

Animal diversity and its social significance among Arctic pastoralists

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ABSTRACT

Earlier studies have classified the importance of animals for pastoralists according to the animals' level of domestication, size and economic value, and have come up with a categorization of small stock and large stock. According to this model, people aim to 'convert' their animal property upwards on the ladder of hierarchy and prestige, focusing on large stock as the most important capital. Reindeer pastoralism confronts this with a focus on reindeer as the only pastoral animal in most cases, which calls into question the usefulness of such a model in the Arctic. I suggest including wild animals alongside domestic ones in the study of animals' significance for pastoralists, and omitting the distinction between mono-species and multi-species orientation in pastoralism. Instead I suggest as a starting point analyzing the intimacy of partnership that humans have with animals. The human role in the environment among pastoral people is shaped in a complex process of domestication. The example of Nenets reindeer and Sakha cows shows, how a developing closeness between pastoralists and animals can reach a level that I call symbiotic domesticity. By identifying 'niches of significance' and hierarchies of prestige and analyzing how various animals fill these niches among two groups in the Arctic (Nentsy¹ and Yakut (Sakha) -Eveny), I suggest a framework for study that enables a better comparison of the social significance of animals beyond boundaries of species or region. Among the findings for the cases analyzed are that the economic significance of animals is less stable than their social significance, as pastoralists and hunters readjust the former more quickly in response to changes in their surroundings, while they retain the latter as a system of social order. This encourages us as anthropologists to investigate the principles of cultural continuity, which have been somewhat out of fashion because of the recent boom in studies of cultural change.

Keywords: animal significance, pastoralism, species-diversity, Yamal-Nentsy, Sakkyryr Sakha-Eveny, cross-cultural analysis

¹ I prefer to use this ethnic group's own ethnonym in its common form: Nentsy is the plural form for the members of the group. Nenets is the singular as well as the adjective form. For the other group, I shall use Sakha as their own ethnonym, while using the Russian 'Yakut' as adjective, and 'Yakutian' as the adjective related to their region, the Republic of Sakha (Yakutia).

INTRODUCTION

The interest of humans in animals is essentially connected to our interest in ourselves, as was noted in the introduction to this volume. In this concluding chapter, I shall show with ethnographic material from two cases in the Arctic how human-animal relationships shape what humans are. The study of the social significance of animals across modes of production, livelihoods, and societies, in a way that Tapper (1988) explored in his seminal paper twenty years ago, proves to be still relevant in the early 21st century. The concept of symbiotic domesticity put forward in this paper sees humans and animals as equal partners in a total environment encompassing social and human components, thus paying more attention to animal agency as well.

No anthropological contribution survives academic scrutiny without clear definitions. While I risk missing some significant philosophical considerations by narrowing down the crucial terms in this article, I find it useful to define the social significance of animals as a process of conversation² in which animals give meaning to groups and individual humans through particular characteristics and practices based on them. Similarly, humans give meaning to and influence animal livelihoods through culturally embedded engagement with animals as one component in an environment that I would like to call a total social phenomenon in the sense of Mauss (1924).

After the following theoretical section I shall focus on two Arctic groups and:

- a) show how 'symbiotic domesticity' as the daily-enacted closeness between humans and animals shapes human and animal persons, as well as the human perception of the environment,
- b) analyze which and how 'niches of significance' for the society are occupied by the various animals in a society,
- c) analyze the importance of animal diversity for exchange, prestige and mobility in the pastoral society and thereby contribute to an understanding of the relative positions of the various animal species in their social and economic dimensions in a human community,
- d) argue against Arctic exceptionalism. The Arctic is not a single area where the only pastoral livelihood is monospecialised reindeer herding, but can rather be conceptualized as one of the world's diversified pastoral regions, inviting comparison along particular topical lines.

SYMBIOTIC DOMESTICITY: THEORIZING THE 'CLOSENESS' OF HUMANS AND ANIMALS

Under one common analytical umbrella, we can see the relationships between people and animals as falling along a continuum of closeness between the two. When one migrates with a team of harnessed reindeer in a big herd, it becomes obvious that domestication is a truly reciprocal symbiotic process involving both humans

² Tim Ingold (2005) has used the term 'conversation' before along similar lines, referring to the North as a conversation.

and animals. As argued elsewhere (Beach and Stammler 2006), it is by far not always clear who domesticates whom, just as it is unclear who follows whom during migration. In the following ethnography I shall show, for example, how reindeer through their skill in moving in the tundra induce their perception of the land and navigation through it onto their herders. This continuously changing symbiotic process is the essence of a relationship of closeness between humans and their animals that I will call 'symbiotic domesticity', elaborating on the process of symbiotic domestication (Beach and Stammler 2006). As such it is never completely stable, and to sustain the closeness this symbiotic domesticity has to be permanently enacted. Otherwise, in the case of reindeer, the relationship loosens and the reindeer become feral (Takakura, this volume). If we assume such a continuous partnership, we can accommodate both wild and domestic animals, for the distinction is not always clear-cut in settings where humans use domestic and wild counterparts of the same species (lama and vicuñas in South America, reindeer in the Arctic), and people thus have relationships with hunted and herded animals alike.

At first glance it seems that the more domestic an animal is, the closer its relationship with people is and the greater its social significance, as Maj (2008) has argued for the Eveno-Bytantay region of Sakha in Eastern Siberia. Examples of this would be the dog or the horse for many. However, Tapper (1988) and hunter-gatherer scholars (Bird David 1990, Willerslev 2007) have rightly noted that relationships can be very intimate between hunters and wild animals, including spiritual ties. The animals are perceived as acting in response to the behavior of the hunters towards the masters of the game: e.g., the performance of rituals before the hunt. At a more general level, animals acquire symbolic significance as totems for a particular group – a representation discussed extensively in classical anthropology (Evans-Pritchard 1956, Levi-Strauss 1963). On the other extreme, the modern rancher, as Ingold (1980) and Beach (1981) have shown for modern reindeer herding, no longer has intimate relationship with the animals (see Mazullo, this volume), but exerts control rather than symbiotic domesticity through force and sometimes violence. This leads to animals being deprived of their personhood, a process referred to as "de-animation" by Vales (1994) and "bare life" (Reinert 2007) in their studies of slaughterhouses.

It is along these lines that in Ingold's (1980) view relationships between people and herded animals are ecological (caring for a herd and protecting animals in order to feed people), whereas relationships with tame animals are social. He suggests (2000: 61–76) that hunter-gatherers have relationships of equal partnership with their animals, whereas pastoralists have relationships of domination, and ranchers have relationships of pure control. Although this model is appealing because of its simplicity, my own research with reindeer herders suggests that it is hard to feed this model with unambiguous evidence, and reducing their relationship with animals to just control would be unfair to herders. As has been argued for domestication and herd-following as a reciprocal process negotiated between equal partners, herded animals have much more agency than this model suggests. For example, it is the animals that almost entirely dominate the everyday reindeer herding process among the Nentsy in summer. Humans follow them throughout a 24-hour cycle of escaping from mosquitoes against the wind, feeding, drinking, and resting. Resting at the

human camp site, it is the animals that decide when the resting time is over, and they slowly stand up and trot away to begin the next cycle. The herder structures the rhythms of his life according to the will of the animals. Along similar lines, Riesman (1977:102) tells how a group of pastoral Fulani in Africa could not live permanently around the mosque of their charismatic Islamic leader because the cattle refused to do so, which "is a reason against which, for the Fulani, there is no argument. Cattle are considered to be one of the most intelligent species of animals; it would be crazy to do something the cattle do not like."

From the preceding we can summarize as follows:

- a) Wild animals are significant for their human users as a generic category at species-level, with importance as dead property in exchange relationships, for food consumption, and as spiritual partners of humans in an all-animate environment;
- b) Herded animals are significant as a group: the herd, with economic, ecological and social importance for notions of wealth, prestige, herd aesthetics, composition, and shaping the relationships of humans with the natural, social and spiritual environment;
- c) Tame animals acquire significance for humans as individuals, for personal relationships with particular people. In the case of domestic animals, the partners enact symbiotic domesticity on a day-to-day basis. This not only influences their ways of knowing and acting in the environment, but also contributes to shaping the personality of the human and the non-human person in the relationship. For analytical reasons, however, I suggest that sustaining and enacting symbiotic domesticity is different from a human relationship with tame animals. Firstly, the partnership of tame animals with humans is more dominated by humans than the more equal partnership in symbiotic domesticity. Secondly, as was argued earlier (Blench 1997:3), tameness can be achieved with completely wild animals and is more temporary, while symbiotic domesticity can be maintained only with animals that are already predestined for this constant partnership through a centuries-long process of domestication that has left its footprint in the animal's biological genetic heritage (Beach & Stammer 2006:8-9);
- d) Feral animals are formerly tame animals that 'become wild' due to unenacted symbiotic domesticity. Through symbiotic domestication this 'hibernating' partnership can be re-enacted again.

