The Anti-politics of TEK: The Institutionalization of Co-management Discourse and Practice

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Abstract: Co-operative resource management holds out the promise of positive social change on two fronts: improved management and the empowerment of local communities. The institutionalization of co-management discourse and practice, however, has unintended political consequences analogous to those identified by recent critics of development discourse. As a result, co-management may actually be preventing rather than fostering the kind of change proponents desire. In this paper, I examine the discourse and practice of co-management and how they constrain the ways people can act—and even think—about wildlife management. I focus on the case of the Ruby Range Sheep Steering Committee, a co-management body established to address concerns about a population of Dall Sheep in the southwest Yukon.

Keywords: co-management, traditional ecological knowledge, bureaucratization, power, development, First Nations, Yukon

Résumé : La gestion coopérative des ressources porte en elle la promesse de transformations sociales positives à deux niveaux: une meilleure gestion et l'habilitation des collectivités locales. Toutefois, l'institutionnalisation du discours et de la pratique de la cogestion comporte des conséquences politiques non désirées, analogues à celles qui ont été identifiées dans des critiques récentes du discours du développement. Ainsi, la cogestion pourrait en fait empêcher plutôt que promouvoir le type de changements souhaités par ses partisans. Dans cet article, j'examine le discours et la pratique de la cogestion et comment ceux-ci orientent la façon dont les gens peuvent agir, voire penser, en ce qui a trait à la gestion de la faune. Je mets l'accent sur le cas du Comité de direction des moutons du Ruby Range, un organisme de cogestion mis sur pied afin de répondre à des préoccupations relatives à une population de moutons Dall dans le sud-ouest du Yukon.

Mots-clés : cogestion, connaissance traditionnelle sur l'environnement, bureaucratisation, pouvoir, développement, Premières Nations, Yukon

Introduction

Over the past 20 years, co-operative management (co-management) has become the accepted—even preferred—approach to wildlife management in the Canadian north.[1] Throughout this period, provincial and territorial governments have worked with First Nations to establish a wide variety of co-management boards and committees throughout the region. Some of these co-management initiatives have been ad hoc responses to specific management problems; but, increasingly, First Nations and governments are establishing permanent co-management bodies through the land claims process. Given the cross-cultural nature of co-management, it is not surprising that anthropologists have been involved with such efforts from the beginning. Whether based at universities, working as consultants, or employed directly by First Nation governments, anthropologists have played an important role in advocating, designing and evaluating processes of wildlife co-management. Despite this involvement, however (and perhaps partially because of it), anthropologists and other scholars studying co-management have generally failed to engage in much critical analysis. Although they have identified numerous problems with the design and implementation of various co-management schemes, few have critically examined the project of co-management itself and the assumptions underlying it. Instead, most have accepted at face value proponents' claims about the potential beneficial effects of co-management and have worked to improve and facilitate co-management processes.[2]

In the standard view advanced by its proponents, co-management has two important potential benefits. First, proponents believe that co-management will lead to an overall improvement in the practice of wildlife management. For one thing, it allows for the integration of "traditional ecological knowledge" (TEK) held by First Nation hunters with the knowledge produced by wildlife biolo-

gists, thus increasing the overall stock of knowledge on which management strategies are based. In addition, decentralized co-management regimes are potentially more responsive to local ecological conditions and more adaptive to highly variable northern ecosystems than are more centralized systems of state management. Secondly, proponents of co-management claim that the use of TEK will empower the aboriginal elders and hunters that hold such knowledge—and, by extension, aboriginal communities more generally (on the potential benefits of co-management, see e.g., Berkes 1994; Freeman 1992; Freeman and Carbyn 1988; Johannes 1989; Johnson 1992).

In this article, I argue that we must not simply accept these claims at face value if we hope to understand co-management as a social phenomenon and gauge its real impact on northern native communities. Accordingly, I question—rather than proceed from—the standard assumptions about co-management. Without denying the sincerity of those who hope for improved management and the empowerment of First Nation people through co-management, we must also acknowledge that the complex process of co-management may have a number of other unforeseen—and unintended—consequences (see Ferguson 1994: 20-21). To get at these unintended effects, I focus on the "institutionalization" of co-management discourse and practice. The need to integrate co-management processes with existing institutional structures of state management has led to a tendency to view co-management as a series of technical problems (primarily associated with the question of how to gather "traditional knowledge" and incorporate it into the management process), rather than as a real *alternative* to the existing structures and practices of state management. This view effectively obscures the political and ethical dimensions of co-management. Indeed, it has engendered and naturalized a discourse that specifically *excludes* political and ethical considerations, which are treated as externalities, if they are considered at all. It also leads almost automatically to the bureaucratization of the people and communities who participate in co-management. Rather than empowering local aboriginal communities, then, co-management may actually be *preventing* the kind of change proponents desire. Indeed, co-management may actually be serving to extend state power into the very communities that it is supposedly empowering.

This paper is based on three years of fieldwork in Burwash Landing, a small village in the southwest Yukon, and especially on my experiences with a specific co-management process there, that of the Ruby Range Sheep Steering Committee (RRSSC). The RRSSC was a multistakeholder body established in 1995 to co-operatively

manage a population of Dall Sheep[3] in the Ruby Range, near Burwash Landing. Kluane First Nation (KFN) and the Yukon Territorial Government established the RRSSC in response to concerns about a decline in the sheep population. I was present at the formation of the RRSSC and attended and participated in all its meetings. The committee was given the explicit mandate to consider both scientific and traditional/local knowledge in formulating its recommendations to the Yukon Fish and Wildlife Management Board (itself a co-management body established under the Yukon land claim with jurisdiction over the entire territory). To this end, the RRSSC heard a great deal of testimony by biologists as well as First Nation elders and hunters, some of whom were themselves members of the committee. As will become apparent, however, the discourse of co-management and the institutional context in which the RRSSC was embedded constrained the ways in which it was possible to talk and even think about Dall sheep and how to go about managing them.

Co-management in the Context of International Development

Scholars have generally attributed the rise of co-management in North America to the growing power and political organization of native people in a context of increasing environmental threat posed by development. The close relationship between co-management and aboriginal land claims in Canada indicates that the growth of First Nation political power has indeed played an important role in the proliferation of co-management regimes throughout the country, but it would be a mistake to see co-management as a purely Canadian, or even northern, phenomenon. The rise of co-management is clearly related to the emergence of community-based or "participatory" models of development/conservation elsewhere around the world. Indeed, one might argue that co-management in North America is merely a regional manifestation of what is in reality a global phenomenon. Any attempt to understand co-management in Canada, then, must take this wider international context into account.

By the mid-1970s, it was becoming clear—even to major international aid organizations like the World Bank—that the top-down capital-intensive development projects they had been funding were simply not working. Development experts attributed this to the fact that local people were being left out of the development process and began to advocate a more participatory community-based approach. Participatory development supposedly has a number of advantages over the old centralized approach (Chambers 1997; Rahnema 1992). For one thing, a bottom-

up approach is supposed to be more rational and cost-effective because it reduces the need for centralized bureaucratic management, which tends to be inefficient and expensive. Proponents also claim that the participatory approach to development is actually more likely to succeed than the old top-down approach for two reasons. First, local people have knowledge of their societies and environments that outsiders lack, and this knowledge turns out to be vital to the success of any development project. Thus, the proponents of participatory development advocate the collection and use of "indigenous" or "local" knowledge. Secondly, participatory development is seen as easier to implement. It had long been recognized that one of the biggest obstacles to top-down development was the intransigence of local people. Having had no input into these development projects, and often seeing their own interests threatened, local people frequently opposed them. States and donor agencies found their ability to coerce local communities into accepting unpopular projects quite limited, and problems of enforcement were often a major factor in project failure (Agrawal and Gibson 2001: 5; Wells and Brandon 1992). By involving local people from the start, participatory projects supposedly avoid many of the problems of non-compliance and opposition that plague more centralized projects. Related to this is another oft-cited advantage of participatory development: it is supposed to lead to the "empowerment" of local populations by giving them a meaningful role in planning and implementing projects that will directly affect them.

