ff., Galvin et al. 2008: 211ff., Humphrey & Sneath 1999: 3, Sneath 2004: 174f.). Second, leases were easier to obtain for wealthy stockowners and harder to acquire for herders caring for pooled herds. This in turn limited the access to highland pastures for poorer livestock owners who relied on herd pooling, and thus contributed to socioeconomic stratification (Robinson et al. 2012: 244). Third, the reform did not provide effective levers for the ecological management of pasture use, or to support herd mobility. Once leases had been issued, there was no control over stocking rates on the respective parcels of land. Neither were there any administrative mechanisms or funds to improve infrastructures to draw on for municipal, regional and *oblast* administrators[12] in order to encourage herders to move to available but remote summer pastures. If nobody obtained a lease for the *syrt*, it simply remained fallow. At the same time, spring and autumn pastures located closer to settlements were in high, and conflictual demand. This structurally led to an overuse of pasturage near villages and to whole highland areas like the *syrt* of Djeti Ögüz district remaining underused and depopulated as they had been since the early

[12] These were the bureaucratic levels on which lease contracts could be issued between 2002 and 2009, depending to the type of pasture (Crewett 2012, Robinson et al. 2012). In general, there are four main administrative levels in Kyrgyzstan: federal, state (*oblast*), district/regional (*rajon*), and municipal.

1990s (Farrington 2005: 190ff., Kerven et al. 2012: 370, Yu & Kasymov 2020: 9f.). It quickly became clear that another reform was urgently needed.

The 2009 pasture reform took a different approach in terms of its structuring assumptions on the relationship between land property and resource management. Turning away from the promotion of privatized pasture access, the new law was based on the concept of decentralized community-based natural resource management (CBNRM), which, by that time, had become the new favored paradigm in international development discourse and the respective flows of donor agencies' funding money (Dörre 2015: 2ff., Kerven et al. 2012: 374, Mestre 2017: 2). The scheme of this second reform re-evaluated common pasture property as a possible, viable, and even desirable mode of resource utilization other than privatization and governmental administration. In 2009, like in 2002, the Kyrgyz state's abstract property title over all designated pasture land was kept in place, but *de facto* governance authority was passed on to associations of pasture users and pasture committees at the village level (Crewett 2012: 272, Jacquesson 2010: 115, Japarov 2017: 72, Robinson et al. 2012: 246ff., Zhumanova et al. 2016: 507). Every livestock owner would have the right to have their animals access all their village's seasonal pastures, along with everybody else, for a fixed fee per head of cattle. Pasture committees were delegated the power – and the responsibility – to develop, document, and implement pasture use plans, to monitor vegetation and herders, to settle disputes, to encourage movement, and to define, collect, and reinvest pasture use fees into infrastructure maintenance (Crewett 2012: 272f., Robinson et al. 2012: 250). All without the interference of higher-up state levels. In every municipality of the republic the local collective of pasture users – which basically is the equivalent of all livestock owners because it is always more costly to grow fodder for one's animals instead of grazing them – was given the full right of pasture control and use under self-governance. This is 'common property made law' (Robinson et al. 2012: 247).
However, this latest reform has its critics as well: control and use rights – property rights – do not only bring value claims but also obligations. The coordination of people, grass, and animals means work. As many newly emancipated communities simply lacked the capacity to mobilize necessary labor, equipment, and management experience the ecological and socioeconomic outcomes of the pasture committee reform turned out to be mixed across the country, and often did not help to alleviate the overuse of certain pastures or inequalities in access (Dörre 2015: 7). This is part of a

broader note of caution voiced against CBNRM models since they have become the celebrated flagship of international development discourse and institutions (Dörre 2015: 2ff., Tsing 2005: 245ff.). Critics tend to be concerned not about the possibility of functioning communal self-governance per se, but rather that CBNRM programs are often installed without any conception – hence without supportive infrastructure – of the actual case-specific labor and processes that socioecological management entails (Jacquesson 2010: 103, 110, 115).

The Kyrgyz 2009 pasture law can be seen as another example of the promotion of community-based management that leaves the murkiness of its practical implementation untouched. The reform included neither guidelines on the agroecological requirements of mobile animal husbandry to be met, nor recommendations on the workings of equitable collective planning and coordination (ibid.). Additionally, and typical for CBNRM models, it was based on a rather simplistic and unrealistic concept of community. Little discussion is to be found in the 2009 reform debates on conflicting interests and unequal socioeconomic power that could turn into political power within newly established pasture committees, nor on communities' blurry boundaries in the context of translocal entanglements through labor migration. The communities on which the task of management would be based were conceptualized with given rather than contingently and laboriously acquired traditional ecological knowledge on pastoral cycles, with implied and unquestioned 'organic' political institutions, as internally homogenous, and as intrinsically acting sustainably. Collective cohesion was taken for granted. 'Community' appeared as empty and romanticizing signifier instead of being unpacked as a core component of the functioning or misfunctioning of any commons situation (Dörre 2015: 7, Jacquesson 2010; see also Li 2014: 150-177, Li 2007: 190f., Tsing 2005: 256). In practice however, pasture committees found themselves in need of respected and legitimately authorized mediators to deal with conflicting interest. Many were short of staff with agroecological expertise who would be able to discern changes in grass growth, of office spaces with documentation facilities, of vegetation maps, and more (Dörre 2015: 11). As all management responsibility had been devolved to their field of duties – which can be and has been interpreted as typically neoliberal strategy of externalizing governmental tasks and costs (ibid.: 2) – the village-level committees had no other state agency to turn to for help or advice in handling these challenges.

Since 2009 it has been up to each singular village to assemble the resources and channels of negotiation to manage their pastures and mobile herders on its own. This, obviously, can go wrong while

risks to livelihoods in the alpine environment are high. As the previous paragraphs already hinted at, this is a general problem when it comes to policies concerning common property and the theories that inform them: they lack in conceptions of how collectively working together with collectively held, livelihood sustaining resources, across differing individual interests, can work, and how this can be supported and fostered (Dörre 2015, Jacquesson 2010: 108f.). An official common property title for municipalities over pastures is not a successful formula for sustainable pasture management in and of itself. Property rights do affect pasture use and herd mobility, but their effects remain an open research question that requires paying case-specific attention to those rights' actualizing collective practices. We have returned to the questions posed at the outset of this chapter: How does collective coordination of collectively held pastures work in Tamga? How does the 2009 reform transform negotiation conditions and use patterns on the ground? How is access regulated, given the complexity of a real heterogenous community, among the particular agroecological layers of real mountain slopes? The reform documents do not contain an answer – but lives in Tamga do hold some.

The contribution this thesis aims to make is precisely its attention to the everyday pasture-coordinating practices that unfold within Kyrgyzstan's legal framework for common pasture property – nested within state property claims of a market-oriented, post-socialist nation. This is the kind of thing that anthropology is good at: ethnographic attention to the micro-level of actual individual subjectivities, animal bowels, or village gossip. Despite the critique that the 2009 reform left municipalities to figure out for themselves how to fulfill the tasks of actually administering the commons, a decade later Tamga's sheep and goats now graze on the *syrt* again after a nearly thirty-year long break, all animals move with the seasons, and all herders pay their fees. This is worth understanding – through the form of a case study, but one that points to broader, partially connected themes in Kyrgyz mobile pastoralism (that make up chapter four) and to gaps in the available conceptual toolkit of commons theory.

3.2 on common gaps

It is no new observation that the commons has often been evoked – even legally instituted – as a category of property without reference to its constitutive content: forms of collective action and negotiation about the distribution of valued resources. This structural inattention formed the basis

for Elinor Ostrom's seminal comparative work on the actual governance of existing, ethnographically documented commons (Ostrom 1990). By glancing into the 'common black box' and thus beyond the confines of merely a designating name, she aimed to defend the viability of communal resource tenure against proponents of the (neo)liberal property paradigm that equated the commons with environmentally destructive open access – a situation that only privatization or authoritative intervention by external state institutions could alleviate (ibid.: 18-28). Drawing together examples of alpine pastures in Switzerland, Japanese forests, irrigation systems in Spain and on the Philippines, and fisheries in Turkey, Ostrom demonstrated that common pool resource management can indeed function in an economically and ecologically sustainable way, without any outside executive power or supervising agency. At the same time, she showed that any particular commons' functioning depends on the fulfillment of a set of tasks; that it depends on labor and on the collective of holders enacting certain practices (ibid.: 58-102). The rash and prevalent repudiation of communal property as inherently prone to be destructive, Ostrom reasons, had been possible precisely because of liberal property theory's blindness towards the practices that make up existing commons situations. The tentative list of tasks and collectively upheld conditions she deduces from her examined case studies, as conducive for creating a workable commons, contains: inclusive arenas and recognized channels of decision-making, mutual monitoring, conflict settlement mechanisms (ibid.: 90), shared norms of behavior (ibid.: 36), trust and a sense of community (ibid.: 43), accountability and graduated sanctions if members take more than their appropriate share, and clearly defined boundaries between the commons and the outside (ibid.: 90). As will become clear in the following ethnographic chapter, this inventory of what lies inside the black box of communal property holds descriptive relevance for the context of Tamga's public pastures, too: there will be stories of monitoring, of fines, of communal solidarity, and more.

I particularly endorse Ostrom's work because of her insight that the commons is made up of practices, from its own ongoing actualization through collective action. This frees the commons from the confining grid of the canonical four-fold typology of property theory, already alluded to above. The types of property regimes this typology differentiates – and thus puts forward as productively mapping out their empirical complexity – are private, state, common, and open access (Bromley

1992: 10ff.). In practice, and in Tamga, these categories appear much less clear cut and hardly as neatly separable.

Take families' plots of arable land, for instance. Legally they belong to the state and were only leased for a certain number of years – not sold, not fully signed over to the people of Tamga. Yet the fields are treated as alienable private property. They can be sold and written over to others, their lessees hold full power of disposal over them, they are even called private property: *menchik*. The irrigation water necessary to make them productive, on the other hand, belongs to the whole village and must be allocated by the municipal government's water deputy before it reaches anyone's soil. Tamga's alpine pastures, too, fall between the categories: This is state-backed community-level management of federal pastures. During socialist times, all land was held by the state in the abstract and managed on a more local level, by the *sovkhoz*, too. However, the channels of villagers' participation in decision-making on animal husbandry, and the structures of authority that backed the *sovkhoz*'s head's coordinating orders, were quite different from those that traverse the contemporary pasture committee. Additionally, back then, animals, machinery, stables, barns, and other infrastructure were all undivided as the state farm's collective assets – now these belong to individuals and households. The strip of forest snaking across the mountain slopes between spring and autumn pastures and the *djajloo* is also the property of the Kyrgyz republic, yet it is controlled by still another agency. The state-run forestry bureau (*leskhoz)* operates not on the municipal but instead on the regional level of Djeti Ögüz. Other than the members of pasture committees, its employees are not elected and controlled by the collective of local users.

The border between communal and state property turns out to be hazy – hard to put one's finger on. Can I say that the forest is more state-owned and less of a commons than the pastures? Where does technocratic bureaucracy end and communal self-organization begin? If something belongs to the state, doesn't that mean that it belongs to the community of all citizens – to the people – anyways? This question is especially pertinent in the post-socialist context where the Soviet Union's property once stood, at least in political theory but also in people's minds, for the collectively earned wealth of the entire working population itself (Alexander 2004: 253ff.). The differentiation between commons and state, I suggest, cannot be absolute but must situationally become a matter of degree and context-dependent scale: Yes, the *djajloo* and the *syrt* are more of a commons

than the *leskhoz*-managed forest, because their use and management involves far more collective coordination work that is not delegated to bureaucrats and experts.

At the same time, the communal pastures and water are only one part of a mosaic of plural property forms. Tamga's agro-pastoral landscape is not only altitudinally layered but also an internally interdependent composite of diversely owned things and means of production: leased land meets collective water and private animals meet common state-owned grass. Another piece of comparative literature on land tenure and agrarian livelihoods – this time by anthropologist Robert Netting – suggests that such tenure composites are the rule rather than the exception in small-scaled, intensive peasant agriculture (Netting 1993: 182, 188), specifically, in agro-pastoral and transhumant settings (ibid.). The distribution of property forms across types of lands and resources that emerges from Netting's assembled examples is not random but reflects forms of usage: animals, gardens, and fields tend to be clearly defined, private, and inheritable household holdings; lands that are less intensively used and most productive when undivided, like pastures and forests, tend to be in communal tenure – along with water and infrastructure (Netting 1993: 169, 181; see also Bromley 1992: 14f., Netting 1981: 34, 63). If the commons, thus, typically exists in co-constitutive conjunction with individualized property forms, how much analytical usefulness does the four-fold typology of distinct categories retain for the description of the empirical? Of Tamga?

Categories are helpful to think with as productive reductions of complexity. As such, however, they also create blind spots. As Anna Tsing eloquently puts it 'categories and discriminations always produce zones of "boredom" and unreadability; powerful projects of categorization […] produce persistently uninteresting, invisible, and sometimes illegitimate zones' (Tsing 2005: 172). I follow her in calling those zones, which oddly lie between category boxes, gaps (ibid.). How should we grasp tenure complexity in Tamga, and the collective coordination that *is* going on among the pastures, when it continuously spills over the defining outlines of available concepts? Tsing's methodological proposition is to direct our ethnographic attention precisely into the cracks where widespread categories turn out to have little grip on actual lives: to seek them out. I endorse this approach: This is where we may find better-tailored answers, at the same time as we learn about what the formerly given categories missed. This is what I set out to do in the ethnographic chapter of this text – to flesh out aspects of Tamga's everyday communal pasture management that

materially organize its lives and its landscape outside and between narrow property categories; I believe that, on the conceptual level and beyond the singular case study, this may even add to a more realistic understanding of how commons work in general. The aspects I find in the gaps are practices.

3.3 on common practices

What is it, then, that constitutes a commons? What is inside the black box? It is time to move from questions towards tentative answers. The working definition I have come to adhere to, and that already lurks among the previous pages, is that commons are best described through their concrete coordination practices. Commons start and end where interdependent collective action becomes necessary for the use of a valued good. This allows for a commons to be intertwined with other types of property and to be 'nested' within legal state ownership, and yet to still be discernable. This rendition is inspired by Ostrom's[13] approach to fill an empty commons concept with praxis, but I also aim to go beyond the set of practices of common tenure delineated in her work. Inspired by feminist scholars like Silvia Federici (2017 & 2019) and literature on the lingering legacy of state-socialist political economy (Alexander 2004, Dunn 2004, Hann 2003, Humphrey & Mandel 2002, Verdery 2018), I give special attention to those patterns of work practices that are often excluded from labor calculations, namely those that involve the reproduction of relationships and social networks of trust, support, and mutual responsibility. I want to reason, and to show through ethnography, that everyday reproduction of solidarity is part and parcel of the work the commons requires, and hence of Tamga's agro-pastoral production itself. 'Commons require a community' (Federici 2019: 94). As the above-quoted critics of unquestioning and 'empty' CBNRM promotion assert, community should not be regarded as given. They stress that any particular collective – any former *sovkhoz*, any village, any association of pasture users – is not a homogenous group guided by the same interests and with the same access to power. This matters because uneven power relations influence the functioning of communal coordination. I would add that to understand collective action, we need to understand (if always imperfectly) communal cohesion within and across

[13] Together with other authors who have concentrated on practices and actualizing processes in their conceptual work on property regimes (Galaty 2016, Verdery 2018).

heterogeneity. And that such cohesion has actually to be fashioned through material sociality-sustaining practices.

The following ethnographic section is a mosaic of four subchapters on commons practices in Tamga. They are not meant to represent an exhaustive list. No ethnographic account can be exhaustive, I believe – anthropology's methods and scope are intrinsically open-ended. And yet, ethnographers can tell partially transferable stories that matter, because the micro-level of particular everyday lives that they are good at describing are permeated by wider connections. The first subchapter, *chöp* (grass and hay), speaks of how information on the growth of grass is made to travel across the altitudes between summer pastures and the village town hall and how this gets translated into executive decisions. *Karta* (map) addresses formal and informal ways of knowing the pasture land's fine-grained topography, as well as their dovetailing in grazing spot allocation. *Suu* (water) delves into the practicalities of intersecting tenure complexity; transhumance requires not only pasturage but also hay fields. *Suu* follows the distribution of irrigation water, which is outside of the sphere of influence of the pasture committee but inseparably entangled with its workings. The final subchapter, *djardam* (help), moves towards the reproductive practices of sustaining community solidarity and adds a layer of history. It talks about how pasture committee members are held personally accountable by the collective of pasture users and how this speaks of Kyrgyzstan's socialist past. It traces practices and norms of reciprocity circulating through Tamga in their importance for the crafting of trust and fora of exchange – both of which are indispensable components within the tissue of collective action.

methodology II: tea and other stuff fieldwork is made of

'Participant observation – living and working alongside the group one is studying – is the hallmark of the anthropological method.' (Dunn 2004: 27) A sentence very similar to this can be found tucked away somewhere in the pages of nearly every ethnography; it is critically yet still ubiquitously taught to students of social and cultural anthropology sometime during the first terms of studying (e.g. Clifford & Marcus 1986, Spittler 2001). I always liked and find it telling that this methodological 'hallmark' of my discipline – participant observation – is such a wide and actually quite hazy umbrella term for a huge array of possible practices. It remains an empty vessel, until it is filled with the idiosyncrasies of a concrete site of fieldwork and engagement. Its whole potential lies in the fact that what it eventually entails is shaped by the place and people an anthropological research projects comes to take place among. Anthropologists start close to the ground – with ordinary details they stumble upon, with stories, as listeners to the meaning that people give to their own decisions, with the bodily experience of labor practices (e.g. Dunn 2004: 23ff., Humphrey 2002: xviii, Li 2007: 30, Tsing 2005: 271, Verdery 2018: 28). This is where abstract reforms based on abstract ideas on land tenure and the workings of collective action may be disentangled into their actual constitutive practices. This strategic particularism and the attention that is given to concrete everyday lives, is precisely what distinguishes ethnography from macrosocial analyses and where 'common black boxes' can be opened.

