

HUNTER–HERDER CONTINUUM IN ANABARSKI DISTRICT, NW SAKHA, SIBERIA, RUSSIAN FEDERATION

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Abstract

Anabarski district in NW Sakha was traditionally a region with mixed hunting/reindeer herding economy. Unusual for tundra reindeer herding, domestic reindeer herding in the Anabar tundra contained many features typical of taiga reindeer herding (riding on mounted deer, milking). In the local economic system, rich reindeer owners focused more on herding and poor people either worked for rich reindeer herders or left their animals in the herds of wealthy people and hunted seasonally for wild reindeer and Arctic foxes. Soviet agriculture incorporated this model into the collective farm ecology. While reindeer brigades focused on reindeer herding and hunted for their own needs, hunters migrated with small reindeer herds in their territory and left animals in the care of the reindeer brigades for the summer season. This practice continued up to the ‘snowmobile revolution’ in 1996. Although the reindeer economy prospered, i.e. the number of reindeer increased constantly, the district ‘produced’ meat of domestic reindeer only in these periods when the migration direction of wild reindeer was suitable. In post-socialist times, after the collapse of the planned economy, most native people of the district started to hunt intensively for subsistence, but in addition to this, private hunting enterprises emerged. At the same time, the government of the Republic of Sakha banned the slaughter of domestic reindeer. Since domestic reindeer were thus removed from the economic sphere, people in reindeer brigades either left for hunting enterprises or started to hunt wild reindeer to sell meat in order to have extra income. In this article, I argue that the hunter–herder continuum and the model of land use in the Anabarski district was adapted as an economic strategy in Soviet industrial agriculture and resisted general reindeer herding standards based on Komi commercial reindeer herding. This continuum made the shift from the Soviet into the post-Soviet economy easier and regulated the use of common pool resources of the tundra (cooperation between hunting and reindeer herding enterprises).

Keywords: reindeer herding, hunting, property relations, Siberia, herder–hunter continuum, Dolgan, post-Socialism

This article examines the economic system of reindeer hunting and breeding in the tundra of the Anabarskii district, Northwestern Sakha, Siberia, Republic of the Russian Federation. According to some anthropological theories which I will address briefly below, hunting and herding are different modes of production within a particular social setting. This paper questions this approach, indicating that at least in regard to reindeer, hunting and herding can exist in a single social and economic setting.

There exists a widespread opinion that the tundra zone is a unique ecologic and economic zone, where one of the main sources of livelihood for nomads has always been northern reindeer (*Rangifer tarandus*). This differs from the situation in other regions of nomadic and pastoralist cultures, which may rely on many species (Galaty and Johnson 1990: 7; Khazanov 1994: 41; Wissler 1923: 230–8). Reindeer are a source of livelihood both as wild game animals and domesticated herd animals. There are various domestic reindeer cultures in Siberia, demonstrating considerable diversity in animal–human relationships and land usage, not to mention almost diametrical differences between the hunting of wild animals and the keeping of domestic animal stock. First of all, there is a difference in animal ownership: Tim Ingold (1980: 2; 1987: 113) has pointed out that ‘a wild animal belongs to nobody’ as long as it is alive. While hunters exercise ownership on killed animals, for herders the subject of ownership rights is a live animal (Ingold 1986: 5; Paine 1971: 169). Another major difference is that hunters do not control animal breeding choice and sex proportions of wild species, and their chances of influencing the movement of prey animals are more limited than those of herders (Paine 1971: 167–8). Ingold even goes as far as to state that herding as a social, cultural and economic activity is closer to agriculture than to hunting (see his comments to Layton et al. 1991: 264). Social relations differ as well with respect to the hunters–herders opposition. While hunters tend to share meat and other animal products with other members of the group in order to establish and maintain reciprocal relations, herders share animals only on special occasions and with a limited number of people (Ingold 1980: 89; Paine: 1971: 168).

There are differences not only between hunter and herder economies. Different patterns occur also within reindeer herding. Ingold has distinguished between two separate classes of domestic reindeer herding. *Milch pastoralism* is a type of pastoralism where reindeer are kept for their services as milk providers and harness and mount animals. In this form of reindeer herding, animals are rarely slaughtered, and the main source of meat is not domesticated but wild animals. In milch pastoralism, herds of domestic animals are small, people know each one of them, and taming enables milking. In *carnivorous pastoralism*, animals are kept for food, as a meat resource. Herds are much larger than in milch pastoralism and animals therefore less tame: in order to recognise individual animals, marking (often ear marking) is needed (Ingold 1980: Chapter 2). In geographical and ecological terms, the former type of pastoralism is typical of the taiga zone, whereas carnivorous pastoralism has been practised in the tundra.