The shift toward "community" and "participation" in international development has been accompanied by a corresponding shift in the realm of environmental conservation. This should not be surprising since, with the rise of notions about "sustainable development," it has become increasingly difficult to distinguish "development" from "conservation" (Escobar 1995: 192-211; Kottak 1999: 26-27). And, indeed, top-down conservation projects suffered from many of the same problems as their development analogues: financially inefficient bureaucratic management and stiff opposition from local people who saw such projects as threats to their own interests. These difficulties led scholars and conservationists, like their counterparts working in development, to conclude that a community-based approach is the best option for developing workable conservation programs (Wells and Brandon 1992; Western and Wright 1994; World Wide Fund for Nature 1993).

Since its introduction in the early 1980s, the notion of "participation" has become commonplace in the discourse of development/conservation. Indeed, "since the early 1990s every major bilateral development agency emphasized participatory policies," and it has become "difficult to find a development project that does not in one way or another claim to adopt a 'participatory' approach involving 'bottom-up' planning, acknowledging the importance of 'indigenous' knowledge and claiming to 'empower' local people" (Henkel and Stirrat 2001: 168). Along these same lines, Agrawal and Gibson (2001: 1) note a recent survey showing that more than 50 countries currently pursue partnerships with local communities to better protect their forests. From its modest beginnings in the mid 1970s, the participatory community-based model has become one of the most important models for development/conservation around the globe. Indeed, some scholars have begun to refer to participation as the "new orthodoxy" (Henkel and Stirrat 2001; Stirrat 1997).

All this interest in communities and participation has been accompanied by an increase in scholarship around the world exploring approaches to and potential benefits of community participation. Much of this work has focussed on the collection and use of indigenous (or local) knowledge (see, e.g., Fischer 2000; Freeman and Carbyn 1988; Sillitoe 1998) and/or has analyzed local institutions for the ownership and management of common property (Berkes 1989; McCay and Acheson 1989; Ostrom 1990). Often closely interrelated with one another (e.g., see Inglis 1993), traditional knowledge and common property regimes are seen as important community-based resources that can and should be harnessed and used as the foundation for participatory community-based development/conservation.

The emergence of co-management in North America must be understood as a part of this global trend toward community-based and participatory development/conservation. Co-management arose in the North American Arctic and Subarctic as much in response to the problems of centralized state management described above (i.e., problems of inefficiency and enforcement) as to the (admittedly related) rise of First Nation power and political organization (e.g., Feit 1998; Pratt 1994). And, as we shall see below, the discourse of co-management in Canada is strikingly similar to that of participatory development elsewhere in the world. Indeed, it would seem that there is little justification for distinguishing the rise of co-management in the Canadian "Fourth World" from the rise of community-based development/conservation in the "Third World."[4]

Unlike wildlife co-management in the Canadian North, however, the practice of international development/conservation has been the subject of wide-ranging and sustained criticism at the theoretical as well as prac-

tical level, and the new community-based participatory approach has received its share of such criticism (e.g., Agrawal and Gibson 2001; Cooke and Kothari 2001; Mosse 1994; Rahnema 1992; Stirrat 1997). If co-management in North America is, as I maintain, a regional incarnation of the global shift toward participatory community-based forms of development/conservation, it should be vulnerable to many of the same types of criticism. Given the similarities between the discourse and institutional practices of co-management and international development/conservation, however, one approach in particular seems especially relevant: a strand of critical work recently developed by scholars focussing on the discourse of development and the institutional forms and practices that it engenders (see e.g., Cooke and Kothari 2001; Escobar 1991, 1995; Ferguson 1994; Fisher 1997; Sachs 1992).

Discourse-based Critiques of Development/ Conservation

Recent discourse-based critics of development are generally in agreement with a long line of other critics when they assert that development projects usually fail to achieve their explicit goals. Indeed, some (e.g., Ferguson 1994) painstakingly document the "failures" of particular projects. They take their analyses of development a step further, however, arguing that while development projects may "fail," they nevertheless have powerful and far-reaching—if unintended—effects. Following Foucault (1977), James Ferguson refers to these unintended side effects of development as its "instrument-effects," because they "are effects that are at one and the same time instruments of what 'turns out' to be an exercise of power" (1994: 255). Development discourse, he argues, obscures the political dimensions of poverty and state intervention while simultaneously facilitating the expansion of state bureaucratic power (1994: 256).

This recent critique of development by Ferguson and others builds upon the notion that "development," as a concept, is based on a set of underlying assumptions about the world that are rooted in the political and economic context of global capitalism. Since development projects are explicitly designed to be carried out within existing political and institutional contexts, development workers have no choice but take that context for granted. The practices and complex institutional structures of the "development industry" are not neutral, but instead constrain thought and action in significant ways, and end up reinforcing existing political and economic inequalities. "Development," then, is "much more than a socio-economic endeavour; it is a perception which models reality..." (Sachs 1992: 1), and this perception, these scholars argue, has

become hegemonic. Because proponents of development necessarily take for granted existing relations of inequality and exploitation, they tend to view the project of development itself as a relatively straightforward exercise that involves identifying a series of "problems" that stand in the way of development (such as poverty), finding technical solutions to those problems, and implementing those solutions (e.g., Escobar 1995: chapter 2). This view of development necessarily obscures the relations of political and economic inequality and exploitation that are the root causes of such "problems" in the first place. In his analysis of the Thaba-Tseka rural development project in Lesotho, for example, Ferguson argues that:

> ...the project was set up to provide technical solutions to "problems" which were not technical in nature. We have seen that the conceptual apparatus systematically translated all the ills of the country into simple, technical problems and thus constituted a suitable object for the apolitical, technical "development" intervention that "development" agencies are in the business of making. (Ferguson 1994: 87)

According to Ferguson, the "real" solutions to the problems faced by "the poor" in Lesotho are not at all technical in nature, but political. Indeed, he argues that solving the "problem of poverty" in Lesotho would require nothing short of a revolution. Solutions of this sort, however, are of no use to development institutions like the World Bank, which "are not in the business of promoting political realignments or supporting revolutionary struggles" (Ferguson 1994: 68-69). Indeed, in the discourse of development, "political" solutions of this sort are not even recognized as solutions at all. As Ferguson put it, development agencies "seek only the kind of advice they can take," and he illustrates this with an account of his conversation with a "developer" who had asked him his advice on what his country could do to help the people of Lesotho:

> When I suggested that his country might contemplate sanctions against *apartheid*, he replied, with predictable irritation, "No, no! I mean *development!*" The only "advice" that is in question here is advice about how to "do development" better. There is a ready ear for criticisms of "bad development projects," so long as these are followed up with calls for "good development projects." (Ferguson 1994: 284, emphasis original)

Thus, the range of possible solutions to development "problems" is constrained by the "development" problematic, which is itself the product of existing political and economic relations. Indeed, development agencies, dependent as they are on existing political structures,

would themselves be threatened by revolutionary "solutions" of the kind advocated by Ferguson and other critics of development discourse. The depoliticizing tendency of development, then, is more than merely an unfortunate, but unavoidable, by-product of development:

