Land Use and Economic Change Among the Dolgan and the Nganasan

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Introduction

This research compared alternative land-tenure strategies developing among the Dolgan and the Nganasan after the 1991 collapse of the USSR. Two distinct strategies emerged in the first post-Soviet decade: 1) hunters and their families maintained use rights to state-enterprise hunting lands; and 2) sets of families and individuals established family/clan holdings. Initiated by a 1992 decree of President Yeltsin, family/clan holdings were a new form of property created to protect traditional lands and economic activities for Russia's indigenous Siberian peoples.¹

In the Taimyr Autonomous Region (*okrug*), land claims under this new property category were called family/clan holdings or clan/community holdings (*semieno/rodovoe or obshchino/rodovoe khoziaistvo*). Owing to Yeltsin's decree, there was no property tax or rent on family/clan holdings, but the regional tax authority was to collect taxes on profits from commercial sales, and obtaining legal documents, bank accounts, and licenses required regular contact with the regional center. Family/clan holdings that were in active operation were involved in the Taimyr's developing free-market system, producing food and fur for sale. By the end of 1997, Dolgan, Nganasan, Nenets, Enets, and Evenk families in the Taimyr Region had created fewer than 50 family/clan holdings. Considering the native population of approximately 10,000 people in 17 villages and two cities, and a region of 825,000 square kilometers, relatively few have pursued formal land claims.

Paradoxically, the other strategy – maintaining use rights to state-enterprise lands – involved decreasing contact with the regional economy. The management of what remained of the state enterprise system allowed native hunters to continue to use the hunting territories allocated to them during the Soviet period, and kept them on the employment rolls, even though the hunters did not receive regular salaries. This strategy allowed the hunters to practice household subsistence foraging, occasionally turn in products for putative

remuneration, receive ever-decreasing allotments of fuel and equipment, and maintain eligibility for state pensions upon retirement. In Ust' Avam, where extended ethnographic research took place between 1994 and 1997, little time and money was available to pursue formal land claims. Unpredictable salaries and contract payments, and ever-increasing costs of living, were the economic realities. Many people in Ust' Avam viewed their increased reliance upon the domestic mode of production as a 'survival economy'. In the words of one Dolgan, 'Bihigi eredebenebit', or, 'We are surviving'.

Research in Ust' Avam focused on the growing subsistence economy to which most hunters had turned and on the non-market distribution of food within the community. Cooperation of families, relatives, friends, and needy people was fostered by a number of traditional rules and practices. These informal strategies extended to land tenure among Ust' Avam hunters, who were actively managing a growing area of common-pool hunting grounds surrounding the settlement.

The situation in this Siberian community contrasts significantly with those in many native and rural communities around the world, where contact and integration with the global economy is increasing. The fragmentation of post-Soviet Russia has left the native peoples of remote Taimyr settlements at the edge of a depressed economy, where local social processes encourage subsistence foraging, food gifts, and communal land tenure. The development of institutions that regulate common-pool resources among hunters in the Taimyr, a process running counter to the global trend, is a topic of applied and fundamental importance (McCay and Jentoft 1998, Hann 1999), especially considering current plans for developing environmental reserves in the Siberian North. The case of the Dolgan and Nganasan in Ust' Avam may be one in which social relationships and ecological conditions favor expanding common property. As is the case in many hunting-and-gathering societies, economic self-aggrandizement is discouraged, and survival is dependent upon the productivity of the tundra and cooperation in social networks.

Ethnographic Background - The Avam Tundra

Two of the Soviet Union's indigenous Siberian peoples, the Dolgan and the Nganasan were involved in *kolkhoz* reindeer herding, fishing, and trapping, beginning in the 1930s with collectivization. The 1,000 or so Nganasan do

not have a settlement of their own. Some families live in urban areas, but most of the Nganasan live with the Dolgan in Ust' Avam and two other settlements: 1) Volochanka, the former county seat, 100 kilometers east of Ust' Avam, and 2) Novoye, located even further east in Khatanga County. The Dolgan language is similar to Sakha (Yakut), a northern Turkic language. Nganasan is one of six languages in the Samoyedic branch of the Uralic language family, along with Nenets and Enets. For census and statistical purposes of this study, the Ust' Avam community also includes the small settlement of Kresty Taimyrski, at the confluence of the Dudypta and Piasina rivers.

