



Social significance of animals in nomadic pastoral societies of the Arctic, Asia and Africa

A Japanese-Finnish seminar organised by Centre for Northeast Asian Studies (CNEAS), Tohoku University and Arctic Centre, University of Lapland

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Venue: 4f Meeting room (436), Centre for Northeast Asian Studies, Tohoku University, 41 Kawauchi, Sendai, 980-8576 Japan

Organisers:

- Florian Stammer, Visiting Associate Professor, CNEAS, Tohoku University, Japan & Senior Researcher, Arctic Centre, University of Lapland, Finland
- Hiroki Takakura, Associate Professor, CNEAS, Tohoku University, Japan

Workshop rationale

Social sciences and area studies have produced significant insights in how societies of nomadic pastoralists in different regions define their systems of social hierarchies, prestige, and stratification through intimate relations of humans and animals. Many of such studies base on extensive empirical material derived from anthropological fieldwork which contributed to theory building. Comaroff and Comaroff, for example (1991) conceptualise cattle as the ‘supreme form of property’ among Tswana pastoralists of Africa, and thus the social significance is much greater than that of sheep and goats for the Basseri of Persia studied by Barth (1964).

Such material invites categorisation into social significance of ‘small stock’ (sheep, goats) versus of ‘large stock’ (camel, cattle) (Ingold 1980). In the Arctic and subarctic, however, most commonly there is no species-diversity of animals in the pastoral economy, which leaves the question open as to where do reindeer belong in this categorisation. In pastoral households with multiple animal species, people try to transform animal capital ‘up the ladder of hierarchy and prestige’ within the category of DOMESTIC (ated) animals (goat ► to cattle ► to camel). In the absence of multiple herded species among Arctic herders, however, this ‘ladder’ has to incorporate WILD animals too, so that capital is transformed ideally from game/fish ► to reindeer herds (Stammer 2005). Can we generalise from there that in Arctic hunter-herder societies the significance of ‘small stock’ is partly replaced by game and fish? This would further confirm Layton’s (et al) argument about a hunting-herding continuum, rather than seeing hunter/gatherers as cardinally differently organised from pastoralists. However, to what extent this leads to different patterns of movement of humans with animals in their environment (Mazzullo and Ingold 2008, Stammer & Beach (eds) 2006), Takakura 2004) should be further explored in comparative studies.

In such a context one case deserves particular attention: within the Arctic in a supposedly mono-species reindeer-focused pastoral environment, there is a region close to the pole of cold with species diversification into reindeer, cattle and horses within the pastoral mobile economy. This empirical evidence in itself challenges the common view of the Arctic as unsuitable for ‘classical’ pastoralism with diversification of domestic animals. So far much research on this ethnically mixed community has focused on the different animals in the economy and society in isolation (Takakura 2003, 2007, Maj 2006, Granberg et al 2006, Li et al 2007). However, it is the combined significance and conversion of animal property - not only in this region - that has largely untapped academic potential

which may advance our understanding of the practices in which humans relate to each other through their animals.

To date our understanding of pastoral mobility and human-animal relations has not sufficiently integrated research insights from other continents and climatic zones, even though the main theoretical assumptions should be tested for relevance in all regions. Especially northern anthropology and pastoralism have suffered from (partly self-generated) isolation to a certain extent (Ingold 2005), a situation that is now being addressed on prominent level by the academic community (BOREAS 2005). The Japanese academic community has recently undertaken promising steps in this direction, e.g. through a first proceeding-publication on 'Mobility, Flexibility and Potential of Nomadic Pastoralism in Eurasia and Africa (Sun & Naito (eds) 2007).

This seminar aims to bring together scholars based in Finland and Japan in the study of human-animal relations of northern Europe, northern Asia, Central Asia and Africa. The presentations will focus on the ways in which animals acquire social and cultural significance beyond the immediate economic dimension of food-intake, conversion of energy and subsistence, covering aspects of prestige, hierarchy, spirituality, (ethnic) identity and politics. We shall explore the applicability of theoretical assumptions in anthropology to the different regions. Presentations will address questions including (but not limited to)

- Are categories of hierarchy and prestige of different animals among pastoralists applicable to Arctic settings?
- Has the continuum in the significance of hunted and herded animals in the Arctic the potential to inform research among pastoralists in more temperate regions?
- How does the social significance of animals influence patterns of human movement?
- Which practices and principles influence the choice of animals as identity markers in political and religious symbolism?

Moreover, the seminar will provide for an opportunity intensify exchange between the Japanese and Finnish academic tradition in this field of research. The final section of the seminar will be dedicated to exploring further avenues of Finnish-Japanese cooperation, and agree on possibilities of continuing this dialogue through a seminar in 2010.