> By uncompromisingly reducing poverty to a technical problem, and by promising technical solutions to the sufferings of powerless and oppressed people, the hegemonic problematic of "development" is the principle means through which the question of poverty is depoliticized in the world today. At the same time, by making the intentional blueprints for "development" so highly visible, a "development" project can end up performing extremely sensitive political operations involving the extension and expansion of institutional state power almost invisibly, under the cover of a neutral technical mission to which no one can object. (Ferguson 1994: 256)

But what are these "sensitive political operations" that extend and expand state power? Here, Ferguson is referring to the extension of bureaucratic forms of management and control. We have seen that from the vantage point of development organizations, the "problems" of development are seen as technical. Thus, their solution generally requires the application of expert knowledge and the provision of government services. Given the institutional context in which development is carried out, this means the creation of new bureaucratic structures—often physically located in the areas experiencing "development." Indeed, Ferguson argues that, at least in some cases, the expansion of the state and the bureaucratization of "nearly all aspects of life . . . may well be the most lasting legacy of the 'development' intervention" (Ferguson 1994: 266-267). To the extent that the discourse of development portrays this creation of new bureaucratic structures (i.e., "development") as a neutral technical exercise to which "no one can object," it serves to disguise—even as it facilitates—the expansion of state bureaucratic power (see also Escobar 1995: 123). It is this dynamic that leads Ferguson to refer to development as "the anti-politics machine."

Although Ferguson himself focused on a fairly centralized "development" project in Lesotho in the late 1970s and early 1980s, other scholars have demonstrated the usefulness of his discourse-oriented approach for analyzing a wide range of other development/conservation projects and interactions (e.g., Brosius 1999; Fisher 1997; Pigg 1992).

Perhaps most significant for the purposes of this article is a body of recent critical work specifically applying a discourse-oriented approach to the analysis of partici-

patory community-based development projects (Cooke and Kothari 2001; Escobar 1995: 141-153; Rahnema 1992). These scholars have argued that the rhetoric of "participation" is itself a particularly European construct whose use is implicated in relations of power.[5] These critics of participation point out that participatory development has not brought about a change in existing institutional practices of development; indeed, they argue, participatory processes are quite compatible with top-down planning systems (Mosse 2001: 17). Rather than representing a "new paradigm" of development, as some proponents claim (e.g., Chambers 1997), participatory processes have simply been grafted onto existing centralized planning systems (of donor states or agencies). This means that despite all the rhetoric about "participation," power relations between donors and local people have not really changed all that much. Important decisions about the distribution of resources continue to be based on the agendas and policies of external donors rather than on information gathered through participatory processes. Indeed, a number of scholars (e.g., Kothari 2001; Mosse 2001) have argued that even the "local/indigenous knowledge" that results from participatory processes is a product of power relations between donors and villagers. Because outside facilitators "own the research tools, choose the topics, record the information, and abstract and summarize according to the project criteria of relevance," participatory processes end up producing knowledge that reflects donor agendas more than local realities (Mosse 2001: 19).

All of this calls into question assumptions about the liberating effects of participation. Henkel and Stirrat (2001) argue that we must be careful about accepting at face value claims that participatory development leads to the empowerment of local people. This "empowerment," they argue, may not be as liberating as is often supposed. The key question, they point out, is not "how much" people are empowered, but rather what it is that they are "empowered" to do. Their answer to this question is clear:

> . . .in the case of many if not all participatory projects it seems evident that what people are "empowered to do" is to take part in the modern sector of "developing" societies. More generally, they are being empowered to be elements in the great project of "the modern:" as citizens of the institutions of the modern state, as consumers in the increasingly global market . . . and so on. Empowerment in this sense is not just a matter of "giving power" to formerly disempowered people. The currency in which this power is given is that of the project of modernity. In other words, the attempt to empower people through the projects envisaged and implemented by the practitioners of the new orthodoxy is

always an attempt, however benevolent, to reshape the personhood of the participants. It is in this sense that we argue that "empowerment" is tantamount to what Foucault calls subjection. (2001: 182)

Because participatory development takes for granted existing political and economic relations, the form and nature of "participation" is shaped by those relations and the assumptions underlying them. To be "empowered," local people must first agree to the rules of the game, rules that they had no role in creating and that constrain what it is possible to do and think. Worse yet, the fact that local people "participate" in these projects makes them much more difficult to challenge than more centralized development projects. For this reason, some scholars have argued that "participation" is often less about providing an alternative to official discourse and practices than it is about legitimizing decisions made in the centre (Cohen 1985; Kothari 2001).

These observations are equally applicable to the discourse and practice of co-management in Canada. Accordingly, I turn now to an examination of the "instrument-effects" of co-management. I begin by looking at the discourse on TEK and how it constrains the ways in which people can act—and even think—about wildlife management.

The Anti-politics of TEK: The Instrument-Effects of Co-management

As we saw above, proponents of co-management, like proponents of participatory development elsewhere, take it for granted that co-management will lead to improved wildlife management and the empowerment of local First Nation communities. Their primary concern is how to make co-management "work." For this reason, most of the discourse about co-management focusses on improving the techniques of co-management, especially on how to go about collecting "TEK" and integrating it with the knowledge of biologists and other scientists for use in the management process. The collection and integration of TEK, however, is far from straightforward; there are a multitude of epistemological, methodological, practical and ethical difficulties.[6] Accordingly, much of the discourse on co-management, like that on development, focusses on identifying these "problems" and devising solutions for dealing with them. These problems, along with their solutions, tend to be conceived of as technical; the problem of how to collect TEK requires the development of proper protocols that take into account cultural differences between the holders and the collectors of TEK (e.g., Johnson 1992); the problem of how to integrate TEK and science requires

the development of appropriate techniques for presenting, comparing, and testing these two very different "types" of knowledge (e.g., Usher 2000); the problem of intellectual property rights requires the development of appropriate protocols and laws that safeguard local control over TEK, while making it available to resource managers (e.g., Stevenson 1996; but see Wenzel 1999 for a discussion of the difficulties surrounding the treatment of TEK as intellectual property); and so on.

Problems of this sort are certainly pressing enough in the context of contemporary co-management practice. As I have argued elsewhere (Nadasdy 1999, 2003), however, any treatment of TEK that focusses on "knowledge-integration" as a technical problem necessarily ignores (i.e., takes for granted) the political dimensions of co-management. Yet, co-management is an extremely complex and culturally charged *political* undertaking, if there ever was one. It is, after all, supposed to be a key component in current efforts to restructure aboriginal-state relations in Canada, and it clearly involves (at least theoretically) broad changes in jurisdiction over and regulation of a wide array of important resources. In light of the deeply political nature of co-management, the general lack of attention to power in the discourse on co-management is startling. How is it that those participating in and writing about co-management can have remained so silent on the question of power?

This silence is not simply an oversight, nor is it easily corrected. Rather, it stems almost automatically from one of the assumptions underlying the discourse of co-management: that the value of TEK lies in its *incorporation into* the management process. It is the assumption that traditional knowledge is simply a new form of "data" to be incorporated into existing management bureaucracies and acted upon by scientists and resource managers that has made it possible to see the integration of TEK and science as a purely technical, rather than political or ethical, problem (see Cruikshank 1998; Nadasdy 1999).

