Environmental Resistance and Aboriginal Development

A Comparative Study of Mining Ventures in the United States and Canada

by

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Table of Contents

Summary:

This dissertation asks the question: why do indigenous communities support environmental causes in certain cases of mining development and not in others, when technical indicators of environmental impact may in fact be comparable? The empirical research question I am trying to address is: When does environmental resistance arise in native communities in the United States and Canada that are faced with the prospect of mining development? Native people in the United States and Canada have endured widespread environmental harm at the behest of mining ventures. During the past two decades, the enactment of environmental laws and the recognition of treaty violations by settler governments have collectively led to a politics of retribution in both countries. However, conflicts surrounding mining development and indigenous people continue to challenge policy-makers on both sides of the border. I use qualitative social science research techniques such as deviant case analysis, process tracing, congruence procedures and counterfactual analysis to study four instances of mining development (cases involving both the prevalence and non-prevalence of environmental resistance in each of the two countries). After using a process of elimination procedure in my initial scoping analysis for the case studies, I test process-oriented hypotheses anchored in theories of negotiation involving social movements and linkage politics. My study reveals that contrary to common belief, neither scientific studies (technical impact) and economic considerations nor external influence of civic society adequately explain the emergence or prevalence of resistance. Instead the negotiation process, particularly the way in which issues are linked, strategic alliance formation and the articulation of sovereignty are the key determinants of environmental resistance in Aboriginal communities. I conclude with some lessons for both the US and Canada in terms of public policy and negotiation processes that can be most conducive to environmentally responsible and effective planning of mining ventures on or near Aboriginal land.

Introduction: My Research Inquiry and its Significance

> *"Like the miner's canary, the Indian marks the shift from fresh air to poison gas in our political atmosphere; and our treatment of Indians, even more than our treatment of other minorities marks the rise and fall of our democratic faith."*
>
> (Felix Cohen, *Handbook of American Indian Law*, 1978)

Imagine two remote communities, Verde and Rouge, which have historically followed hunter-gatherer subsistence lifestyles, but over a period of a few hundred years of colonization, by culturally different invaders, have ostensibly moved towards a more "modern" existence. Both communities have technological amenities such as televisions, cars or snowmobiles, and are quite different from many other indigenous people in the world. There is still a part of them, however, which feels rooted in the past.

Over the course of several decades, the colonizing people begin to recognize that they have treated the natives unfairly, and unjustly appropriated their lands. The settlers move towards measures to compensate the natives for these injustices. During this time, the communities are given greater control over their own natural resources. Given their historical reliance on the land, as their source of livelihood, both communities can be presumed to have a bias in favor of environmental conservation and sustainable resource usage. This assumption is particularly important in directing the conduct of external environmental organizations that feel they are natural allies of these two indigenous groups. Some of these external organizations are particularly averse to mineral development, which they see as a source of serious environmental harm (in terms of long-term ecological impact) on land as well as a bad choice in terms of material and energy usage, given the non-renewable nature of the extracted resource.

As these two communities try to map their development trajectories, given the increasing level of autonomy they have been granted, mineral resources are discovered on their lands. They have had past experiences with mineral development on their land as well, but previously they had little or no negotiating power. Now, however, they have far more control over decision-making. Nevertheless, both communities are still embroiled in various legal conflicts over the definition and terms of their land rights and the authority they can exercise. Since the colonizing people have a federal state structure of their own, the communities of Verde and Rouge must take account of politics at various levels.

The two communities are approached by mining companies who are seeking approval from various authorities for new mines. The environmental impacts of such extraction (i.e. adverse effects on water quality, land disturbance and occupational health) on Verde look to be much less harmful than the likely impacts of mining on Rouge. Both communities have relatively few development options and do not yet have any particular development plans for their region. Despite the likelihood of greater impact of mining, Rouge, decides to go ahead with mineral development while Verde decides to oppose mining.

This dynamic is puzzling to the federal authorities who had initially felt that resource development with proper mitigation would be in the best interest of Verde, and perhaps even more so than Rouge. The government authorities are now faced with a conflict between the mining company and the community of Verde, which is busy building alliances with anti-mining groups in external communities. On the other hand, in Rouge, the project is going forward as planned, though there are some external environmental organizations which are resisting mining development. However, these

organizations have little or no support from the Rouge community, even though they are framing their resistance as an indigenous community cause.

Why might resistance to mining, based on environmental concerns, emerge in Verde and not in Rouge when a "scientific" assessment predicted otherwise? Environmental planners and technocrats in government agencies in developed countries with elaborate regulatory regimes are all too often confronted with such resistance. The policy-makers and the government administrators are often situated uncomfortably at the interface between the community and industry and all the misunderstandings and misgivings which may lie in between. The interface is particularly abrasive and largely ill-defined when the community is an impoverished and historically disadvantaged group such as a Native tribe, and the industry in question is particularly surreptitious and environmentally "unfriendly" as mining. Hence this dissertation aims to focus on this interface with the hope that if lessons can be gleaned from such a major chasm of differences between an industry and a community, then they can perhaps be applied to other less acrimonious differences between other industries and communities as well.

My reason for choosing this topic and its broader contribution to environmental discourse are four-fold:

(a) The importance of minerals on Native land

Minerals are a pivotal natural resource for Native communities on both sides of the border and hence an extremely important political concern. In the United States when tribally owned lands are considered together with lands owned by individual tribal members, Indians possess approximately 30 % of the coal found west of the Mississippi,

50% of potential uranium reserves and 20% of known natural gas and oil reserves.[1] An inventory of on-reserve mineral potential prepared by the Canadian Department of Indian Affairs and Northern Development (DIAND) in 1990 recorded 3,276 "mineral occurrences" on the 2,267 First Nation reserves in Canada. Of these, 770 reserves were identified with precious and base metal potential. A meaningful number of reserves, 184, were classed as "of significant interest," in other words, warranting further examination.[2] However, much of the property rights and environmental jurisdiction concerns over these deposits is entangled in law suits and land claim conflicts. There is thus a need for a specific study of this kind because of a wide-ranging problem of mineral development specifically on Native land.

b) The significance of the mining industry in determining a country's ability to achieve the goals of sustainable development and industrial ecology

Modern society relies fundamentally on mining as a primary source of raw material and fuel for production at all levels of industry. Mining companies are thus powerful entities that can wield considerable influence with government and the population at large. They also have the resources to bring a sudden surge of development in otherwise remote and impoverished parts of the world which are sometimes inhabited by indigenous tribal populations.

Environmental resistance to mining is certainly amplified by the fact that it is a nonrenewable extractive enterprise. It thus forces us to frame the problem in the most extreme context and thus provides an unambiguous arena to explore resource conflicts which may not have simple win-win outcomes.

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[1] Quoted in Fixico, 1998.
[2] Canadian Department of Indian Affairs and Northern Development web site: http://www.inac.gc.ca

Like most environmental concerns there is often a stark difference between actual environmental impact and perceived impact – though policy decisions may not necessarily reflect this distinction. In the case of mining on Indian land perceptions regarding current mining ventures may be largely linked to some of the historical impacts of mining which were all too real. For example, of the 150 Navajo uranium miners who worked at the Kerr-McGee uranium mine in Shiprock, New Mexico until 1970, 133 had died of lung cancer or various forms of fibrosis by 1980. Yet, such historical harms do not necessarily translate into contemporary resistance either. There is a belief in many tribal establishments that technological advance and regulatory stringency can collectively allow for mining to be a means of sustainable development. This is most clearly manifest in the BIA and DIAND's programs for mineral assessments on tribal land which are in very high demand. Can mining be means for sustainable development on tribal land and at what cost?

(c) Relationships between the indigenous rights movement and the environmental movement

European colonial repression of indigenous communities in the "New Worlds" of America and Australia was particularly severe and persistent. Unlike regions such as India or most of Africa, the settlers in America and Australia have become a permanent and overwhelming majority of the population, often displacing the indigenous peoples from their environment and instituting resource-intensive enterprises, such as mining, in their place. Environmental groups in Australia and the Americas have thus felt a particular degree of contrition towards the Native cause.

The past few decades, particularly since the United Nation's involvement in indigenous peoples' issues, has brought forth a need for "atonement" in these countries. This is exemplified by the numerous initiatives to publicly apologize for the injustices of the past. Canada has been particularly strident in this regard through the publication of its plan for Aboriginal renewal *Gathering Strength,* in which the Canadian government recognized the past legacy of injustices and officially apologized for the abuse of Aboriginal children in the residential system, committing $350 million to healing centers to deal with the effects of this abuse. The plan spells out a sense of contrition quite explicitly:

> "Sadly our history with respect to the treatment of Aboriginal people is not something in which we can take pride……We must recognize the impact of these actions on the once self-sustaining nations that were disaggregated, disrupted, limited or even destroyed….We must acknowledge that the result of these actions was the erosion of the political, economic and social systems of Aboriginal people and nations."[3]

New Zealand has followed a similar path vis-à-vis an apology and statement of reconciliation. In the US and Australia, a public apology has not yet been issued, but the policies have moved strongly in the direction of "undoing" the injustices of the past through Native title settlement in Australia and various monetary settlements and self-determination regulation in the United States.[4]

This sense of retribution is similar to the congruent need for remediation efforts in the environmental realm, as exemplified by laws such as the Superfund legislation in the United States. The common theme is clearly to undo the wrongs of the past – whether

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[3] Government of Canada (1997). *Gathering Strength: Canada's Aboriginal Action Plan.* Ottawa: Canadian Government Publishing Office.

[4] The phenomenon of "retributive politics" has become particularly widespread since the end of Apartheid in South Africa. Professor Melissa Nobles (MIT Political Science Department) is currently working on a book comparing the "apology question" to Natives in the US, Canada and Australia.

that is pollution of ecosystems or racial discrimination of Native populations. There has thus been a confluence of interests between the indigenous rights movement and the environmental movement at some junctures of political lobbying, which may eclipse the latent conflicts in interest between the two movements at other levels of analysis. The common perception is that the Native people of the world are inherently environmentalists because for so long they have led relatively sustainable lifestyles. The web sites and published literature of environmental organizations tends to emphasize the linkage between a pristine environment and a peaceful and contented indigenous population, and often highlight the lobbying efforts of the organization in preserving indigenous aspirations. However, a closer analysis reveals that there are in fact many points of disagreement between the two groups and alliances which form are often opportunistic and may even be mutually destructive – they clearly live in a contested field.[5]

d) Defining degrees of cooperation, dependency and sovereignty among Native communities

The relationship between cooperative behavior and dependency interests me greatly and the way in which many environmental accords tend to be brandished as success stories deserves greater attention. Too often we do not fully understand the dynamics of the agreements and the terms by which they are reached and destructive policies can often result from such efforts.[6] In the context of Native American

[5] Ali, 1999. There is also much debate in the literature about whether the environmental justice movement is serving the interests of Native Americans (Weaver, 1996). Indeed, historical work on the native/environment relationship has been highly polarized, with detractors of native environmentalism arguing that the fur trade was a manifestation of Native "plundering" of nature (see Martin, 1978).