Publication

The proceedings of the seminar are planned to be published as an edited volume. We will discuss details of this publication at the end of the seminar on Sunday. In order to streamline the publication process, we aim for the following procedure: each participant wanting to be part of the publication arrives to the seminar with a written first draft, which he/she presents at the seminar. After the seminar, everybody will have time to incorporate results of discussion into their drafts, and then we start the review process. The exact venue for publication will be decided upon during the seminar.

List of Speakers and title

(all participants PhD or Professor, unless indicated otherwise)

- Stammler, Florian** , Japan (CNEAS) & Finland (Arctic Centre), fstammle@cneas.tohoku.ac.jp, <fms36@cam.ac.uk>
Animal-diversity in the pastoral community: towards an understanding of multiple dynamic significances among Arctic pastoralists
- Takakura, Hiroki**, Japan (CNEAS) <hrk@m.tains.tohoku.ac.jp>
A strategy for differentiating the tameness of animals: A consideration against the exceptionalism of arctic pastoralism
- Granberg, Leo**, Helsinki, Finland (Ruralia Institute) <leo.granberg@helsinki.fi>
Socio-diversity of animal keeping and sustainability of an Arctic village during the Russian transition
- Ikeya, Kazunobu**, Japan (National Museum of Ethnology) <ikeya@idc.minpaku.ac.jp>
Social Significance of Animals of Two Pastoralist Groups: Comparative Studies of the Kgalagadi and Chukchi
- Kantanen, Juha**, Finland & Norway (MTT & Nordic Gene Resource Centre)
<juha.kantanen@nordgen.org>
The origin and genetic diversity of the native Yakutian Cattle as revealed by DNA-marker analysis
- Konaka, Shinya**, Japan (University of Shizuoka) <konaka@u-shizuoka-ken.ac.jp>
Research Notes: Metaphorical Thinking and Integrated Cognitive Systems among the Samburu in North Central Kenya
- Mazzullo, Nuccio**, Finland (Arctic Centre) <nmazzullo@hotmail.com>
More than meat on the hoof? Social significance of reindeer among Finnish Sámi in a rationalised pastoralist economy
- Nakamura, Tomoko**, Japan (CNEAS) <fwjh1030@nifty.com>
The Cultural and Economic Value of Livestock in Mongolia
- Ohta, Itaru**, Japan (Kyoto University) <ohta@jambo.africa.kyoto-u.ac.jp>
discussant
- Osva, Anu**, Finland (artist, & agronomist Animal Breeding) <anuosva@gmail.com>
Symbiotic human animal relationship, Yakutian Cattle – an intersecting art & science approach
- Sasaki, Shiro**, Japan (National Museum of Ethnology) <ssasaki@idc.minpaku.ac.jp>
Enlargement of the reindeer breeding in the European and West Siberian Tundras
- Soga, Toru**, Japan (Hirosaki University) <sogap@cc.hirosaki-u.ac.jp>
The Primogeniture and Camel Trust System of the Gabra, Cushitic Pastoralist in Northern Kenya
- Stammler-Gossman, Anna**, Japan (CNEAS) & Finland (Arctic Centre)
<astammle@cneas.tohoku.ac.jp>< astammle@ueapland.fi>
Political animals of Sakha Yakutia
- Virtanen, Tea**, Finland (University of Helsinki) <teavirta@mappi.helsinki.fi>
Sealing relations, mediating gender: social and gendered meaning of cattle among the Mbororo pastoralists in Cameroon
- Vuojala-Magga, Terhi**, Finland (Arctic Centre) (absentee paper)
What is the meaning of character and temperament of a single reindeer without the herd and within the herd? A case study of Ukko-Poika and Viljami, two named and trained reindeer in Inari (Anar) of Sápmi-Finnish Lapland

Yoshida, Atsushi, Japan (Chiba University) <RXA00102@nifty.com>

Private reindeer herding among the Tundra Nenets in West Siberia: The practice of “ethnic” herding

Preliminary programme:

Day 1, Friday, May 15

Arrival of guests, accommodation, welcome dinner

Day 2, Saturday, May 16

9:30	Intro Takakura & Stammler
10:00	paper 1 Stammler:
10:45	paper 2 Ikeya
11:30	paper 3 Soga
12:15	lunch
13:15	paper 4 Mazzullo
14:00	paper 5 Konaka (shorter)
14:30	paper 6 Stammler-Gossmann (shorter)
15:00	coffee
15:30	paper 7 Takakura
16:15	paper 8 Nakamura
17:00	paper 9 Sasaki
17:45	changing time, dinner

Day 3, Sunday, May 17

9:45	practicalities and 1st day summary
10:00	paper 10 Yoshida
10:45	paper 11 Granberg
11:30	Paper 12 Kantanen
12:15	lunch
13:15	paper 13 Virtanen
14:00	paper 14 Osva
14:45	coffee, leading over to
15:00	general discussion: discussant Ohta
16:00	publication planning
16:30	departure of early leavers,
18:30	dinner