In the case of Elizabeth Dunn, from whose monograph on the messy privatization of a Polish food factory after the end of state-communism I quote above, participant observation meant working on the shop floor of a juice bottling plant, joining sales representatives on car rides, chats during cigarette breaks, and playing with her co-employees' children after the shift or on the weekend. Fieldwork on Tamga's pasture commons actualized in its own ways. Most of all, it meant sitting down around tables set with bread, sugar, and jam and having *chaj* (tea). No day passes in Tamga without hours spent chatting over steaming cups of black tea, be it in a tent on the pastures or in a kitchen down below in the village. *Chaj* is the fuel for exchange in Kyrgyzstan – it is literally impossible to pass by somebody's house without sharing a cup, a piece of bread, and a piece or two of information and news. Most of my interviews emerged from some of the many daily *chaj*-conversations, rather than being arranged more formally.

Beyond the uncounted tea breaks that punctuate every activity in Tamga, fieldwork meant both joining friends and acquaintances in diverse everyday chores and accompanying work teams or going on trips that had specifically to do with animal husbandry. In terms of the latter, I helped to corral herds of sheep for them to pass through a disinfection bath before leaving to the summer pastures; I joined cattle drives on foot and on horseback (or, once on the *syrt*, even in a honking Russian jeep); I held sheep, rams, and goats while they received a vaccination on the high plateau; I helped dairying on the *djajloo* by watching kettles of fresh milk heating on an iron stove and by taking off the cream with a separator afterwards. Several friends allowed me to accompany them on visits and stays with herding families on both the *djajloo* and the *syrt*. Others drove and walked me across the pasturage and retold me the names and stories of valleys, hills, streams, and crumbling Soviet barns. Still others saved me a seat in the cattle truck from Tamga to the region's largest animal bazaar in Karakol to witness the hubbub of auctions and the traders who buy the animals that will end up at the slaughterhouses and markets of Bishkek. Second to the tea conversations, car or horse rides and hikes were the most common setting of me systematically posing research questions and (often clumsily) jotting down notes. A couple of times, after many phone calls, I managed to arrange appointments with representatives of the village government and the pasture committee at Tamga's townhall. While most of the more or less structured interviews I conducted arose from casual conversations – notebook with collected questions ready at hand or a pen and scrap-paper hastily fetched from my pocket – the meetings with local officials at their desks were more formal and were guided by more curated inquiry outlines. The style of the interviews followed the setting, the roles, and the pace of the occasion. The process of learning to read the different textures of sociality in the village townhall, in a herding family's tent, in cattle trucks, or during the celebration of a life cycle ritual – and learning how to speak and ask questions in each – already is part and parcel of ethnographic work.

On days without the opportunity for excursions – frankly, the majority of days – time in Tamga readily filled up with conversations over peeling carrots, doing dishes, the slow process of cleaning wool from burdock by hand, playing with my friends' children, picking and pitting cherries, planting potatoes, painting doors and window frames with a new coating of Russian turquoise, many more cups of tea, or just with seemingly empty time of waiting for something new and unexpected to happen. In between chores I scribbled notes, went for walks through Tamga's streets to go

shopping and strike up chats with neighbors of the households I was staying with, or I strolled into the fields to check on the growth of fodder plants and to follow the irrigation channels. Sometimes I was invited (or simply taken along) to feasts; sometimes herders would talk me through their old copybooks in which they had noted down animal numbers, livestock owners' markings on their livestock, and fees paid in former seasons. It was often in the serendipitous flow of village life, spontaneous invitations, and gossip that I got to know more herders, mine worker, teachers, shop owner, or former foresters whom I had not met before. It was also in this flow that I most often learned about aspects of pastoralism or of the workings of the pasture committee that I had not formerly thought of and that I subsequently started to inquire about during the next *chaj*-conversations or cattle drives. Some of these have eventually ended up on these pages.

The open-endedness of anthropological method, of participant observation interspersed with conversations and interviews, gives rise to insights that do not readily lend themselves to being directly transferable to other empirical contexts or to being statistically computed. However, it allows for generative surprises and for sometimes noticing connections and relevant questions beyond those preconceived in research agendas. The commons practices that emerged to me as relevant during my stay in Tamga and that I present in the following ethnographic chapters are thus based on the idiosyncratic coming together of a whole array of different kinds of conversations, joined tasks, and accompanied trips. On planned excursions as much as on slow-paced serendipity. On friendships, on listening and being listened to, on time, on many filled-up notebooks, and on many cups of tea. This is the kind of realism ethnography is made of.

4 the ethnography: four pieces of a grassy mosaic

> "Those things which occur to me, occur to me not from the root up but rather only from somewhere about their middle. Let someone then attempt to seize them, let someone attempt to seize a blade of grass and hold fast to it when it begins to grow only from the middle." Why is this so difficult? […] try it, you'll see that everything changes. It's not easy to see the grass in things and in words (similarly, Nietzsche said that an aphorism had to be "ruminated"; never is a plateau separable from the cows that populate it, which are also the clouds in the sky). (Deleuze & Guattari 1987 [1980]: 23)

4.1 чөп (*chöp*, grass & hay) – monitoring and enforcement as commons thing politics

In *Kara Suu*, Bekdjan and I descend from our horse's back. It is mid-July 2019. The gelding, Tuman, is tired of our weight and all the flies, and *Kara Suu* is a well-suited spot to recover our strength after three hours of steadily trotting up mountain paths from Tamga towards the *djajloo*. It is a flattened-out and *nym* (damp) valley with a creek in its middle and with a stunning view of both the mountain peaks above and the lake's vast surface below. Further up from *Kara Suu* the slope gets steeper again for the remaining thirty minutes of our ascent to the *djajloo* herders' tents. The grass is high and dense: at least ten centimeters off the ground wherever I turn my gaze, and in some patchy parts up to more than twice that[14]. It is interspersed with white small-petalled flowers that smell of honey. I think that this is sweet alyssum, but I omit to pick any, nor do I take a photograph to double-check in my botany book later. We are among the last patches of forest, just on the treeline that separates forest from the rolling summer pasture landscape. A few cows, calves, horses, and foals graze close by; some half-curiously raise their heads but do not seem to find us interesting or alarming enough to change their pace. 'Do you still remember the wooden house that used to stand here, Lisa? When was it that you visited *Kara Suu* for the first time?', Bekdjan asks. 'That was in 2015.', I reply. Back then, the weathered remnants of the summer pasture house still sat among the grazing animals – now the poles and planks have completely vanished. Decomposed, scattered, buried by four winters. One of Bekdjan's brothers used to work as a sheep herder (*kojchu*) with his wife and children in this valley, staying in the wooden house, until 2013 – when he decided rather to do construction work during summers. Another *kojchu* took over his pooled flock.

[14] Grass plants can grow much taller in lower altitudes but for 2,500m above sea-level this is substantial.

photograph 4.1.1: *remnants of the wooden shed in Kara Suu, August 2015*

In 2015, not only were there the traces of a summer camp in *Kara Suu* where, now, no one sets up tents, but there were more herding households[15] on *the djajloo* in general: There were three households of cattle and horse herders, and two that looked after sheep and goats. In 2019 there are only two tent camps and only large livestock. This is why the grass is so high, Bekdjan and the *djajloo* herder we are about to visit reason. This is the second summer since it was decreed by the pasture committee that no small livestock should be driven onto these pasture grounds, under penalty of a monetary fine. Instead, sheep herders would have to start migrating to the high plateau of the *syrt* again like they used to before 1991. When the sheep were still allowed onto the *djajloo* they ate too much grass, they bit it too short, and the cows would always try to move downhill too early in the season because they did not find enough forage above. Now the grass – *chöp* – is better again.

[15] Commissioned herders do not take herds on the transhumant migration on their own but set up camp on the summer pastures with others, mostly with relatives. Common herding household patterns in Tamga and its neighboring villages are couples with their children; elderly couples with one or two grown children as support – sometimes even with grandchildren; only the father or the mother camping with at least one adult child; couples without children but with non-related, subcontracted helpers (*djardamchylar*). Usually the husband or father of the household (or in some yet rare cases the single mother) is the contracted herder, documented by the pasture committee and responsible for the animals.

photograph: 4.1.2: *Kara Suu in the second year of the moratorium, August 2019*

Chöp is a crop. It is valuable from a human perspective because in the metabolism of ruminants it transforms into meat and milk, into nutritious substances that our bodies can digest. Our guts cannot, by contrast, break down the grass plants – or rather the bundle of diverse grass and herb species that make up *chöp* – themselves (Haiger 2005: 49f.). As with any useful crop in agriculture and animal husbandry humans have an interest in fostering and supporting, or at least not reducing the grass's growth. The more herbage, the more fodder, the more sheep can be sustained, the more milk can form in cows' and mares' udders, the faster calves and foals will grow, the more animals can be sold, eaten, and shared at festivals with relatives and guests. The trouble with harvesting grass, be it through the mouths of grazing animals or by cutting it for making hay, is that the part gathered from the plants is their leaves – their photosynthetically active organs (Parsons & Chapman 2000: 52, Schnyder 2006: 40). This means that what is harvested is also part of the plant's capacity to gain energy: to synthesize and maintain its nutritious matter, to stay alive, to regrow. Making use of grass in this way means striking a balance between feeding one's animals as much forage as possible while not damaging the pastures' and meadows' valuable plants to a point where they die off, have to deplete their energy reserves to rebuild their blades, or severely slow down their regrowth. Diverse pastoral strategies reflect this balancing challenge: animal

rotation on pastures, the timing of hay-cutting, matching animal species with fodder plants species, large-scale animal mobility like the moves between seasonal pastures, managing livestock density, etc. If such balancing is not observed, if pastures suffer from overgrazing, the amount of available forage eventually reduces, as less *chöp* manages to grow back, unpalatable plant species may take over the space left by withered grass, or as defoliated and trampled soil erodes.

Along fisheries and irrigation systems, pastures are one of the favored figures of thought in commons theory – both on the side of the commons' most prominent repudiator Garrett Hardin in his article 'The Tragedy of the Commons' (1968), as well as by their famous defender Elinor Ostrom (1990). The trouble with collective pasture use is that if every herder and cattle owner kept increasing the stock numbers on a shared pasture to get the most gain out of it, the combined and rising grazing effects would eventually damage the pasture and lead to a diminished fodder availability for all. On top of that the negative impact of certain grazing methods or intensities is not necessarily immediately visible. If we do not follow Hardin's argument in assuming that such 'tragic' overgrazing is basically inevitable on common pastures, the question of interest on Tamga's alps becomes: How does the village's collective of herders monitor their joint and long-term influence on their pastures? How can they make sure that sustainable balancing is observed according to the specific conditions of their grassland? Apparently, the issuance of leasing contracts and the propagation of individualized observance of defined pasture plots under the 2002 legislation in Kyrgyzstan has not brought about the hoped-for effects on pasture use; it has been dropped in favor of collective prevention of overgrazing with the 2009 reform (chapter 3.1). The following pages trace the practices along which this task is performed among Tamga's pasture grounds.

In order to better understand how grasses react to grazing animals and cutting, let me first venture to present a short digression into their physiology. Blades of grass indeed grow from the middle[16] (Jones & Lazenby 1988: 37f., Schnyder 2006: 41). What is colloquially referred to as a grass's stem, is actually not a stem from which leaves branch off, but rather several rolled up leaves enfolding each other.

[16] Pace Deleuze and Guattari, they also grow from the root: there could be no seedling without seminal roots and, throughout a grass plant's life, the roots' and blades' growth are intimately connected and interdependent in their nutrient cycles (Jones & Lazenby 1988, Nelson 2000).

From a shoot's pseudo-stem, the youngest leaf (figure 4.1.1: 5) pushes out and upward through the middle of the other blades' enclosing sheaths. Shoots do not accumulate an endless number of leaves (figure 4.1.1: 1-5). Once they reach a species-dependent maximum, for every newly produced leaf an older one withers, dies off, and is lost as unutilized for the harvester (ibid.). Grass has a quick turnover of matter: leaves may live as little as three weeks before they are replaced by younger blades (Parsons & Chapman 2000: 35, Jones & Lazenby 1988: 71). The leaves per individual plant can still be increased beyond one shoot's stabilized count of blades, however, as grass plants can develop lateral shoots (figure 4.1.1: a-c). One plant can grow a hypothetically endless number of tillers out of axillary buds that form along with every new leaf of the original shoot (ibid.); every tiller can grow new blades from its middle and, eventually, tillers of its own. Accordingly, grass plants can spread and establish themselves in a pasture not only through seeds but also through theoretically exponential branching out (Nelson 2000: 116ff., Parsons & Chapman 2000: 35ff.). In practice its own tillers and competition with other plants and species for soil, water, and light limit such sprawling.

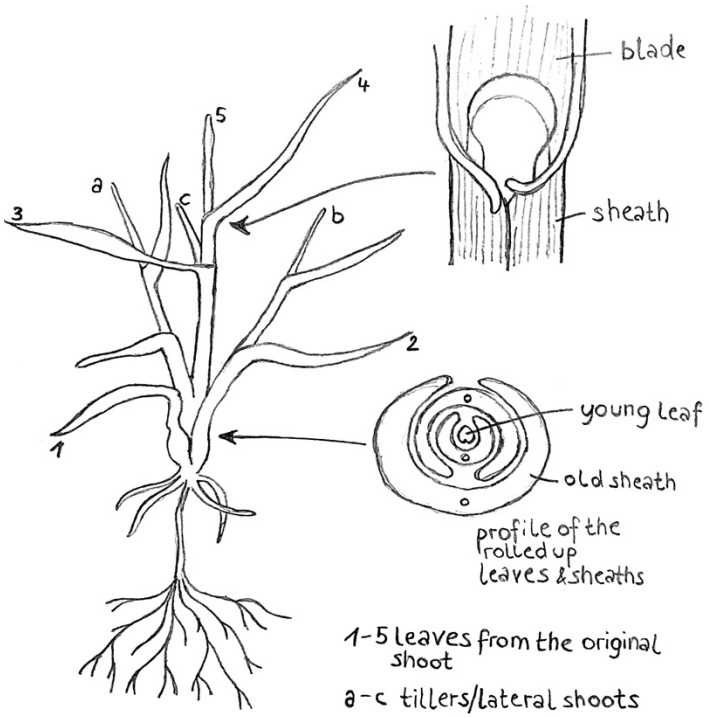

figure 4.1.1: *scheme of a young plant with five leaves on the main stem (1-5) and three tillers (a-c); the junction of blade and sheath; profile of the pseudo-stem (reproduction from Jones & Lazenby 1988: 28)*

Grazing jaws or sickles interfere in these growth patterns. Their coordination matters for the grass. The frequency of cutting or browsing influences if plants – and which plant species – can or cannot recover enough to keep up their leaf density. The availability of water and sunlight affects the speed and ease of leaf and tiller production and, thus, the timing of defoliation matters, too (Jones & Lazenby 1988: 46ff.). Different animals have different sets of teeth, bite at different heights from the ground, have different feeding preferences, and thus damage plants in different ways (Parsons

& Chapman 2000: 64). If too much photosynthetically active matter is withdrawn – because of unwise timing, lack of animal movement, excessive animal density, or a mismatch of grass and animal species – *chöp* will regrow slower, get shorter, and the cows may decide to wander downhill in the search for food too early. Grass on the *djajloo* is indeed inseparable from the ruminating cows that populate it and the water- or snow-shedding clouds in the sky.

I learned about these basic bio-physical principles of grass growth in a university course on organic grassland farming – far away from *Kara Suu*, in Vienna – as well as from articles and books. This helped me to grasp what is at stake when pastures have to be allocated, or when pasture committees are entrusted with the responsibility to ensure that their village's pasturage is used sustainably. It helped me to start observing pastures' plants more attentively. It helped me to ask more relevant questions. There are some villagers who earned degrees in agronomy in the cities Bishkek or Karakol; controlled natural scientific pasture assessment is part of Tamga's pasture committee's workings, as I will touch on shortly. Yet in *Kara Suu*, on the pasture, it is long-term experience and everyday observation of animal and plants that people draw on, not on schemes of pseudo-stem profiles or tiller production. Bekdjan's and the *djajloo* herders' intimate knowledge and understanding of the growth of grass differs from mine, but the basal insight into grass physiology gathered in a lecture hall, served as a working tool for me to partake a little better in pasture surveillance in Tamga despite my lack of practical experience. I reproduced it here because I believe that it may also be a guide to readers, and because grass's matter matters for the running of a pasture commons.

Herders and the books mentioned above both know that the matching of browsing animals and pasture grounds is a complex task and that there are no stable, no mechanistic optimal solutions. Good pasture management requires flexibility. Too many interdependent parameters are involved to make permanent animal ratio plans: rainfall, snowmelt, sunlight, hail, temperature, cattle breeds more or less adapted to the alpine climate and its plants, herb composition, animal behavior, soil, slope, and more. Thus, pasture management requires the work of constant observation and constant adjustment. This is where the growth of grass leads back to the question of commons practices, of the labor that is done to sustain Tamga's communal pasture use and governance.

Who observes the grassland? Who keeps monitoring how the herders move their browsing animals and how this affects the plants? How does the observational knowledge reach the village and come to be translated into managerial decisions that are socially feasible, accepted as legitimate, and that live up to the material needs and constraints of grasses and animals? Or, borrowing a word that I find good to think with from Bruno Latour: How does Tamga's collective of pasture users get its 'thing politics' (Latour 2005) right? Pasture politics is more than the coordination of only human interests, power relations, and opinions; it is also about the state of *chöp* and herds and how they come to bear on decision-making. In *Politics of Nature* (2004) and *From Realpolitik to Dingpolitik* (2005) Latour makes the case for a broadened concept of political negotiation beyond human actors that includes both nonhumans – things, Dinge – affected by any particular resolution that is up for debate, as well as the procedures of mediation and representation that make those nonhumans 'speak' in arenas of decision-making. This may sound like a truism, but what I find productive about Latour's proposal nonetheless is that it forces the analyst to pay close attention to the actually constitutive practices that make up the coordination of things and people. In the words of Latour, this means exploring the procedures and the '*added* labor' (Latour 2005: 34; italics in the original) that assemble the concerned parties – from tillering grass to the sheep herders who would like to set camp on the *djajloo*, from trampled soil to hungry cows – around the same discussion table, into a 'Parliament of Things' (ibid.).