Soviet and Russian scholars divide reindeer herding into four main types. Their classification is based on differences in harness techniques, the practice of riding or not riding reindeer, the use of dogs, and also herding practices. The *Sami type* is distinctive in that reindeer are left unguarded in the tundra for a part of the year; the *Nenets-Komi type* is characterised by large herds of

tundra reindeer herded with dogs, where animals are slaughtered for food and, similarly to the Sami type, only sledges are used for transport. Contrasting the two previous types, the *Evenki* or *Tungus-Yakut* reindeer herding exemplify what Ingold defined as milch pastoralism: small herds, where animals are milked and used as riding, pack or harness animals. The Evenki, at least in historical reconstruction, did not use dogs or slaughter animals. The *Chukchi-Koryak* type of reindeer herding is characterised by large herds of tundra reindeer, but it is distinctive from others types by its use of reindeer, rather than dogs, as harness animals, and only in winter periods; in summer herders followed animals on foot, carrying personal equipment with them. Analogously to western scholars/authors, reindeer husbandry was classified into tundra and taiga reindeer herding, and only the Evenki type can be classified as taiga reindeer herding (Syrovatskii 2000: 14–16; Vasilevich 1969: 75–77; Klovov and Jernsletten 2002: 24–30).

In patterns of land use, scholars have noted differences as well. Saltman (2002: 160) writes that cattle herders have no interest in land itself but are interested in resources – namely, grasslands and water. It is generally asserted that nomadic societies are expected to have collective ownership of pasture lands (Gellner 1994 [1981]: xii; Ingold 1987: 199–200). Overuse of pastures causes grassland degradation that opens up the ‘tragedy of the commons’ discussion (Hardin 1968). Only in the case of excessive use have herders established regimes of controlling and managing the commons, which may be informal but may also end up with state involvement (cf. Anderson and Hill 1977).

Hunters follow a different land use model. Their resources are live animals that move around constantly. Burch (1991) argues in his ‘herd following model’ that hunters do not follow a particular herd all the year round but expect herds to migrate through certain regions at particular seasons. Important to the land use pattern is its predictability and density of resources (Casimir 1992a: 10). Hunters therefore establish regulations to control access of the regions where game animals but also fish or food plants are most likely to be obtained. Casimir (1992a: 10; 1992b: 166–9) distinguishes between two models of resource defence: ‘spatial boundary defence’ and ‘social boundary defence’. Which model is more effective is determined by costs to maintain a control regime. Dyson-Hudson and Smith (1978) claim in their ‘economic defendability model’ that territoriality occurs when profits outweigh the costs of boundary defence. Elizabeth Cashdan (1983), using data about bushman groups, explains cases when a social-boundary defence model is more efficient than other models of territoriality. She argues that in situations where territories are large, and resources dispersed, the control of land through social relations is most effective. Cashdan has found that the networks that monitored access to lands were kin-based: similarly to people in the Anabar tundra, Bushman hunters and gatherers monitored access to resources through kinship ties.

Relying on my field data, I disagree with Ingold's absolute hunting/gathering vs. herding distinction (Ingold 1987: 11; see also his comments to Layton et al. 1991). The combination of herding and hunting is not necessarily contradictory, but the two should rather be seen as separate economies within one economic setting (see examples in Dyson-Hudson and Smith 1978, and Layton et al. 1991). Here, I have found support in Barnard (1993), who doubts that the division between hunter-herder is very obvious (p. 34). In this article I will argue that livestock can be seen as a predictable defendable resource whose well-being is closely connected to another resource – grazing lands – shared with game animals (see Dyson-Hudson and Smith 1978: 35). I agree with Layton et al. (1991) that hunting and reindeer husbandry cannot be seen as 'an evolutionary progression from one distinct type of society to another'. My data shows that hunting wild reindeer and reindeer herding in the Anabarski district were 'alternative strategies', as per Layton et al., that existed in one setting and in the same social space at least until 1996 when 'full mechanisation' altered the situation. Both hunters and herders were interested in access to two kinds of resources – pastures and wild reindeer herds. Thus I wish to show that hunters and herders are not necessarily opposed economic groups, but can become extensions of each other.

Field Region

The Republic of Sakha is the biggest territorial unit in the Russian Federation with a territory of over 3 million square kilometres. In the Soviet period the republic was called the Yakut Autonomous Soviet Socialist Republic; it declared sovereignty in 1991 and was renamed as the Republic of Sakha (Yakutia). Sakha is a region that is famous for its diamond production but also for gold and precious metals resources (Tichotsky 2000). Due to mineral resources and the republic's ability to pay subsidies for transport to remote villages, such villages are far better off than those in many other Siberian regions.

