

# Hunting and Management of Beluga Whales (*Delphinapterus leucas*) in Greenland: Changing Strategies to Cope with New National and Local Interests

FRANK SEJERSEN<sup>1</sup>

(Received 29 February 2000; accepted in revised form 21 March 2001)

**ABSTRACT.** Modernization, as well as the rapid socioeconomic and political changes that have taken place in Greenland in the 20th century, have altered the interests and concerns of Greenland's hunters. For example, these changes can be observed in the way hunters divide a catch of beluga whales. This article focuses specifically on how beluga hunters have negotiated new ways of dividing the catch in order to respond to new needs and demands. Today, Greenland is a heterogeneous society with a number of different socioeconomic groups: a situation that has intensified conflicts and strategies based on social compartmentalization. The chosen strategies lead us to question the emphasis that social scientists usually place on community integration. Apart from considering local problems, hunters must also relate to a number of elaborate Home Rule regulations that influence their rights and control their activity. The Home Rule government has strengthened the regulations because biologists and international/regional management commissions have concluded that the stock of beluga whales is substantially depleted. The regional management commission, NAMMCO, thus warns that the present harvests are several times the sustainable yield, and, if continued, will likely lead to stock extinction within 20 years. This new concern has made it even more necessary to redefine the rules for catch division and make them locally flexible. The Home Rule regulations are discussed and compared to local ways of dealing with new concerns and interests.

**Key words:** beluga whaling, division rules, Greenland, hunting rights, management, social change

**RÉSUMÉ.** La modernisation, tout comme les changements brusques qui ont eu lieu au Groenland au cours du XX<sup>e</sup> siècle aux niveaux socio-économique et politique, ont modifié les intérêts et les préoccupations des chasseurs groenlandais. On peut ainsi observer ces changements dans la façon dont les chasseurs partagent une prise de béluga. Cet article se penche en particulier sur la façon dont les chasseurs de bélugas ont négocié de nouveaux modes de partage des prises afin de répondre aux demandes et aux besoins actuels. Aujourd'hui, le Groenland est une société hétérogène formée de plusieurs groupes socio-économiques différents, situation qui a intensifié les conflits et les stratégies fondés sur la compartimentation sociale. Les stratégies choisies nous amènent à remettre en question l'insistance généralement placée par les spécialistes des sciences sociales sur l'intégration au sein de la collectivité. En plus de tenir compte des problèmes locaux, les chasseurs doivent composer avec plusieurs règlements complexes de la Loi d'autonomie du Groenland, qui influencent leurs droits et contrôlent leur activité. Le gouvernement autonome a renforcé les règlements après que les biologistes et les commissions de gestion internationale et régionale ont conclu que le stock de bélugas connaît un important déclin. La commission de gestion régionale, NAMMCO, prédit ainsi que les prélèvements actuels représentent plusieurs fois un rendement équilibré et que, s'ils se poursuivent, ils mèneront probablement à l'extinction des stocks d'ici vingt ans. Ce nouveau sujet de préoccupation rend encore plus nécessaires une redéfinition des règles pour le partage des prises et leur assouplissement au niveau local. On discute les règlements du gouvernement autonome et on les compare à la façon dont les communautés abordent leurs intérêts et préoccupations actuels.

**Mots clés:** pêche au béluga, règles de partage, Groenland, droits de chasse, gestion, changement social

Traduit pour la revue *Arctic* par Nésida Loyer.

## INTRODUCTION

The complexity and development of Arctic hunting, as well as its social, cultural, and economic significance, have always intrigued social scientists. To understand hunting in the Arctic, researchers have employed a variety of theoretical and methodological perspectives. Some researchers use comprehensive, formalized descriptions and analyses of hunting technology, practices, ecology, social life, and worldview to build a functional perspective from

which to understand the hunting complex. Others use more diachronic and critical approaches, focusing on the rapid changes taking place and the role of internal and external forces in this process. While the functional perspective focuses on the interconnection and integration of social, cultural, and ecological elements, the latter approach studies the changes taking place during the transformation from traditional to modern forms of organization. Theoretical differences apart, all researchers put great emphasis on community unity and integration. Some of the sociocultural

<sup>1</sup> Department of Eskimology, University of Copenhagen, Strandgade 100H, 1401 Copenhagen K, Denmark; sejersen@hum.ku.dk  
© The Arctic Institute of North America

elements scientists have outlined as central to the integration of Arctic community life are sharing practices, cooperative hunting activities, rules of adoption, name-sharing, marriage, feelings of community belonging, common user rights, and intimate knowledge of the social and physical landscape. Even in the cases where the studies of rapid cultural changes in Arctic communities focus on the disintegrative forces of, for example, new technology, trade, missionary activity, and colonization, researchers often conclude that certain traditional elements that secure integration are still present.

This article questions the emphasis normally put on integrative forces and the strategies of community members to sustain community integration. An analysis of beluga whaling in Greenland, with a primary focus on the town of Sisimiut, surprisingly indicates that both hunters and managers have been encouraging processes that are aimed at further community heterogeneity and exclusion of users. Management regulations, as well as local practices, reflect an increasing compartmentalization of social groups—a process that may be understood as disintegrative, since more and more hunters are restricted in their hunting possibilities. These processes, however, are negotiated and politicized continuously. Paradoxically, they may be understood as an integrated part of community life today and an active way to deal with new concerns and priorities. The central point is that community demarcation has changed and become increasingly contestable. Processes of community compartmentalization may be seen as complementary to processes of integration, in the sense that they offer ways to deal constructively with internal (local) and external (national and international) factors that influence community life. Internally, specific user groups are arguing for economic and cultural gains at the expense of the other user groups. Externally, political pressure is put on hunters and managers to decrease the hunt because of alarming stock estimations. The local and the national intersect, since bureaucratic solutions at times set an agenda for local strategies (e.g., they define different categories of hunters). At the same time, local perceptions of community needs and structure may stimulate certain bureaucratic structures. All in all, beluga whales and access rights have become limited goods. The article discusses how different groups in Greenland have related to new concerns and interests.

Greenlandic communities experienced rapid and thorough cultural changes during the 20th century. The beluga whale hunting complex is one sphere where such changes can be traced and examined. Additionally, an analysis of the complex may reveal how people relate to and bring about change. Hunting of beluga whales is an activity of great sociocultural and economic significance in present-day Greenland (Dahl, 1989, 2000; Sejersen, 1998). During present-day whaling and catch division, hunters have to relate to the presence of a variety of socioeconomic groups, an increasing hunting pressure on beluga whales, and the need to secure a market for the catch. Hunters have reacted

to these pressures by introducing changes to the structure of the hunt and practices such as the allocation of rights and the division of the catch. These changes are taking place continuously, and they are accompanied by social tension. For some of the Greenlandic hunters, these changes include a redefinition of who belongs to the hunter category. These processes are different from community to community, depending upon demography and economy, among other things. The town of Sisimiut constitutes the primary point of analysis. In Sisimiut, which is the second-largest town in Greenland, the conflicts are ever present as *internal* conflicts within the diversified group of hunters. Processes taking place in Sisimiut are compared to those taking place in smaller communities, where the hunters face internal occupational conflicts to a much smaller degree, but have greater *external* pressure from the new national management regime and the socioeconomic heterogeneity of Greenlandic society in general. Additionally, this article will compare communities in Greenland to communities elsewhere in the Arctic, to clarify the differences between their internal and external conflicts and illustrate their handling of recent conflicts between cooperative and individualized ways of hunting.

The beluga whaling complex in Sisimiut was studied during five fieldwork periods from 1995 to 2000. In the course of these five years, the beluga whaling complex underwent major changes due to local economic concerns and national management obligations. The hunters interviewed were chosen from a number of different sectors, taking into account economic dependence on hunting, vessel size, and rights allocated by the Home Rule government. Interviews centered on actual whaling activities and the importance of hunting to each hunter, as he defined it. Other focal points were the hunters' understanding of and experiences with division rules, their reflections on present and future regulations, and the need for changes. Every time rumour spread about a successful beluga hunt, all or some of the participants were interviewed about the hunt, the number of hunters who participated, and how the division took place. In addition, the social organization of whaling was studied during hunting trips. Continual discussion of the initiatives and regulations with Home Rule managers and biologists during the five-year period added valuable perspectives to the analyses of written material such as reports, regulations, and political papers.