SOCIAL SIGNIFICANCE AND SPECIES DIVERSITY

Pastoralists keep different animals for particular reasons of relevance for the society, and these reasons always have an economic and ecological dimension (see introduction, this volume). However, the emphasis in this paper lies on significance beyond the economic sphere. Animal exchange is among the most important indicators of social significance among all pastoralists, and the peoples of the Arctic are no exception (Stammer 2005, Chap. 5, Granberg et al 2006, Argounova-Low 2009). Therefore, it is of particular interest how animals occupy different niches of social significance

that are best visible when they are exchanged, either for other animal species (e.g., horses for cows) or for other animals of the same species (e.g., reindeer for reindeer). My concern in this paper is the functions of species diversification and the different niches of significance for each animal fulfilled in so-called 'monospecialised' nomadic pastoralist contexts. Besides reindeer herders, Khazanov mentions camel breeders in Arabia and the Sahara (1994:49) and specialized sheep breeders in Central Asia as examples of nomads with zero species diversification. To clarify this question empirically, a supposedly monospecialised group of Yamal-Nenets large-scale tundra reindeer nomads in West Siberia is compared with Sakkyryr animal husbanders of East Siberia, who diversify in reindeer, horses and cattle. Both groups are well known in the ethnographic record (Stammler 2005, Golovnev & Osherenko 1999, Takakura 2002 and 2004, Maj 2008, Granberg et al 2009), but my purpose here is slightly different in focus: the example of these two groups is used mainly to illustrate how symbiotic domesticity is enacted with different animals and how the social significance of animals works among different nomads as 'managers of animal diversity'.

SYMBIOTIC DOMESTICITY I: YAMAL NENTSY

The Nentsy have become the most prototypical pastoralists in the Arctic today, being exemplar for their nomadic ethos, for a supposedly pure pastoralist and monospecialised (Khazanov 1994) livelihood, where reindeer mean everything in all spheres of life. Nenets reindeer herders protect their animals from birth onwards, and reindeer, in turn, serve people as guides and teachers, as a means of transport, as sacrifice, as a vehicle for spiritual communication, and provide food, clothing and housing.

The best-known group, on the West Siberian Yamal Peninsula, have been migrating for centuries with their herds between the taiga (forest) and the tundra (treeless Arctic desert), covering distances of up to 1200 km yearly (Stammler 2005, Sasaki, this volume). Herd sizes vary between 20 and 5000 reindeer. There are other groups of Nenets nomads who have more localized migration patterns, covering not more than 100 km yearly (Stammler 2005, Yoshida 1997). Some of their herds have reached similar headcounts (3000) since the collapse of the Soviet Union, but traditionally fish have been more important to these less mobile herders. One important feature of the herding technology of Nenets nomads is that the herd is under human supervision 24 hours a day throughout much of the year, except in deepest winter.

Since the 17th century, being a mobile herder with a carefully composed herd has been the proud goal of almost every nomad in the area. Such is the *nenei ilgnana*, the real (Nenets) way of life. A good herd includes many 'unproductive' animals (see Yoshida 2005): trained transport animals, preferably castrated males, for pulling sledges / households, and 'dry' (non-productive) females for racing purposes, and a *minareï*, which is the leader of the herd and a spiritually important close partner of the head of the household.

It is in the daily contact between the people and the animals that symbiotic domesticity is enacted. Almost all year round, herders are busy training animals and being trained by their animals to know the land. Training is a mutual process in

which both humans and animals learn, as Vuojala-Magga (this volume) has described among the Sámi. Among the Nentsy, this happens during the daily roundup of the herd, the 'herd service' (*dezhurstvo*), which is done in 24-hour shifts, and the migrations with the household.

The mutual training and negotiation of the relationship with reindeer can be very well experienced when driving one's own sledge in a group of herders visiting a neighboring camp in summer. The travel plan is announced during the morning roundup of the herd, and the herders tell each other which animals they are going to choose for the day. Between two and five animals per sledge are chosen, representing a mix of experienced draft bulls alongside young energetic ones for training purposes. (I, of course, get well-trained old ones due to my lack of driving experience. As Alexei says, 'You don't give your new high performance sports car to somebody who hasn't driven for years'.)

The draft animals are also chosen according to the preferences of the reindeer. You would not be well advised to harness a team whose members hate each other. The skilled herders, therefore, know about the friendships among their animals and which ones complement each other well in character. Often the names of the reindeer reflect this character. For example, 'Hooligan' is a reindeer with a strong temperament that is difficult to manage. 'Yeltsin' is one that is big, slow and moody, often changing his mind. Knowing which temperaments of which draft animals go together well is an important skill in the human-animal partnership. For training purposes, often 'junior' wilder animals occupy the middle positions in the harness, so they are trained by the lead castrated bull on the left side. This way the other animals in the harness are trained not only by the herder, but also by their fellows, who know how to behave well in a harness and choose the right route for their human master on the sledge, while the latter learns about animal habits and the land through the preferences of the animals. Such everyday skills of herders show the significance of individual animal-persons for the everyday movement of people.

Once the draft animals have been harnessed, the remaining herders drive the rest of the herd slightly in front of the camp and to the right of the desired direction of departure. By doing so, they know that our departure will be more smooth and easy, as the harnessed reindeer pull first and foremost in the direction of their friends (the herd), rather than where their drivers want to go. The drivers' task is therefore to keep the animals constantly to the left of the herd. This is easier than keeping them to the right, as the steering rope is always on the left side in Nenets harnesses. During departure, we search together with the animals for a good route that the harness animals like: e.g., one that contains previous tracks, but which also leads in the direction in which we want to go. We have to lure the animals into the feeling of being on that track, until they get tuned into the direction of our destination and do not pull back towards the herd anymore. Once the herd is out of sight (and out of smell), we can safely move on.

The first harness and driver share the demanding job of negotiating the route among themselves and with the land. The following harnesses will trot more or less in the track of this 'path-maker'. However, while moving, all drivers will intimately enact their symbiotic domesticity with the animals by deciding on the pace and

micro-route. Reindeer have the capacity to check the condition of the terrain very carefully with their front legs. If the ground is too soft (boggy), they will choose a different spot. Moreover the density of shrubs influences the choice of the route. A sensitive driver and herder will let the animals make these choices themselves, because such details are hardly visible to the driver sitting behind on the sledge. His job is carefully to observe the reindeer's choices and thus learn about the conditions of every meter of the land as well as the reindeer's preferences. Thus, the herder decides on the general direction, and the reindeer choose the precise route. The exact pace of traveling is also negotiated in a process of symbiotic domestication: the herder will try to determine the general speed of travel, but as a good reindeer partner he is well advised not to exhaust his animals too much. They, in turn, have their own reasoning, wanting to stop here and there for a break, choosing spots with lots of fresh leaves (shrubs or grass) for a snack or creeks and ponds for a drink on the way.

As we approach the neighboring camp, our reindeer smell the neighboring herd from far away, and we notice how they understand where we are going. When the camp is in sight, they themselves increase the pace. Since we are going to stay for several days, we release the reindeer into the other herd for grazing immediately upon arrival. Neighbors who visit frequently even know how their animals integrate into the neighboring herd, since they socialize there as well.

After releasing the draft animals, the herders are keen to find out how I managed with the traveling and experienced the journey. Such a discussion happens not only because of the novelty of an anthropologist driving a reindeer sledge, but is part of most learning processes in Yamal-Nenets reindeer nomadism. First comes the experience, and after that the experience can be discussed and commented upon, and advice is given by senior to junior people. Such advice can also be given through story-telling with implicit messages. For example, one day I go with Zhenya to a trading post to trade some meat for bread. On the way we find a *khorey* (steering pole) on the river shore. We pick it up and take it back to the camp. Zhenya immediately guesses what has happened and says: "Sasha came here recently to get bread, and the workers invited him over for dinner. After heavy drinking, they brought Sasha to the other side of the river, where he had left his reindeer. He untied the reindeer, and fell asleep there on the sledge. When he woke up, he realized he was back in the camp." What happened was that the reindeer had taken him home on their own. Zhenya explains that they remember and smell the route by which they came, and they smell their home herd and camp. The implicit advice to me here is that once the reindeer know where to go, it makes sense to leave the detailed decisions on pace and route up to them, rather than wasting energy trying to impose senseless modes of travel on them.