The Nganasan and Dolgan living in the Avam tundra of the central Taimyr lowlands were semi-nomadic reindeer herders, hunters, and fishermen until the early 1970s. The traditions that related to their mobile life ways, from reindeer herding and native language to production of tent coverings and winter clothes, began to go out of use after ground was broken in 1971 for the current permanent settlement, Ust' Avam. The state invested heavily in central points of residence for the Dolgan and Nganasan, as it did for many other small-numbering peoples of Siberia beginning in the late 1960s. Six collective units (*kolkhoz*) were combined and recombined to form the Ust' Avam community; these collectives represented four Dolgan and two Nganasan bands that existed prior to the advent of the Soviet administration in 1930.

In 1971, the Dolgan and the Nganasan living in the Avam, Dudypta, and Lower Piasina river drainages were transferred to the *gospromkhoz* Taimyrski in the new settlement, Ust' Avam.² This intensified rural state enterprise was created to pursue wild reindeer hunting, fishing, and trapping, and thus support the growing industrial center of Noril'sk, where the *gospromkhoz* had its headquarters. Apartments were offered to native families in Ust' Avam, 400 kilometers by water from Noril'sk. Men were hired as professional hunters in the enterprise and supplied with mechanized transportation, contemporary hunting implements, and fuel. Domestic-reindeer herding ended in 1978, and seasonal harvests of wild reindeer reached 50,000 head in the late 1980s.³ Women were hired as seamstresses in the *podshivtzekh*, producing decorated sections for reindeer fur boots (*untaiki*). A small number of non-native individuals from former Soviet republics also came to live in Ust' Avam, and many more worked in seasonal hunting brigades along the major rivers. Most native Ust' Avam hunters were assigned to territories (*ugod'ia*), but

seasonal brigades were also formed, and there were many support jobs in the settlement.

As recently as the early 1990s, the Dolgan and the Nganasan were integral sources of food and fur for the cities of Noril'sk and Dudinka.⁴ That function waned as federal inputs to local economies were reduced and rural enterprise and transportation were privatized. Free-market reform in effect made the business of supplying commercial quantities of caribou meat and fish to the Taimyr's urban centers unprofitable. Conversely, food imported from abroad was reasonably priced, well packaged, and easily accessible for the cities; it could be shipped to Dudinka year-round. In addition, the crumbling state enterprises and the Bureau of Agriculture could no longer act as middlemen for distant communities. These trends have led to economic and social depression in native communities (Ziker 1998b, 1999, n.d.).

Formal Land Tenure

Originally intended to preserve native lands and traditional economic activities, family/clan holdings were a formal and contractual solution to the post-Soviet transition of the Taimyr Region's state enterprises. The way the transfer worked was that a set of indigenous nuclear-family members and their relatives and friends assembled and voted to form a voluntary association that would pursue a land claim on which traditional economic activities could occur. The association typically had a head, or *glava*, and members, and the territory was generally, but not always, in areas where the members' ancestors had lived before collectivization. The Dudinka City Committee on Land Use was to continue managing land funds, however, and it required the holding to follow criteria of rational resource use and ecological safety. While this approach sounded promising for native self-determination, a disjunction appears to have formed between the intent of the family/clan holding and practical applications of it.

Family/clan holdings were understood to be a form of business that was, in part, replacing the state-enterprise system. Land was taken from state-enterprise holdings and transferred to family/clan holdings. This transfer of land, and the capital resources on it, was often viewed as a zero-sum game, especially by those still involved in and managing the state enterprise.

Reflecting this interpretation, the members of early family/clan holdings were referred to derogatorily as *arendatory*, or renters. Family/clan holdings' articles of incorporation (*ustav*) specified that traditional activities could include commercial sales. In this respect, the private holdings were in competition with the state enterprise, an organization with a history of commercial relationships and big budgets. Without commercial sales, however, the question remained: How were the members of the holdings to purchase equipment and fuel that would be needed to access the territory and harvest wild food resources? This question was reflected in both informal interviews and structured surveys in the Avam tundra.

To start a family/clan holding I would need a big loan. What bank would give it to me? I have nothing to secure it. The *gospromkhoz* will strangle me. The *gospromkhoz* has power and finances, I would be starting from nothing. If I had a financial position, I might be able to do it. It's one person versus the mafia. Why do hunters live poorly? The *gospromkhoz* is the mafia now. (*Gospromkhoz* hunter, July 1997)

While native-run business could be interpreted as a sign of revitalization, the actual distribution of the holdings revealed a more complicated situation. A simple way to evaluate the distribution of family/clan holdings is to analyze their location. The majority of the family/clan holdings have been located near, or with good water access to, the Taimyr Region's urban centers, Dudinka and Noril'sk. Few family/clan holdings are located in and around the 17 rural settlements, where the majority of the native population lives. Of 46 holdings in Dudinka District, 29 were on land contiguous with the city of Dudinka. Twelve holdings were on lands more distant from the city, but three of these had access to Noril'sk by water. Five holdings were on unspecified lands. Proximity to the Taimyr's urban centers likely facilitated access to services, markets, and government, which was necessary for active use of the holding. The economic situation in the villages decreased access to the urban centers, as well as distant tundra locations where hunting territories were located.