Sisimiut, with its large population and diverse user groups, represents a location where social change is intense and continually contested. Its wide resource base and elaborated meat market, which constitute a basis for turning hunting into a financially rewarding enterprise, further intensify the conflicts between different categories of users. On a daily basis, hunters are preoccupied with the state of resources and the market. In both the hunting sphere and the market sphere, competition is present to a high degree, and most hunters are constantly looking for ways to develop their market possibilities and increase their income. Since the 1950s, Sisimiut has been one of the

central towns in Greenland, as it was one of five core towns chosen for intensive development. The development of the fishing industry in this region, which has open water year-round, triggered a development burst that attracted families from smaller settlements and other regions. Today, Sisimiut is a town that explicitly underlines its eager interest in progress and development (Olsen, 1998; Thuesen, 1999). In a newspaper advertisement (Sisimiut Kommune, 1998), Sisimiut municipality proudly announced that the economic growth rate of 10% in the 1990s has been used to speed up development. According to a recent study (Løgstrup, 1999), public institutions make up 54% of the income generated in town, followed by construction work (15%), retail trade (10%), fishing/hunting (9%), business services (6%), production (5%), and tourism (1%). At the end of 1998, a new airport was opened. Previously, the only way to get to Sisimiut was by boat, by helicopter, or over land (hiking, dog-sledge, or skidoo). The airport is expected to foster new dynamics in the town—for example, to bring in more tourists as well as trawler crewmembers, according to the most optimistic.

Beluga hunters come from all groups within the diverse socioeconomic landscape found in Sisimiut. Out of the 5127 inhabitants in Sisimiut (Grønlands Statistik, 2000:427), there are 210 occupational hunters and 1079 non-occupational hunters registered (in the year 2000). Of the 210 occupational hunters, about 50 make a living primarily from hunting all year round, according to the local association of hunters. The remaining 160 persons have fishing as their primary occupation, but they still qualify to apply for an occupational hunting licence because they receive more than 50% of their income from hunting and fishing. Hunters who do not qualify for an occupational hunting licence can hold a non-occupational hunting licence, available to anyone who is in the national register. Holders of valid hunting licences are considered hunters and are allowed by the Home Rule government to pursue beluga whaling. Thus, stock owners, sport hunters, and politicians in expensive motorboats hunt side by side with hunters in small skiffs and fishermen onboard cutters and trawlers. All participants are eager to get as much *mattak* (skin and attached blubber) and meat as possible because of their high cultural value. For the occupational hunters in small skiffs and on cutters, the economic incentives are important too.

#### HUNTING OF BELUGA WHALES

The size of beluga whales (*Delphinapterus leucas*), as well as their migration pattern close to the Greenlandic west coast, makes them valued prey. Adult whales have an average length of 4–6 m and an average weight of 400–1300 kg (Watson, 1981:166). Depending upon ice conditions, West Greenlandic hunters encounter beluga whales from February (Sisimiut) to June, when the whales migrate north towards their summer location in the Canadian High

Arctic. (Belugas are occasionally taken in Avanersuaq municipality in July–August.) Later in the fall (September through November), the whales migrate south again along Greenland's west coast. During this fall migration, large numbers are usually taken in Upernavik municipality (Kapel, 1977; Heide-Jørgensen et al., 1993).

Biologist Mads Peter Heide-Jørgensen (1994:148) argues that the migration pattern makes the beluga whale population especially vulnerable to overexploitation because of the whales' coastal habits. "During the autumn they move south along the west coast of Greenland, passing near a number of settlements with intensive white whale hunting and where especially females are taken in large numbers. These coastal areas may act as 'bottle-necks' for the whale population."

Beluga whales are pursued in different ways, from both small and large vessels: with nets set out from the coast (especially in Upernavik municipality); directly from the ice edge (especially in Uummannaq, Upernavik, and Avanersuaq municipalities); by encirclement hunting (collective drive hunting) close to the shore (in the Vaigat Channel and Upernavik municipality, in particular); and in the open sea (especially in Sisimiut and Kangaatsiaq municipalities). During the hunting season, Sisimiut hunters sail to locations at sea close to the ice or near the banks and keep a lookout for whales. When whales are spotted, the hunters pursue them in the open sea while shooting. If a flock of whales splits up, the hunters split up as well in order to pursue the wounded whales. The whales are harpooned as soon as possible to prevent them from sinking. The catch is transported to the ice or brought onboard a bigger vessel to be divided.

There is no reliable information on the historical harvest level in Greenland. Even the present catch reporting system is subject to uncertainty. However, revised catch statistics for the period 1862 to 1999 have been produced on the basis of official catch statistics, trade in *mattak*, sampling of jaws, and reports from locals and other observers (Heide-Jørgensen and Rosing-Asvid, 2000). According to these revised statistics, the total annual landing in the period 1981–98 was approximately 689 whales (see Table 1).

Visual aerial surveys of the important wintering area between Sisimiut and Disko Island, which have been conducted since 1981, indicate trends in abundance. The latest survey resulted in an estimated total abundance of 7941 (95% CI = 4264–14789) beluga whales wintering off the West Greenlandic coast in 1998–99 (NAMMCO, 2000a:114). The index count from the surveys conducted from 1982 to 1999 indicates a decline in abundance of more than 60% during that period (NAMMCO, 2000a:111). The scientific committee of NAMMCO concludes that "the stock is substantially depleted and that present harvests are several times the sustainable yield, and, if continued, will likely lead to stock extinction within 20 years... It is apparent that harvest must be reduced to about 100 animals per year to have any significant chance of stopping the decline of the stock within the next 10 years"

TABLE 1. Revised catch statistics for beluga whales in Sisimiut and West Greenland 1981–98 (adopted from Heide-Jørgensen and Rosing-Asvid, 2000).

Year	Sisimiut	Total in West Greenland
1981	62	1017
1982	95	894
1983	99	601
1984	25	763
1985	25	611
1986		695
1987		696
1988		275
1989		499
1990		1063
1991		550
1992		687
1993	80	798
1994	105	618
1995	116	780
1996	131	542
1997	101	576
1998	125	744

(NAMMCO, 2000b:15–16). NAMMCO (2000b:16) estimated the 1998 and 1999 harvests to reach 700 a year; in 1998 the catch actually reached 744 (Heide-Jørgensen and Rosing-Asvid, 2000). These large annual harvests, combined with the alarming scientific population estimates, have also caused the Greenlandic/Canadian Joint Commission on the Conservation and Management of Narwhal and Beluga (JCCMNB) to define the Greenlandic hunt as non-sustainable, and the Joint Commission has urged the Home Rule government to intervene immediately. The Home Rule government started to implement the first management regime for beluga whaling in 1992, with the purpose of reducing the harvest significantly. On the local level, the scientific reports, recommendations from NAMMCO and JCCMNB, and the Home Rule management initiatives all add to an already complex setting, intensifying the process of compartmentalization and heterogeneity. The local responses to these reports and initiatives are multiple, ranging from mistrust to sincere concern. However, most local hunters have turned the external pressure to reduce the harvest into a debate about local access rights and division rules, trying in this way to keep the matter under local control. This a central point, which adds to the understanding of local and national relations of control with regard to management. The preoccupation with national and local control primarily stems from the high cultural and economic significance of beluga whales.