What I want to show through these ethnographic sketches is the human-animal partnership on equal terms. It is constantly re-enacted, and both sides know the extent to which they can pursue their own agendas and when it is more reasonable to consider the reasoning of the other side. This example also shows how the human relationship with the surrounding land and the ways of knowing it are mainly instated through the relationship with the animals. At the herd level, this partner-

ship is enacted along similar lines when the herder studies the larger area and the seasonal cycle by learning how the herd as a group behaves in different situations on a day-to-day basis. At the group level the general patterns of movement of different populations of reindeer profoundly shape their human partners' lifecycle and their ways of knowing the land. For example, nomads from the central Yamal Peninsula know the northern coastal areas only in summer and the forest only in winter. Therefore, under normal conditions they visit villages and towns only between early winter and early spring. Such is the 'contract' that people have agreed upon with their animal-partners. Therefore, we can say that this relationship with the animals also shapes people's relationships with each other. Thus, we see how the relationship of individual human persons as well as human communities with their surroundings is largely shaped by their symbiotic domesticity with individual animal-persons and animal communities (herds).

Animal diversity and exchange among 'monospecialised' nomads Khazanov (1994:63) has mentioned that animals can also acquire 'stereotypical importance' through over-emphasis in the ethnographic record. This is not only true of cattle in Africa, but, to a lesser extent, of Nenets reindeer as well. In spite of the fact that the partnership between human and animal persons is an important structural factor in life, the whole Nenets social-cultural-ecological system would not work with reindeer alone, just as most African pastoralists do not live from cattle alone. Most, if not all, of them also have either small stock (sheep or goats) or supplementary agriculture, hunt wild animals, or provide wage labor. It has been argued that these other stock species have economic significance only, while large stock have social and cultural significance as well. However, this assumption has been proved to be simplistic (Broch-Due 1990).

What replaces pastoral species diversity among monospecialised reindeer nomads? At first glance, fish and game among Nenets people seem to have mainly economic significance. However, not only are fish almost as important as reindeer meat for subsistence, but through familiarity with fish and interacting with fish populations in the lakes and rivers, people also shape their relationships with the thousands of water bodies of the tundra and with fellow fishermen, as well as with other herders. Nenets nomads with a great deal of fishing activity therefore have a profound knowledge of fish and maintain intimate connections with both the physical and spiritual spheres.

People know very well which fish like which places, and how fish migrate in the water, where fish stay in winter, and so forth. It is through fish that people find out about the characteristics of lakes. Shallow or boggy lakes where fish do not go are called 'dead lakes'. Other lakes that freeze completely to the bottom and therefore have no fish in winter are called 'dry'. Lakes or rivers with fish populations in winter are valued most and cared for. Particularly older people feel a certain responsibility for the fish population. Not only should the lakes not be over-fished, they also should not be under-fished. One explanation I got was that under-fishing in the end leads to a natural population crash of fish, because the population becomes too large and consumes all the plants in the lakes, the oxygen content of the water decreases,

and as a consequence fish cannot survive there. There were cases reported where all the fish in a lake died due to under-fishing. So people, together with fish, are responsible for keeping lakes healthy. Here too, the perception is that people together with animals maintain the environment in a healthy state.

The social significance of fish is important in the hierarchy of prestige among people and animals. Even though fish as a commodity enjoys broader popularity than reindeer meat, among the Nentsy fishing is clearly less prestigious than herding, which is in line with findings from other groups in the North, even those who have few reindeer (Argounova-Low 2009). One popular economic pattern therefore is the conversion of fish into reindeer³.

On the other hand, less voluntarily, a shift from reindeer to fish can also occur in extreme situations such as reindeer epidemics, or exceptionally harsh weather conditions. Herders can then focus on fishing, which, in good years, provides a solid income with which reindeer can be obtained again. So just like small stock among multi-species pastoralists, fish in the northern Arctic setting allow one to rebuild one's herd quickly, but provide a less stable livelihood. Reindeer are seen as the supreme property, like cattle among the Nuer or Tswana (Comaroff & Comaroff 1991), and as a more reliable form of capital that can be 'stored' on the pasture.

In this way, I would argue that there are several similarities between the way fish are regarded among Nenets people and the way other pastoralists view small stock, the meat of wild animals, or agriculture:

1. Fish represent the lowest step on the ladder of prestige, being the most ordinary everyday food (Argounova-Low 2009: 491, 501). It is therefore used as an item for converting 'upwards' to reindeer. Subsistence-wise, it makes sense to exchange fish for meat in order to diversify the diet. But more important is the conversion to live animals. Some years ago, the terms of trade were one reindeer for a sledge-load of fish. This kind of exchange can also happen within families living together. In that case the reciprocity is more generalized.
2. Fish can also be used as an item in marriage transactions, though the bride price (*kalym*) is usually quoted and paid in live reindeer. But if the family of the bride agrees, part of the bride price can be paid in fish, or fish could be used to acquire reindeer. Fish can also be an add-on to the dowry that a young woman brings into her marriage. However, fish are clearly inferior to reindeer as an item of exchange in terms of prestige. Furthermore, a reindeer-fish exchange can never be entirely equal, of course, since fish are always exchanged as dead property (i.e., food), whereas reindeer are exchanged in numerous ways as live property. In this way Nenets nomads are indeed confined to one species of animal that can be exchanged for both dietary and social reasons. Therefore, I have argued earlier (Stammler 2005: 166) that reindeer have the significance of both small and large stock among these pastoralists. It is perhaps this preoccupation with live and domestic animals that has

³ The concept of *conversion* comes from the economic anthropology of pastoralism and refers to the process of exchanging capital stored in the form of one animal to another animal. It is similar to converting from a less-valued to a more higher-valued currency. In our case, fish are the low-value currency, and reindeer the high-value currency.

led to the classification of Nenets as monospecialised pastoralists.

Significance and prestige We see from the significance of fish that even among these supposedly monospecialised Nenets reindeer nomads, other animals have not only economic but also social significance. The difference between fish and reindeer, though, is clear-cut, as is that between small stock and large stock among pastoralists with different domestic animal species. Like other wild animals fish are not significant on an individual level, but at the species level as another component of the animate environment. Although the fishing reindeer herders have not talked about the spirits of fish, and fish-related rituals, important fishing lakes are sacred, and especially people with few reindeer have an elaborate knowledge of the natural and possibly spiritual needs of the fish-environment. However, it is worth noting that more often than the fish themselves, it seems to be the spirit of the water body that is addressed, although I do not exclude the existence of masters of the fish similar to masters of the game among hunters.⁴

Attached to the lower step in the hierarchy of animal-prestige that fish occupy among the Nentsy is the lower level of mobility associated with fishing. Fishermen can stay from spring to autumn in one place on the tundra, and then move to a village on the shore or a major lake for the winter. This low level of mobility means lower prestige in Nenets society, too, because *nenei ilgnana* is the nomadic life. In many cases, less mobile tundra people do not have enough animals to move their whole households frequently or have health problems that prevent them from doing hard physical work. Therefore, fishing is a suitable activity for pensioners, or for households that do not have enough manpower to handle reindeer herds in a mobile way. In such households women also join in, working together with the men in fishing. Such people try to give their reindeer to relatives or friends for migration, and provide fish to the herders in exchange for their work.

Hunting is also, of course, practiced by the Nentsy, but the economic significance of hunting has decreased tremendously since the time of the Soviet Union. In the past, however, hunting was a highly valued activity, and there were Soviet state-employed hunters with plans to fulfill of a certain number of game animals per year. Like fishing, hunting used to be an activity which provided a way of 'converting upwards' to live reindeer property. Among herders the hunting of birds in spring and the hunting of the Arctic fox in autumn are still very important, because they are done collectively and provide a welcome occasion to meet friends, relatives and neighbors. When I first came to the Yamal area, there were as many 'hunting brigades' as 'reindeer herding brigades'. However, within a few years, all the 'hunters' had converted upwards and acquired reindeer herds. As of 2003, there were only 'virtual' hunters left, who were listed in all papers as hunters but were, in fact, all herders. This situation is also connected with the fact that among those Nentsy where I was, there is no wild reindeer business (unlike on the Gydan Peninsula), and the demand for and price of fur-bearing animals (sable, Arctic fox, wolverine, etc.) has plummeted since fifteen years ago.