I conducted my fieldwork in the Anabarskii district of the Republic of Sakha. It is the most northwestern district of the republic, located at the coast of the Arctic Ocean and sharing a border with the neighbouring Krasnoiarski Krai. The district's territory is about 50,000 square kilometres, i.e. it is a little larger than my native Estonia, and its population is about 4,000. With the exception of the southern fringe of the district, the whole territory is plain tundra on the two sides of the Anabar River. The Anabarski district has three villages: the district centre Saaskylaakh, Uurung Khaia, my fieldsite for eight months in 2000 and 2001, and Ebeleekh, a diamond-mining village. One third of the district's population were Russians who lived either in Ebeleekh and were engaged in the diamond industry, or in Saaskylaakh, working at the airport. The rest were the local native population and the few Sakha

immigrants. Saaskylaakh was populated mainly by the Evenki and the Even, Uurung Khaia by the Dolgan. The local population spoke a northern dialect of Sakha. Local administration was dominated by natives and headed by a local Even.

Development of Reindeer Herding and Hunting

The Anabar region with its southern Olenek taiga zone was (as far as can be known from historical records since the seventeenth century) a region that wild reindeer herds passed in their migration. The southern taiga was also populated by different fur-bearing animals, including sable. Since the seventeenth century different Russian, Tungus¹ and Sakha hunters have travelled to this area to hunt seasonally and have often settled there permanently (Gurvich 1977). In the seventeenth and eighteenth centuries, Anabar and Olenek suffered from repeated smallpox epidemics that resulted in a considerable decrease in local population. But, since the region was located at the border of two administrative units – the provinces of Yakutsk and Mangazeia – and was peripheral to both, the population grew constantly due to the immigration of tax evaders.

According to historical records, hunting of fur-bearing animals was the main source of income for the people, but, for sustenance, the population depended on the herds of wild reindeer (Gurvich 1977: 15). At the end of the eighteenth century, the local economy became more trade-oriented, and the importance of hunting increased (Gurvich 1949: 7). In this period, domestic reindeer herding also increased in importance. Russian hunters, who had used dog sledges for transport, took over reindeer herding, and the Sakha and Tungus reindeer herders adopted several specific hunting techniques and skills from the Russians (Dolgikh 1963: 132; Gurvich 1949: 7–8; Popov 1937: 11). Reindeer husbandry in the region was thus a typical taiga reindeer herding, where animals were kept for transportation and milking, were used as decoys in hunting and not slaughtered for food (Gulevskii 1993: 20; Gurvich 1977: 18; Vasilevich 1969: 52). Gurvich (1952: 81) argues that domestic animals were occasionally eaten only in the northern part of the tundra.

During the eighteenth and nineteenth centuries, the populations of the Anabar and Olenek region were consolidated both culturally and economically. Despite their different ethnic backgrounds, the people adopted Sakha as the main language of communication, and their economy became a combination of reindeer herding and hunting wild reindeer and fur-bearing animals (Gurvich 1977: 22). One ship of the Second Kamchatka Expedition, which in 1735 visited the coast of the Laptev Sea with the aim of mapping the coastline and describe the flora and fauna of the region, found several Russian and Sakha hunters' settlements on the coast (Gurvich 1950: 159; Kalashnikov 2000: 82). The commander of the ship, Russian explorer Dmitri Laptev, mentioned in his records that the whole population was similar 'in their character and 'customs' and participated in the seasonal wild reindeer hunt where

animals were killed at river crossings, similar to what I registered almost three centuries later (Gurvich 1950: 159, 196).

Systematic ethnographic fieldwork has been conducted in the region by Soviet ethnographers only since the 1920s. In the 1930s and 1940s the region was visited by scholars with the aim of researching the ethnicity and economy of the population (see Dolgikh 1950, 1952; Gurvich 1952, 1977; Suslov 1952; Tereletskii 1950). The ethnic mixture of the Anabar and Olenek region prompted various discussions about the population's identity (see Ventsel 2005: Chapters 2 and 7), but many decades later I noticed people of Dolgan identity in the northern part of the tundra, and people of Evenki identity in the southern tundra of the Anabarskii district. Economically, the area was a part of the eastern fringe of the Dolgan reindeer herding, described in Popov (1935). Compared to other ethnic groups in Siberia, the Dolgan kept domestic reindeer herds of a size rather suitable for taiga (Gulevskii 1993: 27), thus indicating the importance of hunting and trading for tundra reindeer herders. Technically, Dolgan reindeer herding was a mixture of different traditions: the Dolgan rode reindeer just like the Evenki, used herding dogs like the Nenets, and borrowed elements of sledge and harness construction from the Enets, Samoyedic and Nganasan traditions (Narody 1994; Popov 1935).