[6] For a revisionist and co-optive view of corporate environmentalism see Greer and Bruno, 1996.

communities this dialectic is further complicated by a history of paternalistic behavior on the part of the government as well.

The framework of parenthood has often been invoked to describe the European immigrant's attitudes towards Indians. However, this imposed parental care has been greatly resented by Indians. For example in 1916, Carlos Montezuma, an Apache chief (and a medical doctor by training) raised the voice of dissent in the most unambiguous words and specifically targeted the Bureau of Indian Affairs in a speech entitled "Let my people go:" Montezuma stated quite clearly that "The BIA's guiding policy that the Indian must be cared for like a child has directly encouraged dependency."[7] To continue the metaphor of the parent, there comes a time when the child grows up and the parent must "let go" -- hence planned obsolescence[8] is implied by this analogy.[9] Since this study is being undertaken through MIT's Department of Urban Studies and Planning, I aim to provide some insights regarding the trajectory of government involvement in First Nation policy formulation. Which way is the policy likely to proceed and is there a role for government as an interposing institution to resolve conflicts of this kind?

There are also two underlying observations which I am trying to piece together in this research. The first is that when one talks to Tribes on either side of the border regarding government involvement, they frequently express dissatisfaction with their own system and feel that their counterparts on the other side of the border are better off.[10] Is this mutual dissatisfaction merely an exemplar of the "grass being greener on the other

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[7] Iverson (1982).

[8] The term "planned obsolescence" is borrowed from the literature in science and technology studies where certain industries or organizations have to plan for the expected demise of a product, such as computers which usually do not have a long market life.

[9] There are of course parents who don't let go or children who never grow up, but Indian Society had shown that it had immense potential for sovereignty and civilization and the parental role of the US BIA or the Canadian DIAND is questionable.

side" or is there a more complex dynamic at play? Secondly, although Canada and the United States have both faced very similar situations with regard to these conflicts, there has been little or no attempt to draw lessons from the experiences of the other on these issues, particularly with regard to how the public organizations in both countries operate at a local level.

Furthermore, the linkage of environmental concerns to Native demands for sovereignty is increasingly prevalent but has not been well-studied.[11] While the literature of linkage politics demonstrates the connections between national and international policies,[12] very little has been done to show the connection between tribal politics and national politics, particularly in the area of environmental policy.

The Dependent Variable

The dependent variable in this study is the level of environmental resistance to development as manifest by whether or not mining projects were actually halted (at least temporarily)[13] on account of the resistance efforts. Thus I have chosen cases that clearly exemplify the dependent variable and where the outcome is unambiguous. However, my study will attempt to also match the aspirations of the resistors with the outcome of the resistance, so that the study is not merely centered on a dichotomous variable.

Table 1 shows the cases studied. The selection was made based on an evaluation of recent conflicts between mining companies and native communities as articulated by various NGOs and documented in newspaper articles, press releases from tribes and

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[10] Nichols, 1998. For a detailed review of development options for tribes see Kalt, 1992.
[11] Perhaps the first attempt to do this in an organized way is a recent volume edited by Litfin, 1998.
[12] See Rosenau's classic edited volume entitled *Linkage Politics,* 1967.
[13] This may be manifest in a court injunction or the subsequent decision of the company to not pursue the project any further and to sell their holdings to another entity.

mining companies. The case studies loosely follow a method of paired comparison, though more general lessons are freely drawn as well. The efficacy of the government's response and its relevance to the regional characteristics of each case will be explored to gain greater insights.

The "prevalence of resistance" was measured at two levels: I) the emergence of a majority opposition movement to mining development within the tribal community II) the effect of that movement on the way the project unfolds (or is halted completely). Because of legal recourse and democratic means within both the United States and Canada these two facets of the research are more tightly connected than they would be in less institutionally developed countries.

Please note that I did not find any evidence to support the "corruption hypothesis" ie: the negotiating authorities were not representing the majority view within the tribe. While there were pockets of dissent against the tribal government in all cases (either pro mining or anti-mining), the government positions were generally representative of the majority view as exemplified by polling data, acceptance of relocation settlements and related measures. While corruption issues and inefficiency are a serious problem among tribes on various matters, they have been largely addressed within the context of mining activities, largely due to judicial redress.

Controls:

In any comparative case study it is important to control for intervening variables which may blur causal connections. The kind of mining activity which is taking place, for example, is one such factor that may be an interfering variable. While my case studies

involve different kinds of mining activity, the differences in environmental impact do not appear to reshape the causal links of the study and in fact reinforce the need for further analysis. For example, while uranium mining is far more environmentally destructive and a major cause for resistance among NGOs, there was much less resistance to the uranium mining ventures in Saskatchewan than there was to a technically less deleterious nickel mine in Newfoundland. Similarly, slurry-transported coal mining is more environmentally problematic and occupationally risky than copper mining, and yet there was greater organized resistance in the case of the Crandon copper mine than there has been to the coal mines on Navajo and Hopi land.

The cases were also selected to control for the distance of mining activity from the community, the scale of the mining project in terms of revenues and growth potential as well as the time-scale of the project.

The most significant concern for controlling variables arises from the fact that the case studies involve different tribes and there are of course many cultural differences among Native communities. Nevertheless, when it comes to environmental concerns Native theology and historical practice (*before* intervention by development ventures) appear to have remarkable commonality and this is supported by various anthropological work by "outsiders" as well as numerous writings by Native peoples.[14]

[14] See for example The Inter Press Service publication (1993) *Story Earth: Native Voices on the Environment* or Weaver ed., 1996.

Table I-1: Cases studied

	Canada	United States of America
Cases where resistance did not prevail	Case C1: Central and Northern Saskatchewan Mines • Company: Cameco, Cogema • Tribes: Various • Minerals: Uranium Outcome summary: Mines were approved with generally overwhelming Native approval despite vigorous ENGO activism and a historical legacy of damaging mining activity.	Case U1: Mines in the Four Corners Region • Company: Peabody Coal, BHP • Tribe: Hopi, Navajo • Minerals: Coal and Uranium Outcome summary: Mining has historically led to severe environmental damage and financial mishandling by mining company. Nevertheless mine lease was renewed and the project continues with minimal resistance despite very close proximity of mine to communities and political strength of tribes.
Cases where resistance has prevailed	Case C2: Voisey's Bay, Newfoundland • Company: Inco Ltd. • Tribe: Innu Nation, Labrador Inuits • Minerals: Nickel Outcome summary: Vehement resistance led to legal action against project which is still pending.	Case U2: Crandon Project, Wisconsin • Company: Exxon-Crandon, Rio Algom • Tribe: Menominee, Chippewa Bands • Mineral: Copper-Zinc Outcome summary: Strong resistance to mining led Exxon to sell the project to Rio Algom and lobbying efforts by tribe and NGOs led to a mining moratorium law in Wisconsin. Project is still pending while the legislature further debates the moratorium.

The data for this study were gathered through field visits to each site. Interviews were conducted involving tribal officials, government agencies and NGOs to gain an appreciation for the various fields of engagement. Environmental impact statements, memoranda of understanding, minutes of meetings and newspaper archives helped in process-tracing.

The way in which the negotiation process plays itself out with major development ventures is partly manifest in the environmental impact assessment. Most details in this regard are documented in the environmental impact statement (EIS) which is usually prepared as a voluminous compendium of documents which chronicle interactions among the company, the community and the government. However, it is important to appreciate

that the EIS, despite its size and scope, is *by no means* an adequate source of documentation. Indeed, the EIS is often written with the tacit intention of justifying decisions that have already been made about the project. Therefore, I have tried to use separate evaluative studies of the issues and data from NGOs as well as public comments to enrich the process trace.

Testing Hypotheses: The Independent Variables

While my narrative will touch upon many plausible hypotheses that could explain the presence or absence of tribal resistance, I will focus on two particular lines of inquiry for the dissertation that are specially compelling and may themselves be linked. My first hypothesis focuses on the actual "negotiation" process by which a community is engaged by the mining company under the direct supervision of the government. This hypothesis is based on the proposition that the way in which a community is engaged in consultations or negotiations partly determines their perception of environmental harm and sets the tone for the relationship that develops among the stakeholders. This hypothesis will be tested through a detailed case analysis of meetings minutes, public statements, press releases, and bargaining tactics used by the mining companies and the government in interacting with the tribe and with each other.

The second, and perhaps more interesting hypothesis, concerns the involvement of external agents, namely environmental organizations, in galvanizing resistance. Much of the literature on civil society in the social sciences has of late given increasing importance to the role of non-governmental organizations as agents of political renewal

and societal reform through resistance.[15] Particularly in the context of indigenous rights, there has been a presumption that the involvement of NGOs is either a source of empowerment or a catalyst for socially "just" resistance. High profile protests against multinational institutions such as the World Trade Organization in Seattle and the World Bank and the International Monetary fund in Washington during 1999 and 2000 have lent further credence to this notion. However, I am quite skeptical about the applicability of this hypothesis to indigenous resistance to resource development in the developed world and will attempt to examine this thesis through detailed analysis of my four cases in this study, and also a general comparison to a constellation of other cases around the world.

[15] See for example, Boulding, 1997, and Wapner, 1997.

Table I-2: Explaining the dynamics of environmental resistance.

Hypotheses which are not supported by the scoping analysis of the case studies are designated as lowercase 'h', and are shaded whereas those hypotheses which merit testing with the given case studies are capitalized and unshaded.