⁴ More research would have to be done to find out about fish-related spiritual practices in this respect.

This shows that within a few years, the economic significance of hunted animals changed completely, but the social significance has remained. People continue to invite each other to participate in the spring and autumn hunts. Since a growing number of Nentsy live in villages now, the hunt is also one of the prime reasons for village people to join relatives in the tundra. The stability of social significance also becomes obvious with reindeer: even though fish can be economically more important than reindeer, the Nentsy still associate themselves mainly with reindeer, which they consider to be the highest prestige animal and the supreme property.

These sketches of the relationships Nenets have with their animals show that they are managers of various animals, all of which have social significance. This includes managing wild stock through rituals addressed to the master of the game, proper consideration for the spirits of the fish and the water bodies, and other practices. However, only reindeer have personhood in individual partnerships, and symbiotic domesticity is enacted only between such animal persons and human persons. This is what makes the reindeer the supreme identity marker for the Nenets, like cattle for some African pastoralists, or the horse for the Sakha, as I shall argue below. The animal diversity mentioned above allows us to reconsider the stereotypical image of Nenets nomads as monospecialised reindeer pastoralists. Economically and socially, fished and hunted wild animals are also important to them, occupying niches of significance that among other pastoralists are occupied by small stock.

SYMBIOTIC DOMESTICITY II: SAKKYRYR

The reason for taking a comparative view of the Eveno-Bytantay district in the North of the Sakha Republic in Siberia (see Granberg, Osva and Kantanen, this volume) is that it is the only Arctic region with three species diversification in the pastoral economy. We know of such pastoralism with several animal species, including reindeer, in northern Finland as well, but there pastoralism is less mobile. Finns have been engaged in reindeer herding alongside agriculture and farming for centuries (Heikkinen 2007:312), as have the Sámi following their contacts with settlers starting in the 1700s (Aikio et al 2002: 54–58). A historical and contemporary comparison of these cases with the Eveno-Bytantay situation may be fruitful in the future, because in both cases multi-species animal husbandry developed after 1700 due to contacts of reindeer herders with agropastoralists. Several contributors to this volume and other authors have worked in Eveno-Bytantay (Takakura 2002 and 2004, Granberg et al 2009) earlier, but only Maj (2008) has shortly focused on analyzing the different niches of social significance for different pastoral animals.

The population in the Eveno-Bytantay area consists of two ethnic groups, after the incoming Yakut horse- and cattle pastoralists started fruitfully coexisting with the indigenous Eveny reindeer herders in the area in the 17th–18th centuries. Hunting and fishing are important as additional sources of food. This animal diversity makes the diet of the people more diverse than that of the Nentsy. In the following ethnographic sketches, I shall show how human-animal interaction is enacted in order to give some comparative insight to the Nenets case.

As remarked by several authors, the horse is the supreme animal and keystone species for the Sakha (Maj 2009), who already centuries ago invested a great deal of

time and effort preparing for horse races (Gabyshev 1966:16, quoting Syroshevskii). Training both horses and reindeer requires an intimate knowledge of the individual animals (Vuojala-Magga, this volume). Training, as I have shown in the Nenets example, can be regarded as the process of symbiotic domestication between the human and animal persons. Eveny and Sakha have developed such relationships with both horses and reindeer, as well as with cows, even though the main orientation of their pastoralism is still dominated by one animal, the other being supplementary.

Takakura (2002, 2004) has shown how daily interaction with animals is organized among horse- and reindeer herders in the region. We lack such detailed accounts (at least in the English and Russian language literature) concerning the personal relationships between cattle breeders and their animals in this region, and the few studies on cattle in Siberia of which I know (Crate 2006, 2003) do not devote the same attention to investigating the personal ties between humans and animals that is well known in the literature on African societies (Hutchinson 1996). Only a year ago, the first accounts with such a focus started appearing, such as Crate's (2008) paper, a short paper by Maj (2008), and Osva's paper in this volume, all of which are valuable first steps. In my ethnographic sketch I shall contribute to the effort in this direction, illustrating some of the features I have seen and experienced, mainly with two women who take care of cows in Sakkyryr.

Nina Vasilevna The head milker of the state cattle farm is an Eveny woman, Nina Vasilevna. Having worked as a milker since 1985, she says she has "raised many of the cows herself, seen them grow up". Therefore she has personal relationships with all of the cows, knows their names and temperaments and how to approach them during milking. Obviously, she has favorite cows and less favorite ones, those with whose character she is 'not compatible': "A cow's character develops depending on how you treat them from early on", she says. Therefore, she talks to the cows during milking a great deal. She has taught this approach to other younger milkers, too, including her own son Anatoly. Milking is a particularly close enactment of symbiotic domesticity with animals, a fact that has led Ingold (1980) to argue for a categorization of carnivorous and milk pastoralism, each of which has its own pattern of animal significance. I have shown that for the Nentsy Ingold's categorization may lead to misinterpretations (Stammer 2005: 165-166), but the example of cow milking in Sakkyryr, which is done by hand, shows the closeness of the human-animal relationship.

On the other hand, one can also notice that the farm on which Nina works is a state farm and the cows are the property of the Sakha Republic rather than of the local people. One day, I am told to arrive in the late morning for the milking. We wait for an hour, have a nice chat, and leave for home again when the cows do not turn up. Nina complains about the herder, who is not very reliable, but it later turns out that the cows had been there in the morning before we came, and had already gone back to the pastures. I am told that this would not have happened in a private setting.

During an evening milking session, sitting in the spacious *khoton* (cowshed), Nina

Vasilevna tells how during milking she often feels closest to herself, reflecting upon the essence of her existence and what she is supposed to do in life. It was during milking that she realized she has a spiritual inclination and a certain capacity to positively influence the health of people who are close to her. She therefore wants to go deeper into healing, although she definitely rejects the notion that she is a shaman. The 'real' shamans, she says, are those out there in the mountains. Later that day, as I am sitting in the farm's office, a fax arrives from Moscow, inviting Nina to an all-Russian congress of healing and alternative medicine.

Nina's example reveals how a close relationship with the animals helps a person to find an inner emotional balance. Being a single mother with a poor salary, she escapes from the hardships and problems of everyday life into a close partnership for at least a short time each day. Sometimes she tells her favorite cows about her problems, and even breaks down in tears while doing so. The cows are domestic animal-partners in a life where there are few human partners left. By enacting this partnership, she embarks on a journey into her own identity. Crate (2008:116) quotes her informants in Viliui Sakha as saying, "[C]ows are people with every human attribute except language". In the case of Nina Vasilevna it seems that it is this combination – the humanization of cows but their lack of verbal language – that makes them so important for her own personhood. There is both a positive and a negative interpretation of this process: from a negative point of view, cows may have a similar function to dogs for some lonely city people, where the animal is 'over-humanized' by the human partner because the latter needs this humanization, thus depriving the animal of its 'animalness' (see Ingold [ed.] 1988). But from a more positive perspective, one can say that the personhood of cows encourages humans to find themselves.

In either case, Nina Vasilevna's experience is a classical example of the social significance of animals for humans in terms of finding themselves, and it is important for what it reveals about her society as well. Considering what Mullin (2002) has said about animals and their lack of agency, Nina's story shows that animals do have agency in shaping human individuals and societies, but our anthropological interest often makes us anthropocentric. There are other cases similar to Nina Vasilevna's where, regardless of people's ethnic origin, close ties between cattle and people develop through many years of experience. Seeing this formation of ties as a mutual process of animals and people shaping each other is a better reflection of the true nature of human-animal relationships than seeing only humans as agents and animals only as the recipients of agency. This view qualifies the statement made by a city Sakha intellectual during fieldwork who claimed that, in general, for Eveny the cow is nothing but work.