In the eighteenth and nineteenth centuries, the local economy became more market-oriented. New traps and tools (rifles) were introduced by the Russians. This changed the economy to the extent that some scholars even speak about a 'technological revolution' (Vasilevich 1969: 54). These changes also took place in the Anabar region (Zykov 1992: 62). Anabar became more accessible to the Sakha traders and the importance of market relations in the local economy increased by the establishment of a network of trading posts (Gurvich 1950: 114). According to Popov (1934: 131), the Eastern Dolgan were more trade-oriented than their western kinsfolk. The Eastern Dolgan had a stronger sense of individual and family property and they limited sharing among the relatives to four generations, whereas among the Western Dolgan, distant relatives were included in the sharing networks. Individuals included in these sharing networks had extensive rights and obligations: the rich were obliged to support their relatives in need, and starving relatives were allowed to kill animals for food (Popov 1934, 1935). Such rights, Popov thought, indicated that 'not long ago' the Dolgan had a communal ownership of reindeer (1935: 199), a view that is not supported by most scholars due to a lack of proof.

The Marxist approach was characteristic of early Soviet ethnographers and scholars working in the Anabarskii District, and their research on the Dolgan and Evenki is no exception. The scholars were thus convinced of the existence of 'class division' among the indigenous population of Anabar. Official data about reindeer ownership in the Anabar region reveals a remarkable change in the form of reindeer ownership. Before the Revolution, the registers included

only few reindeer herders who owned from 5,000 up to 10,000 head. My informants of more advanced age told me that such rich reindeer herders had always hired herders (*pastukhi*) to look after their herds. At the same time many ‘average’ reindeer herders had only 20 reindeer (Gurvich 1950; Tereletskii 1950). These figures were different in the 1926 census, where the largest documented herd was 23,000 head (Tereletskii 1950: 93–5). The fact that state officials never actually counted the animals and relied on what people told them clearly explains the difference.

In the Marxist tradition, sharing and borrowing animals, and also hiring labour was often interpreted as a sign of exploitation. The question is whether the local population saw it the same way. When reading the ethnographic arguments of Gurvich and Tereletskii, I tentatively argue that the ‘rich’ reindeer herders, as described, were living in the tundra zone, whereas the ‘poor’ reindeer herders were taiga hunters. This can be concluded from their ‘extra’ activities: wealthy reindeer owners hunted arctic fox with dead fall traps (in the tundra), while the small reindeer owners hunted squirrels (a taiga animal) (Gurvich 1952: 83; Tereletskii 1950: 95). Wealthy reindeer herders got their income largely from reindeer herding, whereas small reindeer owners depended on hunting and fishing. This argument is indirectly supported by Gurvich (1952) who argues that numbers of caught fur-bearing animals, reported by Tereletskii, were insufficient to make a living. Southern hunters, however, with their small herds of 60–70 head could not reproduce a sufficient number of transport animals and purchased additional animals from northern tundra reindeer herders (Tereletskii 1950: 94–5).

It is questionable whether wealth difference was a result of class division and different economic zones: perhaps the Soviet ethnographers failed to see a broader perspective. As to the exploitation, it is rather difficult to prove that this was seen as such by indigenous people. Bogoras (1975 [1904–9]: 83) has demonstrated that reindeer cultures had paid labour with different categories of wages. Stammer shows for the Yamal Nentsy that working for other herders’ households is – rather than exploitation – a normal strategy to build up one’s herd and learn the necessary skills for reindeer herding. It is also an important feature of the social network that prevents poor herders from moving out of the tundra when they no longer have enough reindeer to survive (Stammer 2005: 195–203). Also, I was told a story about a rich reindeer herder in the Anabar tundra. When he got old, he needed help and many young men joined him to work as a herder, and in return were allowed to use the old man’s reindeer on their hunting trips. It was seen as ‘helping out’, rather than as a contractual employer–employee relationship. Popov (1935: 199–200) documented incidents about wealthy reindeer herders, who, when they did not have enough labour in their own family, gave some reindeer herds away for the summer. Such hired herders were paid two to three reindeer per season. It remains unclear whether herders were allowed to use the owner’s reindeer

labour and milk, but it seems very likely that this must have been a motivation for the less well-off to consider such a job.

Earlier Soviet ethnography shows that the economy in the Anabarskii district can be interpreted as a mutual cooperation between the wealthy and the poorer, which crossed the border between the tundra and the taiga. Many tundra herd owners needed additional labour, while poorer families needed either reindeer to reproduce their herds, or shelter and food for the next season. When hunters wished to increase their mobility for the next season they left some of their animals in tundra herds and probably some family members, too. In this light, the regional economy can be perceived as a combined economy where hunting and reindeer herding were socially related.

On 27 April 1922, the Yakut Autonomous Soviet Socialist Republic (YASSR) with the capital Yakutsk was established. In the beginning, the northern districts of the republic managed to evade government control, but with the establishment of the Anabarskii district (*raion*) on 21 February 1931, the territory was incorporated into the YASSR. In 1931 district centre Saaskylaakh and the Uurung Khaia village with educational institutions were established under state control. Some 1,500 people lived in the district, mostly Dolgan, Evenki and Sakha. In Anabar the collectivisation began with small state cooperatives or *tovarishchevsto* in the 1930s (Neustroeva 1995: 4). The first cooperatives did not change property relations: reindeer belonged to different owners but were herded together (Kuoljok 1985: 103–6, 110).