Monday, May 18

- Excursion to the Field Science Center, Graduate School of Agricultural Science, Tohoku University (Introduction to the local species of Japanese cattle)

Abstracts:

Stammler, Florian ,Japan (CNEAS) & Finland (Arctic Centre)

Animal-diversity in the pastoral community: towards an understanding of multiple dynamic significances among Arctic pastoralists

Earlier studies have classified the importance of animals for pastoralists according to size and value and have come up with a certain conformity of small stock and large stock, large stock enjoying greater prestige than small stock. In this model people would aim to “convert” their animal property upwards the ladder of hierarchy, focusing on large stock as most important social capital. Arctic reindeer pastoralism confronts that model with a mono-species orientation on reindeer in most cases, which makes it difficult to apply these significance categories to an Arctic setting. The aim of this paper is to critically re-visit these categories. I start out by provocatively arguing that mono-species orientation does not exist in human-animal relations: rather should we include the significance of non-pastoral animals in our analysis in those cases where there is only one pastoral species, such as the reindeer. If we include hunted or fished animals into the picture, mono-species pastoralists turn into managers of animal diversity. This perspective is particularly useful when taking the extended family or territorial community as a unit of analysis. It allows us to identify principles of animal diversity. Therefore, studying the ever changing dynamics in using and positioning the different animal species in society fruitfully complements research on the meaning of one particular animal among pastoralists. On the example of the Euro/Siberian Nenets and the Siberian Sakha and Eveny I show how analysing animal exchange as a social process among community-members particularly well reveals this changing relative significance of animals over time, space and group members’ biographies. In conclusion to this material I preliminarily hypothesize that the economic significance of animals is less stable than the social significance, as pastoralists and hunters readjust the former more quickly in responding to changes in their surrounding environment, while they retain the latter as a system of social order. This encourages us as anthropologists to investigate the principles of cultural continuity, rather than exclusively focusing on cultural change.

Takakura, Hiroki, Japan (CNEAS)

A strategy for differentiating the tameness of animals: A consideration against the exceptionalism of arctic pastoralism

This paper critically considers the hitherto theoretical assumption of the exceptionalism of arctic pastoralism by examining the ways of herd management of reindeer in the arctic forest ecology. The reindeer as an overwhelmingly predominant livestock in arctic is often called “half-domesticated” in terms of herd management and food production from the comparative perspective of world pastoralism. I argue against this classification of tameness and identify a strategy for differentiating the tameness of animals as a shared principle in the mode of subsistence among pastoralists. The cases discussed in this paper are the forest reindeer herding of the Eveny in eastern Siberia and the Nenets in west Siberia. These two groups developed reindeer pastoralism linguistically and cultural historically independently. Nonetheless, they devise the differentiation of the role of livestock in similar ways according to the

tameness. This strategy enables these people either to maintain large scale reindeer production or to engage in hunting and fishing. I also argue that the feral behaviour of reindeer is not attributed to the extent of half-domestication, rather it could be understood in the context of 'large stock' herd management. Finally I claim that strategies among arctic and arid pastoralists are structurally the same in the human-animal relations. The former employs the diversification of roles in the mono-species livestock and the latter prefers the diversification of domestic animal livestock. The difference is dictated by not cultural-historical settings but the ecological and social environment.

Granberg, Leo, Helsinki, Finland (Ruralia Institute)

Socio-diversity of animal keeping and sustainability of an Arctic village during the Russian transition

This presentation is based on the research made on Yakutian Cattle, including fieldwork in Spring 2005 in Eveno-Bytantay district, Republic of Sakha, Russian Federation. Farming system in Eveno-Bytantay is a unique mixture of traditions, Soviet remnants and modern features. Socio-diversity is an obvious feature of the production structure. State farms, registered farmers, private families and reindeer herders keep cattle. Production is diversified among different kinds of production unit as well as different types of people, mostly Evens and Yakuts. Production methods do not meet all the standards of the industrial world, milk is not pasteurised, water is scarce, and hygiene is inadequate. On the other hand, the production chains are short, costs are low and local people know how to live in these circumstances.

Russian transition had the consequence that the State Farm cut its cattle production and private households, registered farmers and reindeer herders' tribal communities increased their cattle production. All these units form together a guarantee of continuing production as well as of preservation of Yakutian Cattle. In this single case socio-diversity became the precondition for ecological sustainability of a single animal race, Yakutian Cattle.

In the second part of the paper, I will discuss the interrelationship between socio-diversity and bio-diversity. I will argue that socio-diversity is an important precondition to sustain biodiversity (to maintain ecological sustainability). The concept 'socio-diversity' refers to the diversity of social and cultural aspects of social life as well as (in our case) the diversity of socio-economic forms to organize animal production.