Infrastructure

The distribution of family/clan holdings is partially a result of changes in infrastructure following the collapse of the Soviet economy. Significant increases in the cost of air travel and shipping, occurring after privatization, have reduced the average villager's ability to travel and send large or heavy packages to the urban centers. Few people in remote settlements can now afford travel to the city, where they would have to be if they wanted to pursue land claims, set up contracts, obtain licenses and equipment, and collect on commercial sales.

Increased transportation costs have also affected consumer supplies and groceries in Ust' Avam. The volume and quality of groceries, generally carbohydrates, and of consumer goods, such as clothing and household appliances, has diminished as old reserves (*starye zapasi*) have been used up. For example, during my first visit to Ust' Avam in 1994, there were a number of types of dried bulk grains, dried potatoes and onions, and pasta for sale in the community's store. By 1997, only white flour and sugar were being sold. In 1998, there were shortages of both of these items, and Ministry of Extreme Situations helicopters were used to fly in flour and sugar. Still, according to letters received subsequently, there was not enough to go around.

In remote settlements, with the collapse of capital inputs from the state enterprise, there has been a degradation of mechanized transportation and other hunting equipment. This equipment cannot be replaced, since people do not have the money to purchase it anew, and the price has increased dramatically relative to average salaries (Ziker 1998a, 210). Hunters with one or two serviceable snowmobiles in the 1992–94 period are now generally working without this form of transportation. Summer travel had been an important family ritual and provided tundra experience to children during the Soviet era. I observed a number of boat motors destroyed in the summer of 1997 when they were used with bad fuel and the pistons and cylinders shattered. Subsequently, motorized travel in the summer has been limited. Boat motors and parts were fairly easy to obtain during the last two decades of the Soviet Union. Hunters purchased motors, spare parts, and other consumer goods through *Poseltorg*, a mail-order service for settlements. This service had ended prior to my arrival in Ust' Avam.

The degradation of mechanized transport on the local level has resulted in increased hunting on foot, in turn stimulating the development of dog teams. Some Dolgan trappers in the Avam tundra traditionally used dog teams, although the dominant method of freight transport in the 19th and 20th centuries was the reindeer-driven sleigh. The problem with dog teams is that a surplus needs to be acquired to feed them, whereas reindeer feed themselves with proper pasturing. These infrastructure changes have influenced modes of production in Ust' Avam, decreasing the territorial range within which Dolgan and Nganasan are foraging and altering the methods of foraging.

Relations of Production

With the collapse of central budget subsidies for rural enterprise, at least half of the adult male population has become inactive since 1993. The loss has been concentrated among the high-paying and respected staff hunter positions. In contrast with the Soviet period, there is now no recruitment of younger men for well-paid jobs. Inactivity in the young male population has implications for social dysfunction, violence, and crime.

My plan was one ton of fish from fresh water lakes and 35 arctic fox. I got prizes all the time because I caught more than my plan: 60 to 75 fox per year. My salary depended on the number of arctic foxes and kilograms of fish turned in to the *gospromkhoz*. The average price was 35 rubles per fox. The *gospromkhoz* added a native coefficient and polar coefficient. It was prestigious to work as a hunter then. (*Gospromkhoz* hunter 1978–85, Ust' Avam, September 1996)

For those people in Ust' Avam who still received regular cash payment, such as civil-service workers, contract laborers, and pensioners, their purchasing power had diminished by an order of magnitude since 1991, and the vast majority viewed their socio-economic situation as continuously worsening (Ziker 1998a, 213, Ziker and Shmetterling 1997, 84–5). In addition, the commodities produced by native hunters, such as arctic-fox pelts, had lost considerable value since 1991 (Ziker 1998a, 211). To make matters worse, cash payments were provided irregularly at best, due to transportation delays and alleged managerial and administrative manipulation of accounts. The post-Soviet economy of the rural Taimyr stands in sharp contrast with that of Soviet planning. After years of daily micro-management of the lives of the

Dolgan and the Nganasan, Ust' Avam residents now view the current Russian government policy as 'Live as you like' (*Zhite, kak khotite*). There is no work, no regular life, and no social protection.