Hypothesis: (Possible explanations for the prevalence of environmental resistance)	**Contextual analysis vis-à-vis case studies**	**Possible areas of further inquiry and ensuing hypotheses**
h1: Macro-level law and policy differences between the US and Canada have an impact on environmental resistance	Not supported by the case selection since cases of prevalence and failure in both countries were found and are being studied	Focus on local government implementation of law and policy
h2: The larger and more resourceful communities are able to exert more influence and hence their resistance is more prevalent	Not supported by a comparison of Cases U1 and U2, as well as a comparison of Cases C1 and C2	The larger communities may also be able to absorb environmental impact more effectively.
h3: Cultural differences between communities determine environmental resistance	Not supported by anthropological literature in this context	Culture may be a linked variable
h4: The technical aspects of the environmental impact analysis determine resistance	Not supported by a comparison of cases C1and C2 or U1 and U2	Perhaps the way in which technical analysis is presented determines resistance
h5: Ambiguous property rights regimes are the basic cause for resistance movements arising	Not supported by a cross-comparison of cases U1 and U2 as well as C1 and C2	This may be linked to h3
Ha: The negotiation process with the company and the government effects the emergence of environmental resistance	Merits further testing at various levels: EIS process, legal backdrop and corporate culture	
Hb: ENGO involvement increases the chances of expanding the constituency of environmental resistance.	Merits further testing at various levels: NGO involvement and resistance strategies; alliance formation	

Theory-building

I hope to build upon various theories of power and dependence. At a general level this approach was initially discussed by Emerson (1962) and further developed by Lukes (1975) and Gaventa (1980). In the context of Native American development this theory is particularly compelling given the historical dependency of tribes on natural resources, which were then appropriated by the government. Stated quite simply, Emerson's theory presumes that "the power of A over B is equal to, and based upon, the dependence of B

upon A." Furthermore, B's dependence on A is (1) directly proportional to the importance B places on the goals (mediated) by A and (2) is inversely proportional to the availability of these goals to B outside the A-B relationship.[16] While this may appear to be a rather self-evident and common-sense theory, it has some profound implications.

As Scott (1998) has pointed out, Emerson's work leads us to think of power not as some "generalized capacity but as a function of specific needs and resources that can vary from one exchange partner to another." Thus, it is possible for a government organization to have relatively little power with respect to one company and much greater power over a tribe. This approach also avoids a zero-sum view of power where it is assumed that one actor gains power at the expense of another. Instead it is possible for actors to mutually gain power by increasing interdependence.[17] Differences in perceived bargaining power can often lead to disillusionment with the process of negotiation. Indeed, there is sometimes a perception that the mere process of negotiation is perhaps a concession to the other side. This has been the case in many ecological disputes, where value systems may be at stake.[18] Developing and refining a non-zero sum view of power is thus critically important to dispute resolution, particularly concerning environmental matters.

In the context of indigenous populations, it is also becoming increasingly obvious that sovereignty and decision-making power are often the subjects of perceived conflict. An extended project on culture and conflict, conducted by the University of Victoria in Canada states that "the most important conclusion of their study was the centrality of how

[16] Several years hence, part of this approach has also been articulated in the dispute resolution literature as the concept of BATNA (Best Alternative to a Negotiated Settlement). Indeed, an article on the sources of "Negotiating Power" by Roger Fisher (1983) identifies BATNA as a source of power.
[17] See Pfeffer and Salanick, 1978 and Pfeffer, 1992.
[18] Crowfoot and Wondolleck (1990)

power is perceived and actually embedded in intercultural conflict."[19] How well a set of public organizations is able to "empower" a community or place things in perspective for all sides is dependent on their understanding of this cultural divide and in their understanding of power and dependency. Underlying this study is the comparative reward of lesson-drawing for both Canada and the United States. There are clearly important differences between the US and Canadian bureaucratic systems.

Towards Synthesis:

While this study aims to present many complex problems with multiple causality, the design of the research and the selection of cases aims to present a clear picture of how environmental resistance movements evolve; how they can, in turn be, agents of change; and how they may affect the development trajectory of Native communities. I have tried to avoid any value judgements about the specific projects reviewed and have not posited any normative view about mining per se. Instead my analysis focuses on the primacy of the process by which an outcome is achieved.

My long-term research interest lies in the interaction of industry and communities over environmental concerns. By choosing the interactions between mining companies and indigenous communities, I have tried to cover the widest margins of dissent in environmental decision-making. If some lessons can be gleaned concerning the causes of conflict and the reasons for cooperation between such a diverse array of stakeholders, then perhaps we can use these lessons in other less intractable settings as well.

[19] Lund and Duryea et al., 1994.

PART 1: THE STAKEHOLDERS AND EMERGENT CONFLICT

1. Mining and Aboriginal Development: Situating the Research Problem

Perhaps the most valuable attribute of social science research lies in its ability to understand complex phenomena in human societies – to explicate situations whose causes are in question and whose dynamics cannot be replicated in vitro. This chapter aims to describe the phenomenon which I am trying to understand in some detail so that the rest of the dissertation can be contextualized. By understanding the scope and scale of the phenomenon we can move with trepidation toward more generally applicable theories, as the story unfolds.

In this chapter I will endeavor to convince the reader that environmental resistance to mining activity on Aboriginal land is a phenomenon that merits in-depth research particularly from a planning perspective. Since this research is a study of conflict, it is essential to gain close familiarity with the categories of stakeholders. This chapter also serves to introduce one of the main stakeholders in the conflicts which I am studying -- Aboriginal groups. They are truly the key protagonists in this dissertation – indeed it is the unique policy challenges that are presented by indigenous people and their predicament in settler-dominated countries which has motivated this study. To summarize the way various stakeholders in such conflicts can be envisaged, Figure 1, attempts to present them as a Venn diagram. It is important to note that the representation of bargaining power in this diagram reflects the more prevalent "environmental justice" worldview that envisages governments and corporations to be much more powerful than indigenous communities and ENGOS. However, this differential of power will itself be a subject of much debate throughout the dissertation.

Figure 1.1: Loci of interest for various stakeholders. Size of ellipses indicates the relative bargaining power of each group

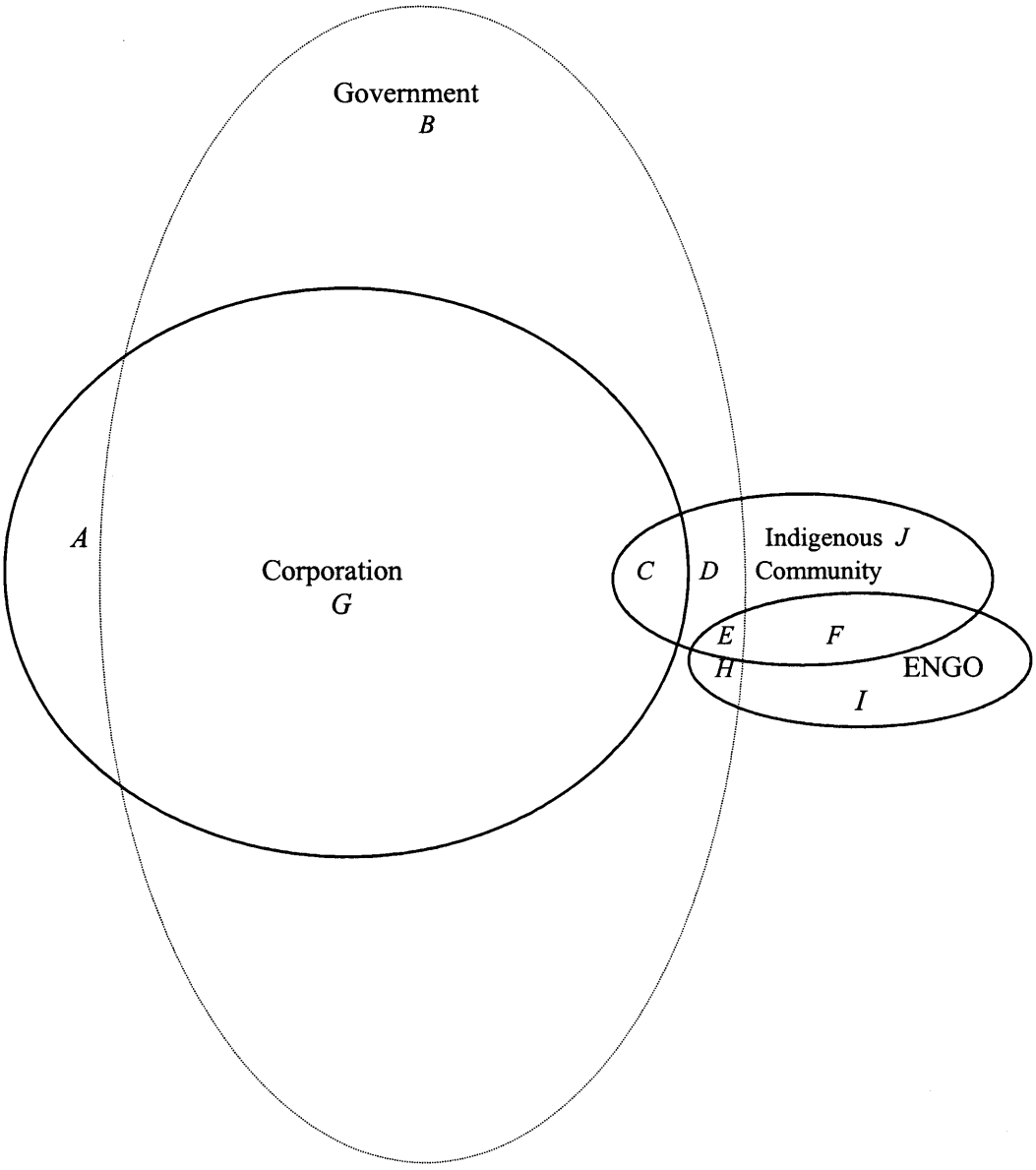

Table 1.1: Explication of loci in Venn diagrams

Venn diagram regions	**Explanation within the context of the conflict and the country in which it is being played.**
A	Corporate interest only: Maximizing profits from operations beyond this country
B	Government interest only: policies of importance to constituencies outside this dispute
C	Common interests between community and corporation: Employment and labor benefits. A portion of the community which feels that the compensation being offered by the company is adequate. Potential for splinter group within community
D	Common interests between the government and the community only (excluding corporate or ENGO interest): welfare benefits, political representation
E	Common interests between ENGO, government and community (excluding corporate interest): environmental protection through state-level economic analysis
F	Common interest between ENGO and community (excluding government or corporate interest): environmental protection based on normative concerns (value-based)
G	Common interests between corporation and government: strategic economic development concerns for the state, exogenous to the region
H	Common interests between ENGO and government (excluding community and corporation): other environmental lobbying efforts in which the ENGO is involved outside this conflict area (but within the country) which the government endorses
I	ENGO interest only: based on a broader vision of the ENGO's charter. Accountability to international headquarters and to the resolution of other disputes outside this country
J	Indigenous Community's interest only: Issues of Cultural significance

Note 1: There is no region of common interest between most ENGO and corporations. However, this may vary depending on the environmental group. As a general policy, ENGOs refuse to take corporate funding in their activities after the landmark decision of the Environmental Defense Fund to refuse funding from McDonalds Corporation for a study it conducted on packing material used by the company.