Svetlana Dmitrievna Svetlana Dmitrievna is a single Sakha woman who makes most of her living from cows. She privately holds a herd of seventeen animals, of which six are milking cows, which is considered a large number. Like Nina Vasilevna at the state farm, she knows her cows extremely well. Her mother taught her to milk when she was five years old. But her engagement is not confined to milking, and she knows not only the cows, but also the whole herd as a social group,

including the oxen, the bull, the calves, etc. Her work includes the whole production chain and complete animal care, including veterinary services. Crate (2003:503) has described the importance of cattle for Vilui Sakha in the following terms: “[C]ows are not only *everywhere*, but they are *everything* to survival”. I think both parts of this axiom may be slightly overstated; it represents the classical trap for the anthropologist focusing on one particular keystone species, which can lead to overemphasis on the importance of that species. In Crate’s Vilui region, as well as in Eveno-Bytantay, the livelihood is connected with animal diversity and not mono specialization. Svetlana therefore has an exchange relationship with horse herder Sergei, who keeps a cow with calf in her *khoton*, and herds a horse for Svetlana.

In contrast to the state farm’s two daily milkings, Svetlana milks her cows three times a day in summer. The morning milking is around 6:30, after which the cows spend a few hours relaxing in the yard. After the mid-day milking at 12:30, Svetlana releases the cows, which wander off to pastures close to the village. From there they come back around 7:30 pm, and if they do not return, Svetlana goes to collect them from the pasture. Heading out with her to the pastures, I experience how she knows and interprets the land surrounding the village. There are two different places where the cows may be, mixing with riding horses and other cows in the pastures. In a way that is reminiscent of a reindeer herder, Svetlana reconstructs the route of her cows according to her knowledge of the preferences of the leading animal. We go and search with the binoculars, and finally spot some animals behind dense shrubs, peacefully grazing. Coming closer, we realize that they are mainly horses, with only a few other cows scattered among them. We turn back towards the village and Svetlana is surprised that the cows seem to have chosen the second possible pasture spot, because she had seen the lead animal trotting off in the other direction. When we get to her home, it turns out that the cows had come themselves, waiting to be milked. Svetlana thinks this is how it should be, as the cows know their human partners and their timetable.

The milking process itself displays a similar kind of closeness of the human to the animal persons as in the state farm example. Svetlana knows exactly which cow has to be fed more just before or during milking, because they will be calmer then. Unlike Nina from the state farm, Svetlana does not bind together any of her milking cows’ back legs to prevent them from kicking. But like Nina, she also has one difficult cow that she thinks has a character, which is too rebellious. She says that cow should be the candidate for the next slaughter, because the bad character must not be allowed to take root in her herd through similar offspring. A state farm milker would not think like this, as it is not in her competence to make husbandry decisions of this kind, since she does not own the animals herself. Svetlana’s favorite cow’s name is *Mais’ka*, the leader of her herd, who has a quite character.

Svetlana’s relationship with *Mais’ka* seems to influence her relationship with the whole herd, perhaps in similar ways to the relationship of a Nenets reindeer herder with a *minarei* lead animal. In contrast with the state farm, Svetlana’s *khoton* is small for the same reason that Crate (2003: 505) describes for Vilui: it is exactly tailored to the appropriate number of animals, small enough to be kept warm from the breath of the cows, but spacious enough to prevent the calves from being trampled. In a

smaller barn like that milking is much more pleasant and cleaner if the manure is tidied up immediately. Therefore Svetlana tries to hold a bucket under the cow when she notices that manure is going to be produced. If she does not succeed in time, she tidies up with a shovel right away. This level of care is very different from that on the state farm, where this kind of labor is divided between several workers. Svetlana, like Nina, says that the working with cows allows for emotional recovery from hardships.

In both of these examples the personal relationship with the animals is worth noting, clearly supporting emotional balance and satisfaction, and expressed through intimate knowledge and complete care. The practice of enacting symbiotic domesticity in these cases is very different from that of the Nenets nomads with their reindeer, obviously, but I would tend to suggest that the level of closeness is similar. Obviously, cows are much more 'tame' than reindeer, but in opposition to Maj's (2008) argument, I cannot see how the material on the relationship between people and cows that I have introduced in the previous pages supports the general equation that 'the more domestic the animal, the closer the relationship'. The symbiotic domesticity of human persons with reindeer persons is evident in Vitebsky's (2005: 277–279) account of the herder's relationship with his *uchakh*, or personal reindeer, with which the partnership goes as far as the reindeer's death being seen as mirroring human death or the reindeer sacrificing its life for the human partner.

Social significance beyond Sakkyryr The works of Crate (2008) and Maj (2008) emphasize the importance of cattle for Sakha ethnic identity. It is an ironic coincidence that the only region where the genetically unique Sakha breed of cattle survived the Soviet Union is the ethnically mixed region around Sakkyryr (Granberg et al 2006), where the Eveny population does not identify with Sakha ethnicity. However, it is likely that the unique combination of horse, reindeer and cattle husbandry in the region came about because of clear cultural preferences when the Eveny and Sakha people met in the 17th century. In fact, a Sakha intellectual in Yaktusk uses the cow to construct Sakha identity, reflecting on the same cultural argument that Diamond (2005:247) has made for the old Norse cattle breeders of Greenland: that they are irrationally culturally obsessed with cows. She says "in principle it is not rational to engage with cows at these latitudes. But we just desperately need milk, and that is why we Sakha do it. We cannot even start living without 'white food'" (Fieldwork, June 2008). This is in line with Crate's (2008:119) recent description of *uurung as* ('white food'). If the reason for the survival of cattle in these latitudes is people's preoccupation with *uurung as*, it is understandable why private cow breeding survives.

The majority of the cattle in the *ulus* (district) are privately owned (see Granberg, this volume) and cared for in small households that rely largely on networks of kinship and friendship to share the work load, as Crate (2003) has shown. This is in contrast to the Republican policy described by Granberg (this volume) of preserving Yakutian cattle genetically for reasons of biodiversity. In fact, local people like Svetlana and the regional chief of agricultural administration complain that the Republic's subsidy policy concerning Sakha cows does not make sense: seven million roubles are allocated for the animals of the state farm to maintain the genetic uniqueness

of Sakha cattle, but no subsidies whatsoever are paid for the milk of these animals. This is why Nina Vasilevna gets 6000 roubles per month (160 EUR at the time of fieldwork). "The scientists are not interested in milk," says Svetlana Dmitrievna, "they want to increase headcounts, and they want the meat, which sells for a higher price than from normal cows". When they filed a request to the Republican Ministry of Agriculture asking what they should do with the milk, the answer was: "You can pour it on the ground, we don't care" (Fieldwork, July 2008). Considering the cultural importance of milk and 'white food' for the people, this negligence of milk is unjust, especially since it is seen as the reason why people in the past developed cattle breeding in this region in the first place and still continue to work hard to maintain it.

The way out of this dilemma is that all the cows on the state farm were registered in Svetlana Dmitrievna's private name, because private family farms get at least the normal subsidy for milk; Svetlana was supposed to re-funnel that money into the farm again. It is notable that all this happened under the eyes of and with the active participation of the regional chief of agriculture.

The contrast described above reveals the different perceptions of the socio-cultural significance of cattle on the ground among people who engage with them physically and people who engage with ideas and models about animals in culture and identity politics. In the different terms of the engagement, we see different human-animal partnerships: whereas at the ground-level it is a matter of individual human-animal partnerships and a match between human and animal character, at the level of the Sakha Republic it is a matter of the relationship between a particular 'breed' of cattle and a particular 'breed' of humans, i.e., the Sakha ethnic group. Socio-cultural significance at that level de-humanizes both the animals and the people, seeing them as manipulable parts of a system.

Animal diversity and exchange among 'multispecialized' nomads Most scholars agree that the diversity in pastoral animals in the Sakha Republic is the result of the Sakha migration, which began in central Asia and moved to the North in the late middle ages. Not only did the Sakha come with their horses and settle with their cattle on the flatlands and valleys, they also quickly acquired the role of linking different population groups and economies through trading. This was made possible by their relationships with multiple animals. Gogolev (2005, Chap. 3.1.5) argues that knowing these various animals and the land was their principal resource for this activity in the 19th century. They would arrive on horseback in places where the Tungus lived, trade furs for other goods, and exchange their horses for reindeer, which they would take back to the southwest in wintertime. There they would trade with the local Tungus, exchanging reindeer back for horses, on which they then would go back to central Yakutia (Vilui).