Modes of Production and Distribution

Commonly, informants in Ust' Avam talked about three types of production: for oneself (*dlia sebia*); for sale or barter (*na prodazhy* or *na levo*); and for turning in (*sdavat*). With reduced production for the outside market (*sdavat*), relatively more Dolgan and Nganasan labor is invested in subsistence, or production for oneself (*dlia sebia*). While respondents in Ust' Avam had mixed opinions about whether barter had increased since 1991, the solid majority (64 of 79, or 81%) felt that cash purchasing had decreased (Ziker 1998a, 215).

Considering the degradation of equipment and its reduced availability, production is becoming more difficult because more time is required in searching for prey. As already mentioned, without mechanized transportation or domestic reindeer, Ust' Avam hunters must travel on foot or on skis. Only one hunter traveled with dog team and sleigh. I walked with another hunter who was trying to get his dog to pull a small sleigh with fishing equipment four kilometers to a lake. The hunter tried it only once, since he ended up dragging the dog most of the way. Instead of traveling hundreds of kilometers a day to pursue large game in patches where it is located, more hunters are focusing on resources closer at hand. As a result, compared to the Soviet period, a wider range of prey, including such species as arctic hare and arctic fox, is being pursued. A focus on highly ranked food sources would be expected when technology decreases search costs (MacArthur and Pianka 1966). A focus on a wider range of prey would be the expectation when technology is lost.

Another way the institution of the subsistence economy has operated in Ust' Avam is through an expansion of non-market distribution of food. Non-market distribution has been documented in a wide array of hunting-and-gathering societies (Woodburn 1982, Kaplan and Hill 1985, Betzig and Turke 1986, Blurton Jones 1987, Peterson 1993, Bird and Bleige Bird 1997). The Dolgan and Nganasan are relying more on non-market distribution than they were when groceries were available in the store and they made money in a cash-based formal economy. Twelve of the 79 household heads

I interviewed in 1997 gave relative estimates of their own caribou consumption and distribution for the winter. Five of the 12 who estimated winter caribou requirements gave away as much as they used themselves (Ziker 1998a, 218). Six stated that they consumed less than what they gave away. Four households gave double what they consumed, one gave away triple, and another gave away quadruple their own consumption. Only one family consumed more than they gave away – 40 versus 10 caribou carcasses – but this is a large family with a high consumer-to-worker ratio. Provisioning of relatives accounts for the bulk of food sharing, according to the survey (Ziker 1998a, 218). In terms of weight of meat and fish, I have some evidence that close relatives are preferentially supplied.

Some meat and fish enters reciprocal food exchange between households that are generally not closely related genealogically. I documented one case of delayed food sharing between hunters in Ust' Avam who were from different generations and different ethnicities. They occasionally hunted together, but they also borrowed meat from one another at times. Reciprocal food sharing also occurs among non-producers in second- and third-level exchanges. For example, retired women mentioned that, when they have bush food, they share with their friends, and vice versa.

In some hunting tasks, food is divided immediately after the hunt. Presumably these hunters increased their marginal output by cooperating with the other hunters and dividing the catch. These small economies of scale appear to be related to certain foraging activities, such as seine fishing, which requires four people. Finally, when hunters have large surpluses, they share food with almost any person who expresses a need. Typically, this food goes to single mothers, invalids, pensioners, neighbors, and other people who ask. Moral prescriptions for sharing mean that accumulation and isolation are socially costly. It is a law of the Avam tundra (zakon tundry), as it is in other places, to share with other people and show respect to nature by not killing too many animals and making sacrifices to the fire and specific places (cf Anderson 1998, Bird-David 1992). Without immediate observable material benefit to the hunter, there is reason to look at social benefits for food transfer. It could be avoidance of a cost, such as the likelihood that derogatory public statements would be made if one did not simply share (Peterson 1997). And there could be non-food-related benefits, such as heightened status or desirability for intimate relationships (Hawkes 1993).

It appears that both short-term- and long-term-risk minimization are important in the subsistence economy of Ust' Avam, whereas the forces of supply and demand and/or government control are characteristic of markets. Short-term-risk minimization concerns the variance in daily consumption. Long-term risks could include the loss of a household producer or incapacitation. Thus, sentiments that encourage the provisioning of unrelated non-producers could help an individual in case of some unforeseen misfortune. If profit maximization is of diminishing value in Ust' Avam, it makes sense that barter of caribou meat and fish for finished goods occurs generally with outsiders. Risk reduction also occurs in the form of pooling of cash for important equipment, such as a new rifle or ammunition.

Land Tenure Practice

I informally interviewed a number of family/clan holdings heads living in Dudinka and Noril'sk and, using a structured survey, interviewed three family/clan heads near Ust' Avam. More prominent holdings produced up to several tons of fish and reindeer meat annually for sale in the cities. Their use of the land differed little from the Soviet period, except that they lived most of the year in the city, where they had to manage transportation, sales, and payments.