As is the case in development/conservation, this "technical" view of co-management has a number of tangible effects that are deeply political in their own right. The focus on "technical" issues takes for granted existing institutions of state management (into which TEK is to be inserted) and so precludes any meaningful inquiry into the political dimensions of co-management. One who takes for granted the institutional context of co-management cannot question the power relations that underlie that context. For this reason, some important questions go unasked: What are people's "real" motives for engaging in co-management and invoking terms like "traditional knowledge"? How are thoughts and actions constrained and directed by

the use of such terms? Who really benefits from co-management and how?[7] Insofar as we take for granted the institutionalized bureaucratic system of state management, we necessarily also take for granted an important aspect of existing aboriginal-state relations in the Canadian North. That traditional knowledge might be used to re-think the unexamined assumptions about the world that underlie aboriginal-state relations, *including* scientific wildlife management, is a possibility that is seldom entertained in the literature on co-management.

I now turn to the case of the Ruby Range Sheep Steering Committee to illuminate some of the ways in which the discourse of co-management can serve to constrain thought and action—and so obscure the political dimensions of co-management. First, however, it will be necessary to describe the RRSSC in a bit more detail and situate it in the wider political context of sheep hunting in the Yukon.

The Ruby Range Sheep Steering Committee

In the fall of 1995, the Kluane First Nation hosted a meeting in Burwash Landing, Yukon to express their concerns about declining populations of Dall sheep in the nearby Ruby and Nisling mountain ranges. This meeting led directly to the creation of the Ruby Range Sheep Steering Committee, a multi-stakeholder body charged with the task of developing a set of recommendations for the management of Dall sheep in the Ruby Range. The committee met for a period of three years (from 1995 through 1998) and consisted of representatives from the two First Nations that had interests in Ruby Range sheep, government biologists, members of several territorial co-management boards, local big game outfitters and members of two Yukon environmental organizations.

The RRSSC was a temporary and ad hoc committee established to address a single management issue, the decline of the sheep population in the Ruby Range. It was not, however, completely isolated from the more comprehensive territorial co-management regime that was at the time being established under the auspices of the Yukon Umbrella Final Agreement. This agreement, while not a land claim agreement in itself, provided a framework for the negotiation of individual Yukon First Nation Final Agreements. It also provided for the establishment in 1993 of the Yukon Fish and Wildlife Management Board as the primary instrument for the co-management of wildlife in the territory. Its members, half of whom are appointed by the Yukon government and half by the Council for Yukon First Nations, deal with wildlife issues that are of territory-wide significance. The Umbrella Final

Agreement also provides for the establishment of a Renewable Resources Council in the traditional territory of each of the Yukon First Nations. These Councils, which come into existence one by one with the ratification of each First Nation's Final Agreement, are supposed to deal with a wide array of local resource issues, including wildlife. A Kluane area Renewable Resources Council would have been the proper body to deal with concerns about the Ruby Range Sheep population, but there was no such committee at the time because KFN had not yet concluded their Final Agreement with the federal and territorial governments. The only solution, then, was to establish a temporary committee to address the problem. Thus was born the RRSSC. But since the Yukon Fish and Wildlife Management Board has jurisdiction over the entire Yukon, including KFN's traditional territory, it was decided that the RRSSC would submit its recommendations to the Board, rather than directly to the Yukon Minister of Renewable Resources (now the Minister of Environment) as a Renewable Resources Council would have done, and that the Board would then consider these recommendations and prepare its own set of recommendations regarding Ruby Range sheep for submission to the Minister.

I now turn to a brief description of the political context that gave rise to the RRSSC and in which it functioned.

The Politics of Ruby Range Sheep

Dall sheep are found throughout much of the Yukon and Alaska, but certain areas of the southwest Yukon, including the Ruby Range, boast an especially high density of these animals. The pure white Dall sheep with its large curving horns is a prized trophy animal for big game hunters all over the world. As trophy animals, Dall sheep represent a significant potential income for big game outfitters, who charge hunters quite substantial sums for their hunts, as well as for the territorial government, which sells hunting licences and collects trophy fees and taxes.

At the same time, Dall sheep have been, and continue to be, an important part of the diet of aboriginal people in the southwest Yukon for at least the last 2000 years.[8] Elsewhere (Nadasdy 2003), I have examined the importance of hunting—and of sheep hunting in particular—to Kluane people. So here I will simply state that Kluane people think of themselves as sheep hunters. They have detailed knowledge of where to go to hunt sheep and know the locations of dozens of traditionally used sheep hunting camps throughout their traditional territory, many of them in the Ruby Range. Kluane people speak

highly of the virtues of sheep meat, and occasionally have gone to great lengths to get it. I was told one story, from the days before the restoration of Kluane people's hunting rights in the Kluane National Park and Game Sanctuary (see Nadasdy 2003: chap. 1), in which a man risked fines and/or imprisonment to get sheep for his father's funeral potlatch, because he felt that a proper ceremony could not be held without sheep meat. On several occasions, I have even heard KFN members use their self-ascribed status as sheep hunters to contrast themselves with members of another First Nation, whom they claimed did not traditionally rely on sheep for subsistence.

Struggles between those who see animals as trophies and those who see them as food have historically played an important role in shaping the politics of big game hunting in the Yukon (see McCandless 1985, n.d.). These struggles were exacerbated by the 1991 Canadian Supreme Court decision *R v. Sparrow*, which upheld Canadian First Nation peoples' aboriginal right to hunt and fish for subsistence, and so effectively exempted them from territorial hunting and fishing regulations. Non-First Nation hunters, on the other hand (even those engaged in subsistence hunting), must abide by all state-imposed hunting regulations, including seasons, bag limits, quotas, and, in the case of sheep, the full curl rule (see below). Perhaps not surprisingly, this situation has led to significant friction and ill will between First Nation and non-First Nation hunters in the territory and throughout Canada.

Because of their economic value and vulnerability to over-hunting, Dall sheep have become the focus of a struggle that especially intense. In fact, it is so intense that, despite overwhelming archaeological and oral evidence of extensive sheep hunting in aboriginal times, it was not until 1998 that the territorial government finally even acknowledged at KFN's land claim negotiations that Dall sheep should qualify as a traditional subsistence animal.[9] Because of their concerns about the sheep population in the Ruby Range, KFN members claimed to have refrained from hunting sheep there for several years prior to the formation of the Ruby Range Sheep Steering Committee. Since First Nation hunters do not have to report their kills to the Department of Environment, some non-First Nation members of the RRSSC clearly doubted the veracity of this claim.[10] Though all KFN members with whom I spoke supported this voluntary cessation of hunting in principle, some of them clearly had misgivings about it in light of continued (and what they saw as excessive) hunting by non-First Nation hunters, especially outfitters. Several times, when discussions about hunting became heated, one KFN member threatened not only to resume hunting sheep, but to "clean

them out." He argued that First Nation people might as well get as many sheep as they could right now, since the non-native hunters were going to wipe them out anyway.[11] It was in this politically charged atmosphere that members of the RRSSC attempted to carry out their mandate.

The Anti-politics of the RRSSC

As discussed above, the RRSSC had a mandate to consider both scientific and traditional knowledge in formulating its management recommendations. Elsewhere (1999, 2003), I have examined the RRSSC in some detail, especially efforts by its members to "integrate" these different "types" of knowledge and the political consequences of those efforts. Here, I will simply point out that the RRSSC's mandate to integrate scientific and traditional knowledge about Dall sheep constrained how RRSSC members could talk and think about the issues they confronted. As is to be expected, there was a great deal of discussion in RRSSC meetings about knowledge: what did various parties know about Ruby Range sheep? How reliable was their knowledge? How could more and better knowledge be obtained? RRSSC members also clearly took a problem-oriented approach to the issue of sheep management. Much of the work of the RRSSC consisted of identifying a series of problems facing either RRSSC members (e.g., how to reconcile discrepancies between the knowledge of different RRSSC members) or the sheep themselves (e.g., aerial harassment, natural predation) and developing solutions to these problems. RRSSC members did not always agree on the severity of some of these problems—or even if they should qualify as "problems" at all (e.g., they were utterly unable to agree on the role human hunting had played in the population decline), nor could they always agree on potential solutions. But all parties to the RRSSC took for granted the need to identify and solve the "problems" of Dall sheep management in the Ruby Range.