So we see that relationships with different animals and their exchange lie at the heart of the Sakha presence in the territory. Starting in the 17th century the Sakha settled in the Verkhoyansk region, preferably in river valleys and along meadows where their cattle could find good pastures. This is about the same time that large-scale reindeer pastoralism developed among the Nentsy. Sakha escaping from the Russian

Yasak-collectors pushed the Eveny up into the hills and mountains, where they stayed from spring to autumn, visiting the Sakha to trade (Sasaki 1998). Intensive alliances of the main 'dynasties' of nomadic Eveny in the mountains and semi-nomadic Sakha in the lowlands developed through the exchange of animals and trading (Ammosov, pers. comm. 2008). It seems that in the 17th century the Sakha did not possess reindeer of their own (Bakhrushin & Tokarev 1953:71f), and the use of horses by the Eveny seems to have been very limited. Rapprochement throughout the centuries, however, led to the mutual adoption of elements of each other's livelihoods.

Intermarriage before and during the Soviet times, which was also sustained through animal exchange, contributed to the increasingly symbiotic coexistence of the two ethnic groups in the region (Ammosov 1997). Marriage involved a bride price (*kalym*) and dowry (*pridanoe*). Tokarev (in Bakhrushin & Tokarev 1953: 76-79, 115) quotes a great deal of evidence for the large extent to which animals were exchanged, mainly horses and cattle; however, there is no mention of live reindeer as being part of these transactions. The dowry was lower than the bride price. It is interesting to note that, similarly to the case of the Nenets, fish could replace livestock as the bride price among poorer people. The reindeer was first exchanged in the form of products such as hides, alongside the furs of sables and other fur-bearing animals.⁵

During Soviet times this exchange practice was partially discontinued due to the collectivization of livestock, but the close interrelation between the three principal pastoral animals was institutionalized by the Soviet state farm (*sovkhos*), which united all three pastoral animal activities under one umbrella, allocating partially overlapping grazing territories and regulating the seasonal movement of animals with their brigades (work teams). According to the *sovkhos* director (Fieldwork, July 2008) it is particularly in winter that reindeer and horse herders live closest together and occupy the same areas with their animals. Maj (2008) shows, however, the diversity of such practices of interaction, including joint grazing in early summer.

In analyzing the relationship of the Sakkyryr people to their animals, it must be noted that both ethnic groups adopted animal transport from the other group for its own use centuries ago. Sakha started earlier to use reindeer in order to get to the winter pastures of their horses, and for hunting and fishing, the significance of which for men of any ethnic group we must not forget. In particular, the snow-sheep (*snezhnyi baran*, *chubuk*, *ovis nivicola*) is very popular, and successfully hunting it brings one great prestige in the community. The *chubuk* is so significant that it was chosen as the official logo of the Eveno-Bytantayskii *ulus* (district).

Yakut horses can survive the cold winter outdoors without additional hay by digging in snow-covered pastures. Since this is a hard winter-life for horses, they are not ridden in winter, and reindeer take over as the principle transport animals. On the other hand, reindeer herders use horses to ride to the village during the snow-free seasons when reindeer cannot pull sledges. However, even the most 'Yakutian-

⁵ However, it seems possible that in marriages between Yakuts and Eveny, live reindeer and horses were exchanged, which may have been documented in archival sources, but more research would be needed to clarify this.

ised' Eveny from the Starostiny clan (Ammosov 1997:158) had very few horses in use for the day-to-day herding and movement of households in their reindeer camps (Starostina, pers. comm. July 2008). The use of horses in day-to-day herding work reported by Maj (2008: 40) is still thought to be somewhat unusual, because only after the time of the Soviet Union did individual reindeer herding camps increasingly start to acquire horses as their own private property. However, as of 2008, this has, according to herding experts in Sakkyryr, radically changed the way of life in the camps: "Reindeer herders firmly started to sit on horses", says Raisa Dmitrievna Starostina. "They buy the horses, or they exchange one horse for four reindeer. Earlier no-one would have had the idea of migrating with horses." She is happy that it has become much easier to move the camp, and provide transport for children, relatives and guests who like to join the camps during their summer holidays, since horses can carry people and much more cargo than reindeer (Starostina, pers. comm. 2008). In this way the horses act as facilitators of social encounters between people, strengthening social cohesion within the reindeer herder community. Through the use of horses, their nomadic lifestyle becomes more popular and more accessible to sedentary relatives and friends. This importance of the horse for social encounters and cohesion is not, however, likely to change the self-identification with reindeer even of 'Yakutianised' Eveny. Reindeer remain the supreme animal for Eveny society and culture in the perception of the people. As for the Sakha, the winter hunt and checking of their horse herds would not be imaginable without reindeer anymore. As Ammosov (Tel. comm. May 2009) told me, they tried using horses for this purpose, but without success, as the snow sheep were scared away.

From this follows that the practical significance of animals varies not only over time, as argued, for example, in Nakamura's paper on Inner Mongolia (this volume), but also according to the seasons. The main argument here, however, is that the economic significance is subject to more rapid change than the socio-cultural, the former depending largely on forces beyond the herders' control – for example the changes caused by the end of the Soviet Union (Granberg, this volume) – while the latter is in the hands of the herders themselves. The Sakkyryr ethnography has shown that the ethnically mixed Eveny / Sakha population has been engaging in economic exchange involving animals for centuries, but the socially significant incorporation of horses into reindeer nomadism as a livelihood, enhancing community cohesion, began much more recently.

Significance and prestige The prestige of animal races is a good example of how the social significance of animals cuts across ethnic boundaries. The passion of Sakha for horse-races has been documented in many historical records (Gabyshev 1966), a remnant of their pre-northern past in Central Asia (Crate 2008:117) that links them culturally to the horse-riding cultures Nakamura describes in this volume. However, in the last ten years or so, there has been increasing interest and participation of Eveny in horse races (during July), as well as Sakha in reindeer races (in April). Being successful in such races gives the participants prestige in the community and with the local administration, as this author witnessed during the horse race in July 2008. Races fulfill several purposes for the participants: besides proving

themselves in the competition and striving to win the main prize, participants also demonstrate their expertise in working together with an animal in order to reach a goal (covering a given distance in a minimum time). Thus, public races are in the best case exhibited enactments of symbiotic domesticity. Moreover, the races are occasions where youngsters can be admired by girls; the races thus serve as meeting places, not to say marriage fairs, for people from remote hamlets or mountain valleys.

Two informants told me that they had taken up reindeer and cattle breeding, respectively, for economic reasons, while their real passion is horses, confirming what earlier scholars reported on the Sakha preoccupation with their horses: "It would hardly be exaggerated to say that the Yakuts have as much horse-blood in them as any Yakut horse itself" (Khudiakov 1869 [1960 ed.:229]). This statement made 140 years ago is confirmed in an impressive way when one day I am supposed to get a detailed introduction to the facilities of the Sakha state farm for preserving the genetically unique cattle breed. However, after ten minutes at the facilities, the local director invites me to wander off to watch the horse racers training. It turns out that he has worked in a horse herding brigade of the *sovkhos* earlier, and he admits that this is where his real passion is, whereas the work with the cattle is what he does as a job to be able to spend more time with his young family and earn a stable income. With this approach he confirms the stereotypical preference of Sakha for horses (Maj 2008, Gabyshev 1966) that I also heard from other informants in town. The chairman of the award-winning team in the 2008 horse races could be observed full of passion and enthusiasm during the weeks before the race. Nonetheless, he permanently holds a herd of reindeer for his meat requirements, as well as trained transport reindeer. He gained his familiarity with reindeer during the past as a reindeer herder and from summer experiences in the mountains as a teenager (Maj 2008: 40; Lukin, pers. comm., July 2008). Along similar lines, Raisa Dmitrievna Starostina, the 'Yakutianised' Eveny woman cited earlier who emphasized the increased significance of horses (see above), clearly indicated that her supreme animal is the reindeer, because she comes from a reindeer herding 'dynasty' (Starostina 2008, pers. comm.).