Note 2: Government, clearly has many levels and bureaucratic agencies can act as sub-stakeholders. However, in this diagram, government is shown as an overarching entity for simplicity -- different competing institutions within various levels of government can be visualized within the overlapping regions with other stakeholders.

1.1 Aboriginal experiences with mining in North America

Most books on the history of mining in North America often begin with a section on "the first mystery miners." – usually there is a description of how Native Americans tribes, particularly in the South-west of the continent may have discovered the usefulness of metallic elements several centuries before the advent of the Europeans. There are numerous ancient abandoned mine sites in the southwest which have spawned much

debate among historians. The Spanish chronicler Farfan de los Godos reported as early as 1598 that he had been given a piece of pulverized ore by an Indian, who later showed him a small primitive mine site in the mountains of what is now eastern Arizona. There is considerable debate about the veracity of such accounts but general consensus that Indians probably did not use metals for tools and implements but rather the ore was used as a source of pigment for body adornement.[20] The association of Aboriginal people with mining activity in the pre-settlement era is thus somewhat obtuse and clearly the extent of any mining at that time was at a very small scale.

Mining does, however, play a pivotal role in the history of Indian-settler relations. The historian Frederick Jackson Turner noted in 1920 that the settlement of North America seemed to follow a rythmic pattern. First came the mountain man into the wilderness hoping to make a fortune trapping and trading furs; then came the miners in search of a proverbial *El Dorado*. They were followed by cattlemen who grazed their herds on open range. Finally came the farmers who fenced the land and ended frontier life for good.[21] While revisionist historians, such as Hine and Faragher (1999) have largely deconstructed Turner's frontier theories of Western expansion, the reality of mining booms and the influx of settlement which they brought remains beyond reproach.[22]

Lucrative prospects for mining drew more and more settlers toward Indian lands in Appalachia, the Southwest, and the extreme Northwest (Alaska and the Yukon). The promise of mineral wealth clearly provided a great impetus for European settlers to encroach upon Indian lands as early as the seventeenth century. While the fur trade

[20] A particularly engaging account of the mystery mines is given in Love, 1974 (Chapter 1).
[21] Turner,1920.

involved reciprocal arrangements between Indians and Europeans and revolved around a commodity with which the Indians were familiar, mining activity occurred on a much more ad hoc basis and involved a commodity with which Indians were not too familiar. Therefore, mining activity was regarded with far more suspicion in the eyes of tribes during the early years of the frontier expansion.

The history of European colonization of Native lands is beyond the scope of this dissertation and has been addressed by a wide body of literature.[23] Nevertheless, it is important to have some historical background to inform our discussion since many arguments presented by resistance movements on Native land are predicated on perceptions of history. Appendix 1 provides a detailed comparative chronology of important historical events in the history of Settler-Native interactions in the United States and Canada with particular relevance to mineral development and the development of Settler-Native relations. The chronology reflects a historical "clash of cultures", with injustices taking place on both sides. However, since the Europeans were the newcomers, the onus of building positive relationships with the Indians was clearly on them.

The profound demographic effect of European settlement should not be understated. There is considerable disagreement about the population of Native societies in North America prior to settlement. However, even conservative estimates of Native depopulation caused by disease, warfare and over-work are staggering. For example the population of Indians in Puerto Rico in 1508 by Spanish estimates of the time was 200,000. Within 3 years, the population was estimated at less than 20,000.[24] While the

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[22] Hine and Faragher 1999 and Limerick, 1999.
[23] See for example, Debo, 1970; Fleet, 1997 and Nichols, 1998.
[24] Quoted in Champagne, 1994, p. ix. An authoritative history of Native American Demography is Thornton, 1990.

extent of such demographic change may vary from region to region, there is no doubt that the Native population generally diminished in all areas where "contact" occurred. The perception of this change persists in the memories of many Native American activists to this day and thus "genocide" is a frequent refrain in Native discourse, as exemplified by the recent publication of Colorado history professor, Ward Churchill's book *A Little Matter of Genocide: Holocaust and Denial in the Americas, 1492 to the Present.*[25] A more relevant variation of this term is "ecocide", which was first used as the title of book published in 1970 on the ecological impacts of wars in Indochina.[26] Since then it has been used to describe colonialism in the Americas by numerous Native writers.[27]

It may be useful for our purposes to divide the period of Settler-Indian relations in North America into three segments – this broad delineation holds true for relations in both the United States and in Canada. The differences in currently applicable legislation and policy between the two countries will be discussed in detail in Chapter 4.

First, was the wave of expansion, from the sixteenth century to the end of the eighteenth century, which involved a series of battles and treaties between Natives and Europeans. This was the time when many Indians were displaced from their lands because of the need for settlers to acquire land for either mining or agricultural activity. The second wave involved the development of institutions to effectively "manage" the Indians by relegating them to reservations or reserves within circumspect boundaries. Initially, Native Americans were relegated to these lands because those lands were thought to be unproductive. As a recent review of a book on Indian mineral resources

[25] Churchill has also written on environmental concerns.
[26] Weisberg, 1970.

points out: "it is no small irony that after Native Americans had been forced onto reservations on land that nobody wanted, a wealth of natural resources would be discovered under those lands."[28]

When minerals were indeed discovered there was a wave of policy initiatives to facilitate the development of mines on Native lands through a rather ad hoc mixture of land appropriation, population displacement and "side payments." While I am holding true to the economic context of the term "side payments," I do not want to suggest that such financial arrangements were by any means just. In 1882 oil was discovered in the Oklahoma territory, which subsequently led to the Indian Mineral-leasing act of 1891. In Canada, mineral resources were included in treaty negotiations between tribes and the Canadian government as early as 1876, when Treaty 6 was signed. In this document indigenous people agreed to share topsoil "to the depth of a plough." (meaning six inches deep).[29]

We are currently at the third stage of Settler-Native relations in North America wherein the political system has reached a level of maturity to preclude overt manipulation of Native American rights. However, there is a continuing sense of distrust among tribes about the terms of resource development on their land, and a congruent sense of resentment among many non-Natives about the special status of Natives. Natural resource policy is a key issue in this larger conflict since through the vicissitudes of history many tribes have large resource endowments, spawning a subsequent desire for

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[27] See Grinde and Johansen, 1999. Some Native leaders in Western Canada also prepared a detailed declaration entitled "Ecocide as Genocide" in May, 1992: See web page: http://kafka.uvic.ca/~vipirg/SISIS/sov/ecogen2.html

[28] *Booklist* review on the back of Fixico, 1998.

[29] Quoted in Venne, Sharon "Understanding Treaty Six: An Indigenous Perspective," in Asch, 1997.

resource exploitation on their land. Tables 1.2, 1.3 and 1.4 show the scale and scope of mineral deposits and mining activity on Native land in the United States and Canada.

One of the puzzles that is evident from these tables is the enormous disparity between solid mineral potential on Canadian reserves and actual mining activity on the reserves. There are basically no large metallic or coal mining ventures on reserves themselves, despite the geologic potential for economically feasible extraction. Most of the mining which is occurring on the reserves is sand and gravel (S&G) mining which is qualitatively quite different from metallic mining or even coal mining. The Canadian case studies in this dissertation involve land which is located in predominantly Aboriginal area but which is not reserve land as such. However, the Saskatchewan case study encompasses the Fond du Lac band, which is the only metallic mineral *exploration* on reserve land. From a comparative perspective, my research will attempt to tease out the differences in how resistance emerges in these two settings.

Table 1.2: Indian Tribes in the US with mineral activity[30]

Reservation (Tribe)	Energy mineral potential	Trust Acreage (% alotted)	Resident Indian Population	Government
Blackfeet (Blackfeet)	Coal, oil and gas	937,701 (68)	7,000	IRA
Crow (Crow)	Coal, oil and gas	1,516,005 (73)	5,500	Non-IRA constitution
Fort Berthold (Mandan, Hidatsa, Arikara)	Coal, oil and gas	419,198 (83)	3,100	IRA
Fort Peck (Assiniboine and Sioux)	Coal, oil and gas	904,683 (57)	5,200	Non-IRA constitution
Hopi (Hopi)	Coal, oil and gas	1,561,213 (0)	9,000	IRA
Jicarilla Apache	Oil and gas, coal	823,580(0)	2,500	IRA
Laguna Pueblo (Keresan)	Uranium, coal	461,099 (0)	6,700	IRA
NANA Corp., Alaska	Zinc, Copper	Non trust, Alaskan Corporation lease		Alaskan
Navajo (Dineh)	Coal, uranium, oil and gas	436,947 (27)	170,000	---
Northern Cheyenne (Cheyenne)	Coal, oil		3,300	IRA
Osage (Osage)	Oil and gas	168,794 (100)	6,200	-----
Southern Ute	Oil and gas, coal	309,970 (1)	1,200	IRA
Spokane	Uranium	130,180 (9)	2,100	-----
Uintah and Ouray (Ute)	Oil and gas, coal oil shale	1,0231,556 (1)	2,500	IRA
Ute Mountain Ute (Ute)	Oil and gas, coal, uranium	597,288 (1)	1,700	IRA
Wind River (Arapahoe and Shoshone)	Coal, Uranium, Oil and gas	1,887,262 (5)	5,500	-----

[30] Based on data presented in Ambler, 1990 and BIA , 2000

Table 1.3: Canadian First Nation reserves with mineral activity[31]

Band Name	Province	Material Extracted	Population on reserves	Area (hectares)
Big River	Saskatchewan	S&G	1638	12129
Blood	Alberta	S&G	7442	134293
Cheam	British Columbia	S&G	180	458
Clearwater River Dene	Saskatchewan	S&G	535	9510
Cowichan	British Columbia	S&G	1850	2254
Cree (Bigstone)	Alberta	S&G	1864	21014
English River	Saskatchewan	S&G	595	13100
Fond du Lac	Saskatchewan	Metallic exploration	805	15520
Joseph Bighead	Saskatchewan	S&G	462	4700
Kamloops	British Columbia	S&G	NA	NA
Kwakiutl	British Columbia	S&G	326	420
Lac La Ronge	Saskatchewan	S&G	4195	43294
Matsqui	British Columbia	S&G	83	165
Montreal Lake	Saskatchewan	S&G	1592	8270
Pavilion	British Columbia	Limestone	165	2126
Penticton	British Columbia	S&G	496	18532
Peter Ballantine Cree Nation	Saskatchewan	S&G	3157	15067
Saik'uz First Nation	British Columbia	S&G	540	2578
Saulteaux	Saskatchewan	S&G	482	11820
Six Nations of the Grand River	Ontario	Underground Gypsum Mine	8323	18265
Skyway	British Columbia	S&G	52	680

It is clear from the data presented here that solid mineral activity is an issue of great salience to Native Americans on both sides of the border. In the United States, tribes have had more experience with metallic mining on their land when compared to their Canadian counterparts. However, the huge mineral potential of Canadian reserves, and even more so the potential for further mineral activity as land claims are settled in British Columbia and Newfoundland, is immense.