As a result of this approach, RRSSC members necessarily also took for granted (some of them in spite of themselves) existing institutional structures of wildlife management in the territory. Some of the solutions that RRSSC members discussed might be considered "extreme" insofar as they entailed changing laws, regulations, or long-standing practices that were, in fact, unlikely to be changed. None of the solutions they discussed, however, were so extreme as to represent a rejection of existing structures of wildlife management in the territory. Indeed, these structures were never seriously questioned at all; instead, they formed the backdrop against which discussions of sheep management took

place. This is not to say, however, that there were not RRSSC members who had more radical "solutions" in mind. One Kluane First Nation hunter and member of the RRSSC, for example, discussed such a solution with me on a number of occasions, though always outside of the formal RRSSC meetings. He felt that the territorial government—beholden as it was to so many special interests and bogged down by the glacial pace of bureaucratic change—would never be able to manage the sheep properly. He suggested that if the government really wanted to save the sheep, it would do well to devolve control over their management to the First Nation. It is significant that, despite his firm beliefs about this, he never suggested this solution at a meeting of the RRSSC.[12] A consummate politician with many years of experience dealing with the territorial government, he was very well aware of how government members of the RRSSC would have received such a "solution." At best, they would have seen it as "unrealistic," since there was clearly no chance of such a thing happening; it was simply out of the realm of possibility. As this hunter-politician himself put it: the government was not yet "ready" for such a solution. At worst, government members of the RRSSC might even have viewed his solution as counterproductive, so blatantly "political" that it undermined committee members' ability to trust one another and work together to manage the Ruby Range sheep. Regardless of how particular RRSSC members might have viewed it, however, a "political" solution of this sort would clearly have fallen well outside the committee's mandate.

The committee was created to solve a "management problem" (the problem of not enough sheep), not to address "political" issues, such as whether First Nations or the Yukon should have jurisdiction over wildlife in the territory. This highlights the degree to which the RRSSC itself was a product of the technical problem-oriented approach to management that I have been discussing. Just as Ferguson's "political" solution to the "problem" of poverty in Lesotho (i.e., end apartheid) did not qualify as an acceptable solution in the eyes of development workers, so this Kluane hunter-politician's call for rethinking jurisdiction over wildlife in the Yukon would not have qualified as an acceptable solution to the *technical* problem of sheep management. That he himself understood this situation clearly is evident in the fact that he quickly lost faith in the RRSSC process, preferring instead to look for a solution to the Ruby Range sheep "problem" in the overtly "political" arena of KFN's land claim negotiations.[13]

All solutions to the problem of sheep management discussed by the RRSSC took for granted the "realities"

of wildlife management in the Yukon. That many members of the RRSSC would have been unreceptive to a political "solution" like the one described above should not be surprising. After all, the Yukon Department of Environment is no more "in the business of promoting political realignments or supporting revolutionary struggles" than is the World Bank. Like their counterparts in "development" around the world, most of those actively working to promote, plan, and implement co-management in northern Canada have some stake in existing structures of state management; and this goes as much for First Nation Fish and Wildlife Officers and contract anthropologists as it does for territorial biologists. For this reason, it is very difficult to for them to question the assumptions upon which these structures are based. The discourse on co-management, then, precisely because it does not explicitly engage the question of power, ends up both reflecting and reinforcing the very power relations it obscures.

Re-examining the Claims for Co-management

We are now in a position to re-examine the claims made by proponents of co-management. As we saw above, they make two major claims regarding the potential benefits of co-management: first, that it is more effective than centralized state management and, second, that it empowers local First Nation people. As we also saw, these are the same claims that are made for participatory community-based development in other parts of the world. Finally, we saw that recent critics of development have effectively called these claims into question. Not surprisingly, many of their criticisms are equally valid when applied to co-management. I shall consider each of the claims for co-management separately.

Claim #1: Co-management is More Effective than State Management

The claim that co-management is more effective than centralized state management is based on the notion that First Nation hunters and elders possess knowledge that government managers do not, and that incorporating this knowledge into existing management processes will necessarily improve those processes. The simplistic assumption that "traditional knowledge" is just sitting out there waiting to be collected and used by those engaged in co-management, however, ignores the institutional realities of wildlife management in the Canadian North. Elsewhere (Nadasdy 1999, 2003), I have argued that the production of "traditional knowledge" for use in co-management involves elaborate processes of compartmentalization and distillation. These processes are specifically geared toward

rendering the lived experiences of local First Nation people into a form that is compatible with (and useable within) existing institutional structures of state management. Because the standards of relevance by which traditional knowledge is distilled derive from the need for it to be "useful," those aspects of local First Nation people's experiences that might actually present an alternative to the official discourse are distilled out as useless or irrelevant (see, e.g., Nadasdy 1999: 7-10). For this reason, traditional knowledge often reflects existing management policies and agendas more than local understandings. This is exactly analogous to the process described by critics of participatory development (see above) by which local knowledge is produced in community-based development projects, and it calls into question the degree to which co-management really represents an alternative and "more effective" approach to wildlife management. Many First Nation people are clearly aware of this. One of the most common complaints I heard at meetings and conferences on TEK and co-management was that traditional knowledge is never used as the sole basis for decision-making; instead, it is used only to confirm the knowledge produced by wildlife biologists and legitimate the decisions made by bureaucratic managers.

Claim #2: Co-management Empowers Local First Nation People

As Ferguson and other critics of development discourse point out, to argue that co-management does not work is to say nothing about what co-management actually *does*. So we need to do more than simply deny the claim that co-management is (necessarily) more effective than top-down state management if we want to understand co-management. I have already shown that the discourse of co-management serves to obscure—and so reinforce—existing power relations, but it does even more than that. Like development, co-management actually helps extend the power of the state. Elsewhere (Nadasdy 1999: 11-13), I have argued that the project of "knowledge-integration" effectively extends the networks of scientific resource management into First Nation communities and concentrates power in bureaucratic centres rather than empowering local people. Here I will examine another, though related, aspect of the expansion of state power: bureaucratization.

Recall Ferguson's claim that bureaucratic expansion may well be the most significant and lasting effect of development. A similar argument can be made for co-management in Canada; after all, co-management is nothing if not bureaucratizing. Indeed, co-management in the North has essentially consisted of establishing a host of

bureaucratic boards and committees whose memberships are appointed equally by First Nations and government. The number of boards and committees so established gives some sense of the bureaucratizing tendencies of co-management. The Yukon Umbrella Final Agreement (UFA), for example, provides for the establishment of no fewer than eight territory-wide co-management bodies,[14] along with a host of regional and local co-management boards and committees that involve members from only a limited number of Yukon First Nations. The consequences of this proliferation for individual First Nations is striking. Kluane First Nation members, for example, currently hold seats on a number of these territorial boards and committees. Upon ratification of KFN's Final Agreement, they will also have a significant number of seats on the Kluane Park Management Board, the Dän Keyi Renewable Resources Council, the Kluane Settlement Lands Commission, and possibly a few others. Finally, they will no doubt continue to participate in various short term ad hoc co-management initiatives created outside the land claims process, such as the Ruby Range Sheep Steering Committee, the Aishihik-Kluane Caribou Recovery Steering Group, and the Spruce Bark Beetle Advisory Committee, all of which KFN members participated in, to varying degrees, during the period of my fieldwork.