In the 1940s district cooperatives were joined into four collective farms (*kolkhoz*) with approximately 14,400 registered domestic reindeer in the district (Neustroeva 1995: 4). In collective farms the individual property was attributed to rich reindeer owners (the so-called *kulaki*) or was donated voluntarily by poorer people – this way, collective herds were created. Collective farm management and its technical facilities were located in villages. Reindeer herding, fishing and hunting were reorganised to be carried out by brigades according to a pre-fixed plan. During this period the number of reindeer herders and hunters in the district started to decrease. Some men and women were occupied with building facilities or serving the incoming specialists and officials; the Communists, ineffectively, decided to introduce cattle and swine breeding which demanded additional workers. As the goal of the district's economic policy was to supply the state with meat and fur, such work-intensive activities as cattle and swine breeding, not adapted to Arctic conditions with little yield, were, with great caution, criticised even by otherwise loyal scholars who otherwise valued positively all Soviet reforms (Gurvich 1950: 111–13).

My senior informants told me that the reorganisation of the economy was carried out with the help of Russian veterinarians and hunting specialists working 'scientifically' from the very beginning. The informants recollected that these first 'ambassadors of civilisation' acculturated quickly: 'They soon mastered riding reindeer and in a few years could communicate in Sakha. They

became real tundra people (*tundroviki*).’ Although Forsyth (1992) argues that with such reforms the indigenous ‘lifestyle was reduced to a job’, my informants did not perceive the first Soviet period in such dramatic terms. Soviet state agriculture integrated local economy in its structures, as happened in other parts of Russia and other socialist countries (cf. Konstantinov 1997: 14; Smith 2002: 236). So the first decades of collective farms were remembered as a time of ‘family brigades’ (*semeinye brigady*), where brigades were formed of relatives. This ‘new order’ also did not comply with pre-Soviet practices where households with few reindeer depended more on hunting, and households with large herds made their living mostly from reindeer herding. Up to the year 1996, the hunters’ and fishers’ brigades owned smaller transport animal herds of a few hundred head, which in summers were given to a reindeer brigade to herd (Turza and Turza 1996/1997). Herding brigades always included one hunter whose task was to set traps for arctic foxes and to hunt wild reindeer. According to my findings, kin-based brigades were relatively independent in their internal organisation of work.

In addition, the introduction of state ‘sentient ecology’ (Anderson 2000), i.e. allocation of territories to hunting and herding enterprises and their working units – brigades – failed to restructure completely native land use. As described by Fondahl (1998), by the example of the Evenki in Transbaikalia, many brigades continued to migrate to the territories that had previously been used by their kin in pre-Soviet times. Although state officials tried to limit the brigades’ movement, they lacked means to keep the brigades within their fixed territories. In Anabar, in the first decades of the Soviet period, most of the native population remained tundra nomads and continued to migrate much in the same way as before the Revolution. The brigades migrated seasonally to the Arctic coast to collect drift for heating and building. They visited villages only a few times a year to stock up supplies, to bring children to school, or to pick them up at the end of semester and to slaughter reindeer to fulfil the meat plan. Since pastures around the villages would become exhausted (cf. Gurvich 1950), the nomads settled in the vicinity of settlements only for a short period of time.

The state attempted to interfere in establishing brigades by introducing a quota on the number of people allowed to work in a brigade. According to the regulations of ‘industrial nomadism’ (*bytovoe kochevanie*), as it was called to distinguish it from pre-Soviet ‘every day life nomadism’ (*bytovoe kocheanie*), reindeer and hunting brigades had to include some male herders and only one or two female ‘tent-workers’ who would be responsible for cooking and cleaning. In contrast to other Siberian regions (cf. Konstantinov and Vladimirova 2002; Ssorin-Chaikov 2003; Vitebsky 1989), this policy was never successful in Anabar, where most men had their wives working as ‘tent-workers’.

The life of tundra people changed fundamentally in the 1960s. In a wave of state farm establishment (*sovkhosisatsiia*), collective farms of the district were united under one state farm ‘Anabarskii’, with the centre in Saaskylaakh.

217 hundred head of reindeer (Anabar-50 1980; Neustroeva 1995) were registered in the new state farm. The enterprise was turned from collective property into state property, which in practice meant the strengthening of state control. The formation of brigades became more controlled by the management, and the inclusion of close relatives in brigades decreased. Also, the management was now better able to control activities of tundra brigades. Wood distribution was organised centrally, and the choice of supplies (food and equipment) distributed by the state farm management was wider.