While the specific nature of mining activity in terms of land tenure and legal regime may have been different on both sides of the border, the environmental impact of mining on Native communities, has been considerably serious for all. Apart from these

[31] Data from personal communication with Mr. Jean-Loius Causse, Project Manager, Environment and

mines there are several other proposed ventures which are located on or near Native land in the US and Canada. A list of these projects, along with other projects which have affected Native communities, is given in Table 1.4.

Table 1.4: Other mining or remediation projects in which native communities are involved[32]

Mining Project / Area	Tribe or Band Affected	Status
Carlotta and Gentry metal mines, Arizona	White Mountain Apache Tribe	Proposal for an open pit copper mine by Canadian mining company Cambior, near the reservation.
Coeur D'Alene Mines, Idaho	Couer d'Alene	DOJ lawsuit against Asarco mining and area near the reservation has been declared a Superfund site.
Colville, Washington	Colville	Tribe passed a referendum to oppose mining by Battle Mountain Gold and Santa Fe Pacific
Crandon Mine	Mole Lake Chippewa, Menominee	Rio Algom has purchased the property from Exxon but there is currently a moratorium on mining in WI.
Crescent Valley, Nevada	Western Shoshone	Oro Nevada Resources has begun exploration work despite tribal requests to stay clear of the area
Crownpoint Uranium Mine, NM	Navajo	Proposal for several uranium mines using in-situ leaching process. EIS process is underway
Dawn Uranium mine	Spokane	Under reclamation negotiations
Diavik Diamond mine	Dogrib and Yellowknives	Diamond mine located in area of land claims being settled. Operation has been OKed by Canadian govt.
Ekati (BHP) mine, NWT, Canada	Dogrib and Yellowknives	Agreement signed in 1999 – mining commenced soon thereafter
Picurus project near Taos, NM	Picurus Pueblo	Summo, a Canadian mining company is conducting exploratory work adjacent to the reservation.
Raglan mine, Quebec, Canada	Makavik corporation	Nickel and copper project commenced in 1998 after an agreement was signed
Zortman-Landusky gold mine, MT	Fort Belknap	Mine is in operation and located adjacent to reservation. Civil cases have been won by the tribe for damages.

Natural Resources, Canadian Department of Indian Affairs and Northern Development, Ottawa, Dec. 1999.

[32] Based on various personal communications with the BIA and DIAND as well as a memorandum on "Mining and Sacred Sites" published by the Mineral Policy Center in Washington DC, 1999. This list includes projects which are not necessarily on Native land but are in close proximity to native areas and have thus required consultation or negotiations with the communities.

1.2 Is this an Environmental Justice Issue?

An argument can also be made that the large preponderance of mining activity on Native land, particularly uranium mining was a manifestation of environmental injustice. The preponderance of mining according to this hypothesis, was not an accident of geology but rather a deliberate attempt by the mining industry to locate mines in areas where there would be minimal resistance on grounds of environmental and occupational harm. However, geological data does not support this hypothesis. Extractable minerals are generally so few and far between that mining companies are seldom in a position to pick and choose deposits. For example Figure 1.2 shows the mineral potential in the United States. Many of the mineralized areas happen to be in mountainous or rough terrain -- areas which are often not ideal for urban establishments but where tribal communities have flourished because of relatively abundant water, game and timber.

The historical record shows that in the early days of frontier expansion the decision to mine was determined totally by the perceived potential of minerals on land and quite irrespective of its prior occupancy (hence the term mining "rush"). Over time, the presence of Natives on the land, environmental issues and other regulatory regimes began to sink in as factors in decision-making on the part of prospectors – but their inclusion was apparently more a cause for pause. Part of the purpose of this study is to understand the factors which contribute to the decision-making process within mining companies. What role do environmental regulations, Aboriginal rights concerns and other regulatory forces play a role in decision-making process of mining developers?

Too often scholars of Native American environmental concerns have fallen to the temptation of lumping together issues such as the siting of nuclear waste sites with

mining development – perhaps this has been caused by the presence of uranium in both issues. However, the siting of nuclear waste sites is far less determinate by geological indicators than is the siting of a mine – the potential choices for possible waste repositories from a purely physical science perspective are far more numerous. For example it was primarily social factors that ended up narrowing the list to 9 sites in the case of the Department of Energy's plans for a waste depository in 1983.[33] Therefore, environmental justice arguments hold more credence in such cases than they do in the case of mining development.

Nevertheless, the subsequent compliance with various environmental laws and human rights issues *post facto* of a mine's establishment may well be discussed with an environmental justice lens. A comparison of environmental compliance and occupational health concerns on mines that are located on Native versus non-Native land is thus quite reasonable. While such questions are not the focus of this research per se, the emergence of resistance may be motivated by at least a perception of such environmental injustice and hence will be discussed where it is evident in the case analysis. It is important that we keep these various distinctions and subtleties regarding environmental justice in mind at the outset to avoid confounding issues.

[33] For a detailed social science analysis of the nuclear siting dilemma in the US and Canada see Rabe, 1994. A more recent work which focuses on Native American issues in Nuclear waste siting is Kuletz, 1998.

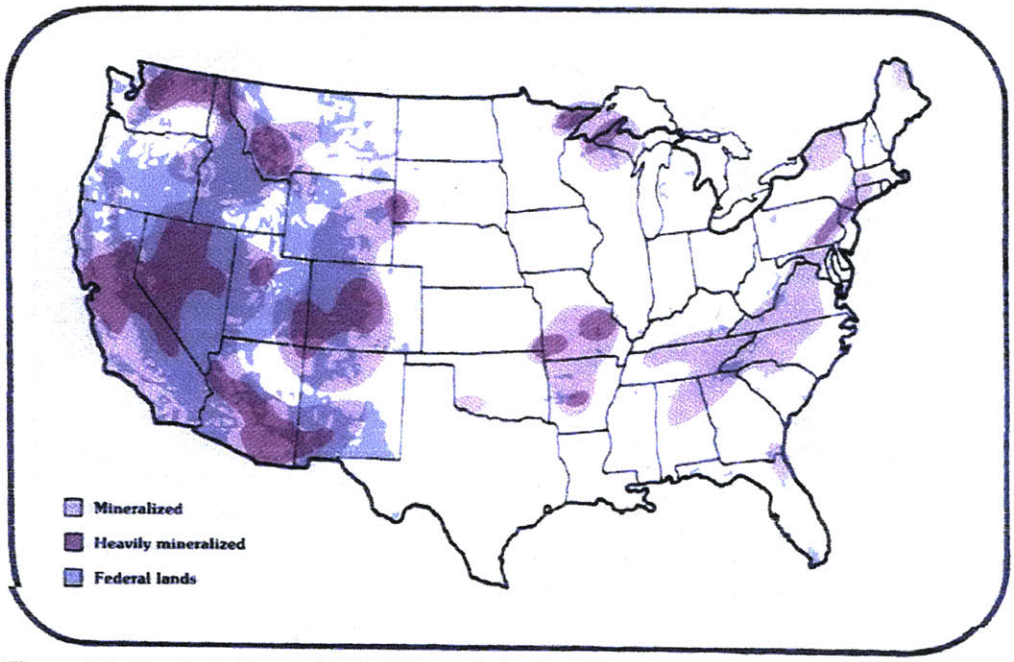
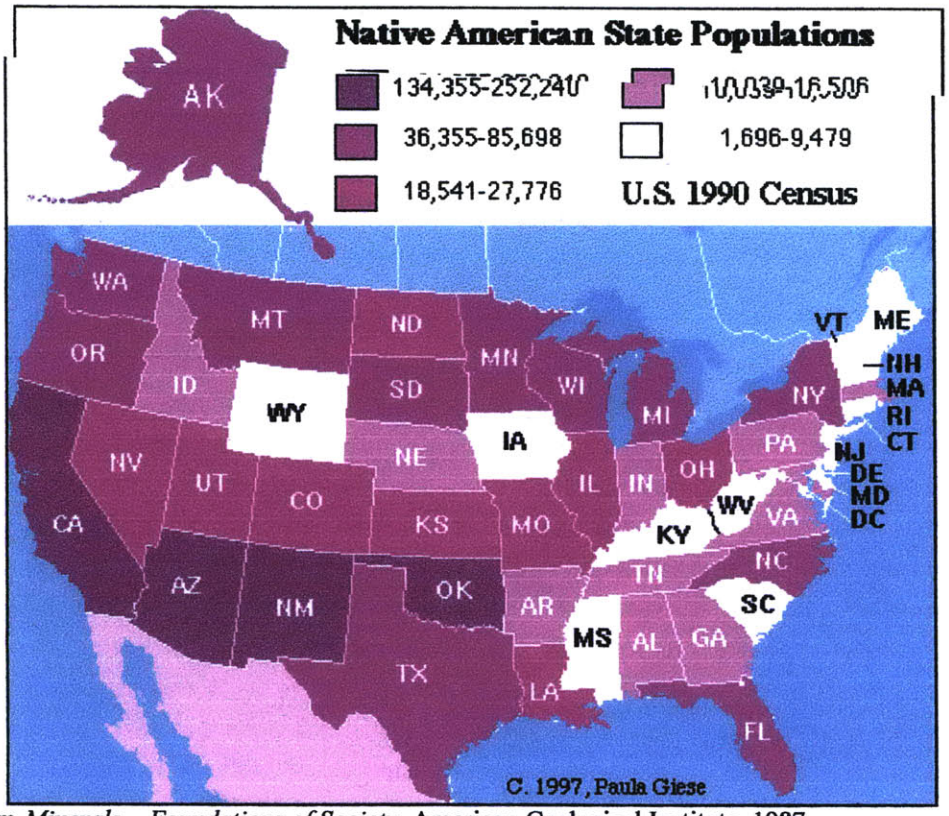
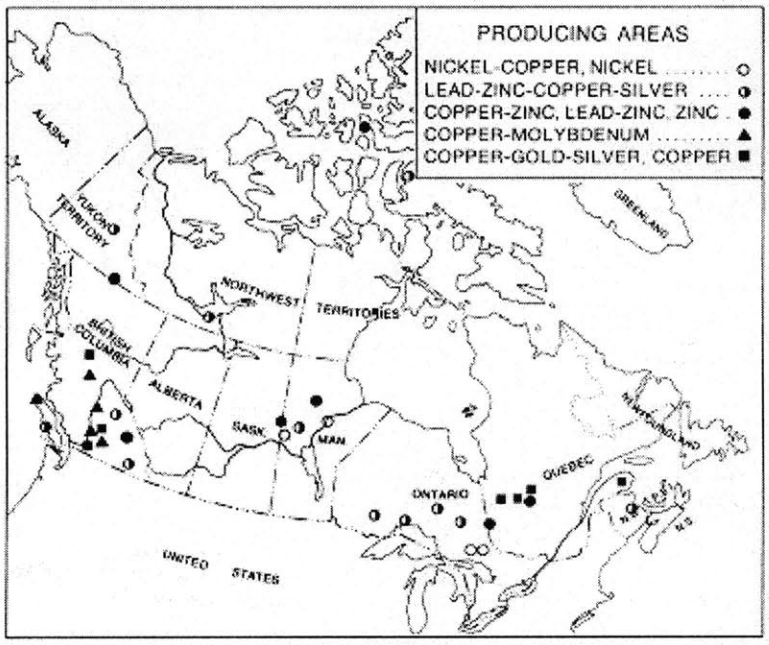


Figure 1.2: Geologic Potential for Minerals in the USA and Coincidence of Native Population



From *Minerals – Foundations of Society.* American Geological Institute, 1987

Source: Bureau of Indian Affairs, based on 1990 census.