Following changes in infrastructure, production, and distribution, a number of assigned brigade territories of the gospromkhoz Taimyrski have reverted to informal, communal use in the tundra surrounding Ust' Avam, rather than be reassigned to other staff hunters or be converted to family/ clan holdings. This growing communal-use area is regulated among the hunters: they decide amongst themselves when, where, and with whom they will hunt, usually making these arrangements before traveling into the tundra. In the Ust' Avam commons, overexploitation of resources by any one individual is attenuated. Rather, if an individual is especially productive with foraging, some of the food gets shared within the community, as above. In addition, if an individual returns with a big catch, other hunters would be expected to travel to that area to utilize the resource. As many of the food resources are migratory, limiting one's hunting to a specific territory could be a liability. While most economists might think of it in terms of market failure, common-pool management is a viable property strategy in the post-Soviet Taimyr.

In addition to a common-use area, social relationships, based on friendship and kinship, extend territories and ecological zones within which hunters forage. The Ust' Avam commons is socially differentiated. A few landmarks, such as high river embankments (iar), are often associated with individuals or ancestral clan lands. Association with these locations is not exclusive. however, since many residents of Ust' Avam had ancestors who lived hundreds of kilometers from the village, and these clan lands are not accessible. Hunters are regularly establishing shelters and blinds in the communal-use area. These are considered that person's property, and permission is usually sought before using them, except in emergencies. Similarly, on assigned gospromkhoz territories and family/clan holdings (there are 19 named hunting ugod'ia surrounding Ust' Avam (Ziker, n.d.)), trap lines are considered individual property, oftentimes passed down from ancestors to descendents within a corporate kinship estate. Some resources, such as wood, caribou, and large predators, are more freely pursued on assigned territories, but requests for permission to do some kinds of hunting, such as for goose or arctic fox, are usually expected. In 1997, Ust' Avam hunters were asked a series of questions regarding land tenure, including the question 'Should someone coming to your territory ask your permission to obtain the following resources (wood, hare, ptarmigan, reindeer, moose, bear, wolverine, wolf, fur-bearing animals, fish, and goose) for oneself or for sale?' Of 31 hunters responding to this question, 22 answered that they expected requests for permission, at least for some resources. Eight hunters did not expect requests of permission for any of those listed. The fact that they did not 'own' the land was mentioned. One respondent did not know.

Hunters were asked, 'Have you ever demanded that someone leave your territory?' Of 31hunters responding, 27 stated that they never had demanded that someone leave the territory. Four did have such experiences, however, and responses to the subsequent question, 'If so, what happened?' reflect personal conflicts and differences. The majority (22) of hunters responding to the question 'Do you feel that you can stop someone going through your territory?' answered that they could not stop or prevent someone from going through their territory. Many hunters added that people would usually stop and visit in any case, and they would find out what the traveler intended to do during a visit. Some hunters stated that it is more interesting when

someone comes to visit, since they usually will stay to do some subsistence or other work, and they may bring news and gifts.

Hunters were asked who they prefer to have hunted on their territories and who disturbs them the most. The categories were: certain individuals; local (*mestny*)/non-local (*priezzhi*) people; Dolgan/Nganasan; neighboring brigade/distant brigade member; close relative/relative/non-relative; and no one. Two hunters preferred no one to come to their territory. Twenty-four of 29 responding to this question preferred a local person, including locals (*mestnye*), Dolgan, Nganasan, neighboring-brigade member, or a relative. Many hunters had multiple preferences, and close relatives were mentioned in about half of the responses. Three hunters stated that they'd accept any 'normal' person.

Granting permission to stay on lands and hunt for a period of time is a land-tenure practice among hunter-gatherer groups in southern Africa (Cashdan 1983). It appears to occur in areas where resources are patchy, territories large, and perimeter defense costly. It makes sense to restrict access on the basis of social ties to maintain access rights to the resource and gain reciprocal privileges to other resources in the future. By controlling access to common-pool resources and kinship estates through social relationships, Ust' Avam hunters appear to have implemented a sustainable, risk-minimizing, and ecologically sensitive land-tenure institution.

Conclusion

Given their remote location in the central Siberian Arctic, and the dismantling of the factory-state in the early 1990s, the Dolgan and Nganasan are more isolated now than at any time in the last 30 years. Subsistence hunting, fishing, and gathering now provide the main source of protein for local households, whereas prior to the breakup of the Soviet Union, caribou meat and fish were available for purchase in the local store or state enterprise, as well as in stores in urban centers. Land tenure, a subject of importance for the native political association, has changed in unexpected ways in Dolgan and Nganasan settlements since 1991. With the growing local importance of a subsistence economy and of non-market distribution of food products, land tenure has to some extent reverted to informal communal use rather than follows formal ownership procedures through family/clan holdings.