This is an example of transdisciplinary conceptual connections. Socio-diversity is a concept from social sciences and bio-diversity is a concept from natural sciences. The argument goes that finding a link between them might open new opportunities for multidisciplinary research work

Main results of the work will be published in the forthcoming book by Leo Granberg, Katriina Soini and Juha Kantanen (eds.): *Sakha Ynaga – Cattle of the Yakuts* (Annales Academiae Scientiarum Fennicae Humaniora 355. 2009. Helsinki.)

Ikeya, Kazunobu, Japan (National Museum of Ethnology, Osaka)

Social Significance of Animals of Two Pastoralist Groups: Comparative Studies of the Kgalagadi and Chukchi

Animals serve important roles in forming social networks between animal owners and animal herders. For example, some Kgalagadi agro-pastoralists living at the periphery of the Kalahari Desert have owned large herds of goats since colonial times (Bechwanaland Protectorate) and have employed hunters to tend goat herds. They give hunters small female goats for raising goats each year. This consignment system among goat herds resembles the Mafisa system used for cattle herds among the Tswana. It is said that the consignment system, within a broader historical context, is important in reducing the risk during severe droughts. On the other hand, some Chukchi living on the tundra had owned more than 10,000 reindeer before the Soviet era. Several owners of large reindeer herds have been prominent among the Chukchi, including Gelairgin, known as the Reindeer King. They hired some herders for their herding, and some herders raised reindeer owned by sea-mammal hunters. This report clarifies socially significant common features and differences of animals between the Kgalagadi and Chukchi pastoralists. This study specifically examines social histories of large livestock owners, called Keigyom and Ettuvgi, in each area for the period from 1930s to 1950s, and describes social changes among the two pastoralist groups.

Kantanen, Juha, Finland & Norway (MTT & Nordic Gene Resource Centre)

The origin and genetic diversity of the native Yakutian Cattle as revealed by DNA-marker analysis

The Yakutian Cattle are the unique last remnants of the Siberian Turano-Mongolian type of domesticated cattle (*Bos taurus*), with 1200 purebred animals left in Sakha (Yakutia), and are well adapted to the extreme sub-arctic Siberian conditions. Turano-Mongolian cattle can be distinguished from the European humpless taurine cattle by their characteristic cranial formation and the shape of the horns. These animals were once common in eastern and central regions of Asia, but currently several of the original types have disappeared due to extensive crossbreeding with modern European cattle breeds. The Yakutian Cattle are characterised by being a purebred aboriginal native cattle population that produces milk and meat. Animals have been used also as a source of draft power. The Yakutian Cattle are currently endangered but the Sakha Republic enacted a law on the conservation and use of the cattle in 2001. As far as I know, there may not be other breeds of domesticated animal species whose conservation has been defined by a law. The history of the Yakutian Cattle is not well-known. The most common theory is that the people and their cattle came from south-west Asia or Mongolia and stayed by Lake Baikal for some time before they migrated to Sakha.

Genetics provides useful tools to study origins, genetic diversity of cattle, genetic variation of distinct breeds and relationships among the breeds. In addition, the conservation value of a breed for the maintenance of genetic diversity of the species can be estimated from molecular and population genetic analyses. For the long-term perspective, genetically diverged breeds, for example the Yakutian Cattle, may be crucial for future sustainable animal production systems. In addition, these breeds can carry genes and gene combinations which are important for survival in extreme conditions or which will have value for future animal breeding and scientific research work. The most popular DNA markers are

biparentally-inherited (from both parents) autosomal¹ microsatellites, or uniparentally-inherited mitochondrial DNA and Y-chromosomal DNA. Microsatellites are DNA segments that consist of a short repeat unit of nucleotides, i.e. a unit of two nucleotides (e.g. CA with cytosine and adenine bases), which is typically repeated 10 to 100 times at a microsatellite locus. Mitochondrial DNA exists outside of the cell nucleus and is maternally inherited (from the dam side) whereas Y-chromosomal DNA markers are paternally inherited (from the sire side). At MTT, Agrifood Research Finland, these kind of molecular genetic analyses on Eurasian cattle breeds have been conducted and the genetics of the Yakutian Cattle have been investigated in a global context in studies where DNA markers for the Yakutian Cattle have been compared with the DNA data of several European and Asiatic cattle breeds.