Since 2009 the municipality of Tamga has been responsible for carrying out this coordination work, and for doing so in local, independent, and common self-organization. On the one hand, this entailed – and continues to entail – establishing modes and arenas for all villagers' political participation: the election of pasture committee representatives, the committee's office where pasture documentation is made accessible and people can drop in with concerns and suggestions, and village-wide meetings held each spring to fix herding fees[17]. Yet, assembling and politically representing what is at stake in a pasture commons includes more than setting up a voting booth and office hours. It also includes the mediating communication channels along which the pastures' dynamic ecology and animals' choices as to where to guide their steps are made present – are re-presented – in fora of decision-making like the committee's office. It includes the circulation of peoples'

[17] For a more detailed analysis of the annual collective fixing of herding prices in municipalities across Kyrgyzstan see Steimann 2010.

observational knowledge that eventually feeds into binding decrees that redirect human and animal mobility on Tamga's alps. Following the practices of grass observation, of knowledge transmission, and its translation into reincorporating the *syrt* into transhumant movement patterns ethnographically, makes them emerge as a first piece in the mosaic of commons practices that constitute Tamga's pasture commons.

Bekdjan decides that Tuman has fed enough of *Kara Suu*'s plentiful *chöp* and we embark on the last stage of our ascent to the *djajloo* herders' camp site. The slope gets steeper and the paths more narrow. We are not the only villagers visiting the summer pasture today: some – like Bekdjan – have come up to routinely check on their cattle, some to take a cow back to Tamga to be slaughtered for an upcoming feast, to be cashed in Karakol, or because an opportunity to sell milk has opened up. We exchange quick words of small talk across the manes of our riding horses – about the usual topics: animals, kin, the current price for apricots, the weather – and move on. Shortly after, we are welcomed at Maksat's and Nargiza's *djajloo* campsite: two tarpaulin-covered tents enclosed by a wooden fence; two excited dogs announcing our arrival; a pile of fire wood; eight young calves loosely tied to wooden poles in the vicinity to keep their milk-giving mothers close by; dairy buckets and a cream separator on a low wooden table. Bekdjan and I enter the tent with the stove that serves as kitchen, living room, and as bedroom during the nights. I hand over the gifts of sugar, biscuits, jam, and noodles that Tuman has carried up here in his saddle bags. Then we sit down for the first of many cups of hot tea, enriched with freshly boiled milk. We will stay with Maksat, Nargiza, and their three children until tomorrow afternoon; most of this shared time we will spend chatting and sipping steaming tea.

We talk about grass and the pasture committee's work. Maksat and Nargiza appreciate the decision that sheep and goats should not be allowed to summer on the *djajloo*, at least for a while. The current moratorium on sheep and goats is valid for another three years; it was issued for five years in total. The *chöp* is growing well with the moratorium, and so are the animals they look after. Nargiza asks me if I have recently visited the neighboring village Barskoon's spring and summer pastures, which fall under the administration of Djeti-Ögüz's forestry bureau – not the village's pasture users. 'You can see the difference as soon as you cross the mountain stream that separates the villages' grazing territories.', she asserts. In contrast to Tamga's pastures, in Barskoon the

migration of small livestock to the *syrt* has neither been made compulsory, nor have sheep herders been incentivized to make the longer move by infrastructural support. The *syrt* is far, windy, and cold – people do not move there on their own or on their own accord. Accordingly, Barskoon's *djajloo* is crowded, its grass is very short, and herders are using the spring pastures even though it is July. Where will they find enough forage in autumn, when the lower pastures have no time to recover in summer?

I had been told and had seen Tamga's sheep summering on the *syrt* again for the first time during a short visit in August 2018. Back then, I spent two days with a *kojchu* household on the high plateau but heard only snippets about how and why the decree had been implemented. Nearly a year later, over milk tea and dunked in pieces of bread with jam I ask Nargiza, Maksat, and Bekdjan, if they could let me in on the details of the moratorium's development. How did the decision come about? Why did it work in Tamga to make herders embark on the more arduous *köch* (transhumant migration, move), and not in Barskoon? What I have come to understand about the decree's history is a composite of their accounts, as well as of those provided by three sheep herders on the *syrt*, by cow herders (*ujchular*) from both of Tamga's neighboring villages, by several non-migrating *tamgalyktar*, and by the pasture committee's accountant.

As a basis for any decision-making, pasture committee representatives are entrusted with the continuous and impartial observation of their pastures' vegetation (Yu & Kasymov 2020: 4). Yet, surprisingly as it may seem, in Tamga there is no scheme for regular monitoring visits. If committee members make the journey all the way up to check on grass's and animals' growth themselves, they make them sporadically. This might be different in other villages, however, depending on the transport infrastructure: if there were drivable roads onto the *djajloo* and if the car ride to Tamga's *syrt* did not take three hours, the officials would go to the mountains more often, both herders and the committee accountant reason. Instead of travelling onto the summer pastures, the committee members make phone calls, and where there is no reception – on the vast expanses of the *syrt* as well as on parts of the *djajloo* – they rely on the everyday, individually motivated traffic of villagers like Bekdjan checking on their cattle or herders visiting the village to stock up on supplies as an up-to-date information channel. The initial observation on the *djajloo*'s grass getting too short and the cows repeatedly – and annoyingly – eloping downhill was not established through a

visit by a commissioned observer. Rather, these concerns – these matters of thing politics – reached the committee's office through uncoordinated but continuous and converging trickles of information assembled by the pool of villagers themselves. This parallels one of Ostrom's comparative findings: the task of monitoring a collective resource does not necessarily require a defined authority, be such an authority imposed from the outside (under a state property regime) or appointed directly by the community of users (in a commons situation). Such monitoring and reporting of labor in fact tends to be spread out across the collectivity of people affected by the state and the distribution of respective common resources. At least when the resource in question cannot be hidden or used in secret, like publicly accessible pasture grounds. This way the work-load of observation becomes easier to manage, and the multiplicity of observing eyes and voices checks and balances individual interests (Ostrom 1990: 94ff.). That the actors who bring the grass's growth into the arena of political debate and decision-making turn out to be those most directly and materially concerned – the *djajloo* herders following their wandering-off animals and the livestock owners checking on their animals' health and thriving – seems not that surprising after all.

Establishing a recognized problem and the need for collectively taking action, however, is only the first step towards making Tamga's *kojchular* and sheep herds move onto the only other available summer pasture: a pasture that is much more remote than the comfortably close *djajloo*. Deciding whether the small or the large livestock would have to be relocated to the *syrt* was not an issue. It is common knowledge in Tamga that the bigger animals don't fare too well in the harsh climate of the *syrt*, especially the cows and their young calves. The distribution of cows and horses on the *djajloo* and sheep and goats further up had been practiced for nearly forty years under the *sovkhoz*'s management. The more difficult question was how to convince the shepherds of the necessity to move again after nearly thirty years of utilizing the *djajloo*, and to convince them that the decree would be implemented fairly for all *kojchular*.

As a first measure, this time, the pasture committee representatives did summon an external expert as a neutral arbiter among *ujchular* and *kojchular* – and between herders and the grass itself. They called in a research team to report on the state of the *djajloo*'s *chöp*. Along with the sovereignty granted by the 2009 reform, municipalities had lost their access to federal support to pay for such an endeavor. Instead, the pasture committee turned to internationally funded

development organizations and, in 2017, had scientists assessing the pasture's vegetation with the financial aid of the International Fund for Agricultural Development (IFAD) and the Kyrgyz Community Development and Investment Agency (ARIS). The researchers confirmed what herders and pasture visitors had observed before: the grass was stressed by the high livestock numbers. Backed by this authorizing declaration the pasture committee announced its five-year moratorium. In addition to that and to preventively calm down the *kojchular*s' discontent, the committee promised to supply housing support on the *syrt*'s plateau. By the following summer they would commission and provide the budget for the construction of small but weather-resistant and insulated houses that could serve as more comfortable bedrooms for herding families than tarpaulin tents with their walls flapping in the mountains' wind. When I visited the *syrt* in 2018, these white cube-shaped cabins were already strewn across the plateau's landscape next to tarpaulin tents that kept serving as kitchens and living rooms.

photograph 4.1.3: *a shepherd's* syrt *camp with one of the new cubic houses, Djaman Tam, August 2018*

Despite the scientists' external judgement and despite the infrastructural support, one elderly shepherd refused to follow the pasture committee's call. In 2018 he set up camp on the rolling *djajloo* with his flock instead of driving them over the two mountain passes that separate Tamga

from its *syrt* grounds. Of course, everybody knew. The mountains may seem vast, empty, and hard to oversee when looked at from below – but in fact it is impossible to hide among the treeless pastures and the constant traffic of herders and visitors. Everybody knew, everybody understood the sheep herder's motivation, but still, everybody was unhappy about this unequal distribution of herding labor and hardship. It did not take long until new complaints reached the committee. The solution that was eventually found, again, strikes me as reminiscent of Ostrom's analysis of working commons situations: The difficulty with imposing penalties for breaching a village's collectively established rules is that the involved parties live in the same place and have an interest in limiting conflict. Penalties must strike the balance of being severe enough to matter materially, but not so severe as to substantially impair one's neighbor's livelihood. One way of resolving this dilemma that communities came up with in several of Elinor Ostrom's examined case-studies are graduated sanctions (Ostrom 1990: 58-90, 94). This is also how Tamga dealt with the reluctant *kojchu*. As discontent got more pronounced in the course of the season, the committee representatives took counsel with the village's livestock owners and mediating *ak sakaldar* (respected elderly members of the community)[18]. They decided that for this first summer spent on the *djajloo* despite the moratorium a fine of 50,000 KGS would have to be paid to the pasture committee. In 2018 this translated into approximately 735 USD and represented a substantial part of a typical herding season's earning[19], or the price of up to ten sheep, or nearly the price of a cow. For any subsequent disregard of the moratorium 150,000 KGS would become due – a sum that is sure to make the laborious transhumant migration not worth the diminished profit. In 2019 all sheep herders, including the one who had refused to reroute his transhumant move the year before, took Tamga's sheep and goats to the *syrt.* Among the long-abandoned sheds that had housed the *sovkhoz*'s large herd, summer camps are put up again. Next to small but shiny new cube-houses.

Let me draw together these threads of the moratorium's history and end this subchapter with a first tentative proposal – with the first mosaic piece of commons practice. In paying attention to

[18] For an in-depth discussion of the practice, history, and current legal status of courts of elders in Kyrgyzstan see Beyer 2006 and 2016. During my research stay in Tamga, the recounted dispute-settlement between the reluctant shepherd and the other herders was the only instance when a contribution of the *ak sakaldar* (lit.: white beards) to pasture coordination got mentioned. This is why I touch their presence only fleetingly here. For a better grasp of their role in Tamga in general, another and accordingly more targeted research would be necessary.

[19] A season's earning amounts to about 3-4,000 USD minus pasture use fees and supply expenses.

grass with Bekdjan on the way up to the *djajloo*, in discussing herders' whereabouts over tea in Maksat and Nargiza's tent, but also on the spreadsheets from the ARIS/IFAD research pinned to the walls of the pasture committee office, I see Tamga's commons emerging as the irreducibly particular and intrinsically political process of continuously bringing together people and things. I find it helpful to call this thing politics in the sense of Bruno Latour.

Community-level self-organization – commons thing politics – makes both problems and solutions place-specific (Dörre 2015: 17, Ostrom 1990: 88ff.). Each village has its own match or mismatch of growing grass and browsing animals, its own capacity or incapacity to strike the right chord for funding applications and to bring in researchers or to invest in infrastructure, and its own set of internal conflicts or relationships of trust. The task of coordinating such an assemblage of ecological parameters, informal and sprawling communication channels, and villages' social networks requires detailed and constantly updated knowledge. Importantly, as I hope to have evoked, the labor that goes into gathering and disseminating this necessary knowledge in the setting of Tamga is not centrally planned but dispersed and fine-veined. The state of the grass and the course of herders' migrations reach the more explicitly political arenas of the pasture committee's office and of village assemblies through everyday mutual self-monitoring and the fostered circulation of observations, news, and gossip. When enough people travel across the mountain slopes and observe and retell their surroundings, their plural voices can make up for the absence of an external monitor. They can also make it impossible for a breaching of collective decisions to pass unnoticed or without consequences. I find parallels resonating with my rendering of one of Tamga's commons practices in other authors' works on resource-sharing peasant or herding communities. For Kyrgyzstan, there are Andrei Dörre's and Irène Mestre's observations that pasture committees in their field sites do not collect comprehensive data on vegetation or animal numbers themselves but rely on the herders' collective knowledge (Dörre 2015: 11, Mestre 2017: 10). Beyond Kyrgyzstan, there is Piers Vitebsky's dense ethnographic account of accompanying mobile reindeer herders in the Siberian taiga. He writes of his astonishment at how, wherever he went, people were aware of who was where 'as information and messages moved around the hushed forest like radio waves' (Vitebsky 2006: 171). There is Robert Netting's description of the distribution of irrigation water as 'the system nobody knows' (Netting 1974: 67): in Törbel, the Swiss alpine village where he conducted fieldwork, individual farmers only know their own precise time for the extraction of water

from the irrigation channels – plus that of the person before and after them. But apparently, there is no need for any institution that supervises and knows the whole scheme to keep the once established allocation system stable. There are Katherine Verdery's remarks on the radical visibility of immovable agrarian land: the known fact that people can and will 'read' what another person is doing on such unsecretive soil influences how everybody makes use of it in the first place (Verdery 2004: 149f.). There are Elinor Ostrom's findings, pointed out above (Ostrom 1990). And, as my last but not least example, there is John Berger's literary but explicitly empirically-based portrait of an unnamed transhumant village somewhere in France, and of how its collective knowledge comes to circulate. As a concluding note, let me quote him at length: 'All villages tell stories. Stories of the past, even of the distant past. […] And, equally, stories of the very same day. Most of what happens during the day is recounted by somebody before the day ends. The stories are factual, based on observation or on a first-hand account. This combination of the sharpest observation, of the daily recounting of the day's events and encounters, and of lifelong mutual familiarities is what constitutes so-called village gossip.' (Berger 1975: 8).

After a night's sleep, a morning of processing milk, and some more slow hours of the early afternoon at Maksat and Nargiza's camp, Bekdjan and I commence our descent. On the way we count Bekdjan's family's horses – none has gone missing – and take a detour to have a look at Barskoon's short pasture grass for ourselves. We pass other herders, several camp sites, and flocks of sheep. When we arrive in Tamga at dusk, we are immediately summoned in to have tea by Bekdjan's wife and mother. Bekdjan's brother comes over from his house and joins us for a while, and a neighbors stops by, too. All inquire about who we met, about the horses, how many cows Nargiza is milking, and what the grass looks like. *Uzunbu?* (Is it long/high?) Bekdjan nods and I chime in that Nargiza milks eight cows currently, twice a day.

Before the day ends, Bekdjan and I have already recounted the events and encounters of our short trip to the mountains. We have added another voice to the collective and continuous observation labor that contributes to Tamga's pasture commons.

4.2 карта (*karta*, map) – the (in)efficacy of formality

There is more to the story of the moratorium than the observation that the monitoring of Tamga's pastures is spread out across the village. The story of how sheep and shepherds came to migrate to the high plateau of the *syrt* again is an account of the viability of decentralized knowledge gathering, but it *also* features a group of visiting expert researchers. It touches on the workings of the collective and self-organized management of grass growth, but circulating information, opinion, and complaints *also* form a pronounced node within the office of the formally elected pasture committee. In the previous episode I concentrated on the informal practices of pasture observation and mutual control. In this ethnographic chapter, in turn, I want to explore in more detail the emergent manifestations of formality – the research team's data, the office space, maps, pasture fee collection, spread sheets, stamped documents – that intersect with the informal ones. I am interested in the intersection itself, in the coming together of formal and informal ways of representing the land, of knowing the resources at stake, and of coordinating individual interests on an open pasture. I want to propose that the dovetailing of formal and informal practices makes up another component of Tamga's commons management. For this purpose this chapter will take a closer look at maps, pasture boundaries, and bureaucracy's promise of impersonal equality.

During my first visit on the *syrt*'s plateau in August 2018 I find it hard to orient myself. On the *djajloo* the view over Lake Yssyk Köl and the palpably rising slope make it easy to distinguish the cardinal direction – lake to the north, mountain peaks to the south, Tosor to the west, Barskoon to the east. The *syrt*, by contrast, consists of stretched out, flat valleys surrounded by mountain ridges on all sides. The stony soil and grass paint the whole landscape in shades of greyish brown and greenish yellow. This monochromy is interspersed only by the blue of some small lakes, tones of dark violet in parts of the rock, or the white of the glaciers. Reading landmarks and finding the right way to one's destination more obviously takes experience and nuance than navigation on the *djajloo*. Djoldosh, the friend from Tamga who had arranged for me to accompany him on a trip to the high plateau, takes me for a walk and tries to teach me how to distinguish hills, mountain streams, and valleys. He also teaches me place names: *Djaman Tam* – a camping spot for several of Tamga's herding households. *Djorgo* – a valley that is part of Tamga's pasture grounds. *Tegerek Saz* – a stretch of marshy wetland. *Sary Köl* – a lake without any visible inlet. *Söök Ashuu* – a

mountain pass named after a battle fought against Russian troops in 1916; *söök* means bone. I scribble down the names and draw sketches of the territory and landmarks while walking. I already know that the *syrt* is shared by all municipalities of Djeti Ögüz district, and that there are codified boundaries between village territories left by the region's former *sovkhozes*. Yet, on the expansive plateau itself there are no signposts, no demarcations of belonging. Eventually I ask Djoldosh if there is any map down in Tamga depicting the *syrt* on which he could show me all the places once more. It would help me to understand better how they are connected to one another, how big Tamga's grazing area is, and also where its borders lie. 'There should be one.', he affirms. 'Let's find it for you, once we are back in the village.'