In areas where family/clan holdings were granted, they actually may represent a process of socio-economic differentiation. By formalizing ownership of territory and assigning the property to sets of individuals, the family/clan holding is generally oriented toward the market. The regional government uses its own framework of land tenure. For the majority of indigenous households in the Taimyr Region, family/clan holdings have not been an issue because of high costs and low benefits and distance from the regional government. This apparent differentiation in land tenure strategies resulting from Yeltsin's 1992 decree is yet another example of the unpredicted effects of the economic-reform process in the former East Bloc (Burawoy and Verdery 1999).

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Notes

- 1 As a result of lobbying efforts of the Association of Peoples of the North and international and Russian academic pressure, Boris Yeltsin issued a decree (no. 492) in April 1992 ordering northern regions to design procedures for returning land and property to native Siberian families and communities (Yeltsin 1992). A number of Russian and Western scholars and native Siberians have written on the problems faced by native Siberians and the policies and politics surrounding their position in the transition to democracy and a free market (e.g., Aipin 1994; Bol'shakov and Klokov 1997; Chance and Andreeva 1995; Fondahl 1997, 1998; Forsyth 1989, 1992; Grant 1995; Gray 1998; Golovnev and Osherenko 1999; Humphrey 1998; Karlov 1991; Khazanov 1991, 1995; Novikova 1994, 1995; Pika and Prokhorov 1988, 1994; Sangi 1991, 1992; Schindler 1991, 1992, 1997; Sokolova 1990; Ziker 1998b).
- 2 Gospromkhoz is an acronym for gosudarsvennoe promyslovoe khoziaistvo, or government hunting-trapping-fishing enterprise. The gospromkhoz Taimyrski was administered by the kraiokhotupravlenie, or the territorial hunting bureau, in

Krasnoyarsk. The bureau was subject to the Ministry of Hunting and Fishing of the R.F.S.F.R. The other rural state enterprises in the Taimyr were administered by the agricultural bureau in Dudinka, the regional arm of the Ministry of Agriculture. Thus, Ust' Avam was administratively a special case in the Taimyr Region.

- 3 The Taimyr Peninsula's wild-reindeer herd is currently estimated at 1,000,000 head.
- 4 Noril'sk is the site of Noril'sk Nickel, formerly the Noril'sk Alpine Metallurgical Combine, producer of approximately a third of the nickel sold on world markets. Dudinka is the Taimyr's regional capital and port, located on the banks of the Yenesei River. The port is kept open year-round by nuclear-powered icebreakers and container ships serving the Dudinka-Murmansk section of the Northern Sea Route.
- 5 In 1997, I reviewed acts (*postanovlenie*) of the City of Dudinka dealing with family/clan holdings (Ziker 2001).

References

- Aipin, Yeremey 1994. Obrashchenie Vtorogo Vserossiiskogo S'ezda Korennykh Malochislennykh Narodov Severa, Sibiri, i Dal'nogo Vostoka k Prezidentu, Pravitel'stvu i Federal'nomy Sobraniiu Rossiiskoi Federatsii [Appeal of the Second All-Russia Congress of Native Small-Numbering Nations of the North, Siberia, and the Far East to the President, Administration and Federal Assembly of the Russian Federation] *Severnye Prostory* 2: 9.
- Anderson, David G. 1998. Property as a Way of Knowing on Evenki Lands. In *Property Relations*, C.M. Hann (ed.), 64–84. Cambridge: Cambridge University Press.
- Betzig, Laura L., and Paul W. Turke 1986. Food Sharing on Ifaluk. *Current Anthropology* 27(4): 397–400.
- Bird-David, Nurit 1992. Beyond 'The Original Affluent Society': A Culturalist Reformulation. *Current Anthropology* 33: 25–47.
- Bliege Bird, Rebecca L., and Douglas W. Bird 1997. Delayed Reciprocity and Tolerated Theft: The Behavioral Ecology of Food-Sharing Strategies. *Current Anthropology* 38(1): 49–78.
- Blurton Jones, Nicholas G. 1987. Tolerated Theft: Suggestions about the Ecology and Evolution of Sharing, Hoarding, and Scrounging. *Social Science Information* 26(1): 31–54.
- Bol'shakov, N.N., and K.B. Klokov 1997. Rol' i Zadachi Tsentral'nosibirskogo Biosfernogo Gosudarstvennogo Zapovednika v Ustoichivom Razvitii Traditsionnogo Prirodopol'zovaniia Turukhanskogo Severa [The Role and Goals for