To shed light on maternal and paternal ancestries of Yakutian Cattle, mitochondrial DNA sequences and Y-chromosomal microsatellite variation in Eurasian cattle breeds have been investigated. The mitochondrial DNA types of the taurine cattle are classified into six haplogroups T, T1, T2, T3, T4 and T5, i.e. 'damlines'. T3, T2 and T4 lines have been found in the samples of the Yakutian Cattle. The T4 exists in far eastern Siberia, but not in the Near Eastern cattle breeds. This is interesting as Eurasian taurine cattle have descended from the wild ox (*Bos primigenius*) populations domesticated 10 000 years ago in the Near East. Some researchers have speculated that the T4 should have its origin in some other wild ox population than Near Eastern population, most probably in an east Asian wild ox population since the T4 has been detected so far only in Turano-Mongolian breeds. However, in the recent whole mitochondrial genomic study, it was suggested that the T4 may have an origin from the same genetic sources as the T3 haplogroup or from a genetically closely-related population of aurochs. In addition to this specific east Asian genetic character, the Yakutian Cattle show dam lineages T3 and T2, which can be found in European samples. This suggests that the Yakutian Cattle share prehistorical maternal ancestries with the domesticated Near Eastern cattle. Moreover, the Y-chromosomal data suggest that the Yakutian Cattle have affinity with some European and Near Eastern cattle breeds. According to the current knowledge, the Yakutian Cattle descended from the Near Eastern domesticated cattle, but it also has an exceptional maternal ancestry (the T4 'damline') the origin of which is not well known yet.

The genetic diversity of the Yakutian Cattle have been investigated also using variation in the autosomal microsatellites. Studies on breed relationships have revealed that the Yakutian Cattle are genetically distinct from other Turano-Mongolian breeds and all European breeds. In addition, the Yakutian Cattle display a lower level of within-breed genetic diversity than several other Eurasian cattle breeds. These observations can be explained by long-term geographic and genetic isolation at the northern limit of the species range. On the other hand, foundation stocks of the Yakutian Cattle could have been small, which could explain the current level of intrapopulation diversity.

To conclude, the results of the DNA marker analysis indicate that the genetic value of the Yakutian Cattle may lie particularly in the novel gene combinations that the population carries, which developed through adaptation to Siberian conditions and after extended isolation.

¹ An autosome is a non-sex chromosome; X and Y are sex chromosomes and therefore non-autosomal chromosomes.

Konaka, Shinya, Japan (Shizuoka University)

Research Notes: Metaphorical Thinking and Integrated Cognitive Systems among the Samburu in North Central Kenya

This study elucidates several characteristics of the cognitive systems of the Samburu pastoralists in North Central Kenya in East Africa. The Samburu (self-professed Iloikop) are nomadic pastoralists who occupy the Samburu District in a region of semi-desert in the north central area of the Republic of Kenya. They speak the north Maa dialect of the Maa language and belong to the greater family of Eastern Nilotic peoples.

Metaphor forms the keynote of the daily life of the Samburu. In their daily conversation, proverbs are rich in metaphorical expression. The cognitive systems of the Samburu can be characterized by the focus on the livestock. Some wild animals are perceived through the metaphor of the livestock. Some kind of wild animals are said to be the sacred animals, just because they have similar characteristics to the livestock. Some kind of wild animals are religiously avoided, just because they have some different and odd characteristics from livestock. Mankind is also perceived through the metaphor of the livestock, according to age and sex.

Therefore, livestock form a “base domain” of the cognitive systems of the Samburu. The base domain based on livestock is projected to other objects as a “target domain”. Therefore, in the cognitive system of the Samburu, livestock, wild animals, and human beings are not separated, but form an integrated system. Several myths and legends tell that even the shift from livestock to wild animals, and human beings to wild animals can happen in the imagined world of the Samburu.

Metaphorical thinking is also important especially in the context of social change and globalization. The metaphor provides the Samburu with a sort of measure to accept the modern world flexibly and creatively. This can be illustrated with several cases of the utilization of waste material. The metaphorical perception, what I call “metaphorical replacement” made it smooth to accept the market economy and modernity.

**Mazzullo, Nuccio, Finland (Arctic Centre) & Germany (Leibnitz Inst. for regional studies)
More than meat on the hoof? Social significance of reindeer among Finnish Sámi in a rationalised pastoralist economy**

The presentation will focus, through an ethnographic account of movement and travel among the Sámi people of Finnish Lapland, on the importance of reindeer pastoralism as a subsistence that reaches beyond purely economic analyses for a more holistic approach. I shall argue that, despite a diminished economic importance, reindeer herding still plays nowadays a very important role in the social and cultural support of Sámi society.

The transition from intensive to extensive herding (Ingold 1980) and the passing of the law for the creation of the herding cooperatives have had a significant impact on both the Sámi perception and on their patterns of movement in the landscape (Mazzullo & Ingold 2008). In social terms such change could be seen in the creation through the herding cooperative of a somewhat artificial *siida*, that did not follow the traditional model and to which followed a Sámi response through the re-naturalization of the social patterns within the newly created herding cooperatives. Thus, within the Sámi cultural universe

reindeer herding has played *de facto* the fundamental role of social catalyst in these processes of disruption and re-appropriation.