So in spite of diversity in the animal environment, people have clear attachments and preferences. Although 'Evenyness' is still more associated with reindeer herding, whereas horse- and cattle herding are thought to be the sphere of Sakha, this does not prevent anybody from having close relationships with any of these animals, which is in agreement with the position of Sasaki (1998). Although the political and symbolic significance of horses in the region is certainly dominant, cattle have increased in symbolic importance recently, empowered by government policies to protect the genetic heritage of Yakutian cattle (Granberg et al 2009, Stammeler-Gossmann, this volume). However, the attention that cattle have got from social scientists in the past is the inverse of the African situation: a clear example of underestimation. Therefore, Crate's (2006, 2008) and Granberg's et al (2009) studies are important to correct this. The remaining gap in our understanding is, however, just as for the Nentsy, the relative significance of these animals for the people, which has not been focused on in previous studies. Maj (2008) has made a first valuable contribution in this direction by comparing the significance of all three animals in Eveno-Bytantay,

focusing on mobility and prestige, although her work compares horses more with reindeer than with cattle. She quotes informants as saying that sedentary cattle herding is dirty, smelly work that is clearly tedious and inferior to the free nomadic lifestyle of a Yakut horse herder (Maj 2008:43). The 'sedentariness' of the work therefore makes cattle a less prestigious animal.⁶ This is mirrored by comments I heard at the horse race in Sakkyryr in 2008, after I offered *kumys* that I had bought at the race course to my hosts: "In the good years we always used to have real *kymys* from horse milk. Now, anyone call tell this *kumys* is weak. It's not even worth calling *kumys*, because it comes from cow milk, but still people do so, because you can't have a horse race without *kumys*." Thus, although *uurung as*, any 'white food' from the cow, enjoys high popularity among the Sakkyryr population and the Sakha in general, for this socially important event of the horse race, a drink made of fermented cow milk is clearly inferior to the 'real *kumys*'.

During my short stay in Sakkyryr I focused mainly on work with cattle and found that, indeed, cattle work is done by those who for some reason cannot engage in horse or reindeer herding. Consequently, cattle are more the sphere of pensioners, the unemployed and women. It is telling about the prestige of animals that there is a reindeer-festival (with races in April), a horse festival (with races in July), and the snow sheep (*chubuk*) is on the coat of arms of the region, but there is no special event or symbol associated with cattle. The social, cultural and symbolic importance of cattle is thus more in the individual and household-sphere than for the whole group or community, as may be seen, for example, in Virtanen's paper (this volume) or in classical African ethnographies.

This leads to a situation where the high significance of cattle for the economy, livelihood and society of Sakkyryr is in contrast to the comparably lower symbolic power of cattle for the whole community, even though Crate (2008) observed in a neighboring region a multiplicity of individual cow-related practices that she classified as sacred. Although caring for cattle is probably the most work-intensive of all three animal relationships, I heard from both horse and reindeer herders that cattle work is something for the lazy. For people more attached to horses, cattle therefore occupy more practical significance, as a source of milk products and meat (which are highly valued particularly when they come from aboriginal Sakha cattle). However, the prestige and preference for *uurung as* ('white food') is not matched by the prestige of producing such food. For Eveny reindeer milk products do not have the same high standing, but the few herders that I met said that they enjoy butter from cows very much.

One of the two richest families in Sakkyryr is a good example of the relative significance of cattle in the human-animal diversity: there are three active, independent siblings with their children, one mainly engaging in horse herding, controlling several hundred horses, one in business (trading), and one (the sister) in cattle in the village. They all live closely together, and their activities are so tightly integrated that they can be analyzed as a single socio-economic unit (or household). For the cattle, a separate peasant farm (Rus: KFKh) was established, but the horses and cattle

⁶ Cf. Khazanov (1994: Chapter 1.8) who states that in central Asia the use of cattle is limited because of such constraints on mobility.

use some of the same pastures in summer. The family also has reindeer, which they give to a herding brigade for summer care, getting them back in winter, when they use them to check on their horses and for hunting. When the old man of the family talks about animals, he seems to be very happy that somebody is interested in cattle, too. He praises the adaptability of Sakha cattle and has precise plans how to use their natural traits more efficiently. He says that the natural grazing season can be extended by one to two months by moving the cattle in spring and autumn to some more distant pastures, where the microclimate is a bit more favorable. This increased mobility – he is convinced – will be good for the health of the cattle and will reduce the amount of hay that has to be prepared per year (1.5 tons under the current system). Soon he will retire from horse herding and will try this pattern. While talking about future plans, we sit at the table enjoying the freshest possible *körche*, whipped cream (made from milk from their own Sahka cows), with berries, or just plain with dry bread.

The setting of my encounter with Dmitrii Bochkarev and the essence of our talk show how important the place of cattle is in the integrated diverse animal livelihood of the Sakkyryr community, although cattle have the lowest prestige of the three pastoral domestic animals.

CONCLUSIONS FROM THE NENTSY-SAKKYRYR COMPARISON

Several insights from this comparison between the pastoralists of Sakkyryr and those of Yamal are worth noting:

- Cattle in Sakkyryr and fish in Yamal share some similar ‘niche of significance’, not in economic terms but rather in their social dimension. This is remarkable because the animals are so different, crossing the domestic/wild boundary as well as the small/large one. I have shown that socially significant activities are attached to both fish and cattle for those who for some reason cannot engage in mobile nomadic pastoralism (pensioners, single mothers, families with small children, the disabled, etc.). Both fish and cattle are seen as ‘low mobility – low prestige’, but they provide valued food. Also, both fish and cattle are actively exchanged among kin and friends and thus sustain the networks that have been identified as so crucial for survival (Crate 2006, 2008).
- A ‘niche of significance’ can be filled by wild and domestic animals, depending on a whole range of conditions including historical, economic, socio-cultural and ecological factors.
- Where there is only one pastoral domestic animal, e.g., the reindeer:
 - a) the significance of that animal may unite the significance of both small and large stock for its owners. Its significance as both small stock and large stock in such cases depends on cultural preferences, the situation, and first and foremost day-to-day practices between humans and animals, and the extent to which domesticity acquires the symbiotic characteristics that I have outlined above;
 - b) some of the significance of small stock in societies with a single pastoral animal species is likely to be occupied by fished or hunted animals.

- Animal exchange both within and across species, has an important social and economic function in pastoralist societies, not only those with classical multi-specialized herds but also among herders of domestic reindeer. In the case of reindeer herders animal exchange and 'conversion' across animal species can cross the border between the wild and the domestic.
- Symbiotic domesticity is one of the distinctive features of a human-animal partnership involving individual persons on both sides, as well as communities of humans and animals (herds). This kind of partnership is only possible with domestic animals. With wild ones, the relationship remains at the generic species level and with the spiritual masters of the game. Thus, while the niche of significance of cattle among the Sakkyryr people may be partially compared with the niche of significance of fish among the Nentsy, this significance is different from and independent of the level of symbiotic domesticity between particular people and particular animals that can exist only with domestic animals that are in close contact with people.
- The prestige of different animals is attached to mobility, with more mobile animal husbandry being considered more prestigious. In both the Nenets and Sakkyryr societies, this suggests that nomadic pastoralism has good potential to serve as a means of survival in a culturally distinct way in a harsh environment in the future.

Crate's (2008:124) article about Sakha cow knowledge contains a short comparative section on the Yamal Nenets situation, too, arguing that they have a similar "model of cultural integrity in their human-animal relations", drawing mostly on conceptual analogies in sacred knowledge among the two groups. In Crate's analysis all culturally embedded practices seem to be classified as sacred, and the application of such practices distinguishes successful from unsuccessful households (Crate 2008:125). The experiences of this author in both fields point to alternative interpretations: numerous practices of engagement with animals, especially training, seem to be part of everyday practices, where it is not the sacredness of the practice that matters but the respectful approach of the human to the animal that generally distinguishes successful herders from unsuccessful ones.

Crate does not define what she means by cultural integrity, but it is clear that for her sacred practices are one, if not, the crucial component. For both Sakha and Nenets, she argues that these practices have been preserved because of cultural integrity. Logically, this means that cultural integrity, described as the presence of sacred practices, is the reason for preserving these very sacred practices. This seems to be a circular line of argumentation without logical linear progression. I have discussed elsewhere (Stammer 2005) how the study of the Nentsy by Golovnev and Osherenko (1999) quoted by Crate falls into the same argumentation, where culture as a non-defined but single most powerful concept inhibits further detailed academic explanation of why certain practices remain meaningful over time while others do not. Crate's idea of the link between sacred knowledge and cultural integrity can only be understood through a co-evolutionary approach, where changes in one variable affect changes in the other, which in turn affects changes in the first.