#### THE VALUE OF BELUGA WHALES

After a successful beluga whale hunt, a hunter's household has large amounts of meat and mattak, which are generously shared with other households of family and friends. The mattak of beluga whales is considered a Greenlandic delicacy and is in great demand. It is served as

a snack or as part of a larger meal. During special celebrations like christenings, confirmations, weddings, and birthdays, a variety of Greenlandic products and dishes are served to the guests. Mattak is probably one of the most popular and sought-after food items. Serving mattak and other foods stemming from Greenlandic resources is understood as hospitality *par excellence*, as it links hosts and guests to a common cultural frame of reference. "Some of these foods can be difficult to procure, which adds to the festive mood and marks the occasion as a particular Greenlandic one" (Kleivan, 1996:154; see also Petersen, 1985; Roepstorff, 1997). Greenlandic foods are strong symbols of Greenlandic identity and are used to celebrate the good life (Sejersen, 1998).

The demand for mattak makes beluga whaling an important activity, economically speaking. Unlike Canada, Greenland has a large and extremely elaborated market for country foods. During 1990, which was a very productive year, West Greenlandic hunters produced 155 216 kg of meat and mattak for further processing and distribution, with a total value of DKr 6 131 976. The meat came primarily from beluga whales, but also from narwhals (Direktoratet for Fiskeri, Fangst og Landbrug, 1994:61). From Saqqaq, a small community located in the Disko Bay area, Dahl (1989:30) makes the following observations on the economic importance of beluga whaling:

The economic position of beluga whale hunting and its role as a manipulative factor [are] easily understood when its commercial value (potential or real) is compared with [that of] other hunting products. In 1980–81 the estimated value of mattak alone—if sold—equalled the commercial value of all traded fishing products (including capelin) plus sealskins, i.e. of all other *de facto* hunting and fishing products traded to the Royal Greenland Trade Department [called the Greenland Trade from 1986].

Since the late 1980s, halibut fishing has taken over as the primary economic activity in Saqqaq, but in some years beluga whaling is very rewarding. This was the case in February 1990, when an ice entrapment of whales (*sassat*) resulted in a harvest that made up 75% of the total traded products for the first two months of that year (Dahl, 2000:107).

Apart from trade to external buyers like the Greenland Trade, the mattak and meat are sold at the local meat market or to institutions in order to produce cash. The amount of meat and mattak sold at the market varies. For some households, this income creates an economic surplus that can be a safety net in periods of lower hunting success and can be used to improve the living conditions and means of production of the household. According to their own statements, many hunters can afford to buy a new rifle or a new outboard motor after the beluga whaling season, as a beluga whale can bring in from 10 000 to 25 000 Dkr (\$1700–\$4300 Canadian), depending on size and

purchaser. Beluga whaling may thus be categorized as a *strategic* activity, in contrast to seal hunting, which represents a *recurrent* activity. Both types of activities are important to sustain the household. The recurrent activities support the household on a daily basis throughout most of the year, while the strategic activities create economic elbow room within a relatively short period. The space of economic freedom creates multiple possibilities that are important in sustaining the social and economic life of the household. Although beluga whaling is a strategic activity, it is also a *venture* activity (Wenzel, 1991:83) in the sense that its success is highly uncertain. In many cases, hunters return empty-handed after a day or a week searching for whales, and the expected economic elbow room has been turned into expenditure. The monetary importance of living resources and the elaborated market for country foods make Greenland stand out compared to Canada and Alaska, where the selling of country foods is limited. Actually, the market orientation of many hunters has produced mixed responses from community members, as they experience a decrease in the amount of meat and mattak being shared freely (Møller and Dybbroe, 1981:139; Nuttall, 1991:220). Hunters are caught in a moral dilemma (the trader's dilemma) between sociocultural norms and economic requirements. Market-oriented hunters are accused by other community members of disrupting the cooperation and maintenance of the community and of eroding the traditional moral code of the hunting complex, which has sharing as one of the main pillars.

Greenlandic hunters are certainly interested in finding good market possibilities and prices in order to sustain their households and maintain equipment. Since most beluga whaling is cooperative in character, the division of the catch among participants is of paramount importance for hunters who engage in market activities and who depend economically on the sale of mattak and meat. The rule of division, in fact, becomes as important as the actual hunt. At the flensing scene, when participants negotiate how to divide the catch, expectations are therefore high. The amount of beluga whale meat and mattak a hunter can bring home is dependent upon the rules of division. An examination of these rules in a historical perspective reveals that they have changed tremendously since the beginning of the 20th century. At the local level, the social organization of the hunt, the subsequent compulsory catch division (*agguaneq*), and further dispositions at the market are probably the most debated issues associated with beluga whaling, apart from animal presence and the voluntary sharing of meat gifts (*pajuppoq*) from the hunters' "private" meat (for a discussion of division and sharing, see Dahl, 2000:174–190; Petersen, 1970:85–91).

#### RULES OF DIVISION IN HISTORICAL PERSPECTIVE

A variety of ethnographic records from different parts of Greenland describe how hunters divided beluga whales

when they were caught from kayaks (Bendixen, 1921a–e; Holm and Petersen, 1921; Birket-Smith, 1924; Thalbitzer, 1941; Petersen, 1970, 1972; Hertz, 1977; Buijs, 1993; Nuttall, 1991; Robbe, 1994; Dahl, 2000). The kayak hunter who threw the first harpoon was considered the principal hunter. The second hunter to throw a harpoon was perceived to be a helper. There could be up to six helpers. A beluga whale was divided according to a system based on the hunter's role in the hunt, where role was determined primarily on the basis of when the hunter harpooned or touched the whale. Despite local differences in the size and quality of the shares allocated to hunters, the local rules for catch division were quite similar throughout Greenland. Regional differences apart, the system of division (*ningerpoq*), which was applied primarily to larger animals, was known elsewhere in the Arctic (Damas, 1972; Wenzel, 1995). If a hunter succeeded in killing a whale single-handed, other hunters would claim to be helpers just by touching the whale. The catch was therefore not the exclusive property of the hunter who killed it. Others had the right to claim a share, except when the catch was within the settlement area or already loaded on a sledge (Petersen, 1970).

This rule of division based on each hunter's role in the hunt started to be questioned when new concerns and interests emerged. One of the principal changes was the emergence of whaling participants in wooden boats (Rask, 1993), skiffs, cutters and trawlers, who demanded larger shares. Hertz (1977) describes a transformation phase in the small community of Ikerasaarssuk, north of Sisimiut in Kangaatsiaq municipality, where kayaks and small boats occasionally hunted together. Here, the hunter who harpooned the beluga whale would get one flipper, and the person who killed it, the other. After they had received the flippers as a token of their role in the hunt, the beluga whale was flensed and the meat and mattak were placed in a number of piles equivalent to the number of hunters *or* the number of boats. Thus the rule of division would alter from time to time, according to the persons negotiating the division rules.

Hunters started to consider participation in the hunt as more important than role: a division practice termed *agguaneq*. Dahl (2000:79–80) mentions an incident in Saqqaq, where an old hunter took part in an encirclement hunt in the shallow water of a bay:

As usual great confusion seemed to arise when a whale came up and more than twenty guns were shot at the same time. In the tumult, the reactive response of the old hunter was far too slow, and before he had aimed at the game the wounded beluga had dived again. Furthermore, in the tumult that now arose, the old hunter came in the sight line of the other boats amid shouts for him to get out of the way.

Despite his questionable contribution to the hunt, the old hunter received a full share simply because he participated.

The “boat-egalitarian” principle of “one boat–one share,” and thus the focus on participation, became the predominant way of dividing the catch as more hunters started to participate and claim shares. Hertz (1977) mentions that the focus on participation (only flippers were divided according to role) was maintained even if one of the hunters was in a kayak and the others in small wooden boats. The traditional rules were negotiated and changed to include the increasing number of participants and the diversity of vessels. It was not, however, a painless process.

The flensing scene became a battlefield of interests and constant negotiation between hunters. First of all, the hunters had to decide who could be defined as participants: i.e., did all hunters pursue the whale(s), or did some turn up after the hunt? When this complex problem had been settled, the division principle had to be decided upon. If participants on board a bigger boat killed a beluga whale together with a participant in a skiff, the latter could claim half the whale according to the “boat-egalitarian” principle. However, the participants could decide to divide the whale according to the number of participants. This “participant-egalitarian” principle of division would favour the bigger boats, while the former rule favoured participants in skiffs. Hertz (1995:139) mentions another rule of division from Ummannaq municipality, where the “participant-egalitarian” principle was elaborated to take the capital investment of boat owners into consideration. Here, participants using wooden boats and cutters would receive an additional share for the boat when the catch was divided according to the number of hunters who participated. This elaboration served the bigger boats and their capital investments to a further extent. Increasingly, capital investment became an argument to legitimize changes in division rules.