- the Central-Siberian Government Biosphere Reserve in the Stable Development of Traditional Nature-Use of the Turukhansk North]. Sankt-Peterburg: NII Geografii Sankt-Peterburg State University.
- Burawoy, Michael, and Katherine Verdery 1999. Introduction. In *Uncertain Transition: Ethnographies of Change in the Postsocialist World.* M. Burawoy and K. Verdery (eds.), 1–17. Lanham, MD: Rowman & Littlefield.
- Cashdan, Elizabeth 1983. Territoriality Among Human Foragers: Ecological Models and an Application to Four Bushman Groups. *Current Anthropology* 24: 47–66.
- Chance, Norman A., and Elena N. Andreeva 1995. Sustainability, Equity, and Natural Resource Development in Northwest Siberia and Arctic Alaska. *Human Ecology* 23: 217–40.
- Eerkens, Jelmer W. 1999. Common Pool Resources, Buffer Zones, and Jointly Owned Territories: Hunter-Gatherer Land and Resource Tenure in Fort Irwin, Southeastern California. *Human Ecology* 27(2): 297–318.
- Fondahl, Gail 1997. Environmental Degradation and Indigenous Land Claims in Russia's North. In *Contested Arctic*. E.A. Smith and J. McCarter (eds.), 68–87. Seattle: University of Washington Press.
- —1998. Gaining Ground? Evenkis, Land, and Reform in Southeastern Siberia. Boston: Allyn and Bacon.
- Forsyth, James 1989. The Indigenous Peoples of Siberia in the Twentieth Century. In *The Development of Siberia*. A. Wood and R.A. French (eds.), 72–95. New York: St. Martin's Press.
- —1992. A History of the Peoples of Siberia: Russia's North Asian Colony, 1581-1990. Cambridge: Cambridge University Press.
- Grant, Bruce 1995. *In the Soviet House of Culture: A Century of Perestroikas*. Princeton, NJ: Princeton University Press.
- Gray, Patty A. 1998. Pursuing a Native Movement in a Russian Space: The Predicament of Indigenous Peoples in Post-Soviet Chukota. Doctoral dissertation, University of Wisconsin-Madison. Ann Arbor, MI: University Microfilms International.
- Golovnev, Andrei V., and Gail Osherenko 1999. *Siberian Survival: the Nenets and Their Story.* Ithaca and London: Cornell University Press.
- Hann, Chris M. 1998. Introduction: The Embeddedness of Property. In *Property Relations*. C.M. Hann (ed.), 1–47. Cambridge: Cambridge University Press.

Hawkes, Kristen 1993. Why Hunter-Gatherers Work: An Ancient Version of the Problem of Public Goods. *Current Anthropology* 34: 341–61.

- Humphrey, Caroline 1998. *Marx Went Away But Karl Stayed Behind*. Ann Arbor: University of Michigan Press.
- Kaplan, Hillard, and Kim Hill 1985. Food Sharing Among Ache Foragers: Tests of Explanatory Hypotheses. *Current Anthropology* 26(2): 223–46.
- Karlov, V.V. 1991. Narodnosti Severa Sibiri: Osobennosti Vosproizvodstva i Al'ternativy Razvitiia [Peoples of Northern Siberia: Peculiarities of Reproduction and Alternatives of Development]. Sovietskaia Etnografiia 5: 3–16.
- Khazanov, Anatoly M. 1991. *Soviet Nationality Policy during Perestroika*. Falls Church, VA: Delphic Associates, Inc.
- —1995. After the USSR: Ethnicity, Nationalism, and Politics in the Commonwealth of Independent States. Madison: The University of Wisconsin Press.
- Krivonogov, V.P. 1999. Sovremennye Etnokul'turnye Protsessy u Nganasan. [Contemporary Ethnocultural Processes Among the Nganasan]. *Etnogra-ficheskoe Obozrenie* 1: 67–79.
- MacArthur Robert H., and Eric R. Pianka 1966. On the Optimal Use of a Patchy Environment. *American Naturalist* 100: 603–9.
- McCay, Bonnie J., and Svein Jentoft 1998. Market or Community Failure? Critical Perspectives on Common Property Research. *Human Organization* 57(1): 21–9.
- Novikova, Natalia I. 1994. Khanty i Mansy: Dva Puty Razvitiia [Khanty and Mansy: Two Roads of Development?]. In *Narody Severa i Sibiri v Usloviiakh Ekonomicheskikh Reform i Demokraticheskikh Preobrazovanii* [Peoples of the North and Siberia Under Conditions of Economic Reform and Democratic Transformation], Z.P. Sokolova (ed.), 113–28. Moscow: Institute of Ethnology and Anthropology im. N.N. Mikliukho-Maklaia, Russian Academy of Sciences.
- —1995. Okhotniki i Neftianiki: Vozmozhnost' Dogovora [Hunters and Oil Workers: The Opportunity of an Agreement]. In Sotsial'no-Ekonomiches-koye i Kul'turnoye Razvitiye Narodov Severa i Sibiri: Traditsii i Sovremennost' [Social-Economic and Cultural Development of the Peoples of the North and Siberia: Tradition and Contemporaneity], Z.P. Sokolova (ed.), 43–63. Moscow: Institute of Ethnology and Anthropology im. N.N. Mikliukho-Maklaia, Russian Academy of Sciences.