In the 1970s and 1980s, most reindeer herders abandoned tents in favour of *balokhs*. A *balokh* is a mobile home built on sledges, and had been used by the Dolgan since the 1930s (Popov 1931). According to my informants, however, *balokhs* were not used in the Anabarskii district before the 1960s. The state farm now had more construction timber to distribute, brought to the North via the Arctic Sea route. The use of relatively heavy mobile homes hindered the mobility of reindeer brigades. At the beginning of the 1970s, stationary hunting bases were built for hunters, so that hunters could spend a part of the year in one region. The brigades were more often visited by agitation brigades (*agitbrigada*), whose task was to 'educate and entertain' the tundra dwellers, as an old official informed me. The state initiated a sedentarisation programme, and more and more families were allocated flats in new houses in villages. With that herders and hunters became economically and emotionally attached to central structures.

In 1983 the big state farm that covered the whole district was split in two independent state farms: in Uurung Khaia, a new state farm 'Severnyi' (Northern) was established, and in Saaskylaakh the state farm 'Arktika' was formed. According to my informants, the purpose of breaking the state farm in two was to make production more efficient. The number of reindeer in the district remained stable until the beginning of the 1990s. The official number in 1987 was 23,000. The 1980s was also a decade of changes for the people living in the district. During this decade the immigrant population grew. Geologists discovered diamonds in the southern part of the district and intensive geological work began. As a result, in 1987, a new village, Ebeleekh, was formed. Along with the launch of the diamond industry, many Russians came to work at airports but also assumed managerial positions in villages, schools and the ports of Uurung Khaia and Saaskylaakh. An increasing number of local native people were allocated flats in villages and thus sedentarised.

Hunting and reindeer herding underwent 'mechanisation'. As in other regions, mechanisation in reindeer herding and hunting was represented mainly by the growth in the use of new means of transport (cf. Liely 1979). Herders, hunters and their supplies were transported to the tundra and back by helicopters. Portable radio stations were taken into use among the tundra hunters and herders. At the end of the 1980s, some brigades even owned television sets. Then again, the 'snowmobile revolution' (see Peltó and Müller-Wille

1987) reached the Anabar tundra relatively late: the Soviet Buran snowmobiles came to wider use in the middle of the 1990s, though even in 1994–96 some families in Uurung Khaia preferred reindeer sledges to motorised transport vehicles. Hunters, on their part, grew accustomed to snowmobiles relatively quickly and in few years abandoned reindeer sledges. This ‘technological revolution’ made hunting and herding brigades also more controllable; the authorities were able to reach brigades by helicopter, and radio enabled them to communicate orders and regulations to the tundra faster. State farm management could control the brigades and force them to remain within their territories and otherwise observe the standards of ‘scientific’ hunting and herding, e.g. hunting in the hunting seasons or following migration routes strictly.² While the sovkhos system separated hunting and herding into distinct economic units (brigades) on paper, because division of labour was thought to be more advanced, in reality people still engaged in both practices (Stammler and Ventsel 2003: 327, 351).

During this period the structure of brigades changed. Although the core of brigades still included close relatives (cf. Vitebsky 1989), the policy of state farm management, to appoint herders and hunters at will, resulted in a smaller number of related brigade members than in earlier decades. For people to change their line of occupation and brigade membership was common in the district. Among my informants of age 35 and over, the majority of hunters and herders switched at least once from herder to hunter or vice versa during their careers. Almost all hunters, regardless of age, claimed to have been born and to have spent their early years in reindeer brigades. People also applied and were appointed to other brigades to be together with their relatives. State farm management also institutionalised the cooperation between hunting and herding brigades. Reindeer herders were paid for repairing and cleaning Arctic fox traps in the tundra, hunters gave their private animals to their relatives in reindeer brigades to tend. State farm management transported supplies and timber to hunters’ brigades, where they became available also for reindeer herders; the supplies were picked up when a reindeer brigade was in the vicinity. This fostered contacts between certain brigades consisting of close relatives. It was mutually profitable, not only for assistance but also for the sharing of scarce goods.

Changes in the Post-Socialist Period

The Soviet-planned agricultural system collapsed in the middle of the 1990s. The first new forms of property in the Anabarskii district, peasant households (*krestianskoe khoziaistvo*), had already appeared by 1994. In 1996–98 the agricultural landscape of the district changed considerably. State farms were turned from the hands of state to the district, and were reregistered as municipal unitarian enterprises (*munitsipal’noe unitarnoe predpriatie* – MUP). New smaller enterprises were established on the basis of brigades, such as small-

scale enterprises (*maloe predpriate*), clan-based communities (*rodovaia obshchina*), family enterprises (*semeionoe predpriate*), etc. These enterprises varied in size and marketing strategies, but were focused on hunting and fishing. Only two enterprises in the Anabarskii district, besides the reindeer brigades of MUP, were engaged with reindeer husbandry.