Source: *Mining in Canada, Facts & Figures*, 1994, The Mining Association of Canada.

Figure 1.3: Mineral Producing Areas in Canada

Environmental justice is, however, becoming an expansive academic concept and acquiring a cache similar to "sustainable development." However, sustainability and environmental justice are by no means synonymous concepts. Andrew Dobson (1999a and 1999b) is among the few political theorists to try and tackle the confluence and divergence of these two concepts. As he insightfully observes in his work *Justice and the Environment*, the key common ground lies in the common preoccupation which both concepts have with the distribution of "benefits and burdens."[34] However, even with his neat typology of comparing the two concepts he encounters a problem which he encapsulates as follows:

> The framework for the exploration of the relationship between environmental sustainability and social justice would have been neater than it turns out to be if it had been possible to demarcate distinct

[34] Dobson borrows these terms from David Miller's work (1990). (Dobson, 1999b, p. 73.). The "benefits and burdens" dichotomy is manifest in the Canadian process of "Impact Benefit Agreements" (IBAs) which will be discussed in our case analyses (Part II).

> conceptions of social justice in the same way as I was able to do for the conceptions of environmental sustainability.[35]

As we shall see (particularly in Chapters 6 and 7), much of the disconnect between Native groups and environmental groups arises because of an inability to judge this disjuncture.

1.3 Mining and sustainable development: A value-based conflict?

Retrieving rocks and minerals from the Earth's crust changes the most basic structure of an ecosystem by disrupting the substrate on which life may develop. The environmentally deleterious effects of mining were noticed as early as 1556, when Georgius Agricola wrote his seminal text on mining:

> "The strongest argument of the detractors [of mining] is that the fields are devastated by mining operations...When ores are washed, the water which has been used poisons the brooks and streams. Therefore the inhabitants of these regions, on account of the devastation of their fields, woods, groves, brooks and rivers find great difficulty in producing the necessities of life."[36]

Enormous quantities of waste material is generated since minerals are generally a rare appendage to huge quantities of worthless sediment. Underground mining often involves rock dewatering and the lowering of piezometric head. This may in turn lead to compaction of sand and clay, alteration in rock mass, and the development of major jointing and surface subsidence. Mining activities are also likely to cause extensive chemical pollution and sedimentation in river channels because detergents and petroleum

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[35] Dobson, 1999b, p. 84.

[36] Agricola, Georgius. *De Re Metallica* (1556). Translated by Herbert Clark Hoover and Lou Henry Hoover 1912 Reprint, New York: Dover Publications. Quoted in Eggert, 1994.

powered machinery are often used in the mining processes. Chemical engineers have described mines, specially abandoned ones, as "arsenic factories."[37] Dredge mining, a process in which unconsolidated mineral-rich sedimentary material is removed by suction from a water-covered area is extremely deleterious for wetland areas.

Water within a mine has been traditionally considered a hindrance to mining and hence draining programs from the mining site have caused major disruptions in groundwater regimes. The direction of groundwater movements may easily change due to mining, thus leading to disruptions in recharge regimes and the drying up of certain springs. There may also be a rise in groundwater in certain mining areas where geotechnological methods are used. Contamination of springs due to seepage of mine wastes may exacerbate the problem of water quality. Highly mineralized water may be very damaging to the organisms residing in rivers, not to mention the deleterious effects on humans.

Mining activities generally change siltation rates in river systems and turbidity measures which may cause serious damage to fisheries. The excavation sites left by mining operations can fill with water and be a haven for mosquitoes and other undesirable pests. This has been a particular problem in the Brazilian mining region, where reported malaria cases increased from 52,469 in 1970 to 577,520 in 1989.[38]

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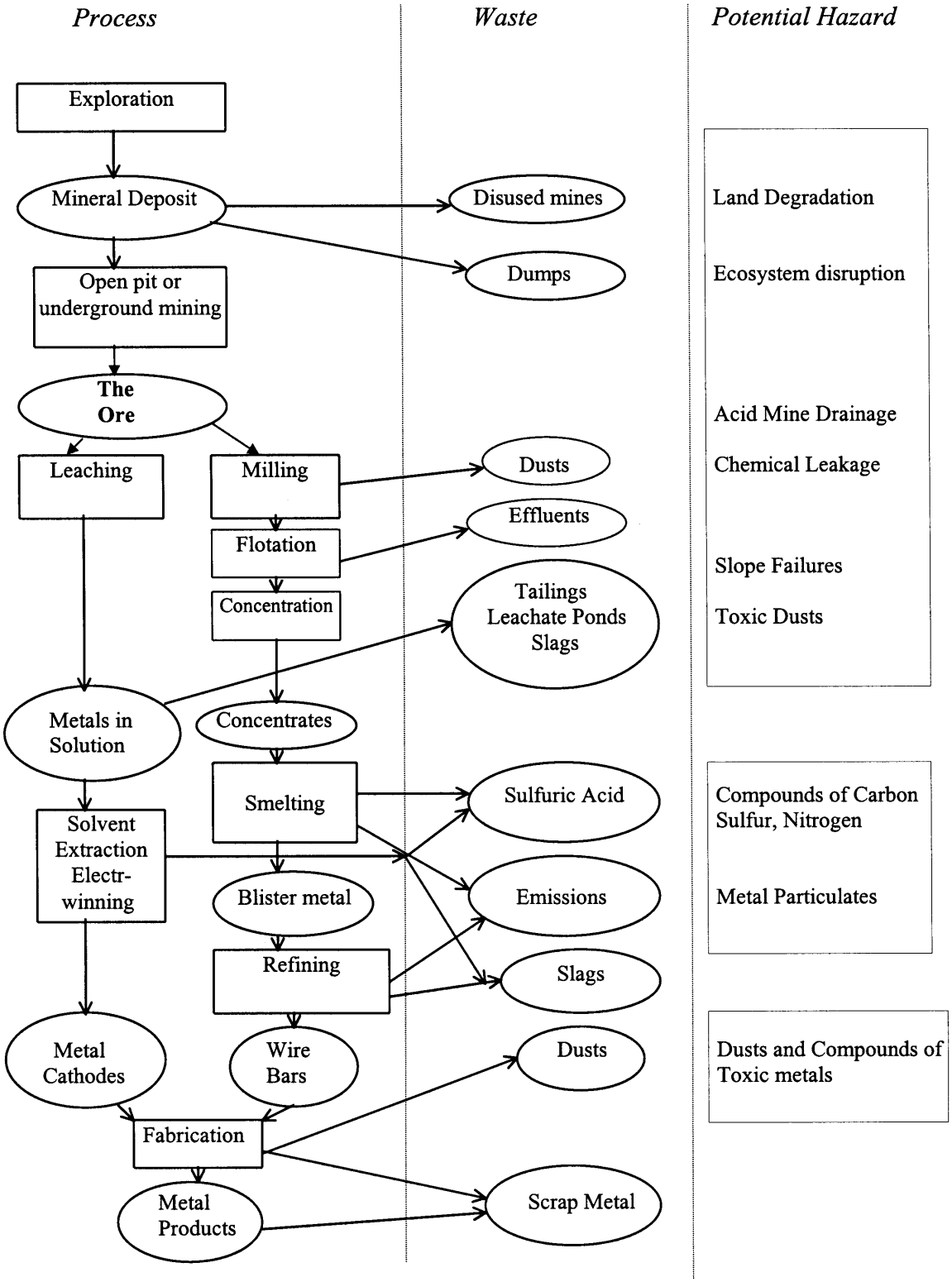
[37] Henk Coetzee and David Cooper. "Wasting Water: Squandering a Precious Resource." in Cock & Kosh eds., 1991, pp. 136.

[38] Cleary, D and I. Thornton. "The Environmental Impact of Gold Mining in the Brazilian Amazon." in Hester and Harrison eds., 1994.

Figure 1.4: Mining and its Environmental Impact (adapted from Warhurst, 1992)



There is considerable variation in the environmental impact of different kinds of mining activities. For example in underground copper, gold, silver and uranium mines in North America, the ratio of overburden + waste rock : ore is on the order of 0.1:1 to 0.3:1, whereas for surface mines (often referring to coal), the ratios range from 2:1 to 10:1[39] However, in other areas underground mining presents greater challenges, particularly in the areas of groundwater contamination, seismic disturbance and occupational health. Overall, solid mineral mining presents different mitigation challenges depending on the method that is employed but collectively environmental concerns surrounding mining development of metallic minerals and coal are significant regardless of the kind of mining method that is employed. Tables 1 .5 and 1.6 highlight some of the key impacts and mitigation measures in the mining industry.

[39] Quoted in Eggert, 1994, p. 8, based on data compiled by the US EPA and the US Bureau of Mines (no longer in existence).