Back in the village Djoldosh starts to investigate, but during my stay in 2018 no map of the *syrt* that is detailed enough to retrace our walk and the places we saw is to be found. We check at Tamga's town hall but are told that, yes, the pasture committee does indeed possess a detailed topographic map of the pastures but that, no, it is not around. Perhaps somebody took it to the district capital, to Kyzyl Suu? Djoldosh makes some calls but does not find out where the committee's map might be. We spend the next two days – half in earnest, half in jest – roaming Tamga for available maps: the ones at the school are not fine-scaled enough, the ones at the old Soviet tourist information center only depict the lake shore and the first mountain ridge but not the plateau stretching out beyond it to the south, and there are none in anybody's home. Everybody we meet or call seems slightly bewildered and amused by our quest – what would you need such a map for? The herders who go to the mountains know the land and its marks and its names without the aid of maps, and the people who do not venture into the mountains have no need to know them. Eventually, Djoldosh's eighteen-year-old nephew takes pity on us and opens Google Maps on his smartphone, yet Djoldosh finds that the small segment the phone screen can show at a time is ill-suited to convey a meaningful picture of the *syrt*. I, meanwhile, have started to be captivated more by people's general disinterest in maps and by their physical absence, than by the prospect of actually peering over one.

One year later, in 2019, I have an interview appointment with Tamga's pasture committee accountant at the town hall. Yrysbek welcomes me in his office. He is in his mid-twenties and had been elected into his position two years ago. As I enter, the first thing I notice are the two large, detailed

maps of Tamga's and Tosor's[20] pastures grounds that are hung up on one of the walls. One is topographic, the other stresses use form potentials – grassland or barren rock – and the minute course of streams. The maps do not show a continuous territory on which village boundaries are inscribed. Instead, they only depict those tranches of *djajloo* and *syrt* land that the municipality of Tamga is responsible for. Beyond the tranche boundaries, the map is left white – the represented stretches of land like pieces of a puzzle.

photograph 4.2.1: *the maps of Tamga's pasturage in the pasture committee's office, Tamga, July 2019*

Apart from the map there is a notice-board covered in stamped documents and lists of names and numbers, a bookshelf holding a handful of folders, a computer and a printer sitting on a side table, and some hung up photographs exhibiting – as I am about to find out during the interview session – the IFAD/ARIS-funded researchers measuring Tamga's grass. The walls themselves are painted in the same shades of white and post-Soviet turquoise that adorn Tamga's houses outside. Yrysbek notices my attention to the maps and explains that they, too, were made with the recent support

[20] Tamga and Tosor are part of the same municipality. This means that they share one registered pasture committee and one elected head and accountant, yet Tosor has its own village-based pasture supervisor and contact person, should conflicts arise.

of IFAD and ARIS; they have only been around since sometime last year. I will not find out if the puzzle piece maps are the same ones that I was looking for with Djoldosh the previous summer.

We spend the next two hours talking about the pasture committee's range of functions. One of its members' tasks is the collection and documentation of pasture use taxes, per head of animal, per year. The taxes are collected at the end of the season, their payment is documented on files in the office, and Yrysbek travels to the district capital Kyzyl Suu to deposit them at the bank; there are no bank branches in Tamga. Two thirds of the tax revenues directly feed into the committee's budget which it is expected to reinvest in supporting infrastructure for the village herders: roads, bridges, more comfortable housing on the *syrt*, or – high in demand – old shipping containers to be installed on the summer pastures as storage facilities for camp stuff during winter. The metal stove, the stove pipe, tarpaulins, stools, milking buckets and the cream separator, blankets, pots and dishes, the low table. There has been one such container on Tamga's *djajloo* since the summer of 2019; Tosor hopes to get one next year. The remaining third of tax receipts have to be transferred to the federal government. This money drains off the municipal budget but, Yrysbek reasons, before the 2009 law and the introduction of the two-thirds-clause there was no mechanism to ensure local reinvestment of pasture fees at all. If the revenues remaining in the village do not suffice, the committee will turn to funding agencies for support. Another duty of the pasture committee appointees is issuing herding contracts and keeping a record of herders' names, animal numbers, and the sites they camp on. Herders and livestock owners also keep their own handwritten accounts – but the committee office holds a comprehensive overview, typed into an orderly table.

We also discuss the limits of the committee's responsibility and influence. I ask Yrysbek if the committee chooses who will take on the village's livestock as commissioned herder each year, and if it picks herding spots for particular herders. He smiles. 'We give suggestions, but it is the people who decide. *El chechet* (The people decide).' Customary herding households tend to summer on the same camp sites each year, by accustomed continuity. Some herders even camp in the same places as their or their parents' generation used to under *sovkhoz* management. Villagers who would like to work as *chaban* (herder) for the first time preferably may take over another herder's camping spot, or – in the case of Tamga's vast enough *syrt* grounds – negotiate a new one with their future pasture neighbors. To become a new *chaban* one additionally has to go through a successful

kandidatura: one has to find enough support within the collective of livestock owners, basically by walking from door to door and spreading the word of one's intention while having tea; there have to be enough people willing to entrust their animals to any new herding household. All this lies beyond the realm of the pasture committee's coordinating power. 'We do not want to interfere with the people. *El chechet, biz djardam berebiz* (The people decide, and we offer help).', Yrysbek stresses once more.

What I find intriguing and telling about these scenes is that they complicate any simple distribution of formal and informal modes of collective coordination, just as they complicate the easy distinction between the state's abstract pasture property and forms of communal tenure 'nested' therein: Stamped documents pass through Tamga's town hall – yet agreements between herders and livestock owners emerge from conversations over tea and are written down by hand in note books carried up to the pastures in saddle bags and are stacked away in living room cabinets.

photograph 4.2.2: a herder's collection of note books from past herding seasons (2004-2011) that contain owners' animal numbers, payments, handover dates, and the earmarks or brandings that distinguish each owner's livestock, Tamga, June 2019

Pasture taxes are extracted from the village-level to flow towards the distant capital of Bishkek – yet the federal government has also granted municipalities the right to manage their pastures of their own accord. *El chechet* and it is the people who observe the pastures – but pasture committee members validate contracts and moratorium decrees with their signatures. The new maps on the wall show puzzle pieces enclosed by unambiguous borders – but on the *syrt* itself boundaries only become visible with experience. Experience fostered not with maps but through herding practice. A map of the kind that could not be found in 2018 does now exist in Tamga but it is the matter of another question what role it plays in the coordination of pasture use, for whom and how.

The purpose of this chapter is not to sort out the informality of communal self-organization from the bureaucratic formality of the Kyrgyz state claiming taxes and accountability. Rather, I will try to unpack their empirical conjunction – the way they constitute each other in practice (on this observation see also Dörre 2015: 17, Kuehnast & Dudwick 2004: 2ff.). A whole spectrum of formal procedures is part of Tamga's working commons and I believe it is worthwhile to examine how collective decision-making processes are affected in intended and unintended ways. In order to do so, I will first turn to what I want to call the *efficacy of formality*: the ways in which the presence of maps and authority-backed decrees reshape communal self-organization. This will be followed by an exploration of the limitations of formal procedures when it comes to the actual coordination of people, animals, and grass. This is what I mean by the *inefficacy of formality*.

the efficacy of formality

A quick sketch of the distinctive features of formality relevant to this study seems appropriate. What distinguishes the formal regulations that I am interested in here from informal collective organization is that they are tied in one way or another to the workings of the larger Kyrgyz state; authorizing stamps, contracts, and tax collection are linked to procedures of state governance. Put roughly and in the abstract, state governance stands for the governance of people and territories by codified law, carried out by appointed officials, and backed by centrally authorized executive forces; it also entails the bureaucratic management and documentation of lives, labor, and resources (for classic accounts on the logic of statehood see e.g. Clastres 1987 [1974], Foucault 2009 [1978], Weber 2009 [1946]). This influences how rules – for example rules on pasture access – are negotiated, stabilized, contested, and adjusted to the demands of involved people and things.

There is an extensive body of social scientific literature on the intended and unintended workings of state institutions, on state-projects of mapping and territorialization, on state borders and boundaries, on the manifestation of state power in everyday lives, on the effects and affects of paperwork, and many other aspects that complicate the notion of the state (e.g. Foucault 2009, Graeber 2015, Hetherington 2011, Reeves 2014, Scott 2017, Ssorin-Chaikov 2003, Weber 2009). In order not to digress, I desist from delving deeper into a review of ethnographies and theories of statehood. Instead I extract from the literature a list of characteristics of ideal state-formality that matter for the empirical context of Tamga's pasture use coordination. That list comprises: impersonal bureaucracy, abstract rules of law to be carried out by assigned and replaceable office holders, executive force backing up formal rules and the state's monopoly on legitimate use of such force, the representation of people and things in officially recognized documents and maps, consistent land registry, rational and transparent management, the ideal of equality before the law. Informal self-organization, ideal-typically put in contrast, can instead be characterized by the absence of any external executive agency that can be called upon for the enforcement of rules if people see no reason to oblige. Rules must collectively be established and legitimized without the backing of state institutions and authority. Accordingly, common rules do not have the same fixity as codified law. They can constantly be contested, and the contesters' opinions have to be engaged with. Unformalized communal rules mean openness to situational adjustment, which entails the continuous labor of persuasion because resolution power lies across and in the collective of positioned individuals itself, not neutrally outside of it like in idealized formal law (Clastres 1987 [1974], Deleuze & Guattari 1987, Graeber 2013, Graeber 2012, Ostrom 1990, Scott 2014).

In Tamga's distribution of pasture access both logics are at play, hand in hand. Negotiation about who migrates to the mountains and who may camp on which spot constantly billows across tea cups on kitchen tables and up and down Tamga's streets. However, the fact that there should be an unambiguous map somewhere and that the moratorium is linked to impersonal scientific expertise makes a difference for how negotiations proceed and where they lead. When maps and stamps are added to the arena of political discussion, people can support their arguments and actions in ways that would not be possible otherwise (Hetherington 2011: 7). There are several aspects of the interplay of formal and informal structures relating to pasture management and resource rights.

First, the emergent formality of the elected pasture committee, which is thus authorized by the village community to pass generally valid decrees, holds the promise of equal and fair enforcement of common decisions. This potential to refer to a neutral authority in itself is efficacious: it can make herders trust that they will not lose out when they follow the call to move to the *syrt* again. Without the trust that ignoring the moratorium will be registered and will have collectively defined consequences, Tamga's shepherds would have been much more reluctant to agree to leave the *djajloo*. This promise of equality is what David Graeber calls the appeal of bureaucracy and rules, an appeal that also applies within contexts of informal self-organization (Graeber 2015: 149ff.). Interestingly and importantly, in Tamga the trust in impersonal equality when it came to the implementation of the moratorium worked even though the pasture committee is not backed by state-sovereignty: the committee cannot summon any coercively enforcing agency to ensure compliance. Thus, the capacity to reassure a collective of people that everyone will be subject to a set of agreed on rules, equally and impersonally, does not have to rest on an apparatus of executive force (Hill 2013: 303) – but it can be enhanced by formal practices: elections, stamps, signatures, scientific reports, office spaces.

Second, the map and the boundaries it defines bear the promise of protection against illegitimate appropriation of pastures by actors beyond the municipality. The fact that each village in Djeti Ögüz district has been uninterruptedly linked to a specific state-owned pasture territory since the 1950s influences land use in several ways. On the one hand, the official land title of Tamga's mountain pastures as inalienable state-property under clearly delineated local administration can protect the livelihood sustaining pasturage from land speculation, repurposing, and fragmentation. The ultimate power of control over pastureland (and the layers of soil and minerals beneath the grass) at the level of the federal Kyrgyz state, however, can also turn the promise of protection on its head: again and again, across the Kyrgyz republic concessions are granted to mining companies on state land – on designated pastures like in the case of Kumtor (Mestre 2017: 2, 9)[21]. On the other, the borders between villages' and agencies' realms of rightful use and responsibility also matter vitally for the coordination of grass, animals, and people. Clear delimitation of a collectively used resource

[21] For more recent mining projects and conflicts over pasture land visit https://www.rferl.org/a/keeping-kyrgyzstan-s-uranium-in-the-ground-/29924122.html (2020/02/09), https://www.rferl.org/a/dozens-injured-as-locals-clash-with-chinese-mining-company-workers-in-kyrgyzstan/30094924.html (2020/02/09)

is another one of Elinor Ostrom's principles for a working commons (Ostrom 1990: 91). The trust that a collective decree will be implemented evenly on a commons for the shared long-term benefit of all also rests on the trust that people's joint efforts will not be exploited by unaccountable outsiders (ibid.). The borderline between the *djajloo* grounds of Tamga and Barskoon seems to hold quite well, even though few people have ever seen a map that certifies its course. It holds up so well that the distribution of authority over land between Tamga's pasture committee and the forestry bureau overlooking Barskoon's half-wooded spring and summer pastures materializes visibly in the differential length of grass on either side of the easily passable mountain stream separating the two domains.

Yet, there is also another way in which the boundaries between pasture territories become palpable apart from neat delineation of a decree's area of validity and its effects on grass growth. The zones around the borders that are meant to consistently and comprehensively allot accountability to municipalities' associations of pasture users or the *leskhoz* (forestry bureau) can also become penumbral areas of dodged responsibility or evaded regulation:

On another day in July 2019, Djoldosh borrows a relative's car for a trip to Tosor's *djajloo*. We are going to visit Djildiz, the only single mother running her own pasture camp that I know. In contrast to Tamga, Tosor's summer pasture is connected to the village by an old Soviet road which makes spontaneous travel up and down the mountain much easier. However, the road is in bad condition. It is full of potholes and scattered rocks that can severely damage cars' bottoms. For a while the road runs along a river; some remnants of crossing bridges are still visible, but it seems a long time since any vehicle could pass over them. Talking over the radio music we can just still receive with the car's antenna, Djoldosh explains that the road and the bridges never get repaired because they fall between zones of responsibility: the road runs parallel to the mountain river but also crisscrosses the border between Tamga's and Tosor's municipality and the next district called Tong. The pasture committees on either side keep claiming that it is the other's tax revenues that should be spent on the road's maintenance and accordingly investment is indefinitely deferred.

It is along similar lines that Yrysbek will tell me about cases of pasture tax evasion in his office a week later. It usually happens along the demarcation line between municipal and the forestry's lands. If one could pay to either institution, one could as well try to pay to none…

Formal procedures and mapped boundaries do not always bring about the effects they are intended to produce. They can even work to the contrary of their purpose, as when borders blur rather than clarify. Yet, they always do *something* – be it in intended or unintended ways (Hetherington 2011: 6ff., Scott 1998:201f.). The specific effects that old *sovkhoz* borders, the puzzle piece maps, or the stamped documents in Yrysbek's office entail matter for Tamga's commons practices. They are part of the pasture commons. Beyond Tamga, paying attention to the case-specific presence and effects of formal procedures of collective organization as they intersect with informal ones appears to me to be relevant in general to fostering our understanding of any commons situation.

the inefficacy of formality

> "The Farm doesn't know about any of this. They have maps and plans. But I've been brigadier since 1978 and they've never given me a map – they just keep it in a safe. It's a formality, no one ever checks up on anything […]!" […] Kesha dealt systematically with each kind of place, turning the physical landscape layer by layer into a complex human memoryscape. (Vitebsky 2006: 318)

All the while the knowledge of pasture expanses, boundaries, and usages that can be represented in maps or noted down on signed contracts does not suffice to carry out all the actual coordination of grass, land, people, camp sites, and sheep. Maps, stamped documents, and files in offices are in need of being supplemented by additional work, further knowledge, and other practices. They exist only in conjunction with other activities going on beyond official accounts and accountability (e.g. Dunn 2004: 28-57, Kuehnast & Dudwick 2004: 13ff., Li 2007: 28f., Scott 2014: xxiff., Scott 1998: 6ff.). What Yrysbek documents in his list of herders' names, animal numbers, and camp spots is a frame – an efficacious frame, as I hope to demonstrate, but nonetheless a frame that has to be filled with content to become meaningful.

To work as *chaban* and to sustainably care for *chöp* while feeding 700 sheep and goats – alongside your pasture neighbor's herds – requires intimate knowledge and practical experience. Where is the best place to gather up small livestock during the night? Where would that mare and her foal wander at this time of the year? When will it hail? Which cow would be willing to foster an orphaned calf? How to rotate the sheep's daily grazing routes? Along which slope do the sheep like to go? Where does someone else's pasturage start? When is the right date to move, when will the

snow come? Any kind of farming and animal husbandry means the constant experimenting with adjustments to eventualities of the weather, of one's animals' vagaries, of the availability of human labor, and of political tides that may influence the distribution of land or the value of one's produce (Berger 1979, Netting 1981, Lorimer 2006: 502, Verdery 2018: 190-228, Vitebsky 2006: 40-59, 63ff.). The necessary skills to carry out all the adjustments required on a transhumant migration in the Tian Shan rest with the herders, not with the pasture committee's appointees and their management tools (see also Dörre 2015: 6, 13, Japarov 2017: 73, Zhumanova et al. 2016: 9). The promise and appeal of formal regulations – simplicity and equalization – is also what makes them insufficient on the ground: to become a herder, that is somebody who is entrusted with fellow villagers' animals, one has to know the mountains through lived experience. Accordingly, not everyone can be a herder, not everyone has a chance to be chosen in the *kandidatura* – to know the mountain landscape only through maps, or even only through a university degree in agronomy will not do. All *chabandar* of Tamga say of themselves that they have grown up in the mountains: *toodo chongojdum.* This is an uncodified but *de facto* prerequisite for taking on a pooled herd. The ability to read the municipal borders on the *syrt* without signposting, to read the growth of grass, and to read the layered traces of past human and animal movement on the pasture takes time and practical engagement (e.g. Ingold 2011 51ff., 165ff., Lorimer 2006, Vitebsky 2006: 92ff.). The villagers who become herders have to have had that time and engagement, and thus they have no need for maps to understand and navigate in the landscape. Maps of the pastures, stacked away in offices, can serve as reference points that ensure one's rightful access to grass and land – but using the pasture properly requires so much else.