One reason why new enterprises were more interested in hunting wild reindeer and fishing than reindeer husbandry was the policy adopted by the Republic of Sakha. With the 1997 Reindeer Husbandry Act (Ob-Olenovodstve 1997) all reindeer of the republic were declared 'the national treasure' (*natsional'noe dostoinstvo*) of the Republic of Sakha. As I have discussed this policy elsewhere (see Stammler and Ventsel 2003), I will mention only some aspects of it. As the aim of the Republican policy was to increase the number of domesticated reindeer, the government of the Republic put a ban on the slaughter of reindeer. Reindeer herders received their salary from the state budget through the Ministry of Agriculture. This way reindeer husbandry moved out of the market sphere. Reindeer herders had a small and stable income, but without any hope of increasing it through reindeer husbandry.

Hunters depended solely on their income but also their luck during hunting seasons. In a good season with numerous wild reindeer migrating through the district, they could make good money. However, the lack of supplies or changes in the wild reindeer migration route might have caused considerable material loss. In modern times hunting is also a seasonal activity, and people stay in the tundra only for summers and for a month in spring, occasionally visiting their hunting bases outside the season to check the traps. This is in sharp contrast to reindeer brigades which have to keep some herders in the tundra throughout the year and supply them not only with commodities, but also with fuel and ammunition. Money and the chance to spend half a year in the village are the main reasons why joining a hunting enterprise is more popular among the native population than becoming a reindeer herder. Nonetheless, the stable cash income and free supplies motivate others to maintain their affiliation with MUP.

Increasing Importance of Informal Structures

Having lived in tundra brigades and at their members' homes in villages for almost a year, I noticed many informal strategies related to networking. These networks and strategies tied different enterprises or their units together, irrespective of their official standing. After the collapse of Socialist agriculture, the importance of kinship ties in the organisation of collectives has become more obvious. In MUP reindeer brigades, herders are allowed to make changes in their unit at will, or as one brigadier explained it to me: 'Formerly the order was strict. You were appointed to a brigade and that was it. Today, all you have to do is get the permission of the brigadier. If he agrees to take you, the MUP's management has no objections. It is up to the brigadier how

many herders he chooses; if he wants he can take even ten!'. The concentration of close relatives was higher in reindeer brigades. However, all new hunting enterprises I visited also consisted of close relatives or of a core of extended kin. A brigade or an enterprise was often formed of brothers or a father and his adult sons.

When someone moved to another brigade, the presence of relatives was an important motivation. Many people explained to me that the reason for switching the working place was to 'go to help my brother', 'because my family was there' or 'they are my relatives, I trust them' or something similar. Relationships based on trust and expectations of support were stressed in comments and discussions. In the process of forming new collectives, the border between being a reindeer herder or a hunter was thin. There was little hesitation to change from one to the other. It seemed to me that loyalty to one's occupation was less important than working in an enterprise with one's relatives. This way many brigades became kin-based collectives, where an eldest brother or a father of many sons, who were hunters, became the official and unofficial leader respectively. Such concentration of relatives had many economic advantages. In winter, for example, relatives often shared one *balokh* to spare timber. They also shared commodities and fuel with each other.

The support of relatives was considered important also outside enterprises. Informal networks of sharing were thus established also between hunting and herding enterprises. Different brigades received different supplies from their managements. As a rule, reindeer herders had regular access to cash and the free commodities they received as state salary, whereas hunters depend on their luck, a good season and their trading skills to sell meat with profit. To understand the situation, one has to know that the hunting economy in the Anabarskii district tends to be cashless, i.e. hunting enterprises bartered most of their produce with buyers (enterprises or traders) and in this process they had to struggle with constantly increasing prices on supplies. Therefore supplies were usually more expensive for hunters, i.e. one could afford less for the same amount of money. Relational ties to herders proved valuable because of reindeer fur. According to local opinion, the best fur to make fur boots *unty* or children's fur coats came from dark domesticated reindeer. Therefore I was repeatedly told in Uurung Khaia: 'If you want to look nice, you must marry a reindeer herder!' Besides that, reindeer herders received a certain amount of free fuel and ammunition from the MUP.

Hunters were allocated construction wood for constructing new sledges and *balokhs*. Many hunting enterprises made partnership deals with village-based enterprises to exchange other construction materials for meat. Compared to reindeer herders, hunters had better access to transportation. Hunters shipped new hunting supplies to the tundra or meat to the villages several times a year. The trading partners of hunters also brought meat from the tundra on their company's helicopters or trucks.