Lastly, both the Sakkyryr and the Nenets ethnographies show how people have not only a very close but also a reciprocal partnership through daily engagement with their pastoral animals, be they reindeer, cows, or horses. This encourages us to rethink Ingold's (2000: 75) distinction that the relationship of hunter-gatherers to their animals is one of trust, whereas among pastoralists it is one of domination. Although Crate (2008: 126) seems to agree with Ingold, she herself presents contradictory evidence from Viliui Sakha cattle herders that is more in line with the reciprocal trustful partnership relations that I have tried to show through the ethnography of the Nenets and Sakkyryr pastoralists. Not only does this relationship make sense for both partners' physical subsistence, but it clearly has social and individual emotional properties that go well beyond domination and control and are a matter of the mutually significant shaping of each other's characters and personalities.

DISCUSSION

The goal of this paper is to revisit the significance of animals in the Arctic in order to incorporate this large area into theoretical understandings of human-animal relationships in pastoralism. By comparing in two different Arctic societies the three topics of a) 'closeness' between human and their animals (symbiotic domesticity), b) animal diversity, and c) the relative social positions of animals in hierarchies of prestige, I propose a framework by which animal significance might be compared across regional and other boundaries. The literature studies and ethnographic evidence from the two cases in Siberia allow us to argue for the presence of what I call niches of significance in the pastoral society, which can be filled by different animals at different times.

The fact that the niches of significance can cross the border between wild and domestic animals confirms Layton's (et al 1991) argument that hunting-gathering and pastoralism are two parts of a multiple mode of people relating to their environment. In hunter-gatherer and pastoralist societies, the human-environment relationship is mediated largely through animals. We should not treat these two livelihoods as mutually exclusive and diametrically opposed, as they sometimes appear in Ingold's work (2000: 61-76). On the other hand, the fact that there are points of similarity between the two livelihoods should not be used to negate the difference between domestic and wild animals completely, as enacting closeness with live animals involves a different way of knowing the land from a hunter-gatherer setting, where people do not protect animals.

I argue that in any pastoral society there is a need for diversification in order to spread risk and make better use of scarce resources, but we can conceive of that diversification more broadly than just in domestic pastoral animal species. Diversification can include fish and game as well as activities not immediately connected with a human-animal relationship, e.g., wage labor on an oil field. Also in any pastoral society there are animals occupying the 'low prestige' niche of significance. They are more likely to be animals that require less mobility and are less work-intensive and reproduce quickly, so that a herd can rapidly be built up through upwards conversion.

In this case the high significance but low prestige of fish for the Nentsy and other

reindeer-related groups (Argounova-Low 2009:485) is more typical than the comparably low prestige that cattle work has among the people in Sakkyryr. Even though work with cows or fish may be more tedious and time-consuming than a nomadic life with reindeer or horses, such work is perceived as suitable mostly for those who are emically classified as weaker members of the society. The fact that a large stock domestic animal like cattle can occupy such a non-prestigious niche is interesting in itself and might be hard to imagine, e.g., in an East African setting. I therefore warn against reifying the differences between small stock and large stock in themselves without considering the relative significance of the animals in the society.

The usefulness of monospecialised versus multispecialized pastoralist livelihoods as a concept is therefore doubtful, because it works only when all non-domestic animal relationships are omitted from the analysis. Khazanov (1994), as well as Layton et al (1991), have shown for pastoralists and hunter-gatherers that no-one relies on one animal species alone for their survival. The incorporation of Arctic reindeer pastoralism in such an analysis of significance-diversity brings the benefit of realizing how wild resources can occupy the same position in society as particular domestic animals in settings where there is species diversity within the herd.

Along the same line I have stressed that animal conversion in different societies does not stop at the domestic/wild border and includes all animal resources. More often than not, products obtained from animals at the lower end of the ladder of prestige may be highly valued and extensively used, which shows that the low esteem associated with the animals is not connected to some inherent quality of the animals themselves, but rather to the limited amount of mobility that is needed to work with them.

Finally, I have shown how people with one or several domestic pastoral animals quickly adapt to the changing economic significance of the animals, which today depends more than ever on external factors beyond the herders' control. They also change their day-to-day occupation with animals throughout their biography, switching across animal species in their main occupation (both domestic and wild/fish). However, the cultural attachment and prestige of the principal animal in the society remains more stable in most cases. Although there is evidence of people switching the supreme animal with which they identify – as with, for example, the Eveny milker – such cases can still be regarded as exceptions rather than the rule. The principal animal for identification and prestige is influenced by ethno-historical traditions. In this way research from the Arctic is in line with other evidence from Africa, South America (Browman 1974, Dransart 2002), and Central Asia (Miller 1998, Nakamura, this volume).

In a time of increased rationalization, mechanization, and anonymization of animal husbandry worldwide (Reinert 2007, Beach 1981, Ingold 1980), it is important to go beyond economic determinism in the analysis: in all pastoral nomadic settings people's husbandry decisions concerning the herd composition within and across species in principle go beyond economic-ecological reasoning. The social significance of animals and intimate relationships with humans that have evolved over centuries, if not millennia, shape pastoralists' role as human agents in the environment.

SUMMARY AND CONCLUSION

This paper began with a list of four focal points in the introduction, which I sought to elaborate with theoretical and ethnographic evidence throughout the paper, leading to the following four conclusions:

1. Symbiotic domesticity as the daily enacted closeness between humans and animals shapes human and animal persons in pastoralism, as well as the human perception of the environment. With which kind of animal such domesticity is enacted is a matter of choice, by the society as well as by the individual, which goes beyond ecological, economic or political reasoning.
2. The examples from the Arctic have shown that small and large, wild and domestic animals can occupy similar 'niches of significance'. The choice of the animal depends on social, cultural, historical, economic and ecological factors, as well as the personal preferences of the agents.
3. The importance of a particular animal species for a society – for example, for exchange, prestige or mobility – can only be understood through a thorough analysis of its relative position in the animal-diversity on which that given society relies for its survival.
4. The Arctic deserves to be included in the analysis of human-animal relationships in pastoralism to a much greater extent than it has heretofore, as Arctic exceptionalism due to a supposed 'monospecialised' setting with reindeer does not hold empirically.

The discussion of the above-mentioned ethnographic case studies from two pastoralist groups in Siberia revealed that the social significance of animals in the Arctic is as complex a topic as in other more classical pastoralist areas such as Central Asia, in spite of Arctic exceptionalism in social science scholarship. The Arctic situation can serve as an illustrative case for the point that in societies that have only one pastoral animal species as a partner, niches of social significance can also be occupied by wild animals or fish. This supports the argument of Takakura (this volume) that the hunter-herder continuum is a useful analytical concept with potential beyond the Arctic region. A theory of species diversification strategies and niches of significance of animals can therefore include both wild and domestic animals. On the other hand, I have also shown how the constitutive role of live and individual animals for humans is enacted in symbiotic domesticity with domestic animals. Therefore, the domestic animal sphere is fundamentally different from the wild one for our analysis of partner relationships that shape the personhood of human beings and animals. Since pastoralists perceive the environment mainly through this partnership with animals, we can conclude that the social significance of animals is at the heart of their relationship with the environment as a total social phenomenon (see Introduction, this volume). As a consequence, different niches of animal significance are linked to perceiving and knowing different aspects in the environment.

I have qualified the strong symbolic link between particular animal 'keystone' species and particular human communities as possibly exaggerated and stereotypi-

cal: the Nentsy are generally seen as typical reindeer people in spite of the importance of fish for their diet and for the sustenance of their social and economic networks. The same is true for the Sakkyryr Eveny as reindeer people in spite of their use of horses and participation in horse-related activities. The Sakha are generally considered to be horse people in spite of their elaborate cattle-related practices and the significant position of reindeer among some Sakha territorial groups such as in Sakkyryr or Yessei (Argounova-Low 2009). I argue that these key associations with particular animal species can only be understood when historical data and ethno-genesis is part of the analysis. This leads to the conclusion that it is the social significance of animals that is the most stable aspect in the human-animal relationship, and it is the one component where the pastoralist group has fullest agency. The economic, political and ecological significance of the animals for the people may change quickly and is often beyond their immediate control, depending on outside influences such as markets, ideologies, and changes in their habitat. By describing processes of enacting and maintaining symbiotic domesticity, I have shown that animals are not only significant others for humans with whom humans learn who they themselves are, but the agency of both humans and animals is relevant for an understanding of the partnership of beings inhabiting a given total social environment.

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食べるだけでなく、共に暮らすに適するもの ——
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