To reiterate and to connect the above observations back to the previous chapter: The official tasks that the pasture committee of Tamga is commissioned to perform are supported and made viable by diverse unformalized ways of knowing and spread-out practices. Granted, in order to issue a moratorium, scientific expertise was drawn on. Its passing, however, equally required the practical observation by villagers and considerate, individualized negotiation with the elderly herder who did not promptly comply with the decree. It needed people able to decipher *chöp* and animal behavior, as well as people, who share the experience of what it means to be a *kojchu* and to spend three months on a windy mountain plateau. Similarly, the allocation of pasture spots is ratified by

the committee, but the choice of camp sites largely depends on habitual use of the same spot by the same family (see also Robinson et al. 2012: 250f). And finally but not exhaustively, another example can be found in the handling of herding fees: the committee accountant issues contracts between herders and livestock owners but the fixed price for herding labor per head and type of animal per month is establishes annually in village community meetings and lies beyond the committee's sphere of competence (Beyer 2016: 11; Steimann 2010: 177ff.). '*El chechet, biz djardam berebiz.* The people decide, and we offer help.', as Yrysbek said.

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The purpose of presenting this piece from an ethnographic mosaic was to complicate the distinction between informal self-organization typically ascribed to commons situations and the bureaucratic formality of state-level governance of resources and people. The distinction matters, as I hope to have shown, but the practical distribution of formal and informal practices of collective coordination is not clear cut. All commons are nested in one way or another in wider networks of political power, including state legislation. However, this fact does not make them 'less common'; it does not undo the work and workings of collective action necessary when a group of people stewards shared resources. Rather, it demands a better understanding of the generative intersection of informal and formal modes of communal rule-making and -legitimization. Tamga is traversed by both. There are maps delineating boundaries although herders know the mountains by heart anyways. There is the responsibility of the committee to issue decrees and to enforce payments of fines while it lacks the power to physically coerce anyone. There are stamps, and there are endless conversations about *chöp* held over endless cups of tea. I dedicated a chapter of this thesis to these confluences in Tamga, because I believe they can speak to the analysis of commons more broadly: they point out the need to study each case of communal self-organization not in isolation but in its partially constitutive entanglements within larger-scaled polities. In commons practices such entanglements are reflected in the coming together of formality and informality.
Pasture commons are not closed systems. They are connected to processes beyond the confines of their designated territory. They leak. In *karta* I traced their entanglement with forms of state-level formality. In the following section, I will subsequently explore how the regulation of animal

numbers in the mountains – and thus the distribution of access to pasturage – is inseparable from the flows of irrigation water down to the village.

4.3 cyy (*suu*, water) – means of production means more than one resource

From spring until autumn Tamga's air is suffused with the sound of purling water. The whole village and its adjacent orchards and fields are traversed by a system of irrigation channels (*aryk*) and metal sluicegates. *Aryktar* run parallel to Tamga's streets and lines of garden fences, their carried water half-hidden by the sprawling herbs that shoot up in the moistened soil along their edges. The water comes down from the mountains as streams that are fed by glaciers and snowmelt. When autumn brings colder temperatures the downflow starts to falter, streams become trickles, and the landscape turns yellow as formerly watered plants dry up. Precipitation across Kyrgyzstan is continentally low with annual rainfall ranging between 250 and 500mm (Diercke Weltatlas 2002: 144). The rain does not suffice to sustain the vegetation enlivened by the mountain streams: where there is a glacial riverbed or irrigation channel the land turns green; where there is none it remains dry and only sparsely overgrown with hardy shrubs and fragrant herbs (see also Hill 2013: 294ff.). Life in Tamga and its practice of crop cultivation depends on some of the more than 10,000 glaciers of the Tian Shan mountain range (Piersall & Halvorson 2014: 695). These glaciers are shrinking here as they are all over the globe – by an estimated 25-35% over the last hundred years, with accelerated loss during the last decades (ibid.: 693) – but for now their runoff holds livelihoods in place. Their water is channeled to periodically flood the soil of fruit orchards that promise cash incomes in summer and the soil of fields that bring forth plants that sustain livestock during winter.

Tamga's pasture commons is intimately tied to this flow of water and the arable land it allows to be tilled. The number of animals that any seasonal pasture can sustain is inseparable from the fodder resources available during all the other months of the year, in general (Jacquesson 2010: 108f., Netting 1981: 18, 24). Before the arrival of tsarist Russian troops and peasants, this meant that herd sizes on summer pastures were checked by the expanse and productivity of winter pasturage, and vice versa. Since sedentary village life, tillage agriculture on former winter pastures, and fodder stores have become integral parts of mobile animal husbandry in the Tian Shan under imperial and socialist Russian governance, stocking rates on the alps have instead been tied to the accessible amount of cultivated forage (Farrington 2005 : 173, Zhumanova et al. 2016: 512): clover,

barley, grass, lucerne, wheat, esparcet. As already mentioned in chapter two, the production of winter fodder was intensified during the decades of Soviet collective farming and villages' capacity to sustain livestock was partially decoupled from their pasture grounds by means of subsidized fodder, which could also be cheaply brought in from other parts of the Union (Alimaev & Behnke 2008: 166f., Farrington 2005: 174ff., Kerven et al. 2012: 370; see also Humphrey & Sneath 1999 19, 238, Wegren 1998: 27). Today, livestock numbers remain dependent on the irrigated fodder crop fields, in the absence of easy access to additional hay and concentrated feed supply from afar. In some households' cases cash remittances and wages from family members become a new source of independence from the limitations of available irrigated soil, yet this is currently far from reaching the scale of fodder input transfer practiced during socialist times.

The above observations on water and watered fields matter for our understanding of the commons practices that go into the sustenance of Tamga's communal alpine pastures. They point out that access to summer pastures alone cannot suffice for a pastoral livelihood. They point out that common resources and the workings of their distribution can only be meaningfully described when grasped within the meshwork of interrelated means and factors of production that they form a node of. In this chapter I delve into a description of an irrigated fodder field and speak of the allocation of the water that runs through Tamga's *aryktar*. Arable land and water are subject to different tenure systems distributed according to different procedures of allocation than the alpine pastures: fields have been privately leased since the early 1990s; water is communal but coordinated by the elected *ajyl ökmötü* (village government). The differentiated access to irrigated fields for villagers lies beyond the realm of influence of the pasture committee, yet it nonetheless shapes the processes of collective self-organization regarding pasture use because of the interdependence of winter feed and summer alps.

The first thing I learned about the irrigation of fields is that it requires shovels and rubber boots. Ainura, Djoldosh's wife, lends me a pair when I set out to join her husband and their neighbor Asat to water a field of lucerne plants, one early morning in May 2019. The men had been waiting for the water to come for the last two days: arranging a time slot when water that gurgles through Tamga gets channeled into the *aryk* that leads to one's field takes many phone calls with the water

deputy of the village government. And usually several postponements. Finally, on the previous evening, it had been confirmed that an allowance of about six hours of irrigation water withdrawal would start the following morning at 5am. The lucerne field is a ten-minute's walk from Asat's and Djoldosh's houses; it has an expanse of 1.2 ha and is nestled in between a major *aryk* and a drivable farm road. In the course of the morning I will be taught that the task of irrigation is to use one's water hours to evenly flood the soil and saturate it with moisture until the next flooding, up to several weeks later. This is done by interrupting the water flow in the main irrigation channel by closing a sluicegate (or erecting a strong dam from large flour bags filled with soil, where there is no sluice) at the most elevated corner of one's plot. This forces the water to spill over the edges of the *aryk*, onto the field. Then one has to make use of gravity and a whole system of smaller and privately built channels and blocking earth dams. These dams are called *kulak* in Kyrgyz, which literally translates to *ear*, and had been set up by Djoldosh's son the week before; Erlan had come from the Kyrgyz capital Bishkek to help with this most arduous part of irrigation labor. The *kulaktar* make the water inundate the soil around one's plants at specific places and in controlled succession. Being used to rainfed agriculture in Central Europe I am fascinated by this directing system and later try to depict it in a drawing:

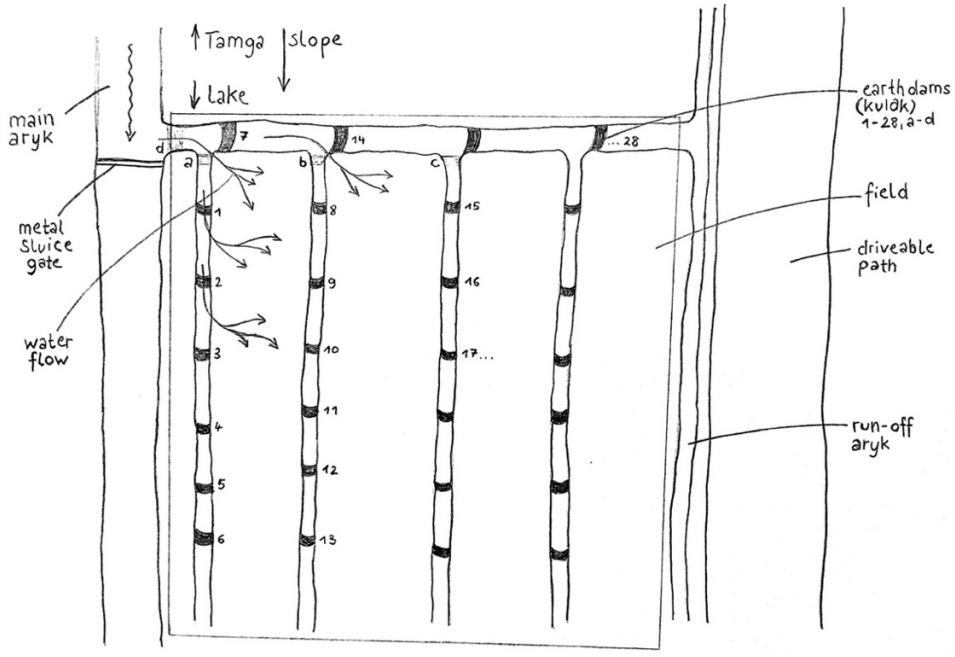

figure 4.3.1: *illustration of the lucerne field and the principle of irrigation by successive, gravity-driven flooding; the dams numbered from 1-28 are consecutively taken down in the irrigation process, those numbered a-d are built up from soil to re-channel the flow of water*

At the beginning of the irrigation all prepared *kulaktar* (figure 4.3.1: 1-28) are still in place. The water from the main *aryk* gushes onto the first segment (figure 4.3.1: upper left corner), directed by the dams designated 1 and 7 in the illustration. As the watering hours progress Asat, Djoldosh, and I successively take down Erlan's dams, and build up some others (figure 4.3.1: a-d) in order to flood segment by segment down to the lowest lying corner, the one furthest away from the main channel's sluicegate. We take down dams 1 to 6, then we use the soil *kulak* 7 is made of to construct *kulak* a so that the water is channeled into the second small *aryk*. For all four parallel channels we repeat this procedure: we take down 8 to 13 and build b from 14's soil, we take down 15 to 20 and build c from 21's soil, we take down 22 to 27. Number 28 is left in place and when the watering hours are over the sluicegate has to be opened and the field closed off by dam d.

photograph 4.3.1: *Djoldosh taking down a dam, and Asat adjusting the wall of the* aryk*, Tamga, May 2019*

We need the shovels for the (de-)construction of the *kulaktar*, and the rubber boots to wade through the field overflowed by rippling water. Irrigation requires a system of dams and channels, and it requires the three of us to walk among the lucerne plants and to observe the water distribution. Every spot of the field should become covered by several centimeters of water for some time. We wade through the icy stream water, push around soil where there are dents or mounds that interrupt its steady flow, signal to each other when it is time to take down the next *kulak*, and

take breaks to chat while we wait for the water to spread across the segments. Swallows shoot through the air above our heads and beneath our feet voles try to escape the deluge of their burrows into adjacent fields.

During one of our breaks Asat and Djoldosh tell me about watering intervals and how water allocation works in Tamga. Lucerne can be grown and cut two times a year, three times in good years with early springs and long vegetation periods. Each cultivation of lucerne requires two irrigation episodes. Apple and apricot orchards need a higher frequency and should be watered up to ten times a year, yet fees for water use are calculated by hectare, regardless of the cultivar: 470 KGS[22] per hectare have to be paid annually to the village government. When one's plants and channel system on the field are ready for irrigation, one calls the water deputy to ask for available time slots. The water deputy is an elected member of the *ajyl ökmötü* commissioned with the task to match all incoming calls from across Tamga and to direct villagers to open or close the right sluicegates at the right time. He[23] hardly ever goes out into the fields himself, Djoldosh and Asat explain, because taking more water than permitted would be noticed by the next person in line for irrigation on their own, and because the penalty is so severe that people can be trusted to comply. One breach leads to being denied any irrigation water for a whole year, which makes field agriculture automatically unfeasible in this dry climate. Intervening in the system of sluices without authorization would surely be noticed and the attached risks are simply too high. As we take down the next *kulak*, water splashing as shovel hits overflown soil, Djoldosh starts to talk about the connection between his family's land for fodder cropping and their animals. His parents' and his siblings' livestock together comprise about 90 head of small livestock, and 15 head of cows and horses. In winter they feed them from forage grown on this field and another one of about the same size that he cultivates for an absentee co-villager and friend. Additionally, they cut the grass and herbs that surround the fruit trees in their orchard, an hour's walk uphill from Tamga. This suffices to sustain their herd numbers but not to accumulate more livestock. The lambs, foals, and calves that are born each spring and that exceed the number of animals consumed throughout the year have to be sold off before winter and the end of the grazing season. Buying hay is prohibitively expensive

[22] ca. 6.7 USD in 2019

[23] I use the male pronoun because the office of the water deputy was held by a man at the time.

for them. In order to keep more animals they would rather first have to gain access to more irrigated land and to assemble the necessary labor power to water, cut, dry, and store more *chöp*. The three of us make the water reach the last segment and the run-off *aryk* by the road before noon. Djoldosh calls the water deputy; we open the sluice, close the field with a final *kulak* (figure 4.3.1: d), and carry home the shovels and rubber boots.

The trip to the field that day in May had originally not been part of my planned fieldwork agenda on Tamga's pasture commons – not in the same way as visits to the *djajloo*, the *syrt*, the committee's office, or cattle drives. Yet, joining Asat and Djoldosh and listening to their comments helped me to develop a more relational and holistic conception of Tamga's communal pastures. They helped me to understand that if I wanted to describe the practices and negotiations that go into pasture management, I would have to pay attention not only to the everyday observation of grass or the pasturage's representation in maps in the village townhall. I would also have to take into account the distribution of land, cash, and water. Let me attempt to sketch some of the most important connections between these means of production involved in Tamga's mobile animal husbandry alongside the mountains' grassland.

land

The land on which fodder plants are grown in Tamga are partly the plots of the former *sovkhoz*'s fields that were equally distributed across villagers in 1993. That year every *tamgalyk* received the same 0.3 ha for a 99-year lease. Families pooled their plots and some villagers sub-leased their parcels, but, since no major sales took place, substantial accumulation of parcels has not occurred (see also Steimann 2010). Families had an interest in keeping the title to their allocated land as a form of social security, even if they did not have the means or need to cultivate it. In contrast to the stories told about the distribution of the *sovkhoz*'s livestock – which is bitterly described as unfair as animals were carted out of Tamga before villagers received their share – the redistribution of plough land is remembered as just (see also Hill 2013: 303). There was more unbalance, however, when it came to claims of ownership over orchards. On the one hand, some state farm workers who had tended the collective apple and apricot trees prior to the *sovkhoz*'s dissolution managed to be granted sole property rights to whole orchards, far beyond what would have been their

equitable share. On the other, villagers of Tamga were allowed to claim new orchards in the mountains' foothills after independence. Land titles were issued for making formerly uncultivated land productive by privately digging irrigation channels and planting trees. This was an attractive opportunity, but not everyone had the means to take it up: in the 1990s some families were able to mobilize the labor and cash resources necessary to set up one or even several new orchards, some were not. By today the favorable spots are all long taken. Orchards are an important source of wealth – and thus a source of socio-economic stratification – for two reasons. First, because fruit sales are a reliable agrarian cash income. Second, because orchards hold additional meadowland. The grass and herbs between the trees is valuable fodder that supplements crops grown on one's fields. As I just delineated with the aid of Djoldosh's explanation of the importance of cultivated *chöp*, the number of animals a family can sustain and send to the *djajloo* or the *syrt* is tied to their specific capacity to stockpile winter forage. Because of this nexus and Tamga's specific history of post-socialist land privatization, herd numbers are connected not only to the expanse of alpine pastures and the steady flow of public water, but also to actions taken by family members in the 1990s and to sustained social relationships with neighbors who would sublease their fields. (As well as to relationships with neighbors, like Asat, who help out with physical labor during irrigation or hay making. The role of labor exchange and relationships of mutual obligation within the village will be the subject of the following ethnographic chapter.)