I shall argue that the Sámi relationship with the landscape is indeed very intimate, despite numerous technological changes that have affected the ways in which people talk about, engage with and move in it. I also argue that there are subtle differences between their approach and that, for example, of the Finnish community, whose cultural background lies in farming

For example, as noted by Ingold (1988), although in Finland both Sámi and Finns practise reindeer herding, the fundamental styles that characterize it are based on two different worldviews. From a pastoralist view that sees the reindeer herd as the repository wealth and traditional values versus an agriculturalist one that sees the forest as a repository of wealth and traditional values and the herd as a thing to be farmed just like crops(Ingold 1988).

Traditionally Sámi subsistence has never been based on one particular activity but has spanned according to the season from hunting to fishing to gathering to herding. Hence Sámi approach on the exploitations of natural resources has had the holistic attitude of incorporating the various elements of the relations with the environment both in economic and cultural ways. This is why in studies that focus on the resilience of herders who stay in such a low-profit subsistence as reindeer herding one could answer this question, as reindeer man once told me, that reindeer herding is a way of living and not a way to *make* a living, and in this encapsulating the very nature of the Sámi worldview. I shall finally emphasise that the understanding of the importance of this statement could shed more light in the ways the symbolic aspects of reindeer herding guide people's understandings of their actions in the landscape, and in turn this would help implementing policies that would take into account these elements too.

Nakamura, Tomoko, Japan (CNEAS)

The Cultural and Economic Value of Livestock in Mongolia

In Mongolian pastoral society, five kinds of livestock are raised in general; horses, sheep, cows, goats and camels. The portions of livestock differ depending on the natural environment of each region. However, all regions have at least two types of animals; animals which have a strong cultural value and/or animals which have a strong economic value. For example, in a region where horses are raised, they are considered to be the most important animals in terms of their cultural value. So are camels in dry areas. On the other hand, sheep, goats, cows are held to be livestock which have significant economic value.

However, the value of these livestock is not stable but flexible over time. Up until the 1950's, hunting had been often conducted by pastoral society in the Mongolian plateau, however now, hunting is rarely done due to a variety of reasons, such as environmental protection, the confiscation of guns, environmental changes and so on. Consequently, the cultural and economical values of livestock have changed.

Focusing on hunting in Mongolian plateau, this presentation aims to clarify the change of these two values of livestock (especially horses) as well as to illustrate the actual circumstances of hunting in Mongolia.

Osva, Anu, Finland (artist, & agronomist Animal Breeding)

Symbiotic human animal relationship – an artistic approach to investigating Yakutian Cattle

For the art project the artist worked with the research team, interviewing people and drawing, painting and photographing the cattle. Working among the cattle made it possible to get to know the cattle from up close, to understand their characters and temperaments. And the cattle also accepted the artist as member of the herd. The main part of the work was done later in her studio in Helsinki. Outcomes of this process were an art project *Yakutian Cattle – Exploring Expedition to Siberia in the 2000's* including an exhibition and a description of cattle breeding practices on daily level over seasons in the extreme environment of the Eveno-Bytantay district.

The paper will draw a picture of symbiotic relationship of humans and cattle in three isolated Siberian villages. It will discuss our perceptions on animals and animal-human relationship. The fairly new artistic approach, where artist and scientists work together, give new challenges to artists, new ways to communicate to scientists and to the public it gives a different view of biological or other phenomena of the world. Theoretical and philosophical aspects of this Art&Sci approach are discussed.

Sasaki, Shiro, Japan (National Museum for Ethnology, Osaka)

Enlargement of the reindeer breeding in the European and West Siberian Tundras

Some historical documents indicate that the original type of the reindeer breeding of the Nenets and Chukchee, who are widely known as typical large scale reindeer breeders in tundras, was one of the types of small scale breeding. Ordinary people had only some heads, and even the rich had less than a hundred. The reindeer breeding played a supporting role for hunting, providing animals of drawing sledges. Though there are some different discussion about times, factors, and results of the enlargement of the reindeer breeding, it is obvious that the large scale breeding provided the breeders with social and cultural vitality. In this paper, I will discuss the factors and process of the enlargement of the reindeer breeding of the Nenets people in the European and West Siberian tundras during the 18th and 19th centuries and its influence on their society.

Soga, Toru, Japan (Hirosaki University)

The Primogeniture and Camel Trust System of the Gabra, Cushitic Pastoralist in Northern Kenya

For the pastoralists, the livestock is important, because it is not only their food source, but also the means of carrier, the motif of poetry and song, the medium for praying to the God and the medium for establishing or maintaining the human relationship. Thus, the pastoralists have a strong interest in their livestock, and concern the inheritance. The Gabra who is the camel pastoralist in northern Kenya employs the primogeniture. In such society, the firstborn son can enjoy their life, while his younger brothers should depend on his eldest brother. Seeking for the independence from the eldest brother, the younger brothers try to borrow camels from other families. The Gabra as well as the

other camel pastoralists in Northern Kenya has developed unique borrowing and lending system that I call the trust system (dabare).