At the flensing scene, participants have to discuss which rule to apply and thus decide upon which socioeconomic group to favour. The actual pile given to each hunter is determined by drawing lots, as described in length by Dahl (1985, 2000). This practice is also used when dividing a minke whale caught by hunters collectively (Sejersen, 1998).

The cooperative nature of beluga whaling in Greenland and the emphasis on shares to all participants stand in contrast to the way in which the Kaniġmiut of Kotzebue Sound, Alaska, have altered beluga whaling and catch division, as recently described by Morseth (1997). Eschscholtz Bay in Kotzebue Sound, especially around Elephant Point, is considered the major harvest area for beluga in Alaska. Not only Kaniġmiut, but also people from far away come there to join the hunt (Feldman, 1986). The surroundings and the technology are quite similar to the Greenlandic context, but the Kaniġmiut have chosen to organize the hunt quite differently. Traditionally, the Kaniġmiut pursued beluga whaling as a cooperative hunt. Hunters in kayaks encircled the whales and drove them toward shore, where, entrapped in shallow water, they were easier to kill. Each hunter was entitled to keep the whales he had killed (Feldman, 1986; Lucier and VanStone, 1995; Morseth, 1997). A similar rule found in

the Mackenzie Delta is described by Nuligak (1966:15–17). Owner marks on harpoons indicated a cooperative hunt with individual acquisition rights. Morseth argues that hunters using faster boats and high-powered rifles have undermined this cooperative organization of the hunt. These hunters have started to pursue whales in the open sea, and they do it individually. Cooperation during the first phase of the hunt is no longer necessary for these hunters to be successful. Hunters with slower boats, who base their hunting success on cooperative hunting in shallow water, have seen their access possibilities erode, as the whales are now hunted at sea. The hunt has become much more individualized. As a result, a few hunters (those with the best technology) succeed at the expense of everyone else. “We used to be of one mind,” a hunter complains (quoted in Morseth, 1997:248). Another elder criticizes the mentality of the younger hunters with their fast-going boats: “They just try to get them on their own; they don’t give people who aren’t as strong a chance to catch them. If they rounded them up into the shallow water, even the old and not so strong [hunters] would have a chance. We end up getting shares from someone else” (Morseth, 1997:248). Conflicts and confrontations have increased since the 1970s, because hunters who formerly hunted at Sisualik have come to Eschscholtz Bay and introduced a highly competitive hunting practice. Several crews pursue the same whale, which then goes to the crew that is able to shoot it first (Feldman, 1986:168). Cooperative hunting, common access, and individual property rights have been turned into individual hunting, limited access, and individual property rights. The reason for this change, as Morseth correctly notes, is not associated solely with the introduction of bigger, faster boats and technology, as the social organization is not inherent in the technology. In Greenland, where the technology is very similar, a cooperative hunt is maintained in addition to inclusive division rules.

In Nuussuaq, Upernavik municipality in Greenland, eskimologist Bo Albrechtsen (2001) has observed an individualization of the hunt since 1997. Only hunters who have fired at a specific whale can now claim a share. Participation in the collective hunt is no longer enough: participation has been redefined and closely linked to shooting at and hitting a specific whale. Unlucky and unskilful hunters or hunters with inadequate technology have lost their role in the hunt and do not receive shares anymore. Albrechtsen mentions that not all hunters find this morally right. In one instance, a young hunter managed to kill a whale alone while he was out hunting together with other skiffs. According to the new rules, he could keep the whole whale to himself, but he did not feel good about it. He looked for advice to his mother, who suggested that he use the old division rules, which he did. In a sense, this kind of individualization is a redefinition of participation that makes it correspond more to the role-oriented division rules previously known. The Home Rule government made encirclement hunting illegal in 1995 in

order to limit the harvest, and this regulation, according to Albrechtsen, has eroded the collective organization of beluga whaling to a large extent.

A study of Inuit knowledge about the southern Baffin beluga (Kilabuk, 1998) indicates that the organization of the hunt has changed as in Greenland and become less cooperative. Some hunters raise worries about the sense of rush and urgency of today's hunts, which have resulted in ineffective and dangerous hunting practices. They blame the quota system and the increasing number of hunters: "Today the elders feel that to restore some order in the hunting of Beluga whales, traditional laws and practices need to be applied and adhered to more strictly" (Kilabuk, 1998:55).

In Sisimiut, hunters still uphold the collective aspect of beluga whaling, and all participants get a share. The question is, however, how big a share each participant should receive. For a long time there has been a conflict between the "boat-egalitarian" and the "participant-egalitarian" rules of division. The boat-egalitarian principle that has been upheld for a long period is certainly to the advantage of the participants using skiffs, and it may indicate the dominant position of this group and their ability to retain social control. But the increasing numbers of participants using bigger vessels question this position. They want to introduce a rule of division that favours participants on bigger boats (and their capital investment) to a greater extent. Several rules—including participant-egalitarian principles—have been suggested. They have created frustration, confusion, and conflicts at the flensing locations. On one occasion, a trawler even departed with the entire catch, leaving angry participants in skiffs in its wake (a similar incident is mentioned in Hertz, 1977:94–96).

In addition, occupational hunters have increasingly aired feelings of discontent with the rights of non-occupational hunters. The former group finds it unfair that the latter group can claim a full share, as they do not depend upon hunting. Increasing conflicts, endless discussions, and dissatisfaction led persons who hunted daily from skiffs to suggest a new rule of division that would reduce the shares of participants with a non-occupational hunting licence to half the normal size, thus introducing a principle of *socioeconomic priority*. The new rule, introduced in 1994, was received with mixed feelings. On one occasion, participants with non-occupational hunting licences felt so unfairly treated that, according to their own statements, they called the police and asked them to settle the dispute. On another occasion, the argument over division rules turned into a fistfight at the flensing scene.

Participants use several reasons to legitimize their preferred rule of division, including differences in hunting licences, vessel sizes, socioeconomic background, and hunting experience. The conflicts are not solely between participants holding different hunting licences, but are also present between participants holding the same hunting licence. In the latter case, vessel size constitutes the major problem.

In an attempt to end these conflicts, the group of skiff hunters put forward a detailed proposal in 1997. They suggested a new rule of division based on a very complicated combination of known rules, in the hope that it could reflect the wishes and needs of hunters belonging to different socioeconomic groups. One paragraph in this suggestion is based on the old system of *role* in the hunt. It stipulates that the hunter who harpoons a narwhal gets the tusk. There is no role principle associated with division of beluga whales. Two paragraphs deal with the question of *participation* and the exclusion of hunters who enter the hunt too late or do not participate. One has to participate (but not necessarily shoot and hit a whale) in the actual hunt: sighting is not understood as participation. Finally, the proposal introduces a system of division between different categories of participants. The size of the shares to be allotted to participants depends on their *socioeconomic status* as reflected in their belonging to one of three groups of hunters outlined in the proposal: skiff hunters, big-vessel hunters (cutters and trawlers), and non-occupational hunters. The three groups are perceived to have different economic needs invested in whaling, and skiff hunters look upon themselves as the most needy because they do not have a steady income.

In the 1997 proposal, the decisive factor that regulates the actual size of the hunting share to be allotted to each group of hunters is *sighting*.

- a) If a skiff hunter sights the whales, all vessels with occupational hunters are allotted the same amount of meat and mattak (boat-egalitarian principle), and non-occupational hunters get only half of a hunting share.
- b) If a person on board a big vessel sights the whales, skiff hunters can claim only half a hunting share, and non-occupational hunters receive a quarter of a hunting share.
- c) If a non-occupational hunter sights the whales first, he can claim a full hunting share. In this case, all participating boats get a full hunting share, independently of the socioeconomic status of hunters.