Stocking rates on Tamga's common pastures thus form a feedback loop with limitations set by the availability of other types of productive land necessary for a transhumant cycle. The pasture committee imposed a restriction of animal numbers for the *djajloo* in 2018, but on the *syrt* there is currently no maximum limit. The total herd numbers for the *djajloo* and the *syrt* combined get balanced by the limiting factor of available winter fodder, for the moment, and apparently do not have to be controlled through additional collectively established restrictions. This resonates with insights of other anthropologists regarding diversified peasant agropastoralism: viable agriculture and animal husbandry usually requires access not to one but to a bundle of resources and thus the distribution of one of these means of production influences the tenure of the others (e.g. Netting 1981: 15 & 1993: 160ff., 181, Rocheleau & Edmunds 1997: 1351). In his case study on a transhumant peasant village in the Swiss alps Robert Netting describes that for a viable agrarian household economy in Törbel access to diverse types of land and storage facilities has to be secured: grain

fields, vineyards, barns, hay land, and alps. He observed that privately inheritable rights to limited meadowland for cutting winter hay and to barns checked the number of animals held by all villagers at a time, which made controlling stocking rates on the communal summer pasture unnecessary (Netting 1981: 24). Similarly, Munavar Zhumanova et al. identify the availability of winter fodder as major influencing factor on summer pasture use intensity, in their more recent study on farmers' agropastoral decision-making conducted in Kyrgyzstan (Zhumanova et al. 2016: 512, 515). In Tamga as in the quoted cases, pasture commons and the coordination work that has to be invested into their sustainable collective use – or not – turns out to be shaped by the tenure arrangements of diversely owned and diversely distributed stretches of land across altitudinal layers (Netting 1981: 15ff., Robinson et al. 2012: 251).

cash

The delineated configuration of resource use, in which overstocking the *syrt* is checked by limited hay land and does not have to be prevented by decrees, may change again, of course. As mentioned above, during the later decades of the USSR stocking density on the high-altitude pastures had not been restricted by regional fodder availability and alpine pasture vegetation had suffered from overgrazing (Farrington 2005: 174, Wegren 1998: 27). High cash remittances that reach Tamga from relatives on labor migration, wages earned by mineworkers, or substantial cash incomes from fruit sales, can similarly lead to the gradual decoupling of otherwise connected agroecological limitations, if they are used to acquire additional hay or grains from other places.

Additionally, I see remittances influence the working of Tamga's pasture commons in a second way: the access to cash and to hay is an important ground for socio-economic differentiation between families in Tamga, reflected in their animal wealth (see also Kerven et. al 2012: 372, Steimann 2010: 86ff.). Links to flows of money – which is usually earned outside of the village – increase one's capacity to gather fodder and thus allow for bigger herds. Adding to this stratification mechanism, families that can draw on external capital resources can also gain more cash from animal husbandry itself as their more flexible access to winter forage enables them to sell during the off-seasons and fetch better prices on the cattle bazaar, as it was explained to me during my stay in Tamga in 2019:

Erbol and Samira live in an expansive concrete house with a vast back garden and a sheep and cow stable in their front yard. Whenever I visit their two-storied house there seems to be a new construction project – be it a wood paneled *banja* (Russian sauna) or decorating the guest room with new shiny wallpaper or luxurious drapes. Erbol works for Kumtor, the Canadian owned goldmine located in the mountains above the neighboring village Barskoon. 'The labor is hard', he often says. Workers get picked up by the company for two-week shifts without any days off, before they can return downhill for a week's break. 'The labor is hard. The air is thin up there. But the salary is good – that is how I pay for the *banja* and the new fridge and my son's bicycle, you see.'

One day in mid-June 2019 I am invited over for tea and notice that there are still two cows ruminating in the stable's twilight even though the village's herds had already left for the *djajloo* two weeks before. Erbol expounds his plan: In autumn supply of animals on the bazaar in Karakol is high because people are eager to sell the livestock that they cannot sustain during the winter months. In spring, and especially in summer, the supply is low and demand for meat is high as most animals have left for the mountain pastures and because summer is the time of feasting and visiting relatives who all have to be fed. In order to profit from this fact, Erbol invested some of his wages into stocking up on grains to fatten two of his cows and to sell them soon at a much higher price than in September or October. He also considers slaughtering them himself and selling off prepared meat instead of the live animals. This might be even more lucrative, he suspects, and with the new fridge there is more space for freezing and storing sellable pieces, too.

Economic hierarchies and the unevenly distributed ability to earn money from agropastoral production affects negotiation processes surrounding Tamga's common pastures. The interests of livestock owners who own a substantial herd, of those who own a few heads of livestock, and of paid herders diverge (Robinson et al. 2012: 249). Wealthy livestock owners may try to push for lower herding fees or consider sending a relative on the transhumant migration with their private herd to reduce expenses. Owners of few animals hope for low enough herding fees, too, but are more dependent on the herders' services and herd pooling. Herders have an interest in having enough co-villagers who entrust them with sufficient livestock for a viable seasonal earning, and in depending not on just one or few livestock owners but rather on ten to twenty. When a herder enters contracts with many instead of a single livestock owner this balances out dependencies and

forestalls overly hierarchical relations between a pastoral service provider and an employer, as has been described in other contemporary and historical cases from Kyrgyzstan (Boyanin 2011: 285f., Farrington 2005: 188ff., Japarov 2017: 71f.; for other pastoral societies see High 2017: 25ff., Humphrey & Sneath 1999: 218ff.). This is an example of the complex heterogeneity of positions and needs – linked as they are to the distribution of resources other than the pasture land itself – that may traverse any particular village community and thus the collective coordination practices that feed into any particular commons (Dörre 2015: 7, Kerven et al. 2012: 375, Mestre 2017: 14).

water

In contrast to flows of cash, the purling water that streams through Tamga's *aryktar* can be tapped and accessed by everybody. Everybody who possesses land to use it for, that is. *Suu* (water) is public, so like the communal pastures it is meant to serve the whole village. However, its allocation to individuals is not spread-out but centralized in the figure of the local government's water deputy. It is also the deputy who is responsible for the maintenance of irrigation infrastructure, which entails periodically organizing work teams to clean and restore the *aryktar* and the sluices. I deliberately choose the adjective 'public' instead of 'communal', because 'public' implies collective access to a certain resource while simultaneously denoting state property and management (Federici 2019: 96). It should have become clear in the course of the preceding chapters that a conceptual line between public water on the one hand, and common pastures on the other cannot be that clear-cut in Tamga: pastures are officially under state property just as much as the water is, and there are formal procedures involved in their management. Yet, there is a difference in the degree of collective participation between water and pasture distribution. When it comes to the alpine pastures every *tamgalyk* is entitled to partake in negotiations about moratoria, fines, and fees. When it comes to water, by contrast, there is only one responsible official endowed with managerial authority for one electoral period, nested in the municipal government that is linked to higher level state institutions.

All the threads of information about who needs irrigation water when, where, and why get directed towards the water deputy. All the phone calls asking for watering hours, for extensions, for shifting time slots show up on his mobile. The villagers who were allocated water one after another do not arrange the handover of water among themselves. Usually it remains unclear who and whose field

is next in line. Irrigators just see if water comes, or not – if the right sluicegates were opened and closed somewhere else in Tamga. This reminds me, again, of Robert Netting's rendition of irrigation water distribution in the Swiss village of Törbel as a 'system that nobody knows' (Netting 1974: 67), already mentioned in the chapter on *chöp* and mutual monitoring: once every community member's usage time is defined, the diffuse and decentralized observation of individual fields and adjacent channels suffices to ensure the implementation of the decreed order of allocation (ibid.). Monitoring of water extraction is decentralized in both the examples of Tamga and Törbel, but the authority that backs the distributive order is not, which in turn matters for the flow of water (Hill 2013). In Törbel water rights are durably tied to specific, individually owned fields and handed down without much renegotiation of time slots; the property of land with the attached rights to water are codified in the village's registry (Netting 1974, Netting 1981: 15, 63). In Tamga, by contrast, the order of water withdrawal is subject to constant adjustment according to villagers' demands but is overseen and legitimized by the authority of the appointed water deputy. One representative, elected specifically for the task, is granted the formal authority to continuously manage and sustain the collectively used and vital resource of mountain water.

This authority lies beyond the pasture committee's realm of competence – just as much as the decision-making processes among livestock owners, committee representatives, and herders lie outside the influence of the water deputy. Nonetheless the coordination of pasture and water access are intimately entangled. As I delineated above, the limited expanse of cultivated land makes controlling total livestock numbers for Tamga's *syrt* a currently unnecessary task. Simultaneously, regulations imposed by the pasture committee that restrict the use of pasturage near the village – like the *djajloo* and its attached spring and autumn pastures – increase the importance of winter fodder production. Less *chöp* that can be taken from the pastures is a strong incentive to intensify the cultivation of lucerne, clover, and barley. This, in turn, requires more water – water requested from the deputy and water that the mountains keep dispensing, for now.

*

Tamga's agroecological layers are inseparably connected because agropastoralism only works on a whole bundle of resources. Hence, the case-specific abundance or shortage of water, converging or diverging access to remittance money, and even or uneven distribution of tillage land in each

Kyrgyz municipality shape the workings of the country's pasture commons in locally diverse ways (see also Dörre 2015, Jacquesson 2010, Zhumanova et al. 2016). Each of the more than 450 pasture committees across Kyrgyzstan has to find situational solutions when balancing grass, animals, institutions with the power to allocate water or register land, and people of various socio-economic standing. This ethnographic description of Tamga and the interlinked practices that go into the sustenance of its common pastures, too, has to be read as a particular case study – not as an analytical blueprint for Kyrgyzstan's 'common property in pastures made law' as a whole (see Robinson et al. 2012: 247ff.). Yet, as a case study this thesis may still hold, on the one hand, some 'partial connections' (Strathern 2004 [1991]) with other Kyrgyz village commons, for example because they share the same legal framework of the federal 2009 pasture reform, and similar continental precipitation patterns. On the other, it can guide our attention towards a set of emerging observations that seem relevant for understanding empirical commons situations in general: from this ethnographic piece on irrigation water and hay land I draw the insight that commons are not only nested in wider networks of institutionalized political power (chapter 4.2), but also among distributive regimes of related resources and the local socio-economic stratification these may give rise to.

Tamga's commons practices include navigating divergent interests and orchard- or remittance-fed herd numbers. They include pasture users picking up shovels and rubber boots. They include that the pasture committee relies on another agency to uphold water access for all villagers. And they include that the collective of pasture users counts on the limited amount of tillage land to keep Tamga's ruminant populations below a level where *djajloo* and *syrt* put together would not be sufficient to feed them anymore. Indeed, never is the *syrt*'s plateau separable from the ownership of the sheep that populate it, or from the clouds in the sky that bring little rain. It is neither separable from the veins of water that permeate it, the water deputy's mobile phone, lease contracts issued in 1993, wage jobs in other places, and the Tian Shan's melting glaciers – nor from the labor that is performed on Tamga's fields and the labor that goes into sustaining communal solidarity and trust across differences in wealth. It is the last point of this list, that I turn to now.

4.4 жардам (*djardam*, help) – a post-socialist reproduction of sociality

Kara Saj is already bustling as Tamga's delegation arrives. More than a hundred people are erecting yurts (*boz üjlör*) – white domes among the glaciered peaks that tower in all directions. The meat and organs of just slaughtered sheep are being prepared to be boiled in big iron pots (*kazandar*). Women are busy washing rice or chopping vegetables for salads and music is blasting through a sound system to mingle with the many sounds of a feast being set up. The pasture committee representatives and the *syrt* herders of Tamga have taken me along to join the 2018 herders' festival of Djeti Ögüz district which takes place here, on the high plateau.

photograph 4.4.1: *setting up the herders' festival of Djeti Ögüz district, Kara Saj, August 2018*

The herding families and I get out of the cars that have carried us to Kara Saj from Tamga's *syrt* grounds. We help unload a red truck that has transported a yurt's frame, lots of food including two live sheep, and the committee members up from the village yesterday. The twenty of us build up Tamga's camp among those of the district's other villages: Barskoon, Ak Terek, Djargylchak, Chychkan, Saruu, Darkan, Lipenka, … Like the other delegations trickling in before and after us, we say a prayer for the two sheep donated by the pasture committee before their throats are slit and their bodies dismembered. The men quickly disassembled the animals' limbs, then proceed to assemble the yurt and patiently watch over our simmering *kazan*. I help the women with cleaning the guts,

slicing tomatoes and onions and cucumbers, and setting up a festive *dastorkon* (lit.: table cloth, fig.: filled table) inside Tamga's *boz üj* – a *dastorkon* full of piled up bread, sweets, bottles of soft drinks and vodka, and salad bowls.

Once the table is set, I take a stroll. Kara Saj is the place on the *syrt* the furthest away from Tamga that I have visited so far; the Chinese border is a mere 30km away towards the south. There are some derelict concrete houses and stables from the time when Kara Saj was a hamlet for *sovkhoz* herders – today these buildings stand empty but the flat and grassy stretch of plateau that surrounds them becomes enlivened again as an annual site for celebration. A large sign that is attached to the side of another village's truck reads: *Rajondun mal-charba kyzmatkerlerinin sletunun katyshuchuularyna djalynduu salam!* A deep-felt welcome to the district's employees in animal husbandry and to the participants in the gathering! Next to the loud speakers of the sound system, in the middle of the emergent festival area, some of the pasture has been left empty as a gathering spot between the villages' camps. There are two microphone holders that seem to await speakers and an audience. Children run around between iron pots and trucks, some young men compete in a riding game at a little distance, groups of men and women sit together on blankets in the grass and sip tea while waiting for the meat to cook.

photograph 4.4.2: *during the feast, Kara Saj, August 2018*

I watch the riders for a while and tell many curious festival visitors where I come from and how I ended up on the summer pastures, until I am summoned back to Tamga's yurt. Partly I am summoned because the mutton soup is nearly ready to be served, but also because my camera and I are asked to properly document the festivity – the ceremonial part of which is about to start. I enter the yurt together with the rest of Tamga's participants and we sit down around the set table. Tea cups circulate and glasses of lemonade and vodka are poured for a first round of toasts. The head of Tamga's pasture committee, Nurbek, raises his glass and his voice. He lavishly thanks Tamga's herders for their accomplishments and recounts the work and success of the committee: he talks about the moratorium for sheep and goats down on the *djajloo* and about the hardship that the shepherds took upon themselves this year by starting to move to the *syrt* again; he praises the efforts that the committee undertook to make accommodation on the *syrt* more agreeable in form of new housing facilities, and proudly states that now the municipality of Tamga finally makes use of their total 33,316 ha of pasturage again. This toast is followed by a round of gifts for the herders. Nurbek and Yrysbek ceremoniously hand over a thermos bottle and a thick, colorful towel to each household and shake hands while I try to capture the representative moment.
After that, food starts to be served. Because the municipalities' pasture committees prove to be generous, this will go on for a couple of hours. During a break between courses while dishes are being washed and more music plays outside, the shepherds pass around a document with a table for signatures. It demands a road repair from the committee. 'They need to help us more on the *syrt*. The new houses are fine, but much of the old infrastructure from Soviet times is falling apart. We used to have good drivable roads and sheds up here. They need to give us more *djardam* (help, support).', Gülnara, one of the women explains to me as she hands me a pen to sign.

This chapter is about expectations of responsibility and supportive care – *djardam* – between the pasture committee and the herders of Tamga and the opening this offers to think through the legacies left by socialist agrarian planning on mobile pastoralism in Kyrgyzstan today. It is about the roles that committee representatives are attributed with as relatively recently institutionalized managerial authority; it is about the pastoral workers' stance of entitlement to provided services, like the repair of a bridge or a road, in return for the power the committee is granted to administer the pastures. It is also about how the committee members act in turn.

In order to add a final component to the picture of Tamga's pasture commons, I will shift my gaze away from the practical tasks of monitoring and documentation and away from the crucial material constrains of grass growth, water, and hay lands explored above. Instead I now turn to focus on the reproduction of relationships of obligation and commitment between those involved in the collective coordination of alps, animals, and herding labor. This choice of focus is inspired by a central argument in critical feminist thought, namely, that the social reproduction of lives and relationships are structurally undervalued or omitted in classical economic analyses (Federici 2017: 94ff.). Familial house and care work, the labor of child rearing, sustaining networks of reciprocity through gifts and generosity, etc. are all too often treated only as a given backdrop for production – agrarian or other – instead of being counted as inseparable, and constitutive components of the labor process. I aim to counter this tendency by deliberately tracing how the relationships among herders, livestock owners, and committee representatives in Tamga are part and parcel of the production of meat and hay, and part and parcel of the village's coordination of its common pasture lands. A commons' functioning depends on the everyday labor that goes into fostering relations of trust and enough social cohesion to provide platforms for negotiation and collective decision-making (Federici 2019: 94). The upcoming pages follow the concrete shapes such labor, such commons practices, takes in Tamga or in associated places like Kara Saj. They follow the exchange of gifts and labor and delve into the collective treatment, assessment, and contestation of positions of authority that were established with the 2009 reform, that is, the administrative power of the pasture committee.

When I started to ask herders and livestock owners about their opinion on the performance of the committee, I noticed that the answers – whether satisfied or dissatisfied – nearly always took the form of lists of '*djardam'* that was provided or lacking. The word kept surfacing in people's judgement of the committee's managerial competence and legitimacy: in complaints that a road still had not been repaired, in appreciations of the new cubic houses on the *syrt*, and also in renditions that the head or the accountant of the pasture committee gave of their own work. I had heard and said the word *djardam*, the generic term in Kyrgyz for help or support, many times before without giving it special weight. Yet in this context it struck me as speaking, more broadly, to the culturally expected circulation of moral obligations and gifts, to the position of the pasture committee

members, and to how their administrative power might be checked and balanced through demands for support and services. Following the term and the ways in which it is mobilized in scenes like the one in Kara Saj or in Yrysbek's office (see also chapter 4.2), turned out to also become an entry point into tracing Tamga's past as an agropastoral *sovkhoz* within the wider political apparatus of the USSR. I found resonances between people's views on the proper role a pasture committee should perform and the logic of the large-scale redistributive machinery that the past socialist political economy can be described as. These include for example the assumption that administrative control should come with care, or that things only ever get done, really, through the mobilization of personal networks of dependence and favors (Dunn 2004: 130-163, Humphrey 1998: 445, 452, Verdery 2004: 148ff., Vitebsky 2006: 48ff.). The reading of the circulation and claims of *djardam* that I propose, thus puts emphasis on their links to Kyrgyzstan's Soviet history. This is not the only possible reading, not even the only one I touch on, but I find it illuminating nonetheless: the era of the USSR is moving away in time, but it is very much still part of many people's biographies, including herders and elected appointees in Tamga's townhall. Decades of 'Soviet Life' (Humphrey 2002) – its aesthetic, its everyday choices and evaluations, its aspirations, its frustrations, its structures of getting access to goods, and more – have shaped subjectivities in the village and on the pastures (Liechti 2012: 305, Steimann 2010: 102f.). In the vein of authors like Kristen Ghodsee (2011), Caroline Humphrey (2002), and Svetlana Alexievich (2017), who have masterfully unrolled how the shared experience of having lived under state socialism cannot but remain a part of people's meaning making and actions, this chapter gives space to the partial legacy of the past as part of Tamga's commons practices.