First, I describe the institutional features of the primogeniture and the trust system (dabare) of the Gabra. Second, I reconstruct the practical features of the dabare, or the camel trusting activities based on the data gathered from 127 Gabra men. Based on this data, I discuss that the trust system possibly narrows the gap in the number of camel per capita between the eldest brother and the younger brothers. Third, I examine the "insurance hypothesis" that the pastoralists beforehand with the expected risks such as the drought or the enemies raid by trusting their camels to other family groups. Lastly, I discuss the social features of the trust system that seems to create or enhance the governance by the firstborn sons in their society.

Stammler-Gossmann, Anna, Japan (CNEAS) and Finland (Arctic Centre)

Political animals of Sakha Yakutia

Reindeer has long held great symbolic importance for Sakha Yakutia as a region in the Northeast of Russia. However, reindeer herding is practiced only by a small part of the indigenous groups of the region, who constitute around 2.5 % of the population. Sakha, the titular ethnic group are contemporary agropastoralists practicing horse and cattle husbandry at the highest northern latitude worldwide. Nevertheless, during the Soviet time reindeer has been the most common symbol associated with this northern region, representing external as well as internal symbolic constituents of regional identity. After declaring its sovereignty within Russia in 1990, the Republic of Sakha Yakutia changed not only its name by putting the de-Russified name of Sakha as the official denomination of the Republic, but also changed radically its symbols. Political targets of national movement and cultural revival have subordinated the symbol of the reindeer under that of the horse, which has become central for the region. It is remarkable that in economic terms both reindeer and horse play a very minor role in the Sakha Republic. In the last years, however, there is a growing tendency in political debates about importance of Sakha cow for the Sakha agriculture and as identity marker.

The paper analyses these remarkable shifts in regional symbolism focusing on the political significance of animals for the northern Russian province during the process of constructing regional identity and forming centre-periphery relations. In doing so, I consider the factors that contribute to the exchangeable nature of animal symbols on the political agenda. We may also ask why some symbols have been accepted and reinterpreted while others have not. How political meanings of created animal symbols resonate with the significance of those animals for people on the ground? Examining the nature and place of particular animal symbols in their political use can greatly contribute to research on the interconnectedness between socio-economic and political significance of human-animal relations. I show how animals as key players possess significant political capital in a changing society. In the post-socialist period both the cow and the horse as symbols have granted the Sakha agency in the political and cultural process of their own identity-making. As exchangeable political symbols, animals are drivers of change for traditional belief systems, as they provide a source of values and for maintaining cultural identity. In this function animal symbols can be seen transforming Sakha society.

Virtanen, Tea, Finland (University of Helsinki)

Sealing relations, mediating gender: social and gendered meaning of cattle among the Mbororo pastoralists in Cameroon

The paper explores divergent ways in which cattle mediates social relations and gender among the seminomadic Mbororo pastoralists in Cameroon. It approaches the topic by examining two specific cultural contexts in which this mediation takes place. First, I look at the central role that cattle has in mediating kinship, especially in the reproduction of the patrilineal ties through the Mbororo cattle inheritance system. Even though most of the cattle is preherited by men, the paper explores also how the cattle owned by women strengthens the patrilineage in an endogamic pastoral group. Second, the paper looks at the role of cattle/cattle milk/sheep sacrifices in the Mbororo traditional life cycle rituals, as well as in yearly Islamic celebrations. In this part of the paper the question of gendered meanings of cattle (man/meat; woman/milk) will also be touched upon.

In the paper a special attention is paid to how Islamisation and sedentarisation of the Mbororo have reshaped the meanings attached to animals in both contexts (inheritance/rituals). I describe the ways the pastoralists' continued cultural rapprochement with Muslims living in villages has influenced their views of allocation of cattle to women. I also investigate how Islamisation of the Mbororo has affected the use and meaning of cattle/sheep in the ritual sphere.

Summing up, the paper shows the flexibility of cattle as a symbolic resource for the Mbororo as they attempt to reconcile their traditional pastoral ways with more recently emerged cultural and spiritual ideas in different spheres of their social life.

Vuojala-Magga, Terhi, Finland (Arctic Centre) (absentee paper)

What is the meaning of character and temperament of a single reindeer without the herd and within the herd? A case study of Ukko-Poika and Viljami, two named and trained reindeer in Inari (Anar) of Sápmi-Finnish Lapland

At the beginning of 2000 I learned to train male reindeer as a process of four years. During these years I worked with Viljami and Ukko-Poika to the final stage of where they learned to work as good sledge-reindeer (ajokas) for tourist industry. In this paper I speak of individual calves, "baby reindeer", which during these four years time grew up to the full sized castrated males. This study is about learning and co-operation within a single animal and human being. I am analyzing the process of taming a reindeer from a context of inter-relationship of emotions and power. This learning process does not comprise only animals but human beings, too. While training a semi-domesticated reindeer one gains a good look at the individual and social behaviour of a single animal - on one hand with human being and on the other hand as a member of a herd. Through this type of training work one gets know the different sides of characteristics of a single animal, which in turn opens up a deeper understanding of the techniques of coping with large herds. Finally, in the end of the paper I will focus on the anthropological discussion on the concepts of emotions and power as attributes of life-world of the reindeer herding societies.