Thus, division of a catch of one or more beluga whales (or narwhals) depends on *participation*, *role*, and *status* (based on affiliation to one of the three hunter groups). Sighting, which triggers the division along status lines, does not correspond directly with role, which traditionally linked the hunter and a specific part of the animal (e.g., tusk of narwhal, skin of polar bear, flipper or meat section of seal and beluga whale). Sighting, as it is used in this proposal, determines the overall division of catch portions to all participating vessels. The introduction of sighting as the determining factor in catch division provides a new tool to deal with the diversity of hunters, but also a way to underpin the division.

In practice, however, the new rules were too complicated and did not fall on fertile ground. Instead, hunters today try to avoid unpleasant conflicts by hunting with like-minded hunters. Some trawler skippers, for example, have stopped announcing the sighting of beluga whales

publicly over the VHF radio. Instead, they use cellular phones to contact fellow trawlers and thus avoid the participation of skiff hunters, who claim large shares. Skiff hunters also try to put together a homogeneous group when whaling. By doing this, they can retain social control and a division rule that supports their economic interests.

On some occasions, however, the different groups still find themselves in conflict. In January 2001, an individual non-occupational hunter filed a lawsuit against a group of occupational hunters for dividing the catch according to the new rule of division. The hunter lost the case and has now appealed. Although the new rule is not fully accepted, it is an attempt by some of the occupational hunters to assert active control over important parts of the overall management regime that have not yet been taken over by the Home Rule government. Status quo with regard to division rules has not eroded local control in this sphere; rather, it has intensified conflicts and stimulated in-group organization of the hunt. However, local control and local priorities are challenged by the Home Rule management strategies aimed at significantly reducing the harvest level.

#### HOME RULE ALLOCATION OF HUNTING RIGHTS

A serious management crisis was triggered in the early 1990s, when the newly established Joint Commission on the Conservation and Management of Narwhal and Beluga (JCCMNB) urged Canada and Greenland to implement management regimes that would substantially reduce hunting of beluga whales. "The rate of decline of the stock requires that the effective implementation of such measures should take place on an urgent basis" (JCCMNB, 1993). In Greenland, this was particularly urgent, as there was no regime to regulate beluga whaling with the purpose of conserving and managing the stock.

The Home Rule Department of Fisheries, Hunting and Agriculture followed the recommendations of JCCMNB and took initiatives to create a management regime that could limit the hunt, even though many local hunters perceived the beluga whales to be plentiful. The Department produced a series of new regulations, primarily allocating different access and disposition rights to different groups of hunters. In 1992, the first order to regulate beluga whaling was adopted (Grønlands Hjemmestyre, 1992). It can be described as a minimal order, with no real effects on the level of hunting (see Table 1). The political discussions in the Greenlandic parliament concerning management of beluga whales were very airy in the early 1990s. Politicians were afraid to make a strong stance on the issue because of the importance of beluga whales. However, subsequent orders, implemented in 1993, 1995, and 1996, put a number of restrictions in place to reduce the hunt (Grønlands Hjemmestyre, 1993, 1995, 1996).

This *national* allocation of rights is a process parallel to the changes in division rules at the *local* level. The Home Rule government bases the management regime primarily

on a differentiation of the *user*, *access*, and *disposition* rights allocated to different groups of hunters. User rights define the right one has to use the resource; access rights outline the requirements to get access to the resource and thus one's possibility to practice one's user right; and disposition rights define one's right to dispose of the catch.

The fundamental basis of many Home Rule regulations is a hunting licence system based on two hunter categories: occupational and non-occupational hunters. With respect to beluga whaling, both groups of hunters have maintained their right to participate (equal user rights), although many occupational hunters lobbied intensively to deprive non-occupational hunters of those rights. The sequence of Home Rule orders slowly introduced a division of the occupational hunter group into four sub-groups, each representing a specific socioeconomic group. Each of these sub-groups is allocated different access rights and disposition rights. In this way, the Home Rule orders reflect and actually support an increasing division and compartmentalization of the hunters. The socioeconomic division is done on the basis of vessel sizes. It is thus presumed that when you hunt from a boat of a certain size, you belong to a specific group of hunters. The vessel is the determining category, not the hunter—a fact that has caused problems, as will be shown below.

Hunters using small skiffs and cutters (under 25 Gross Register Tonnage [GRT]) are allocated the right to hunt, consume, and sell beluga whales without restrictions. Hunters using vessels between 25 and 50 GRT are allowed to hunt beluga whales without any restrictions, but only for household consumption. These hunters are consequently restricted in their right to dispose of the catch as they please and are cut off from an economic possibility (limitation of *disposition right*). Hunters on board trawlers between 50 and 79.9 GRT are allowed to take two beluga whales on each trip to supply the vessel. These hunters face quota restrictions (limitation of *access rights*) and are not allowed to consume or share the catch outside the vessel (further limitation of *disposition right*). Finally, hunters are not allowed to go beluga whaling at all if they are on board vessels bigger than 79.9 GRT (deprivation of *access rights*). In real life, licensed hunters often alternate between different sizes of vessels. A skiff hunter may, for example, choose to join as a crewman on a big trawler for a period, or to join a small trawler pursuing beluga whaling. His access and disposition rights with reference to beluga whales change every time he changes vessel. This has caused some confusion. To continue beluga whaling, some trawler skippers would bring a skiff along. When beluga whales were sighted, some of the crewmembers would pursue them in the skiff. According to the Home Rule regulations, they would thus have the best access and disposition rights (they could hunt and sell as much as they please). Clearly this practice does not correspond with the intentions of the Home Rule. Basically, hunters in economic need were to be favoured, and not trawler crewmembers, who receive a salary. Although the

regulations are based on a technical measure (vessel size), their aim is to support certain socioeconomic groups of hunters and reduce beluga whaling at the same time. The Home Rule had to file a new order in 1996 to make it clear that allocating rights to vessels of certain sizes was not a technical issue, but a socioeconomic one. In the 1996 order, the Home Rule explicitly points out that hunters (often crewmembers) on board bigger vessels may not hunt beluga whales from the big vessel itself or from skiffs that they have in tow. However, nothing in the order restricts occupational or non-occupational hunters from beluga whaling; a crewmember on board a trawler can go beluga whaling in his spare time without restrictions if he uses a small vessel. In practice, the regulations limit the access rights of many hunters, not their user rights. Thus the restrictions are not *de jure* limitations of user rights; they are rather *de facto* limitations, because many crewmembers (having an occupational hunting licence) are only able to go beluga whaling from bigger vessels.

The Home Rule is very reluctant to limit Greenlanders' user rights, although a few species (polar bear, minke whale, fin whale, and walrus) are restricted to occupational hunters only, except in Qaanaaq and Ittoqqortoormiit municipalities. Instead, the Home Rule prefers to limit the access rights and disposition rights of different groups of hunters. In adopting these kinds of management tools, the Home Rule regulations to some extent correspond to the wishes of the skiff hunters, who would like to see other occupational hunters restricted in their rights because they are less dependent upon hunting. In Greenland, the process of rights allocation is one that gradually promotes *occupational specialization* and supports the economies and households of small-scale hunters. Non-specialized hunters and fishermen, who hunt to contribute to the household economy during certain periods (e.g., unemployment), are given fewer opportunities than before, because they cannot obtain an occupational hunting licence or because their access and disposition rights have been reduced. This has created problems for some households. A recent change in the issuing of hunting licences also supports this process (Sejersen, 1998). Today, applicants have to prove that they get at least 50% of their annual income from hunting and fishing from vessels under 75 GRT.

The national beluga management regime has produced mixed responses at the local level because local control is lost in the wake of an inclusive national management regime. The following section examines the national regulations with respect to their implications for local control.