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Giving *djardam* can materialize in many practical ways in Tamga. Mutual help can circulate in the shape of un- or underpaid labor in the field or for road repairs, of shared knowledge, of mobilized relationships, of sums of money loaned or given, of donated building material, of free lifts, of housing someone else's child during their university studies, of providing a storage container for herding households on the pasture, of plowing a plot just for the cost of the fuel, or of presents of seeds and seedlings. *Djardam* is exchanged between relatives, close and distant, between neighbors and friends, between colleagues or former classmates, but also between villagers and local government

representatives. Some examples have already appeared throughout the preceding pages of this text. For the irrigation of the lucerne field described in the previous chapter, Djoldosh's son Erlan had left Bishkek for two days in order to help out with needed physical labor. When not in Tamga but studying in the capital, Erlan lives with his father's elder brother. That same uncle had bought the cement, wood, and corrugated iron sheets for the construction of Djoldosh's newest hay shed from his wages earned in the city and, in turn, Djoldosh feeds his brother's animals along his own from the stockpiled lucerne. Asat had given *djardam* to water the fodder plants, too, while some weeks before Djoldosh had helped Asat to find a temporary employment on a construction site in the neighboring village, where Djoldosh knows the building contractor. The pasture committee offered support to the *syrt* herders by financing the building of new pasture houses; the villagers who did the actual construction work helped the committee and the collective of herders by charging a low rate for labor costs. The committee donated the food for Tamga's participation at the herders' festival of Djeti Ögüz, while the labor of setting up the festive meal was shared among all *tamgalyktar* present.

This illustrative list is expansive – the circulation of *djardam* is an omnipresent constituent of people's lives and their diversified livelihood strategies. Importantly for my argument and similarly described by other ethnographers of contemporary Central Asia (Beyer 2016, Isabaeva 2011, Kuehnast & Dudwick 2004, Werner 1998), giving and asking for *djardam* in Tamga are not simply spontaneous instances of generalized solidarity but normatively codified and expectable social behavior. The obligation to support and to partake in ritualized gifting and hospitality is collectively anticipated and specified according to gender, age, life situation, access to capital and influential social networks, or degree of kinship: women rather help out through shared housework, men rather through labor in agriculture and construction. Villagers who have found a lucrative employment on labor migration abroad tend to share their acquired wealth through lavish feasts or donations for schools or kindergartens at home in return for a gain in status for their family. For life-cycle rituals like weddings, funerals, or commemorations extensive networks of relatives pool their financial and labor resources (Reeves 2012: 110, Steimann 2010: 208, Werner 1998: 601ff.). Breaching such accustomed expectations will be socially repudiated as improper, even as shameful – as *ujattuu* (Isabaeva 2011: 548). A lack of generosity, not hosting life-cycle rituals, or perceived laziness in giving *djardam* to others easily gets turned into negative gossip and mistrust. Co-

villagers and relatives in Bishkek or abroad can thus be trusted to respond to demands of *djardam* and the invitations to feasts or work parties, during which networks of interdependence are periodically performed and reaffirmed (Isabaeva 2011: 541f., Reeves 2012: 114ff., Werner 1998: 603ff.).

Such expectations of reciprocity traverse Tamga and its pastures. They are part of the traffic of villagers up and down the mountains to supply herders with groceries, and of the cups of shared tea over which the state of grass and animals is discussed and eventually brought to bear on managerial decisions. It is also the stability of relationships of moral obligation that sustains the flows of remittance money and the flow of siblings, sons, daughters, nephews, nieces, cousins, aunts, and uncles flocking into Tamga during summer for fruit harvests, sharing their family's animals' meat[24], and making hay. This is where the feminist emphasis on social reproduction as labor can be fruitfully employed. Gifting, feasts, ritual expenses, and sharing tea should not simply be framed as economically unnecessary leisure or irrational spending – as it often is in Kyrgyz public discourse (Isabaeva 2011: 549, Reeves 2012: 112, 131) and in everyday complaints by villagers about all the labor and money that adequate hospitality entails – but also as part of the coordination work that goes into Tamga's pasture commons.

What I find especially interesting about the circulation of *djardam* in the context of Tamga's mountain pastures, however, is how it extends beyond connections of kin- or friendship and how it incorporates local administrators. The member of the village government and the pasture committee in Tamga use the idiom of *djardam* to present their own accomplishments for the village community; they draw on its moral force when calling upon villagers to join up for the annual clearing of the main irrigation channels or for other communal labor (see also Steimann 2010: 208f.). In turn, the stance of entitlement to receive help and support back in the form of welfare services or infrastructure projects from administrative agencies is strong. Appointees are judged according to how good they are at giving help to the village, that is how successful they are in translating

[24] The slaughter of animals and the distribution of meat is highly ritualized: each piece of bone and meat has its specific meaning and is thus given out to the people present at a meal according to age, gender, and status. A meal of meat is always also a material assertation of relationships and positions. This is another aspect of the laborious reproduction of relationship, recurrently performed by families but also at public gatherings like the one in Kara Saj.

collected taxes and fees into benefits. The incapacity of village officials to provide expected services similarly leads to negative talk as does a neglect of returning invitations. Eventually it can even lead to an early loss of office. The turnover of mayors and deputies in Tamga is fast, if they do not live up to demands: the last two mayors did not last a whole election period before early revotes were scheduled[25] and the current one, elected in 2019, is anxious to stress and document the *djardam* provided during his term of office in speeches similar to Nurbek's in Kara Saj.

A little later during the festivities in Kara Saj, all the guests are summoned out to the open square left between the municipalities' yurts. What follows is a series of laudatory addresses by pasture committee heads and a couple of present mayors from villages across Djeti Ögüz to the assembled audience. One after the other steps up to one of the microphones and reports on this year's numbers of animals sent to the high plateau and on the mobilization of investments in bridges or roads or shipping containers brought up to the mountains as storage facility. They list hectares of used grassland on the *syrt* – 8,000, 10,000, 20,000 depending on the allocation of land for each state or collective farm defined in the 1950s – and like Nurbek at the festive table before, praise the herders for the hardship they take upon themselves in keeping up the arduous work of pastoral movement. The gathered crowd nods and claps, somewhat half-heartedly, for each of the speakers and the similar speeches they give. The addresses unroll one after the other, as some people chat in the background. Once all expanses of land, all numbers of animals, and sums of invested money have been put forth, the grassy stage is left to a singer and mayors and committee representatives return to mingle in the crowd or their villages' yurts. Back at Tamga's festive *dastorkon*, Nurbek is confronted with the petition sheet and tries to appease the present herders with promises that the committee will do its best to support them on the *syrt* and to tend to the road.

Demands for *djardam* can be deployed to keep representatives of tax-collecting and rule-enforcing agencies like village governments and pasture committees entangled in networks of personal moral obligations. The shared and righteous stance of entitlement to receive benefits from those equipped with the temporary right of administrative control and with institutional connections to higher levels of government works to hold the officials in Tamga's townhall accountable vis-à-vis

[25] The normal frequency of municipal elections is five years.

the collective of villagers. The appointees have to react to the insistence that control is legitimized through and should come with provisioning care and responsibility; they use public platforms like the herders' festival – but also the annual graduation or opening events at Tamga's school or kindergarten, alumni reunions, etc. – to present achievements in welfare services or infrastructure effected under their tenure. I find it helpful to interpret these observations in the light of Kyrgyzstan's past as part of the USSR. On the one hand, because claims of support addressed to village officials, today, are often framed as comparisons with the services remembered from the later decades under socialist governance: there used to be three kindergartens – now there is only one, there used to be air traffic between Tamga and Bishkek – now the airport's old tower and landing strip are hardly visible any more, the roads used to be good – now many have become impassable by car, there used to be groceries provided on the pastures – now herders have to care for themselves (for similar observations in Kyrgyzstan see also Farrington 2005: 175, Howell 1996: 63, Isakov 2016: 70f., Rahimov 2012: 60f.). On the other, because of the resonances I perceive between evaluations of village officials' actions recurrently voiced in Tamga and social scientific literature on the workings of former state socialist organization of labor, social security, and power. Let me give some space to an elaborating overview:

> As a citizen, the person was entitled to work and, through that work, to the social and material benefits with which it was interwoven. With privatization, the social infrastructure vanished, along with the implicit contract that the world of work embraced provision for a whole living environment. (Alexander 2004: 263)

A central characteristic of state-socialist governance in the 20th century, described for the republics of the former USSR but also for countries in Eastern Europe or Mongolia, was that administrative state agencies both intrusively exercised control over citizens' everyday lives, work, and choices but also paternalistically assumed the responsibility to supply its population with all basic material needs and services (e.g. Alexander 2004: 264, Collier 2011: 2ff., Ghodsee 2011: 183, Vitebsky 2006: 47). State institutions, often in the form of state-run workplaces like *sovkhozes* and *kolkhozes*, or factories, claimed a high degree of authority over people's labor force – forming brigades, setting up and enforcing plans, deciding on pastoral migration routes or crop rotation and on individuals' careers (Isakov 2016: 66ff., Liechti 2012: 307f., Steimann 2010: 103ff.). Yet, such control had to be

accompanied by a far-reaching commitment to care and provisioning: in the course of the establishing decades of socialist rule many older provisioning and solidarity structures had systematically been destroyed or weakened as potential seed for independence efforts and resistance (Vitebsky 2006: 252ff.). Instead, farms or also factories became what Caroline Humphrey and David Sneath call 'total social institutions' (Humphrey & Sneath 1999: 78) and took over not only the coordination of labor but eventually also of housing, education, healthcare, food and energy supplies, infrastructure, cultural programs, and childcare (Alexander 2004: 260f., Rahimov 2012: 61).

Tamga's *syrt* herders who used to make the seasonal migration to the high plateau in the time of the *sovkhoz*, before the nearly three decades of fallow that unfolded after 1991, describe the control of their routes and production but also the security they experienced, especially in the later decades of the USSR. There are stories of particularly hard cattle drives, ordered too early by the farm administration; at the same time there are all the well-remembered protective sheds and vaccination stations that were built and used on the *syrt*, which now keep crumbling away. Over the years Tolgonaj, the wife of the *sovkhoz*'s horse breeder from 1972 to 1990 and one of my closest acquaintances in the village, often told me about the plans for producing wool and meat and milk products like *kymyz* (fermented mare's milk) that she and her husband, aided by their children, were commissioned to fulfill. Milking mares and churning *kymyz* is arduous work. Mares do not hold still like cows and only give small amounts of milk at a time, less than a liter usually. Yet, for that labor, she and her husband could be sure to receive wages and trust that in return for the goods their *sovkhoz* could assemble, products and resources from other parts of the union would be brought to Tamga.

The large-scale and interconnected command economy of the Soviet Union can also be grasped as an immense redistributive machinery (Dunn 2004: 165; Verdery 2018: 55-59): a centrally coordinated cascade of administrators directed what, how, and how much the Union's population should produce – but also what everybody should receive in return. The legitimacy granted to state agencies for their control over working lives was based on the understanding that they were also holistically responsible for the reproduction of the 'whole living environment' (Alexander 2004: 263) of their labor force. This redistributive system has long been notoriously known for its miscalculations, hick-ups along production lines, unequal returns between different regions of the Union, with Central Asia rather on the unprivileged side of the exchange, and abuses of allocative power

by farm directors or other positions of prime access to flows of resources and goods (Dunn 2004: 15, Humphrey & Sneath 1999: 18ff., Khazanov 1995: 115f., Vitebsky 2006: 50ff., 248ff.). Its logic, that the state and its local emanations as employers had the moral obligation to ensure the livelihoods and well-being of their employees and their families, however, held true despite the practical deviations from the ideal. Labor signified the entitlement to benefit from collectively produced wealth across regions and republics, without an individual person or company having to produce a profit (Dunn 2004: 15ff., 170ff.; on moral economic legacies of socialism see also Hann 2003).

This is important to understand the budgeting and welfare politics of the USSR and other socialist countries of the 20th century. Enterprises worked with soft budget constraints which means that, ultimately owned by the state and entangled into the larger distributive network, they did not need to worry about going bankrupt; neither was there need for competition between companies (Alexander 2004: 260, Wegren 1998: 9f., 109). Farms operating at a loss were bailed out, because their purpose was not only to generate gains but rather to keep running, to provide employment to the population, and, through the welfare infrastructure tied to employment, to care for their workforce. Such linkage between production, labor, and provisioning has implications for the experienced and officially framed value of work, namely that the function of work should be to sustain persons and lives rather than the other way around – that work was on the one hand a moral obligation to contribute to the collective well-being, but also a moral entitlement to be supported to live (Dunn 2004: 17, Humphrey 1998: 452). Accordingly, it makes sense that the experience of the end of the Soviet Union has so often been described and captured as an experience of abandonment, of loss of care and security, and of the harsh naturalization of emergent inequality along with the privatization of land and enterprises and the establishment of competitive job markets – and not necessarily only as one of liberation (Alexievich 2017, Ghodsee 2011: 188f).

Another structuring aspect of former socialist planned economy and the patterns of relationships it gave rise to, can be found in the sprawling networks of barter and exchange between individuals and between enterprises that were necessary to actually maintain the centralized machinery under the circumstances of recurrent shortages and supply bottlenecks (Howell 1996: 63, Kuehnast & Dudwick 2004: 13ff., Verdery 2018: 60ff.). In the large interconnected web, the allocation of resources necessary for production processes – and those needed for the diverse social services implicated in production, as delineated above – often did not work out as planned; be it because of

miscalculations, or strategic hoarding somewhere along the line of distribution. This meant that in order to meet expected production plans enterprise directors systemically had to mobilizing webs of personal connections to make up for acute lacks in fuel, tractors, building material, medicine, etc. Such webs both reached up the bureaucratic hierarchy of distribution, but also extended laterally through trade and alliances with fellow farm heads or office holders in other managerial positions (Verdery 2018: 60ff.). Similarly, private access to consumer goods, certain jobs, or places in higher education depended on the fostered networks of reciprocity one could draw on (Alexievich 2017, Kuehnast & Dudwick 2004). This is a recurrent theme in ethnographies and oral history projects in post-socialist contexts: the shared experience that getting things and getting things done worked through connections, as well as that assembling especially many people as part of wide-flung network was a main characteristic – and substrate – of power (Kuehnast & Dudwick 2004: 13, Humphrey 2002: 170ff., Verdery 2004: 148). Local administrators who, qua their office, were connected to regional or even further away centers like Bishkek[26] were thus expected to mobilize this capacity to procure agrarian inputs, wanted consumer items or new machines on behalf of the villages, farms, or factories they oversaw (Humphrey 1998: 451ff., Ssorin-Chaikov 2017: 19ff.).

Drawing together these analyses, I believe, can help to understand some of the interactions between pasture committee representatives and herders – especially so the demands for *djardam* or the scenes of laudatory speeches and ceremonial gifting that led me into this discussion of the past in the first place. Contemporary pasture negotiation in Tamga is surely not reducible to such broadly delineated patterns of socialist governance. Neither, of course, were people's actions during the decades of socialism: the socialist civilizational project was extraordinary in how sweepingly it restructured social organization across the vast Eurasian landmass (Vitebsky 2006: 46, 382). Yet, still, this purposefully homogenizing endeavor could not but intersect with local specificities. It intersected with the requirements of a landscape that would not allow for sedentary agriculture (Boyanin 2011: 293, Dienes 1975: 357). It had to engage with pre-Soviet forms of collectivism that

[26] Bishkek was called Frunze during the time of the Soviet Union. Regional centers of importance for Tamga are Kyzyl Suu (capital of the district) and Karakol (capital of the *oblast*); both have remained administrative centers in the subsidiary levels of organization of the Kyrgyz nation state.

could be drawn on for the propagation of socialist ideology (Humphrey 2002: 169f., Sneath 2004: 165ff., Steimann 2010: 152). It had to deal with kinship structures and practices that were partially suppressed as potentially challenging centralized state authority (Jacquesson 2010: 106) but also pragmatically incorporated to enhance compliance with managerial decisions and plans (Isakov 2016: 58, 65ff.). Rather, I presented some characteristics of the logic at work within the political economy of the former USSR and its *sovkhozes* in order to grasp a little better the experiences many herders and villagers refer to when making demands on their local administrators, or when comparing provisioning of today to that of Soviet times. It can contribute to understanding expectations of care or collectivism and how power may or may not be perceived to legitimately unfold in Tamga.

The coordination of mobile pastoralism has changed since 1991 and continues to change. The flows of money and materials that once sustained infrastructure and services, and that circulated within intricate networks of connections during the decades of the USSR have long ceased. Village officials have to collect their own fees or apply for funding from development agencies; importantly, too, they now can be voted out of office. However, stances of entitlement to *djardam* and parameters to evaluate the performance of office holders fostered under socialist rule partially linger in the workings of Tamga's pasture commons across the institutional changes that unrolled since 1991. They partially linger in the implementation of the 2009 pasture reform: in the rhetoric of the speeches held in Kara Saj, in how the pasture committee persuaded Tamga's herders to move to the *syrt* again through providing infrastructure, in the demands villagers address to their official representatives and vice versa, in the persistent absence of price competition between herders, and in the insistence that legitimate authority has to be accompanied with palpable care. The speeches and gifting at the herders' festival, the petitioning, and the everyday talk about the *djardam* mobilized, or not, by the pasture committee are part of the maintenance of the infrastructure that makes mobile pastoralism viable for Tamga's herders. The reproduction of relationships of responsibility and accountability, some of which bear traces of Kyrgyzstan's socialist past, is part and parcel of the production of animal bodies, hay, milk – and thus of people's livelihoods. Both reliably giving and insistently asking for *djardam* from those who can reach out to obtain funding money or support from higher-up state-levels are practices that contribute to the coordination of Tamga's pasture commons.