Table 1.5 : Environmental Effects of Various Methods of Mineral Extraction

(after Ripley et al., 1996)

Mining Method	Environmental Advantages	Environmental Disadvantages
Underground		
Open stopping	less waste rock than with surface mining	high subsidence potential oxidation of exposed materials
Filled stopping	lower risk of subsidence; disposes of some waste material	possibility of oxidation and combustion of backfill; slurry drainage and water disposal aquifer impact
Surface		
Open pit	accessibility and lower worker risk than underground	waste rock and dust; noise; mine drainage; ore oxidation
Alluvial	relatively easy to control damage although rarely done	high potential for particulate emissions to atmosphere and hydrosphere; surface disturbance
Non-entry		
Auguer	minimum surface disturbance and low worker risk	low extraction efficiency
in-situ leaching	reduction of solid wastes, mill tailings, surface disturbance and worker risk	requires disposal of large amounts of soluble salts, possible groundwater contamination and surface subsidence
in-situ utilization	minimal surface disturbance, worker risk and solid residuals	difficulty in containing and controlling underground process; high potential for underground contamination and explosions

Table 1.6: Abatement Procedures for Some Environmental Effects of Mineral Exploitation

(after Ripley et al., 1996)

Effect	Traditional Abatement	Advanced abatement
Surface disturbance and Waste Dumps	reclamation, backfilling and slope engineering physical stabilization: covering with inert material such as slag, soil, concrete chemical stabilization: spraying with oil-resin emulsion; vegetative stabilization	greater use of waste material for mine backfilling, roads, construction greater use of non-entry methods of mining and alternative methods of disposal better waste-dump siting
Hydrospheric effluents (water pollution)	settling ponds, recycling, lime neutralization chemical treatment: neutralization, coagulation, precipitation, oxidation, reduction, oil exchange chemical stabilization: spraying with oil-resin emulsion; vegetative stabilization	use of wet drilling or enclosure and dust collection, more recycling biological polishing better waste-dump siting

Waste generation is probably the most widely publicized mining problem, and deservedly so. Mining and beneficiation generate two billion tons of solid waste a year in the United States, which represents about 40% of the country's total solid waste. However, these numbers can be deceptive as well. Interestingly enough, the total hazardous waste, which is classified as a subset of solid waste, is only 270 million tons. Unfortunately, there is no comprehensive data available on what percentage of hazardous waste actually comes from mining. Nevertheless, hazardous or not, the solid waste generated is still an immense challenge to dispose and the EPA has had a lot of difficulty classifying the waste under the Resource Conservation and Recovery Act of 1976.[40] In 1980 Congress passed the Bevill amendment which excluded the solid waste from mining, milling and processing of minerals from regulation under Subtitle C of RCRA (which deals with hazardous waste). Subsequently EPA prepared a report on the impact of mining wastes on the environment and differentiated between extraction and beneficiation wastes on the one hand and mineral processing wastes on the other. The report concluded that while some mineral processing waste met the criteria for Subtitle C hazardous classification, most exploration and benficiation wastes did not. Therefore the agency decided to regulate mining wastes under Subtitle D of RCRA (Non-hazardous wastes), with the caveat that federal oversight and enforcement would be required (even though they are not stipulated in the statute).

This decision was challenged in court by the Environmental Defense Fund and in 1988 the U.S. Court of Appeals ruled against the agency insofar that the exemption of all mining wastes from Subtitle C was too broad. Therefore EPA issued two final rules in

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[40] The precursor of RCRA was the Solid Waste Disposal Act of 1965.

1990 under which most were made subject to Subtitle C. Nevertheless the rules also identified 20 mineral processing wastes whose impact would be studied further before a classification was made. These wastes included muds from bauxite refining, residue from chrome roasting, slag and tailings from primary copper processing, wastewater from magnesium processing and slag from lead and zinc production. In 1991, the agency determined all 20 of these wastes to be nonhazardous. Two of them, phosphogypsum and process wastewater from phosphoric acid production are now regulated under the Toxic Substances Control Act, while all the other 20 contentious wastes are now regulated under Subtitle D. this example just goes to illustrate the complexity involved in regulating only one aspect of the environmental impact of mining. A summary of contemporary laws pertaining to mining in the United States and Canada will be given in Chapter 4.

While mining clearly has had a deleterious impact on the environment, it has also had a profoundly positive impact on the development of industrial establishments and our modern way of living. In the words of one eminent historian of mining:

> "Without mining – from coal to iron to gold – the United States could not have emerged as a world power by the turn of the century, nor could it have successfully launched its international career in the twentieth century. The Carnegies and Rockefellers, giants of the age, would have faced a hard go of it without the labor and sweat of thousands of now nameless men digging in the bowels of the earth, blasting and hauling mineral out of dark caverns far underground in now forgotten mines and mining districts scattered throughout the country."[41]

Mining of metals can also be defended on the grounds that metals are recyclable and hence even though the extraction from the Earth is nonrenewable, the material itself is more worthwhile than a nonrecyclable substitute such as plastic. However, this

[41] Smith, 1986, p. 2.

argument ignores the fact that metals can also be oxidized and decay into forms that are not economically reusable. Perhaps more research on this issue is needed from an industrial ecology perspective.[42] However, this pessimistic outcome is by no means inevitable. There are some minerals, such as aluminum, iron and silicon, that are abundant in the earth's crust beyond any possible level of utilization by mankind, and these minerals can conceivably serve as substitutes for less abundant materials, For example, more than 8 per cent of the earth's crust consists of aluminum, the most abundant metal; iron takes second place at 5 per cent.[43] Modern technology has already led to the substitution of fiber optics (produced from sand) for copper, and ceramic materials (produced from clay) for iron and other metals. Materials technology has been advancing very rapidly in response to supply limitations signaled by rising prices for individual minerals. Moreover, the potential for recycling and conservation of less abundant minerals is enormous. The late economist Julian Simon extended this reasoning perhaps too optimistically to declare that even with the finite resources of minerals at our disposal, we can still say that the supply is infinite because we do not know the full potential of reserves and how they can be utilized. He compared the situation to a straight line segment which has a finite length, but which has an infinite number of points contained within it.[44]

My aim in this section has been to present the significance of mining as an industry and also its environmental impact from a technical perspective. Clearly there are many underlying issues of what certain human societies value about the environment that

[42] Ayres and Simonis, 1994.
[43] Encarta Electronic Encyclopedia, 1999, Microsoft Corporation.
[44] Simon, 1999.

often cause resistance to mining. Those issues are equally important but more difficult to measure and hence will be addressed on a case-by-case basis in Part II of the dissertation.

So the question still remains: is mining compatible with sustainable development?[45] The answer must take two parts: First there is no doubt that mining under present technological conditions does have a certain degree of permanent impact on a region. Mining also involves extraction of nonrenewable resources. By these measures the answer at one level is No: mining is not sustainable. However, while the landscape may be permanently changed by mining in certain ways, that does not necessarily mean that communities cannot thrive if the project is appropriately planned. Mining can therefore be a prelude to sustainable development if we are willing to absorb a certain degree of permanent impact. The key then is to be able to use mining as an entry point towards a more stable industrial or service-based economy that is not inherently obsolescent. Much of this dissertation is about how communities, companies and the government can move in a partnership to achieve this goal of a sustainable livelihood for a community with minimal environmental impact.

It is important to appreciate that mineral activity evokes a strong sense of ambivalence among tribes, as it does among society in general. Nevertheless, tribes are eager to at least explore options with mineral resources . The requests for mineral assessments to the BIA's mineral resources department are staggering. In 1999 there

[45] This question has recently been posed by the World Bank group but with characteristically inconclusive outcomes (See Ackermann, 1999 and McPhail and Davy, 1998). The World Business Council on Sustainable Development has also commissioned a survey study on mining and sustainable development and the possibility of setting up a World Commission on Mining similar to the World Commission on Dams (this study is presently being carried out by the International Institute for Environment and Development in London, UK).

were more than 50 tribes who applied for mineral assessments.[46] The BIA has had to initiate a screening process to select which tribes are most deserving based on various geologic and economic indictors. Only about one-third of the tribes who apply are accepted for an assessment – such is the scale of the interest in mineral ventures.

In Canada, mineral potential studies have already been carried out for most reserves and are available. While the enthusiasm for mineral development in First Nations in Canada has not been as strong as in the United States, all first nation bands clearly want to keep their options open. Mineral rights are a salient theme in treaty negotiations in British Columbia and Labrador and were a major demand by the Inuit in the Nunavut agreement, that has led to the establishment of the largest territory within Canada and the largest area governed by Aboriginal people in the world.

Mining is thus a very real option for tribes in the US and Canada and poses important questions about viable trajectories for development of Aboriginal communities.

[46] Personal communication, Robert Wilson, Department of Mineral Resources, BIA, Lakewood, Colorado, January, 2000.

2. The Resistance Brokers: Environmental NGOs and Mining

2.1 Defining Resistance

A revelatory metaphor for environmental resistance in the context of indigenous movements was offered by the President of the Innu Nation, Peter Penatshiu in Labrador, Canada when I interviewed him about the Voisey's Bay nickel mine: "We think of it (the mining negotiations) as an elastic – how much can we stretch it without letting it snap."[47] This insight is reminiscent of Piven and Cloward's classic work on social movements among the poor in which they stated that "occasions when protest is possible among the poor, the forms that it must take, and the impact it can have are all delimited by the social structure in ways which usually diminish its extent and diminish its force."[48]

Resistance in such movements can be tacit -- manifest as intransigence at the negotiating table; or overt -- involving public protests and civil disobedience. The form which the resistance may take depends on the opportunities and the dynamics of control which are exercised by other stakeholders in the process. According to Tilly (1978) "far from the image we sometimes hold of mindless crowds, people tend to act within known limits, to innovate at the margins of existing forms, and to miss many opportunities available to them in principle."[49] As we shall see in Part II, the perception of the other's "control" is critically important to the emergence of resistance against mining.

Within an environmental context, the agricultural sociologist Nancy Lee Peluso has developed a theory of community resistance that is predicated on the work of the

[47] Peter Penatshiu, President of the Innu Nation, personal communication, Sheshathiu, Labrador, Canada, March 2000.
[48] Piven and Cloward, 1979, p. 3
[49] Tilly, 1978, p. 390.

Tillys and political scientist James Scott (1985). In her detailed ethnographic study of resistance to forestry in Java, Peluso claims that the "repertoire of resistance" is embedded within – indeed it is a product of – specific historical and environmental circumstances. The forms that resistance takes depends on the nature and generality of the complaint and the kinds of 'weapons' (social, political, or broadly defined technological) at the disposal of the resisters."[50] The weapons at the disposal of indigenous communities are often quite different from those at the disposal of environmental NGOs, who are usually the popularizers of resistance. However, not only are the weapons different but the consequences of resistance failure are also different – hence determining the form which resistance may take. To return to President Penatshiu's metaphor, the effect of snapping an elastic are quite different for certain NGOs and communities depending on which "side" they are on. In the language of negotiation, one might say that the BATNA (Best Alternative To a Negotiated Agreement) is usually much better for environmental NGOs than it is for indigenous communities. In other words Native communities have much more at stake in the negotiations and are often more dependent on the outcome than the NGOs.