#### NATIONAL MANAGEMENT AND COMMUNITY HUNTING TERRITORIES

The new Home Rule regulations, based on a differentiation of socioeconomic groups and licence holders, have introduced a new type of discrimination, according to Dahl (1998). Basically, the regulations are based on the idea that

Greenland is one national community where one law has to apply. The national regulations erode the social control of small communities such as Saqqaq. Dahl (1998, 2000) describes the management of hunting prior to the introduction of Home Rule as based on local social control of a community hunting territory (see also Petersen, 1963, 1965; Brøsted, 1986; Haller, 1986). A person from outside the community was allowed to hunt in the local hunting territory as long as he was defined as a member of the community. One could be defined as such by staying overnight for a few days, so the membership rules were not exclusive. But the right to hunt was closely linked to the social obligation to accept the local customs of hunting methods, division, and sharing. The hunting territory was defined in social terms rather than in geographical terms. By combining rights and obligations, the community was able to enforce social control, maintain the network of social relations, and underpin community continuity. "The heart of the matter is that we deal with a society in which access to the territory is defined by membership in a community, and within this the access is non-exclusive" (Dahl, 1998:68). The establishment of the Greenlandic Home Rule in 1979 has consolidated Nuuk as the administrative and political centre, and the control has been put in the hands of politicians, bureaucrats, and the police force. The Home Rule has taken over and monopolized the allocation of user, access, and disposition rights to citizens in Greenland (Dahl, 1998:74–75), and this change has influenced community territories and community control. Furthermore, Home Rule has based its allocation of rights on the assertion that all inhabitants have equal user rights to the Greenlandic territory and its resources. Greenland has been turned into one hunting territory.

In 1990, the Home Rule parliament decided to employ a number of hunting officers (*jagtbetjente*) to strengthen the monitoring of hunters. Today, the system of hunting officers is being further elaborated. Despite general contentment with the system, the size of Greenland makes the tasks of the few hunting officers immense and nearly impossible to carry out. Employment of hunting officers is an institutionalization of authority and can be seen as a challenge to the local, embedded authority based on local knowledge and personal competence. The transfer of control and allocation of rights and obligations from the local community to the national community is not the heart of the problem, according to Dahl (1998). It is far more problematic that the local control is evaporating and is being replaced by a weak or nonexistent national control system (hunting officers). Conflicts will emerge when there is a vacuum in the social control that encloses hunting.

At the local level, still exemplified by Saqqaq, this process is reflected in the increasing number of big vessels coming from other Greenlandic locations far away. These vessels hunt beluga whales within the community territory, but without respect for local customs. Today, even hunters from Sisimiut travel 350 km in skiffs and cutters to pursue beluga whaling near Saqqaq. The big vessels

operate legitimately within the borders of the national community, but outside the control of the national hunting officers. They often hunt away from the local hunters in order to avoid division conflicts. If they hunt together with local hunters, they seldom respect the local division rules. In practice, they hunt in “no-man’s land” (Dahl, 1998:66). No one can control their hunting methods or the number of beluga whales they hunt, which is significant, exceeding the number hunted by Saqqaq hunters (Dahl, 1998:67). In 1995, the Home Rule decided to *ban* encirclement whaling as practiced by local Saqqaq hunters, but only to *limit* the whaling pursued by trawlers. This process of nation building, which is reflected in the increasing problems of Saqqaq beluga whalers, can be described as a transfer of control of access and disposition from the local and personal level to the national and impersonal level. Hunters from regions where encirclement is not practiced supported the ban. Faced with possible limitations on their own hunt, southern hunters singled out the North Greenlandic encirclement whaling as the major reason why the harvest in Greenland is so high, and thus avoided severe restrictions on their own hunt. Although the ban reduced the harvest for a few years, it is highly questionable whether the harvest will decrease in the long run, as hunters have adopted effective new methods. The major change to be observed is the change from an organized community hunt to an unorganized individual hunt.

The Home Rule regulations, which are nationally comprehensive, thus stand out as discriminating, according to Dahl (1998), because they overrule local customs and local control. Furthermore, the regulations, seen from a Saqqaq point of view, actually favour the outside vessels, because the community’s collective hunting practice was banned by the 1995 regulation. People in Saqqaq face an increasing number of large vessels and skiffs operating in what they perceive as their hunting territory, but these vessels are outside their community control and network. Furthermore, the hunting activities of the big vessels are forcing the whales away from shore and thus away from Saqqaq hunters. Some municipalities have issued local bylaws in order to restrict whaling pursued by non-locals. In Avanersuaq in northern Greenland, the municipality has issued bylaws that order beluga and narwhal hunters to harpoon the whales before they are shot with rifles (Avanersuaq Kommune, 1986)—a practice that non-locals seldom use. In Uummannaq, the municipality has implemented elaborate bylaws for beluga whaling. Rules specifying the sizes of vessels allowed in the hunt and the division of the catch are explicitly noted in order to strengthen local control. Only boats smaller than 30 feet can participate, and they must not be accompanied by bigger vessels. This restriction limits the number of outside vessels without questioning their user rights. In Upernavik, similar bylaws have been implemented. Consequently, bigger vessels tend to hunt farther out to sea. These regulations try to restrict non-local participation and thus have a geographical preference.

While hunters in Saqqaq, Upernavik, Uummannaq, and Avanersuaq are trying to deal with an increasing number of *external* vessels legitimately pursuing beluga whaling in what they perceive as their area, hunters in Sisimiut are trying to deal with the *internal* differentiation and new concerns of the hunter community. In both cases, the demarcation of socioeconomic status groups and distribution of rights and resources are the principal issues. The Home Rule regulations enforce the process of socioeconomic differentiation while disregarding geographical differentiation. The reason may be ascribed to the nation-building strategy pursued by the Home Rule.

Notwithstanding these management initiatives, the existing hunting regulations have not decreased the harvest level, and the Home Rule government has thus been unable to reverse the asserted decline in the beluga whale population.

#### SUMMARY AND CONCLUSION

The transformations in the rules applied to dividing a catch of beluga whales in Greenland indicate new concerns, practices, and interests. The rapid technological, cultural, political, and socioeconomic changes create new contexts that hunters have to live with and actively respond to. Hunters are not only spectators to these changes but are engaged in making changes as well. Negotiation about division rules is an example. When the first hunters started to use small wooden vessels at the beginning of the 20th century, some of these hunters’ interests and priorities changed, and they were able to negotiate/enforce a new rule of division that benefited them at the expense of the kayak hunters. The previous relation between a hunter’s role in the hunt and the actual hunting share was replaced by rules stressing participation as the main principle, thereby indicating a shift from individual to collective acquisition. Since then, equal rights to participate and to claim a share in the catch have been the ideological core of beluga whaling in Greenland. Cooperative hunting and inclusive rules of division have been very important in Greenland despite the introduction of new technology.

The introduction of new technology has triggered changes, but has not determined either the specific organization of the hunt or the division rules. A comparison to other Arctic regions indicates that hunters elsewhere have managed the introduction of new technology differently. In Kotzebue Sound, Alaska, the Kan̄igmiut have abandoned cooperative beluga whaling. The individualized hunt favours hunters using fast boats and high-powered rifles at the expense of other hunters. This individualized hunt in Alaska is different from the collective hunt in Greenland, although changes towards individualization have been observed lately in North Greenland. In Greenland, everyone has the right to participate in beluga whaling, and all participants get a share of the catch independently of their role during the hunt. This is a

widely accepted cultural value in Greenland. The main conflicts at the flensing scene are about how big a share each participant can claim. It depends greatly on which group of hunters the participant is thought to belong to. Participants use vessel size, hunting licence, and socio-economic status when determining group affiliation. Sometimes the division may fall out to the advantage of the group of skiff hunters; at other times, it may favour cutters and trawlers.

The socioeconomic development in Greenland has intensified a diversification of the hunter community, not only in terms of technology but also with regard to socio-economic strategies. The Home Rule of Greenland places no limitations on hunters' user rights and few limitations on their access rights. Consequently, skiff hunters, who depend economically upon small-scale hunting, are seen whaling together with non-occupational hunters, crewmembers on shrimp trawlers, and fishermen on cutters. Locally, hunters try to deal with the diversified hunter community and new economic concerns by suggesting new rules of division, which basically are allocations of disposition rights. The new rules are normally based on a further compartmentalization of the hunter community.