Let me conclude by returning to the purported aim of this chapter, namely, to explore what contribution to the working of Tamga's collective pasture organization can be discerned in certain sets of relationships that shape social life in the village. Attention to how people evaluate the exercise of power and judge the need to participate in cycles of reciprocity is something I find in the pages of ethnographic accounts of rural livelihoods in contemporary Kyrgyzstan (e.g. Beyer 2006: 164ff., Isabaeva 2011: 545ff., Reeves 2012: 131ff.), but not so much in analyses of the county's changing pasture tenure. An explanation for this divergence might lie in the continued pursuit of commons analyses in widespread accordance with the conceptual framework put forth by Elinor Ostrom. In her influential work on common resource situations, Ostrom importantly pointed out that viable commons are based on forms of collective organization – on self-coordinated institutions of monitoring, decision-making, sanctioning, or conflict-settlement upheld by the collective of users themselves (Ostrom 1990: 15ff.). She argued that within such institutions – which do not need to be imposed by a superordinate state agency – individual resource users' economic choices are different than they were assumed to be by repudiators of common property arrangements: within functional, self-organized collective management the pursuit of individual interests will not result in the overexploitation of a resource. In other words, if an institutional set-up works well, it makes users include long-term availability of the shared valuable good for all members of the collective into their cost-benefit-calculations. This focus on how institutions influence individual decision-making is the basis for Ostrom's defense of the functionality of common resource management (ibid.). Her approach remains significant for the study of empirical commons situations, including pasture commons and including cases from Central Asia. I read the analytical focus put forward by Ostrom productively applied in the bulk of the available analyses of post-2009 pasture commons coordination in Kyrgyzstan (e.g. Crewett 2012, Yu & Kasymov 2020, Zhumanova et al. 2016)[27]. I doubt, however, that the rational choice-making, resource-using individual – even when analyzed as embedded in institutions – is the only possible or the only promising pivotal point to start investigations into commons situations.

[27] There are exceptions, of course, e.g. Karina Liechti's explicit exploration of the role of the meaning and value ascribed to pastures or pasture quality by herders as part of pasture management of two villages in Chuy district, Kyrgyzstan (2012).

What I attempted to do in this chapter is to purposefully not take the individual as the basic unit of analysis, but to look at Tamga's pasture commons through the prism of historically grown patterns of relationships and the labor their maintenance entails. This focus does not make other approaches less valuable. However, it adds a layer of commons practices that substantially contributes to the coordination of common pastures, at least in this particular case study, but that is still often missed. Ethnographic attention to concepts like *djardam* and the actions and relations they may mobilize seems to me a fruitful method to reach a deeper understanding of specific commons situations and how they are made to work. On this note I want to close my descriptive exploration of commons practices in Tamga and move on to bring them together into a conclusion.

5 the conclusion: combining the threads, and a note on a virus

After this hike through grasses of different length, past maps – absent and present, across channels of water but also of cash, and through the undergrowth of networks of gifts and requests for help, let me turn around for a final panoramic overview.

Tamga's alpine pastures stretch across the altitudes of the Tian Shan's slopes that rise up south of lake Yssyk Köl. What used to be the well-defined pasturage of a state farm during the time of the USSR has remained state property, although the country's name is a different one and the structure of the polity has changed dramatically. The pasture land has remained public, yet for nearly three decades until now, it has served as a source of fodder not for one large collective herd but for many flocks of animals owned by many private smallholders. In 2009 a nationwide reform in Kyrgyzstan introduced a new form of official collectivism for the use of the country's pastures: where private livestock owners had received individual leases for pasture plots, along with the responsibility to use them well, there should be no further parcellation of alpine grassland, nor of its care. In 2009 municipalities were commissioned to each develop their own pasture-use plans in order to manage the movement of their inhabitants' animals; the collectives of villagers were tasked with coordinating their needs as livestock owners and herders among themselves – and between themselves and the state of the grass that grows on their municipality's specific pasture grounds. Pasture committees were created in the villages to bundle, document, and implement their community members' interests and watch over the ecological consequences. Ideally, the collectives of villages all over Kyrgyzstan would ensure access to clearly delineated, communal, and seasonal pastures for all residents while distributing grazing pressure in ways that would not deplete the grasslands' regenerative capacity.

This historical setting of reform in Kyrgyzstan, and thus also in Tamga, formed the foundation for the research that gave rise to this text: interested in (and sympathetic with) the political move to entrust to the users of state pastures themselves the mandate to collectively administer their usage, it nevertheless started with the probing question: how? Collective self-organization, as well as its equitable and environmentally sustainable outcomes, should not be taken for granted, nor should we assume it arrives automatically with a legal shift of authority over, for example, pastures. Rather, I believe, a case can be made for the viability of communal resource management not so much through unqualified advocacy but by inquiring into the constitutive processes that make up

empirical commons situations. For ten years, municipalities and collectives of livestock keepers across the Kyrgyz republic have been experimenting with ways – surely quite diverse – of how to handle the task of communal pasture management. In my mind this begs for engaged and comparative investigation: on the one hand for the sake of better understanding and potentially supporting contemporary mobile pastoralism as a basis for livelihoods in Kyrgyzstan itself, on the other as a source of inspiration for commons projects pursued in other places. What I offered here can, unfortunately, not live up to the challenging aspiration to carry out comparative work, yet. What I offered here, instead, is a situated case study from one village that I have learned to know well; I hope this still holds some interesting insights that can serve as a stepping stone towards further relevant research on communal pasture use in Kyrgyzstan.

The foremost aim and scope of this thesis lay in the exploration of concrete labor practices involved in the coordination of Tamga's pasture-use within the current framework of municipal administrative authority over alpine grasslands acting through an established pasture committee. I elaborated four sets – or: conjunctions – of practices that emerged during my research as constitutive for the ongoing process of negotiations over pasture-use among Tamga's fields and alps. Grass, maps, water, and help. The observations assembled in the preceding ethnographic chapters specifically speak of Tamga. However I hope that, beyond their descriptive value, they may also serve as workable tools for drawing the attention of other analysists working in other settings of collective resource management and the action this entails. By way of conclusion, I will briefly restate the main argument of each of the ethnographic episodes in turn and suggest that these can speak to wider contexts.

The chapter *chöp* rests on the insight that the non-depleting use of grassland requires the continuous study of both plants and the movements of herds and herders, as well as on the circulation of this observational knowledge. Following how this is accomplished in Tamga, and by whom, I put forth the argument that the task of monitoring is and can effectively be done in a decentralized way. Information about the overuse of pasture grass on the *djajloo,* and about the thus eloping cows, reached the village in everyday trickles, not via monitoring visits by a specifically charged supervising agency. Attention to the concrete but informal channels through which observations flow in the absence of an overseeing institution – having tea, regular provisioning trips and visits

between village and alps, gossiping, etc. – can obviate the hasty assumption that monitoring itself is lacking; it could be, but this is not necessarily so. A grasp of the practices of sharing knowledge that are in place in a specific commons situation, taking into account that they may turn out to take unexpected forms, seems to me to be important groundwork not only for the understanding of how the collective of *tamgalyktar* manages to keep track of its joint impact on its own pastures, but of instances of communal resource use in general.

In *karta* I focused on how Tamga's pasture commons is influenced by the fact that it is nested within wider political structures and their practical manifestations: ultimately the village's alps belong to the Kyrgyz state; their expanse is recorded in maps authorized by state agencies; parts of the collected pasture fees have to be paid in taxes to higher up state levels, which in turn implies the documentation of animal numbers and grazing months on the basis of which fees are calculated; pasture committee members are officially recognized as representatives endowed with the duty to document and charge the fees. As the preceding chapter already illustrated, the workings of Tamga's pasture coordination cannot be reduced to the formal and bureaucratic procedures of the official institution concerned with pasture management in the village. Knowledge of the land, reporting on daily moves of herds and herders, or the choice of camping spots lie beyond the control (and the capacity) of the pasture committee. However, the presence of maps and spreadsheets as reference points for the legitimate use of grassland shapes how the informal practices that contribute to pasture management unfold. Two broader insights can thus be drawn from the first two chapters. The first one can be read as a reiteration of a central argument developed by Elinor Ostrom: that viable commons are made up from collective institutions, like for example decentralized monitoring, but that those have all too often not been recognized as such because they operate in informal ways; an understanding of the all relevant decision-shaping institutions, formal and informal, is necessary to draw a realistic picture of the behavior of members in a commons situation and thus of collective action and cooperation (Ostrom 1990: 1-57). The second is that, in practice, commons situations take form as the concurrence of formal and informal practices of organization: it is not only that official management needs to be supplemented by practical experience and negotiation 'behind the scenes', but also that commons situations never exist in isolation from the political structures that surround them. This bears analytical relevance beyond Tamga – the question of the concrete ways in which the framing presence of state agencies or, for example, of

international funding organizations, is reflected in the workings of communal self-organization bear promises insights in other commons settings, too.

Suu is concerned with another form of constitutive entanglement of situations of common resource use and allocation: not the entanglement of herders and livestock owners with administrative levels that reach beyond the municipality, but rather the agroecological entanglement of the resource in question itself. The vegetation that grows on Tamga's seasonal pastures on its own cannot sustain the villagers' animals the whole year round. In order to provide a viable source for agropastoral livelihoods in Tamga, it needs to be combined with other resources, namely water, arable land for fodder crops, and cash.[28] The value of the communally held pasturage for each household is intimately linked to the additional availability of privately held, watered, and worked fields by the lake shore. Limited access to one of these coupled resources constrains the use of the others. On the one hand this can make collective coordination of pasture use an easier task: if the total animal numbers in Tamga are already checked by the expanse of fodder fields, there is less need to worry that the combined grazing pressure will surpass the capacity of the village's alps to regenerate. At the same time the uneven distribution of one type of needed land might mean that villagers benefit from communal land unequally, even though they hold the same access rights in the abstract. Similar considerations of potential interdependencies between a common good and other complementary resources may prove relevant in different study contexts, too. In addition to that, it is important to point out that, of course, such interdependencies are not static but in flux. In Tamga, changing flows of remittance money, for example, will probably influence the stocking rates on the summer pastures although the cultivated acreage for winter feed remains the same. In the long run, it can be anticipated that, in the face of global warming, the availability of water will greatly influence agropastoralism not only in Tamga but in the whole Tian Shan range: now locally abundant enough to not be overly strictly controlled at the village level, irrigation water will sooner or later become more limited as the glaciers above Tamga keep shrinking. How this will reshape the use of highland pastures remains to be seen.

[28] Another important component of making a living from keeping livestock as a household, which I have left quite untouched on the grounds of limited space, is the availability of labor. It surfaces in chapter 4.4, yet admittedly rather fleetingly. Developing a deeper discussion of the role of labor for agropastoralism in Tamga promises relevant insights but for now this will have to wait for another occasion.

In the fourth and last chapter, *djardam*, I looked at the everyday labor that goes into the reproduction of networks of reciprocity and support in Tamga and how this contributes to the use of pastures and the related provisioning or maintenance of needed infrastructure. Collectively held expectations of mutual obligation to share one's ability to help others – among kin, among co-villagers, as well as between herder, livestock owners, and pasture committee representatives – shape the coordination of agropastoral livelihoods: villagers can trust in the general participation of others when collective work is scheduled, many people can rely on extra labor during harvest season provided by relatives who feel obliged to contribute to their families' production, and local officials are judged and held accountable according to how skilled they are at mobilizing their positions to bring benefits to the municipality. In more abstract terms and beyond the context of Tamga, this chapter proposed that in order to understand the working of a commons situation, analyses should not be limited to the organization of monitoring or its documentation, but should consider patterns of relationships, meaning-making, and shared values at play among the people involved. These can be investigated empirically and situated within their specific historical contexts. It is interesting to take this thought further: how does this speak to commons theory and literature in the footsteps of Elinor Ostrom, which analyzes communal resource use in terms of collectively established institutions that influence resource users' behavior and economic choices (Ostrom 1990: 22, 29-57)? In Ostrom's approach institutions are conceptualized in a broad sense. They do not need to be formalized but can also be made up from informal but collectively upheld procedures and rules; which precisely is typically the case in commons situations. This is how Ostrom peered into the black box of the commons: inside of it she found recurrent patterns of practices of collective coordination of wants and needs. In 'Governing the Commons' Ostrom also mentions the conducive potential of shared norms, values, and visions of a future for viable and sustainable self-organization of members of a commons (Ostrom 1990: 21, 36, 205), although she does not enter into a deeper analysis. On a conceptual level, she thus frames collective values, trusted networks of reciprocity, and patterns of relationships, etc., as another part of informal institutional set-ups – as another functional component that structures individual behavior. I do not want to suggest that this approach is unfruitful. The continued widespread application of analyses of commons situations that follow Ostrom's institutional approach – including work on pasture commons in Kyrgyzstan – speaks to the contrary. Yet, I think it remains an interesting question to ask what other

insights might be overlooked when relationships and the meaning people attribute to them are translated into their potential institutional function. Exploring the everyday philosophical underpinning of people's actions, meaning-making, or relationships is something anthropology is good at qua its methodology and orientation as a discipline. Detailed attention to such dimension of commons situations, like for example following *djardam* in the context of small-scale agropastoral livelihoods in Tamga, also can contribute to our understanding of how people organize themselves – of situated collective action.

Grass, maps, water, and help. Each of these ethnographic chapters is centered on one aspect of pasture coordination in the specific setting of Tamga but, as I hope, also fruitfully points beyond the particular in several of ways. Additionally, there is one thread that traverses them all, which is also the basis for the title of this thesis, and which is the note on which I want to end it: the approach of capturing Tamga's commons through the practices that are performed within the legal framework of communal pasture tenure. As elaborated in chapter three, this choice of approach is based on my dissatisfaction with the political and analytic value of the term 'the commons' as long as it remains a name tag and is not filled with the practical content of actual implementation. Let me rephrase this one more time into a practice-based definition of the commons and my stance as researcher towards the phenomenon and the concept. I see commons situations as situations in which, firstly, collective use rights and access to a certain resource make interdependent self-organization necessary, and secondly, in which this capacity to coordinate is granted to the collective of users themselves. (When a resource use and management situation is officially called a commons or community-based, without these two conditions being practically fulfilled, I suggest it should not be considered as a commons despite the name.) The main inference I have drawn from this definition as this text unfolded is that a commons inevitably entails work and that it entails work of quite diverse kinds, as I have attempted to illustrate. Assembling and furthering our understanding of some of the labor practices that are performed in effective empirical commons settings, to my mind, can contribute to an informed political defense, propagation, and support of decentralized and communal self-management that is not based on 'the commons' as an empty signifier. It is from the practical experience and actions of people in particular places, like for

example in Tamga, that most lessons can and should be learned for this endeavor, and for other settings of collective self-organization.

coda

It is early April 2020 as I write these lines. When I called Djoldosh a couple of days ago, he told me that the livestock owners were busy branding all the newborn lambs and that the herders of Tamga were already preparing to pool the village's animals and to depart for the spring pastures. In June the shepherds plan to drive the sheep and goats up the serpentines and across the two mountain passes of the long road that leads to the *syrt* for the third year in a row; the cow and horse *cha-bandar* are expected to move to the *djajloo* as usual. As the winter's snow starts to melt in the mountains, water fills the *aryktar* and gurgles past awakening front gardens, past turquoise window frames, and onto fields and orchards for the season's first irrigation. The flow of people from and to Tamga, however, is severely constrained this spring: the global spread of the virus Covid-19 has not spared Kyrgyzstan. Djoldosh told me about police road blocks between the villages along the shore of Lake Yssyk Köl to isolate municipalities from one another and to prevent the spread of viral infections. International traffic has been stopped nearly completely and many villagers on labor migration got stuck abroad as flights were cancelled and borders closed, unable to return home. The bazaar in Karakol cannot be reached, neither visitors nor remittance money can arrive easily in Tamga, and no one can know if the middlemen who usually buy the village's apples and apricots will be allowed to drive across the country by summer.

The current pandemic, and the measures taken by governments to control it that so profoundly reshape lives around the globe, is also a time of heightened visibility of our societies' make-up in the cracks of the status quo. What becomes visible are connections constitutive of livelihoods as they suddenly are painfully severed. What becomes visible is the degree of vulnerability – unevenly distributed and unevenly cushioned as it is – that characterizes the channels of provision of so many people with their most basic needs. Even if this was relevant before the crisis, the current upheaval urges us more than ever to rethink and reimagine the organization of livelihoods, and among other things the production and distribution of food. What also becomes visible in the face of Covid-19 are the livelihood strategies and networks that keep working and that can be relied on. One example could be sustaining animals on Tamga's public mountain pastures. This is not to

romanticize: the discomfort about the road blocks points out that small-scale agropastoralism in Tamga, as in other places, is not a closed self-sustaining system. Whence cash for the herding and pasture fees, whence winter hay when this year's newborn animals cannot be sold? Yet, I believe the pandemic still pushes us to discern that some ways of doing agriculture and of provisioning a population with food could cope without being as reliant on far-flung transportation networks and the smooth flow of agrarian inputs as others in the long run. Understanding how these more crisis-proof food-ways work, and the concrete entanglements they are dependent on – like remittances, bazaars, middlemen, etc. – can be an important basis for fostering them further. If readers of these pages can join me in my final plea that mobile agropastoralism on common pastures in the Tian Shan is a viable and sustainable way of making a living from the land, even or especially in the light of crisis, that is worthy of support for the future, then my text will have achieved its goal.

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