Each of these co-management bodies differs in the level of participation required; some meet only a few times a year, while others require quite significant commitments of time and energy. There is no question, however, that participation in these co-management processes represents a huge burden in terms of both time and labour in a village whose year round population consists of approximately 40 adult members.[15] There is some justifiable fear among First Nation people that co-management processes of this sort might be *preventing* rather than fostering meaningful change by ensnaring participants in a tangle of bureaucracy and endless meetings.

Some might object, however, that while the time devoted to these boards and committees may indeed be significant, these bodies are not "bureaucratic," but instead stand outside the established bureaucratic system. Indeed, members of the co-management boards established under the UFA are seldom professional bureaucrats; rather, they tend to be "regular citizens" appointed to serve for relatively short terms by First Nation and territorial governments. In what sense, then, is participation on these boards bureaucratizing? To answer this question, it is worth reviewing Max Weber's characterization of bureaucracy. In his well-known essay on the subject, he noted that the most salient feature of bureaucracies is their tendency to institutionalize "rationality":

> Bureaucratization offers above all the optimum possibility for carrying through the principle of specializing administrative functions according to purely objective considerations. Individual performances are allocated to functionaries who have specialized training and who by constant practice learn more and more. The "objective" discharge of business primarily means a discharge of business according to calculable rules and "without regard for persons."...[Bureaucracy's] specific nature, which is welcomed by capitalism, develops more perfectly, the more bureaucracy is "dehumanized," the more perfectly it succeeds in eliminating from official business love, hatred, and all purely personal, irrational, and emotional elements which escape calculation. This is the specific nature of bureaucracy and it is appraised as its special virtue. (Weber 1946: 215-216)

Co-management boards and committees are never established in an administrative vacuum. Rather, their creation is always accompanied by the creation of a set of administrative rules and procedures that regulate not only how they function internally, but how they relate to external bureaucratic institutions. Indeed, the relationship between co-management bodies and the existing bureaucracy is always clearly spelled out (e.g., in the land claim agreements that created them). These "calculable rules" are necessary precisely because they allow these co-management bodies to function "without regard for persons." That is, the specific identities of co-management board members become irrelevant. So long as they abide by the established rules of procedure, the boards continue to function despite the regular turnover in membership. Such rules enable co-management boards to interface with existing offices and institutions of state management, and this is absolutely essential if they are to play their appointed roles. In this important sense, co-management boards are inherently bureaucratic entities.

These boards and committees, however, are not the only manifestation of the bureaucratization associated with co-management. In an important sense, these co-management bodies have been established to function as intermediaries between First Nation and federal/territorial governments. For First Nations to participate in these processes at all, they have had to organize and express themselves in ways compatible with the government bureaucracies with which they deal. This has necessarily entailed a significant degree of bureaucratization within First Nation communities themselves. Many First Nation people now spend a considerable portion of their lives working in First Nation offices, as Fish and Wildlife Officers, Heritage Directors, Land Claim Negotiators and so on. To function effectively in these positions, they have had

to learn the intricacies of Canadian law, scientific resource management and other fields relevant to their work. They have become adept at using computers, telephones and the other trappings of modern bureaucratic life, and they feel at home meeting with biologists and government bureaucrats in the context of land claim negotiations and co-management meetings. In other words, just to get to the point where co-management is a meaningful possibility, First Nation people have had to build bureaucratic infrastructures modelled on and linked to those of government.

First Nation bureaucracies, like their federal and territorial counterparts, necessarily function "without regard for persons." As long as the Fish and Wildlife Officer, for example, performs his or her job correctly, it does not matter *who* he or she is. This "rationalization" is essential for First Nation participation in co-management and other such processes because it allows federal and territorial bureaucrats (who are responsible for negotiating and implementing these processes on behalf of their respective governments) to interact with their First Nation counterparts according to the "calculable rules" within which they already function. In other words, it makes government to government relations among First Nations, Canada, and the territories possible.

Despite the rhetoric about "co-operation" and "participation," then, co-management does not represent as radical a break from centralized state management as is often supposed. Indeed, far from representing an *alternative* to bureaucratic state management, co-management processes have instead been *inserted into* that bureaucracy. This perspective sheds new light on claims about the empowering tendencies of co-management. Co-management, it seems, much like participatory development elsewhere in the world, has "empowered" First Nation people to participate in existing processes of state management. First Nation people have simply been given their own "slot" in the bureaucratic system. To participate, however, they have had to accept the rules and assumptions of the state management game. This can be seen clearly in the role played by co-management boards in the Yukon.

Co-management bodies in the Yukon have a purely advisory role; they make recommendations, not decisions, and those recommendations must be implemented (or not) by politicians and bureaucrats whose actions are judged by standards that have nothing to do with First Nation peoples' knowledge and values and everything to do with the exigencies of the wider political and economic situation.[16] The Yukon Fish and Wildlife Management Board, for example, which was "established as the primary

instrument of Fish and Wildlife Management in the Yukon" (Council for Yukon Indians 1993: 166) in fact only has the power to make recommendations to the Yukon Minister of Environment, who is under no obligation to follow those recommendations, but only to respond to them in writing within a specified period of time.[17] The minister and his or her bureaucratic advisors in the Department of Environment, regardless of their personal background and/or sympathies,[18] must necessarily act within existing institutional and political frameworks (at least if they want to keep their jobs) (Nadasdy 1999, 2003). Thus, despite the widespread establishment of co-management bodies, the state management system remains essentially unaltered and unchallenged. Indeed, co-management boards and councils (along with First Nation management bureaucracies) can be viewed simply as new elements of existing state management bureaucracies.

Bureaucratization, however, does more than simply force First Nation people to comply with the existing institutional forms and social hierarchies of state management. It forces them to accept, at least implicitly, a set of Euro-Canadian values and assumptions that constrain the ways in which it is possible to think and act. As Marcuse (1964), Habermas (1989) and others have pointed out, the bureaucratic systems of modern capitalism and science, like all cultural systems, are ultimately grounded in subjective values, which themselves derive from non-rational sources. So, although modern Euro-North American bureaucrats pursue their objectives "rationally" according to a institutionalized set of rules for purposive-rational action, those objectives are themselves based on subjective values and non-rational assumptions about the world. Furthermore, the rationalization of bureaucratic and scientific functions serves to legitimize the assumptions underlying bureaucratic objectives. This in turn obscures—and in effect legitimates—the non-rational assumptions that underlie the whole system.

By accepting and adapting to governments' bureaucratic approach to aboriginal-state relations, First Nation people therefore also tacitly accept the assumptions about the nature of land and animals that underlie the rules and functions of that bureaucracy. Though First Nation people can and do voice their disagreements with these assumptions, very little comes of their protests because in the context of contemporary bureaucratic wildlife management and land claim negotiations, decisions/concessions simply *cannot* be based on anything other than Euro-North American assumptions about land and animals (Nadasdy 2003). When First Nation people make arguments based on their conception of animals as intelligent social and spiritual beings, they get nowhere

because government biologists and resource managers, regardless of their own personal beliefs and understandings, simply cannot implement management decisions based on such alternate conceptions of animals. An example from the RRSSC process illustrates this clearly.