The process of compartmentalization can be observed in the Greenlandic town of Sisimiut, where many different socioeconomic groups are represented. Economically speaking, the hunt carries different importance to each of these groups. At the flensing scenes, tension emerges among the groups. Occupational hunters have started to question whether non-occupational hunters should receive the same amount of meat and *mattak* as occupational hunters. The controversies between occupational and non-occupational hunters are accompanied by controversies between different socioeconomic sectors within the group of occupational hunters. Hunters on board vessels like cutters and trawlers claim bigger shares of the catch because they want to consider the number of crewmembers and the size of the capital investment in the large vessels. However, skiff hunters have argued that occupational hunters on trawlers are not in the same need of beluga whaling as they are. The combination of increasing conflicts and discussions about division rules at the flensing scene made Sisimiut skiff hunters put forward a written proposal that reflected the socioeconomic diversity of the town. It combined three principles: role, participation, and socioeconomic status. It is unique in the sense that it allowed cooperative beluga whaling to continue. It does not limit any of the hunters' user and access rights, but restricts disposition rights depending upon socioeconomic status. The division rule is a further compartmentalization of the hunter community, but simultaneously a means to maintain the integration of the hunter community by not depriving anyone of user and access rights. However, the proposal has not been fully accepted by the strong group of non-occupational hunters, whose shares are cut significantly when this rule is followed. Presently, the rule is

neither applied on all occasions nor accepted by all hunters. This uncertain status is the cause of further conflicts.

The strategy of social compartmentalization and occupational specialization is also pursued by the Home Rule government, which since the early 1990s has tried to decrease the level of harvest significantly, following the advice of biologists and regional/international management commissions. The primary management tool used in beluga whaling regulations is the allocation of different rights to distinct socioeconomic groups. Skiff hunters are given the highest priority, while hunters pursuing whaling from the biggest trawlers are not allowed to hunt anymore. The strategy of social compartmentalization is evident in the last two regulations, which divide occupational hunters, who previously had the same rights, into four socioeconomic groups determined on the basis of vessel size, each group with different rights. The social compartmentalization has much in common with the social process taking place in the town of Sisimiut. This similarity between local and national processes is not always the case. In some cases, the Home Rule government has been discriminatory towards local ways of managing and controlling beluga whaling since its management system is based on a national and unifying agenda. However, the government lacks proper means of national control. This vacuum with respect to social control has made some local communities unable to deal effectively with the increasing numbers of non-local beluga whalers in their hunting territory. In order to reduce the vacuum, national wildlife officers have been employed to control local hunters. However, increasing national control interferes in local ways of combining rights, obligations, and control. At the local level, the process of social compartmentalization and loss of control has been accompanied by conflicts, much negotiation, and social strain. The possibility for hunters to take action and negotiate at the flensing scene may be eroded by the increasing number of Home Rule regulations dividing the hunters into fixed groups, each with its rights and privileges, and by the wildlife officers whose mandate is to inspect local practices. The continual discussion of needs and equality will solidify in the regulations and leave the privileges in the hands of the hunter group enjoying political goodwill.

On the national and local level, processes of compartmentalization have been a disintegrative force on the beluga whaling complex. Specific groups and sub-groups have been limited in what they consider their cultural and economic rights. Paradoxically, perhaps, compartmentalization has also resulted in an integration of each of the groups and sub-groups, as each of them now has to stand united in order to be successful. Additionally, the national allocation of access and disposition rights to different compartments of the hunter community, while upholding the common user right, reinforces the nation-building project of the Home Rule—a project that can be understood as integrative from a political perspective.

## ACKNOWLEDGEMENTS

I want to thank the hunters and fishermen in Sisimiut for their hospitality, encouragement and support of this research project. The initial research was started under a Ph.D. grant given by The Danish Research Council for Humanities and later continued as part of the project entitled "Environmental Knowledge: Cultural Strategies and Development in Greenland and the Circumpolar North," financed by the Danish Research Councils (TUPOLAR). A number of people have helped to sharpen the arguments in this paper, particularly Susanne Dybbroe and Andreas Roepstorff (both from the Department of Ethnography and Social Anthropology, Aarhus University), Jens Dahl (International Work Group for Indigenous Affairs), Birgitte Sonne and Søren Thuesen (both from the Department of Eskimology, University of Copenhagen), Bo Albrechtsen (Upernavik Museum), and Mark Nuttall (Department of Sociology, University of Aberdeen). Furthermore, I am grateful for background information provided by Mario Acquarone (National Environmental Research Institute, Copenhagen), Mads Peter Heide-Jørgensen (Greenland Institute of Natural Resources), and Amalie Jessen (Home Rule Department of Fisheries, Hunting and Agriculture).

## REFERENCES

- ALBRECHTSEN, B. 2001. Hvalerne i Nuussuaq. Delingsprincipper udveksling og social samhörighed blandt fangerbefolkningen i det nordlige Upernavik-distrikt. Thesis, Department of Eskimology, University of Copenhagen.
- AVANERSUUP KOMMUNEA. 1986. Vedtægt for Avannersuup Kommunian om fangst af narhvaler i Hvalsund og Inglefield Bredning. 23. juni.
- BENDIXEN, O. 1921a. Frederikshaab distrikt. Meddelelser om Grønland (Grønland i Tohundredaaret for Hans Egedes Landing) 61(2):297–369.
- . 1921b. Godthaab distrikt. Meddelelser om Grønland (Grønland i Tohundredaaret for Hans Egedes Landing) 61(2):176–269.
- . 1921c. Holsteinborg distrikt. Meddelelser om Grønland (Grønland i Tohundredaaret for Hans Egedes Landing) 61(2): 1–86.
- . 1921d. Julianehaab distrikt. Meddelelser om Grønland (Grønland i Tohundredaaret for Hans Egedes Landing) 61(2):374–536.
- . 1921e. Sukkertoppen distrikt. Meddelelser om Grønland (Grønland i Tohundredaaret for Hans Egedes Landing) 61(2): 95–169.
- BIRKET-SMITH, K. 1924. Ethnography of the Egedesminde District with aspects of the general culture of West Greenland. Meddelelser om Grønland 66.
- BRØSTED, J. 1986. Territorial rights in Greenland: Some preliminary notes. *Arctic Anthropology* 23(1-2):325–338.
- BUIJS, C. 1993. Disappearance of traditional meat-sharing systems among the Tinitekilaamiut of East Greenland and the Arviliguarmiut and Igulingmiut of Canada. In: Buijs, C., ed. *Continuity and discontinuity in Arctic cultures*. Leiden: Centre of Non-Western Studies and National Museum of Ethnology. 108–135.
- DAHL, J. 1989. The integrative and cultural role of hunting and subsistence in Greenland. *Études/Inuit/Studies* 13(1):23–42.
- . 1998. Resource appropriation, territories and social control. In: Dorais, L.J., Nagy, M., and Müller-Wille, L., eds. *Aboriginal environmental knowledge in the North*. Québec: GÉTIC, University of Laval. 61–80.
- . 2000. *Saqqaq: An Inuit hunting community in the modern world*. Toronto: University of Toronto Press.
- DAMAS, D. 1972. Central Eskimo systems of food sharing. *Ethnology* 11(3):220–240.
- DIREKTORATET FOR FISKERI, FANGST OG LANDBRUG. 1994. Redegørelse for fangererhvervet 1994 (No. EM 1994/40 DFFL. Jr.nr. 21.00.010). Nuuk: Direktoratet for Fiskeri, Fangst og Landbrug.
- FELDMAN, K.D. 1986. Subsistence beluga whale hunting in Alaska: A view from Eschscholtz Bay. In: Langdon, S., ed. *Contemporary Alaskan native economies*. Lanham: University Press of America. 153–172.
- GRØNLANDS HJEMMESTYRE. 1992. Hjemmestyrets bekendtgørelse nr. 10 af 19. juni 1992 om fangst af hvid- og narhvaler. Nuuk: Grønlands Hjemmestyre.
- . 1993. Hjemmestyrets bekendtgørelse nr. 21 af 29. juli 1993 om fangst af hvid- og narhvaler. Nuuk: Grønlands Hjemmestyre.
- . 1995. Hjemmestyrets bekendtgørelse nr. 30 af 11. oktober 1995 om fangst af hvid- og narhvaler. Nuuk: Grønlands Hjemmestyre.
- . 1996. Hjemmestyrets bekendtgørelse nr. 6 af 29. februar 1996 om ændring af bekendtgørelse nr. 30 af 11. oktober 1995 om fangst af hvid- og narhvaler. Nuuk: Grønlands Hjemmestyre.
- GRØNLANDS STATISTIK. 2000. Grønland 2000 - Statistisk Årbog. Nuuk: Grønlands Hjemmestyre og Grønlands Statistik.
- HALLER, A.A. 1986. The spatial organization of the marine hunting culture in the Upernavik district, Greenland. Bamberg: University of Bamberg.
- HEIDE-JØRGENSEN, M.P. 1994. Distribution, exploitation and population status of white whales (*Delphinapterus leucas*) and narwhals (*Monodon monoceros*) in West Greenland. Meddelelser om Grønland, Bioscience 39. 135–149.
- HEIDE-JØRGENSEN, M.P., and ROSING-ASVID, A. 2000. Revised catch statistics for belugas in West Greenland 1862 to 1999. NAMMCO SC/8/BN/4.
- HEIDE-JØRGENSEN, M.P., LASSEN, H., TEILMANN, J., and DAVIS, R.A. 1993. An index of the relative abundance of wintering belugas, *Delphinapterus leucas*, and narwhals, *Monodon monoceros*, off West Greenland. *Canadian Journal of Fisheries and Aquatic Sciences* 50(11):2323–2335.
- HERTZ, O. 1977. Ikerasârssuk - en boplads i Vestgrønland. København: Nationalmuseet.
- . 1995. *Økologi og levevilkår i Arktis*. Ummannamiut. København: Christian Ejlers' Forlag og Mellemfolkeligt Samvirke.
- HOLM, G., and PETERSEN, J. 1921. Angmagssalik distrikt. Meddelelser om Grønland (Grønland i Tohundredaaret for Hans Egedes Landing) 61(2):560–661.
- JCCMNB (JOINT COMMISSION ON CONSERVATION AND MANAGEMENT OF NARWHAL AND BELUGA). 1993. Press release, 26. august.