Both goods and services were a constant object of exchange between hunting and herding enterprises. Reindeer brigades that migrated in the vicinity of hunting enterprises often sent meat or fish to their village relatives using random transport from hunting bases. Sometimes relatives sent extra foodstuffs or other goods to the tundra, provided that trucks heading to a hunting base had extra space on board. In all these cases, sending and picking up goods between different brigades and villages was organised over radio transmitters. Hunters also exchanged construction wood for surplus ammunition or fuel left over by reindeer herders during winter or summer. The quantity of ammunition an enterprise is allowed to purchase legally is limited. Ammunition could also be bought illegally from private entrepreneurs, who arrived in Uurung Khaia in winter, though the price was many times higher, and the purchaser had to drive to the village for the transaction. Hunters quite often ran out of ammunition in the middle of a hunting season, and had to 'borrow' ammunition from a relative in the reindeer brigade migrating in the vicinity. Women also 'borrowed' reindeer furs and foodstuff from each other, negotiating over the radio and sending parcels with their husbands when they went to visit each other. Most transactions took place either by barter exchanges or by 'borrowing', i.e. money was not involved. People perceived such deals as sharing with relatives.

One aspect of these sharing networks was allowing access to resources of land. After some months of fieldwork in the tundra, I noticed that particular reindeer brigades always migrated in the vicinity of particular hunting bases. There was always some connection of close kinship between these enterprises.

Although reindeer herders had a steady income, it was not sufficient to cope in the tundra. Most snowmobiles and commodities that reindeer herders had, were bartered from entrepreneurs in exchange for wild reindeer meat. It means that reindeer herders had to have access to good hunting regions during the wild reindeer hunting season. As a rule, the best hunting regions were located in the vicinity or around hunting bases, which in the Soviet times were established in regions where wild reindeer herds crossed rivers.

Hunting territories were divided among local enterprises and were seen as an informal property of the hunters. For a right to hunt in an area, one had to negotiate with the leader of the enterprise and obtain his permission. Hunters, whose livelihood also depended on luck in wild reindeer hunting, were generally reluctant to grant permission to shoot reindeer in their territory to other hunters. There was also a widespread belief that domesticated reindeer herds may disturb the migration rhythm of their wild relatives and drive the game away. This is why reindeer brigades were not welcome in hunting regions during the migration of wild reindeer.

The cooperation system was explained to me by the daughter of an old hunter who allowed the reindeer brigade hosting me to hunt on his hunting grounds:

My father does not allow other hunters to come here and hunt. They always cause trouble... But this brigade, the brigadier is our relative. And A. [the former brigadier who still works in the brigade] is also our good friend and relative. And my father's brother is in the brigade. Once, young hunters from the village came to shoot reindeer and did not notice my father and almost killed him. Or they claimed the carcass of reindeer my father had shot. We do not want troubles like that, and this is why our father allows only people we know well to come here and hunt!

Access to resources is negotiated between relatives. Other hunters have also stated that they prefer their relatives, people 'we know well', to enter their hunting grounds. Using such a 'social boundary defence model' (Cashdan 1983), extended families keep tundra resources under control. Resource monitoring is combined with the mutual support network that enables the distribution of scarce but also necessary goods and services.

Conclusion

I started this paper with the argument that hunting and animal husbandry can be seen as complementary strategies. In this paper I wish to demonstrate how hunting and reindeer husbandry in the Anabarskii district has historically developed into a single complex economic system, how this economic model has been incorporated into collective and state farm systems, and how this mixed model has later been used as an informal initiative of survival.

The economic situation of people in the Anabarskii district can be called 'a survival economy' (Ziker 2003), where people are occupied with making their ends meet and the goal of their economic behaviour is to satisfy basic needs. Reindeer husbandry and wild reindeer hunting are different sources of income that are tied together to one economic system through a kinship network. In this network people move from reindeer herding brigades to hunting enterprises, and are involved in hunting and animal husbandry at the same time. These kinship networks also channel and control services and goods in a parallel way.

Living effectively with both economies, viewed by some scholars as contradictory in terms of the social relations between humans and between humans and animals, has been practised in northwestern Sakha for centuries. The hunter–herder continuum where hunting reindeer herders and herding hunters belonged to the same economic and social space, existed due to the social relationships based on mutual rights and obligations and the support of the people involved in these networks. These networks and social relations enabled people to switch from one economic sphere to another, but also to distribute resources between different spheres.

The same economic models continued to operate in the Soviet collective and state farms. While kin-based social relations played a less important role

within these economic structures, their relevance increased in the post-socialist time. In this paper I have indicated that the emergence of the hunter–herder continuum in the Anabarskii district is not only the result of ‘path dependence’ (Stark 1991) development of the state farm period, but a re-activation of pre-Soviet social strategies. Once again, enterprises and their subunits of different legal status exist as one economic and social space. Kinship networks became the basis for distribution and access to resources and guaranteed survival in the period when official structures were ineffective.

Notes

1. An ethnonym used in the pre-Soviet era for the Evenki and the Even.
2. This does not mean that there was no resistance to state orders. The archives of the former Uurung Khaia state farm protocols contain complaints of state officials stating that reindeer herders did not follow official herding regulations prescribed by specialists at the Ministry of Agriculture. Also I have collected some data on illicit excessive hunting in the Soviet period.

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