Yoshida, Atsushi, Japan (Chiba University)

'Private reindeer herding among the Tundra Nenets in West Siberia: The practice of "ethnic" herding'

The northernmost part of West Siberia, Russia, is a unique place where we can encounter the "ethnic" reindeer herding (Yuzhakov&Mukhachev 2001) up to the first decade of 21st century. I have carried out fieldwork on the Gydan Peninsula, the eastern part of Yamal-Nenets autonomous district, several times from 1995 to 2005. The Tazovsky administrative district is situated in the eastern part of this region on the Gydan Peninsula where 88% of domesticated reindeer is privately owned (at the beginning of 2006). It is much the same situation as that of the Yamal Peninsula region (Stammler 2005), but in some points there might be differences according to the geographical location, ethnic situation other factors.

In my presentation I will show the concrete situation of private herding of the Gydan group of the Tundra Nenets, using still photos and video films, recorded during my fieldwork in 2001 and 2005 years.

The main points will be as follows:

- "private" deer has continuously existed throughout the Soviet period as the *lichnye*, or personally owned, reindeer.
- Different from other regions among Nenets or other reindeer herding ethnic groups in Russia, on the Gydan Peninsula most private herds are grazed separately from the herds of state enterprises.
- The economic orientation of such private herds is different from the state or publicly owned (commercial) herds.
- The structure of the private herds is different from that of commercial herds. Such structure reflects the herd's cultural characteristics.

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Appendix:

The campus map and the university cafeteria



(3) CNEAS; (13) & (32) Cafeteria

Cultural programme

1. Sendai city cruise, May 15 Friday from 10:00 to 15:00
 - Participants are picked up from the 'Sumireh' hotel at 10:00 .
 - Walking through Katahira-campus, Tohoku Univ. to the Zuihoden
 - a. The Zuihoden Mausoleum (40 to 60 min) Admission fee JPY\550
www.zuihoden.com/english/english.htm
 - b. Sendai City Museum (exhibition & lunch) Fee \400 (for permanent exhibition)
www.city.sendai.jp/kyouiku/museum/english/index.html

c.Site of Sendai-Castle(30 min) Admission Fee ¥700

www.sendai-slowlife.net/honmarukaikan/shiryokan.html

-We take a sight-seeing bus, Loope Sendai (Free pass charging ¥600)

2. Introduction to the local species of Japanese cattle, the Field Science Center, Tohoku University, May 18 Monday, from 7:30 (departure from Hotel) to 18:00

-Participants take a mini-bus from the 'Sumireh' hotel at 7:30(an hour and a half). 3000yen/person

- Lunch at a local restaurant 2000yen/person

-We return by trains (departure 16:00& arrival 18:00 at Sendai-station) 2000yen/person

Social programme

May 15, Friday

-Welcome dinner 18:30- Kushi-yaki Rakusyu MOJA 串焼楽酒 MOJA 一番町店

<http://moja.co.jp/menu/>

*approx. budget per person - 4000yen

宮城県仙台市青葉区一番町2丁目3-28 中央市場D (いろは横町内) 022-713-3553

May 16, Saturday

-Dinner, 19:30- Omachidou 旬食彩酒おまちどう*approx. budget per person - 5000yen

http://www.hotpepper.jp/A_20100/str:J000026042.html

宮城県仙台市青葉区国分町2-7-5 国分町 KY パークビル2F 022-214-2223

-Before dinner - a short visit to the Sendai Aoba Matsuri festival.

We will move to the venue by taxi, and look on Yoimatsuri(宵まつり)at-Jozenji Dori.

<http://www.aoba-matsuri.com/index.html> (Japanese)

<http://www.aoba-matsuri.com/english/index.html> (English)

May 17, Sunday

-Dinner, 18:00 -

Emergency contact numbers of organisers:

- Associate Professor Hiroki Takakura, office room 410, mobile 080 31461048 (seminar programme, logistics for Japanese participants)
- Associate Professor Florian Stammer, office room 422, mobile 090 29824272 (seminar programme, logistics for international participants)
- PhD candidate Itoe Kaneshiro, office room 415, mobile 090 50273770 (logistics, accommodation and dinner arrangements)
- Wakako Shimokakimoto, mobile 090 39203056 (Sendai excursion and agricultural field centre excursion)