The Full Curl Rule, the Nature of Sheep, and the Politics of Sheep Management in the Yukon

At one meeting of the RRSSC, a number of KFN members expressed concern over the use of the "full curl rule" to regulate sheep hunting in the Ruby Range. The full curl rule makes it illegal for a hunter to shoot anything but a full curl ram. The horns of Dall rams curl around and outward from their heads as they grow. Though rams reach sexual maturity at around one and a half years of age, their horns do not usually achieve full curl (360 degrees) until sometime between their eighth and ninth years. Since the maximum life expectancy for Dall sheep in the southwest Yukon is 13—with most rams dying between the ages of seven and 10 (Hoefs 1984: 103)—the full curl rule allows hunters to take only the oldest mature rams from the population.[19] KFN members argued that these old rams are especially important to the overall sheep population because of their role as teachers; it is from them that younger rams learn proper mating and rutting behaviour as well as more general survival strategies. Thus, killing too many full curl rams has an impact on the population far in excess of the number of animals actually killed by hunters. One person specifically likened it to killing off all the elders in the community; although the actual number of people killed might not be great, the damage to the community in terms of knowledge and social reproduction would be incalculable. KFN members raised these concerns in the hopes that they would lead to a switch from use of the full curl rule to a quota system as a means for limiting the sheep kill in the area.[20]

As it turns out, First Nation people got nowhere with this argument. In response to their concerns, biologists did examine the existing scientific literature that had a bearing on the issue of the full curl rule, but they were unable to find any evidence against its use. As a result, the RRSSC never seriously considered recommending the implementation of a quota system. But why not? How could the committee, charged as it was with the task of integrating TEK and science, have simply ignored such a potentially significant argument rooted in the knowledge of First Nation elders and hunters? Part of the problem was the conception of sheep underlying Kluane people's objections to the full curl rule. Their concerns were based on the notion that sheep are intelligent social beings, that they have agency which must be taken into account in any

attempt to understand them. This contrasts sharply with the conception of sheep (and animals more generally) commonly held and acted upon by Euro-Canadian wildlife biologists. Consider, for example, the rationale underlying the widely accepted (by biologists) prohibition against hunting ewes. Since ewes bear young, they represent not only themselves but all of their unborn potential offspring as well. Thus, killing an ewe has a much greater impact on the future population than the death of a single animal. This argument is structurally identical to First Nation argument against use of the full curl rule. Significantly, however, the argument for a ban on hunting ewes is mathematical rather than social in nature. Everything that one needs to know about sheep to calculate the potential impact of killing an ewe can be expressed numerically (e.g., average numbers of offspring, number of reproductive years per ewe, and so on). One does not need to grant sheep agency in order to find the argument compelling. Instead, they remain passive objects of mathematical manipulation.

This is not to say that the notion of animals as social beings is so foreign to Euro-Canadian biologists that they could not understand or cope with KFN hunters' objections. In fact, I would not want to argue that the notion of animals-as-social beings is foreign to Euro-Canadians at all. Indeed, many are quite accustomed to treating pets in this way. Nor would I argue that Kluane people's conception of sheep-as-social-beings is somehow culturally incompatible with a "scientific" understanding of animal populations. Indeed, the scientific study of primates takes such an approach for granted, and recent work by behavioural ecologists has led them to make claims about African elephants that bear a striking resemblance to those made by Kluane people about sheep (see Pennisi 2001). Thus, there is nothing inherently "unscientific" about a social understanding of even non-primate animal behaviour.

In point of fact, biologists on the RRSSC who had been working with First Nation people for many years had at least a basic understanding of how First Nation conceptions of animals differ from their own. They clearly understood, at least to some degree, Kluane people's justification for opposing the full curl rule. That RRSSC members did not act on First Nation concerns about the full curl rule, then, must have had more to do with their broader political implications than with any epistemological or methodological "problems" of knowledge-integration. The fact is that despite their own personal beliefs and understandings, bureaucratic wildlife managers—in their official capacities—could not act upon those understandings. Biologists on the RRSSC simply could not support the switch to a quota system based solely on Kluane people's arguments, regardless of how well they understood these arguments or how personally sympathetic they might have been. Biologists have to be able to justify (with scientific evidence) the positions they take on wildlife management. They must be able to answer the criticisms of other biologists employed by those with competing political interests. For them to take a position that they could not defend in this way would be viewed as irresponsible. This could jeopardize not only the management process, but their jobs as well. Had they gone ahead and recommended the switch to a quota system anyway, they would certainly have been criticized by the outfitters on the RRSSC for being biased and "unscientific." They would have been utterly unable to defend themselves from these charges, their reputation as scientists would have been damaged, and they might conceivably even have lost their jobs. And all of this would have been for naught since, without incontrovertible scientific proof showing that the full curl rule was damaging the sheep populations, the government could not have implemented such a recommendation anyway, considering the political power wielded by outfitters in the territory (it would have been difficult enough even *with* such proof). Supporting Kluane people's position regarding the full curl rule in the absence of scientific evidence simply was not an option for biologists on the RRSSC.

It is not only government bureaucrats who are constrained by the implicit assumptions underlying the rules and forms of government bureaucracy. First Nation bureaucrats too, to the extent that they accept the rational rules and functions of Euro-Canadian style bureaucracy, must tacitly accept the underlying assumptions that accompany them (e.g., about the nature of land and animals). Like Euro-North American bureaucrats, they are constrained by the "calculable rules" of bureaucracy and the implicit non-rational assumptions about the nature of the world upon which these rules are based. So long as they accept the existing bureaucratic contexts of land claim negotiations and co-management, they cannot do otherwise. There are simply no acceptable bureaucratic rules or functions that allow First Nation people *as bureaucrats* to act upon the land and animals according to their own particular—and alternative—conceptions of the world. And, to the extent that they accept the existing bureaucratic rules and functions of co-management and land claims, it is difficult for them to question the legitimacy of these processes or the implicit assumptions that inform them.

Thus, we see that co-management, which is supposedly empowering First Nation people, may in fact be hav-

ing exactly the opposite effect. Although on the surface co-management may seem to be giving aboriginal people increased control over their lives and land, these processes might instead be seen as subtle extensions of empire, replacing local aboriginal ways of talking, thinking and acting with those specifically sanctioned by the state. At the same time, First Nation participation in co-management makes it much more difficult for them to challenge these processes than it had been for them to question the top-down decisions of the old state management system. Thus, co-management—like participatory development projects elsewhere in the world—may be less about providing real alternatives to official discourse and practices than legitimating decisions made in (or at least shaped by the assumptions of) the centre (see, e.g., Feit and Beaulieu 2001).

Conclusion

This is not to say that these imperialist aspects of co-management are intentional, or even conscious. I do not mean to impugn the morality of those government officials, anthropologists and others who engage in and contribute to the discourse on co-management. On the contrary, I believe that the vast majority of them sincerely believe in the potential benefits of co-management discussed above (i.e., improved management and the empowerment of aboriginal people) and are genuinely interested in granting First Nation people a meaningful role in their own governance and the management of local resources. The instrument-effects I discuss in this article are unintended and unforeseen by those who participate in the (official) discourse and practice of co-management. As Ferguson notes:

> If unintended effects of a project end up having political uses, even seeming to be "instruments" of some larger political deployment, this is not any kind of conspiracy; it really just does happen to be the way things work out. (Ferguson 1994: 256)

Indeed, the negative consequences co-management that I describe in this article are subtle enough that few scholars or government officials seem to have noted them. As a result, when bureaucrats (whether federal, territorial or First Nation) encounter difficulties in their attempts to co-manage wildlife, they tend to put the blame on a lack of technical expertise (e.g., "we'll get it right when we figure out exactly how to do it") and/or selfish political interests on the part of others (e.g., bad faith in negotiations) rather than on the structure of and assumptions underlying co-management itself. As processes of co-management, like

development, become more and more bureaucratically entrenched, however, certain segments of society come to have a vested interest in them. To quote Ferguson again:

> But because things do work out this way [see above quote], and because "failed" development projects can so successfully help to accomplish important strategic tasks behind the backs of the most sincere participants, it does become less mysterious why "failed" development projects should end up being replicated again and again. It is perhaps reasonable to suggest that it may even be because development projects turn out to have such uses, even if they are in some sense unforeseen, that they continue to attract so much interest and support. (Ferguson 1994: 256)

In some ways it is beginning to make sense to talk about a "co-management industry" that, much like the "development industry" critiqued by Ferguson, Escobar and others, employs or otherwise provides a living for a host of government employees, scholars, First Nation officials and consultants. These people all have a vested interest in the discourse and practice of co-management, whether or not it is "successful" and quite regardless of its instrument-effects. For this reason alone, it is imperative that anthropologists and other scholars critically examine their own involvement in processes of knowledge-integration and co-management.