- Peterson, Nicolas 1993. Demand Sharing: Reciprocity and the Pressure for Generosity Among Foragers. *American Anthropologist* 95(4): 860–74.
- Pika, A.I., and V.V. Prokhorov 1988. Bolshiye Problemy Malykh Narodov [Big Problems for Small Peoples]. *Kommunist* 16:76–83.
- —1994. Neotraditsionalism na Rossiiskom Severe [Neotraditionalism in the Russian North]. Moscow: Institute of National Prognosis, Center for Human Demography and Ecology, Russian Academy of Sciences.
- Sangi, Vladimir M. 1991. Konventsiia-26 Assotsiatsii Malochislennykh Narodov Severa Rossii [Convention-26 of the Association of Small-Numbering Peoples of the North of Russia]. *Poliarnaia Pochta* 3(5): 1–4.
- —1992. Deklaratsiia Svobodnogo Razvitiia Narodov Severa [Declaration of Free Development of the Peoples of the North]. *Poliarnaia Pochta* 3(2): 1–4.
- Schindler, Debra 1991. Theory, Policy, and the Narody Severa. *Anthropological Quarterly* 64: 68–79.
- —1992. Russian Hegemony and Indigenous Rights in Chukotka. *Études Inuit Studies* 16: 51–74.
- —1997. Redefining Tradition and Renegotiating Ethnicity in Native Russia. *Arctic Anthropology* 34: 194–211.
- Smith, Eric A. 1991. *Inujjuamiut Foraging Strategies: Evolutionary Ecology of an Arctic Hunting Economy.* New York: Aldine de Gruyter.
- Sokolova, Zoia P. 1990. Perestroika i Sud'by Malochislennykh Narodov Severa [Perestroika and the Fate of the Small-Numbering Peoples of the North]. *Istoriia SSSR* 1: 155–66.
- Woodburn, James 1982. Egalitarian Societies. Man (n.s.) 17: 431-51.
- Yeltsin, B.N. 1992. Ukaz Prezidenta Rossiiskoi Federatsii o Neotlozhnykh Merakh po Zashchite Mest Prozhivaniia i Khoziaistvennoi Deiatel'nosti Malochislennykh Narodov Severa, No. 397 [Decree of the President of the Russian Federation About Immediate Measures for Protection of Places of Residence and Economic Activities of the Small-Numbering Peoples of the North, No. 397]. *Rossiiskie Vesti*, April, No. 4 (50): 4.
- Ziker, John P. 2001. Land Use and Social Change among the Dolgan and Nganasan of Northern Siberia. In *Parks, Property, and Power: Managing Hunting Practice and Identity within State Policy Regimes.* Senri Ethnological Studies No. 59, D.G. Anderson and K. Ikeya (eds.), 47–65. Osaka: National Museum of Ethnology.

—1999. Survival Economy and Core-Periphery Dynamics in the Taimyr Autonomous Region, Russia. *Anthropology of Eastern Europe Review* 17(2): 59–65.

- —1998a. Kinship and Exchange Among the Dolgan and Nganasan of Northern Siberia. In *Research in Economic Anthropology*, Volume 19. B. Isaac (ed.), 191–238. Greenwich, Conn.: JAI Press.
- —1998b. Land Tenure and Economic Collapse in Northern Siberia. *Arctic Research in the U.S.* 12: 73–80. Arlington, VA: National Science Foundation. Interagency Arctic Research Policy Committee.
- —n.d. The Socio-Demography of a Native Siberian Community: Alcohol and Violent Death in Post-Soviet Russia, unpublished manuscript.
- Ziker, John P., and Ivan Shmetterling 1997. Robinzony i Pyatnisty, Odnako [Robinsons and Fridays, You Don't Say]. *Ekspert* 48: 82–5.