- KAPEL, F.O. 1977. Catch of belugas, narwhals and harbour porpoises in Greenland, 1954-75, by year, month and region. Report of the International Whaling Commission 27, Paper L.27.
- KILABUK, P. 1998. A study of Inuit knowledge of the southern Baffin beluga. Report prepared for the Southeast Baffin Beluga Management Committee. Iqaluit: Nunavut Wildlife Management Board.
- KLEIVAN, I. 1996. An ethnic perspective on Greenlandic food. In: Jacobsen, B., ed. Cultural and social research in Greenland 95/96. Essays in honour of Robert Petersen. Nuuk: Ilisimatusarfik/Atuakkiortik. 146–157.
- LUCIER, C.V., and VANSTONE, J.W. 1995. Traditional beluga drives of the Iñupiat of Kotzebue Sound, Alaska. *Fieldiana* 25.
- LØGSTRUP, L. 1999. Indtjeningsanalyse for Sisimiut 1998. Sisimiut: Sisimiut Kommune og Erhvervssekretariatet.
- MORSETH, M.C. 1997. Twentieth-century changes in beluga whale hunting and butchering by the Kaniġmiut of Buckland, Alaska. *Arctic* 50(3):241–255.
- MØLLER, P.B., and DYBBROE, S. 1981. Fanger/fisker - lånarbejder? En undersøgelse af sammenhængene mellem fangst og lånarbejde i Godhavn, 1976 og 1977. Aarhus: Institut for forhistorisk arkæologi, middelalder-arkæologi, etnografi og socialantropologi.
- NAMMCO (NORTH ATLANTIC MARINE MAMMAL COMMISSION). 2000a. Report of the Scientific Committee Working Group on the Population Status of Narwhal and Beluga in the North Atlantic from the meeting in Oslo, 15–17 June 2000. In: NAMMCO, ed. Scientific Committee – Report of the Eighth Meeting. Akraberg, Faroe Islands, 13–16 June 2000. Tromsø: NAMMCO. 111–127.
- . 2000b. Report of the eighth meeting of the NAMMCO scientific committee. In: NAMMCO, ed. Scientific Committee – Report of the Eighth Meeting. Akraberg, Faroe Islands, 13–16 June 2000. Tromsø: NAMMCO. 2–33.
- NULIGAK. 1966. I, Nuligak. Translated by M. Metayer. Toronto: Peter Martin Associates Limited.
- NUTTALL, M. 1991. Sharing and the ideology of subsistence in a Greenlandic sealing community. *Polar Record* 27(162):217–222.
- OLSEN, S. 1998. Kære messedeltager og messegæst. *Aalisartog*, November 1998, no. 8, 2.
- PETERSEN, R. 1963. Family ownership and right of disposition in Sukkertoppen district, West Greenland. *Folk* 5:269–281.
- . 1965. Some regulating factors in the hunting life of Greenlanders. *Folk* 7:107–124.
- . 1970. Fangst og bosættelse. Studie fra to grønlandske fangersamfund. Unpul. manuscript available at the Polar Library, Strandgade 100 H, Copenhagen K, Denmark.
- . 1972. Acquisition and sharing of the bag in East Greenland. *Inter-Nord* 12:282–286.
- . 1985. The use of certain symbols in connection with Greenlanders identity. In: Brøsted, J., Dahl, J., Gray, A., Gulløv, H.C., Henriksen, G., Jørgensen, J.B., and Kleivan, I., eds. Native power. Bergen: Universitetsforlaget. 294–300.
- RASK, S. 1993. De første erhvervsmotorbåde. Om fangstens betydning for udviklingen i industrifiskeriet. *Grønland* 41(3):100–118.
- ROBBE, P. 1994. Les Inuit d’Ammassalik, chasseurs de l’Arctique. Paris: Éditions du Muséum national d’Histoire naturelle.
- ROEPSTORFF, A. 1997. Den symbolske betydning af kalaalimernit. Inussuk - Arktisk forskningsjournal, no. 1 (Kalaalimernit. Rapport fra seminaret “Den sociokulturelle og sundhedsmæssige betydning af kalaalimernit,” 6–7. May 1997 in Nuuk). 97–105.
- SEJERSEN, F. 1998. Strategies for sustainability and management of people: An analysis of hunting and environmental perceptions in Greenland with a special focus on Sisimiut. Unpublished Ph.D. dissertation, Department of Eskimology, University of Copenhagen.
- SISIMIUT KOMMUNE. 1998. Sisimiut kommune - Sisimiut en driftig by. *Aalisartog*, november 1998, nr. 8, 5.
- THALBITZER, W. 1941. The Ammassalik Eskimo. Contributions to the ethnology of the East Greenland Natives. Social customs and mutual aid. *Meddelelser om Grønland* 21(4):569–741.
- THUESEN, S. 1999. Local identity and history of a Greenlandic town: The making of the town of Sisimiut (Holsteinsborg) from the 18th to the 20th century. *Études/Inuit/Studies* 23(1-2):55–67.
- WATSON, L. 1981. Whales of the world: A complete guide to the world’s living whales, dolphins and porpoises. London: Hutchinson.
- WENZEL, G.W. 1991. Animal rights - human rights. Ecology, economy and ideology in the Canadian Arctic. London: Belhaven Press.
- . 1995. “Ningiqtuq”: Resource sharing and generalized reciprocity in Clyde River, Nunavut. *Arctic Anthropology* 32(2):43–60.