Acknowledgments

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Notes

1 The meaning of the term "co-management" is somewhat vague, having been used to refer to many different types of institutional arrangements. These run the gamut from simple consultation, which consists of an explicit attempt on the part of resource managers to elicit the views of local people but in which "resource users may be heard but not heeded, and perhaps not even understood" (Berkes, George and Preston 1991: 7), to the actual institutionalization of joint decision-making. See Berkes, George and Preston (1991) for a discussion of the spectrum of co-management institutions.

2 Notable exceptions to this include the contributors to this special issue. See also Cruikshank (1998), Ellen et al. (2000), Feit (1998), Morrow and Hensel (1992), Nadasdy (1999) and Scott and Webber (2001).

3 A smaller cousin of the Bighorn sheep found in the Rockies, the pure white Dall sheep with its large curving horns is found throughout much of the Yukon Territory and Alaska.

4 Even the scholarly literature on co-management in Canada is thoroughly integrated with the literature on community-based development/conservation in the rest of the world. Articles by scholars studying co-management in Canada frequently appear in collections alongside and/or cite the works of scholars working on similar issues in other parts of the world (e.g., Inglis 1993; Johannes 1989; Williams and Hunn 1982).

5 In a provocative article, Henkel and Stirrat (2001) argue that the concept of "participation" underlying participatory development has its roots in the Protestant Reformation, and that many of its religious and symbolic connotations have survived—though somewhat transformed—the concept's application to development.

6 This reference to the ethical problems of knowledge-integration may strike some readers as inconsistent in light of my argument that the reduction of co-management to a series of technological problems *obscures* its political and ethical dimensions. The ethical difficulties scholars have addressed, however, have to do with *how* TEK is collected and integrated with science (including the thorny political/ethical problem of how to recognize and protect proprietary rights in traditional knowledge while still allowing for its use in public management processes) and not with *whether* the collection and integration of TEK is even an appropriate undertaking. Notably absent from such discussions is any consideration of broader ethical issues, such as whether knowledge-integration is a good thing in the first place, or the ethical dimensions of existing wildlife management structures.

7 Unfortunately, one of the few published articles to ask questions of this sort, a 1996 article entitled "Traditional Knowledge Threatens Environmental Assessment" published in the Canadian Journal *Policy Options* (Howard and Widdowson 1996), is closer to a racist tirade than a constructive analysis of the political issues surrounding co-management. Though the article received some effective (and much deserved) criticism (see Berkes and Henley 1997; Stevenson 1997), it nevertheless remains one of the few contributions to the literature on TEK that questions, rather than takes for granted, the political agendas of those engaged in the effort to integrate TEK and science (though, in the process, its authors make their own unfortunate and unsubstantiated assumptions about those actors and their agendas).

8 In the summers of 1948 and 1949, McClellan (1975: 120) reports having seen "good numbers of sheep being dried at a Tutchone meat camp on the Big Arm of Kluane Lake." See also Arthurs (1995) for archaeological evidence of sheep hunting in the area.

9 Until that time, they had refused to consider including sheep with moose and caribou as animals to which First Nation people had special rights in the event of the need to establish a Total Allowable Harvest as per 16.9.0 of the Yukon Umbrella Final Agreement (Council for Yukon Indians 1993: 176-177).

10 I have no independent way to verify this claim for the period before my arrival in Burwash in December of 1995—aside from the fact that I trust those who made it—but I can verify the fact that no KFN members took any sheep in the Ruby Range during the period in which the RRSSC was meeting.

11 It was my impression that no one in the room took this threat very seriously, but it is likely that over the years native people throughout Canada have at least on occasion reacted to excessive hunting and/or trapping by Euro-Canadians in just this way. Harvey Feit, for example, notes that Cree elders in the southernmost section of the Cree area admit that they themselves trapped out the beaver population in the 1930s because they saw no possibility of maintaining that population in the face of increased pressure by Euro-Canadian trappers. By 1950, however, once the area had been closed to Euro-Canadian trappers, the beaver population recovered (Feit 1986: 187). Shepard Krech, too, describes a similar episode of pre-emptive overtrapping among the Northern Ojibwa in the 1840s (1999: 193).

12 It also illustrates one of the forms of "self-censorship" in co-management that I have alluded to elsewhere (Nadasdy 1999: 14).

13 Another of the potential dangers of co-management is reflected in the fact that KFN's subsequent efforts to address their concerns about Ruby Range sheep through land claim negotiations were rebuffed by government negotiators, who flatly stated that *because there was already a management tool in place* for dealing with KFN's concerns about Ruby Range Sheep (i.e., the RRSSC), the Yukon government was unwilling to include provisions for protecting the sheep in KFN's land claim agreement.

14 These include: the Surface Rights Board, the Yukon Land Use Planning Council, the Yukon Development Assessment Board, the Yukon Heritage Resources Board, the Geographical Place Names Board, the Water Board, the Yukon Fish and Wildlife Management Board and the Dispute Resolution Board.

15 It is very difficult to give a meaningful figure for the population of Burwash Landing. Although there is a core of perennial year round residents, many people split their time between Burwash and Whitehorse or Haines Junction. A significant number come to live with relatives in Burwash for several months or years at a time, while others go off in a similar fashion to reside in other Yukon communities or to find work elsewhere in the territory or Canada. There is also

significant seasonal variation; students return to the village in the summer, and many people take seasonal jobs in construction or highway maintenance that take them out of the community for parts of the year. This figure is, therefore, only a very rough estimate.

16 The same is true for most of the co-management bodies in Canada. Even in those exceptional cases where co-management bodies technically have some degree of decision-making authority (e.g., under the James Bay and Northern Quebec Agreement), government has been loathe to relinquish its control, often treating these boards *as if* their role was an advisory one (see, e.g., Scott and Webber 2001).

17 As of 2002, when this article was written, territorial ministers had in fact accepted nearly all of the Board's recommendations (in the 11 years of the Board's existence, ministers had rejected only four such recommendations; and the board and minister had eventually been able to work out a compromise on three of these). In 2003, however, the Board submitted 34 recommendations that dealt with wildlife in captivity (e.g., game farming), a very sensitive issue for most First Nation people who regard many such practices as disrespectful to animals (see Nadasdy 2003: 79-94). Of those 34 recommendations, the minister rejected 18, replaced or modified nine, and accepted only seven. The minister's ability to disregard recommendations that were based on First Nation concerns about respectful treatment of animals highlighted the political context within which the Board is embedded. This incident led many First Nation people with whom I spoke to lose faith in the co-management processes set up under the Yukon land claim agreements.

18 There have been First Nation ministers, for example, who have been personally sympathetic to First Nation positions on management.

19 The full curl rule, along with season and bag limits, is at present the principle mechanism for managing sheep hunting in the territory. See Nadasdy (2003) for a more complete description of Sheep management regulations in the Yukon.

20 A quota system would spread the kill more evenly over the entire population, rather than focusing it on a particular age group.

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