Before I try to locate the place of environmental NGOs in the context of such conflicts, it is also important to keep in mind a unique characteristic of environmental movements, which can often be misinterpreted. The anthropologist William Fisher highlighted this feature in his study of the resistance of the Kayapo Indians to hydroelectric development in the Amazon:

> "One of the unique features of environmentalism as an ideology is the indeterminate quality of environmental concerns as a social issue. In the abstract, there is no constituency that is uniquely or exclusively positioned

[50] Peluso, 1992, p. 13

> to benefit from environmental quality, although there are pressing immediate interests at stake in any particular case."[51]

I disagree with Fisher in his claim that there is an absence of exclusive environmental benefits in certain constituencies, since there are indeed instances of exclusive environmental benefit accruing to one party, usually by not having a particular industrial facility located in a particular place (leading the way to the infamous NIMBY syndrome). However, Fisher's insight regarding "the indeterminate quality of environmental concerns as a social issue" is compelling. He concludes, and I concur, that "the implications and agenda of environmentalism at any point need to be analyzed as a social product." The term "social product" refers to the nexus of interactions between values and needs that collectively comprise notions of environmentalism in communities. In analyzing environmental resistance at the community level, we must not lose sight of the structural links which such movements have to other polities and systems of economic and social relations.

2.2 NGOs in Theory and Practice

The Greco-Roman tradition of jurisprudence, which forms the basis of most Western political economies, broadly delineates public and private domains of interest. Individual enterprise and rights are generally termed private, whereas collective goods and services fall in the public domain. The evolution of the modern nation-state has caused the public sector to take the form of large institutional structures that often alienate the citizenry. Somewhat ironically the same seems to have happened with the "private" sector as well, where individual enterprise has given rise to large organizational

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[51] Fisher, 1994, p. 228.

structures that rival nation-states. Indeed, the contemporary multinational corporation certainly has the size and scope of many public entities. Though collective action on the part of private actors has been a primordial feature of almost all societies, the institutional polarization of public and private domains – and perhaps public alienation from both -- has stimulated the emergence of a third sector. This third sector, or "civil society," manifests itself most prominently as non-governmental organizations.[52] NGOs can be thought of as buffers between the classically defined public and private domains.[53]

Christopher Hood (1984) has constructed a typology of what he refers to as "para-governmental organizations," reminding us that the nonchalance with which the acronym "GO" is used in various forms, often detracts from appreciating the "menagerie" of highly varied organizations that actually fall under this rubric. Indeed, in Hood's analysis several para-governmental organizations are created by the government itself and are used for policy purposes. However, I am more interested in environmental organizations, which according to Hood's typology would fall under "private or independent, bottom-up organizations."[54] As we will see, the significance of this sector is acute when dealing with disenfranchised communities and efforts to empower such groups to assert, what they perceive to be, their "environmental rights."

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[52] A notable scholarly work that articulates the presence of a "third non-profit sector" in the economy is Weisbrod (1975).

[53] Berger and Neauhaus (1979) would define them as a "mediating structure" in public policy. They argue that such structures play an essential role in balancing the seemingly conflicting desires of the populace to have strong elements of a welfare state, while maintaining an equally vehement hostility to "big government."

[54] Hood (1984). Figure 1. The typology is outlined in a table where there are four categories of PGO institutions: organization, authority, treasury and nodality. each one of these has a public and private division. These categories are correlated with three "modes of emergence:" top down, bottom up and sideways across. Various combinations of these categories give 24 different kinds of institutional forms.

The idea of "mediating" or "buffering" institutions should not be confused with "mediation" where an external, and usually neutral, party helps to resolve a dispute.[55] Though ENGOs, may play the role of mediators in rare instances, the context of this research involves ENGOs that are by no means neutral and which "mediate" only in the most contorted sense of the word -- organizations that stand between the individual and the larger institution of public life. These larger institutions of public life may also involve economically private entities such as corporations. Individuals with shared perspectives on a certain issue may also comprise a community that normatively assume the same domain as the classical conception of "private," since the devolution of government authority may not be sensitive enough to account for their collective will. Once again the issue of scale in government institutions is the key factor in necessitating the involvement of ENGOs.

The value of natural resources in monetary terms is often at odds with their intrinsic worth to certain communities. In most modern economies, the primary agent of change in a resource-rich ecosystem is usually a profit-driven entity such as a private corporation for which ecological considerations are mere economic externalities. The inertial forces in the same system are often indigenous groups, and non-profit organizations and individual activists, for whom environmental change is unusually traumatic. The government is an ambivalent player in most of these disputes, owing "allegiance to all sides" -- a circumstance which must not be confused with neutrality.

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[55] Interactional field theory provides a similar basis for thinking about the role of ENGOs in corporate/community interactions (Kaufman, 1959). The ENGO, in the light of this theory, provides a *field of interaction* in which collective involvement and the social definition of principles can be manifest, based on the objectivity of technical expertise. Thus, the ENGO can be seen as the field of interaction between the "corporate community" and the "indigenous community."

Whereas neutrality implies indifference towards outcome, "allegiance to all sides" indicates a desired "optimal" outcome.

The involvement of ENGOs in these kinds of situations depends largely on the actual charter of such organizations and their adherents. Social movement theorists divide ENGO activism into two broad categories "consensus movements" and "conflict movements."[56] This delineation is defined by most theorists in terms of what the majority of the surrounding community believes about a particular issue. If the majority concur with the objectives of the movement, then it is termed "consensus" (an example is Mothers Against Drunk Driving: MADD), whereas if the movement represents the points of view of a minority within the community, then it is termed "a conflict movement". The current Green party presidential candidacy of Ralph Nader (whose running mate Winona LaDuke is incidentally a Native American) may be called a conflict movement at one level since he would garner a small minority of the vote. However, when specific issues are brought to the fore (such as unequal income distribution), environmentalists argue that his "positions" are espoused by a majority of the population. Environmental movements, as manifest in NGO activity, depending on the issue and the locus of analysis can fall into either of the two categories.

There is considerable disagreement in the literature about the efficacy of this distinction. Instead of joining this debate, my aim is to focus on the commonality in the way these movements succeed or fail in achieving their initial objectives. I am also interested in how conflict movements can be transformed into consensus movements and

[56] A detailed exposition of social movement theory and its contemporary ramifications can be found in Morris and Mueller eds. (1992).

whether such transformations can achieve the initial aims of the movement without necessarily compromising the principles on which the movement was galvanized.

While conventional social movements have attempted to alter the state, contemporary social movements often serve as countervailing forces to the state, motivated by issues of identity and embracing more than economic considerations.[57] This is particularly true with certain ENGOs that operate in *developed* countries where the basic necessities of life are rarely placed on the bargaining table. My choice of case studies in two high income developed countries is thus more than a mere coincidence.

Since my focus is on the process by which resistance is galvanized, I would also like to distinguish between confrontational and collaborative approaches to hammering out differences.

While some environmental conflicts are by their very nature intractable, and not conducive to negotiations. Indeed, many ENGOs find themselves in this situation vis-à-vis environmental disputes because disagreements are so often framed in win-lose terms. In such cases legal recourse is often seen as the only alternative. However, we can also reframe these conflicts by taking the perspective of constructive confrontation.[58] This approach realizes the limitations of mediation and negotiation, but attempts to look at ways in which a mediator can attempt to optimize benefits by reducing conflict and creating forums for dialogue and problem-solving that seek to maximize joint gains.[59]

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[57] Tinker, 1996.
[58] Burgess and Burgess, 1995.
[59] Susskind and Cruikshank, 1987.

2.1.1 Internal Disputes and Conflicts within ENGOs

Disputes are an essential part of organizational life and often the way by which creativity is exercised. However, it is important that people who are part of the same organization live up to Martin Luther King's celebrated aphorism: "to disagree without being violently disagreeable." At this juncture, it may be useful to differentiate "dispute" and "conflict – the former implying an episodic disagreement, while the latter referring to a more protracted and perhaps systemic divergence of views, which may be tacit of active.[60]

The sociological roots of organizational theory, particularly the writings of Max Weber (1924), depict disputes and conflicts as an inevitable consequence of hierarchy. Management theorists, on the other hand, think of disputes as correctable failures of management. Barnard (1938) summed up conflict as a "melancholy failure of leadership," while March and Simon (1993) briefly describe disputes as basically an "interpersonal problem." Both these literatures frame internal disputes within organizations as pathologies and not much effort has been made to focus on structural issues.

Disputes within organizations are often latent and hence the research methods needed to study them must often be quite subtle. Dalton (1950) pioneered the use of intensive participant observation (in four organizations over a ten-year period) to study organizational behavior. He concluded that "conflict fluctuates around some balance of the constructive and destructive," caused by "active seeking nature of man, his ancient and obvious tendency to twist the world to his interests"[61]. Implicit in these theories is

[60] Kolb and Bartunek, 1992.
[61] Quoted in Scott, 1998, p. 76.

that individuals within an organization have divergent goals and that this can often lead to disputes.

However, in my discussion of non-governmental organizations, particularly environmental NGOs, there is often a normative meta-goal that may challenge the applicability of conventional organizational models to such entities. Research on organizational behavior and internal disputes within NGOs is still inchoate.[62] Most of the literature on NGOs tends to focus on their external involvement with political establishments and development as manifestations of "civic society" (Wapner, 1996; Tinker, 1996). To illustrate the dynamics of internal and external conflict facing ENGOs, let us briefly compare and contrast episodes in the lives of two prominent ENGOs.

2.2.2 Case Examples: NRDC and FOE

Let us focus on two prominent environmental NGOs, each of which are representative of a small but growing genre of activism. While their general objective of protecting the environment is similar, each favors different means of achieving this goals. Their organizational hierarchies and professional strengths also differ and thus provide additional independent variables for comparison. The dependant variable in this very brief comparison will be the outcomes – presented qualitatively as both the internal and external dispute resolution outcomes and resilience of the organizations.

The Natural Resources Defense Council (NRDC) [63]

The NRDC was started by three law school students at Yale, J. Gustave Speth, Richard Ayres and Tom Stoel, who received a grant from the Ford Foundation, in their

[62] A study of internal conflict within an environmental NGO is Predelli's study (1996) of the radical group "Earth First!" However, the almost unique nature of this group renders it not very suitable for an inductive analysis for our purposes.

final year of studies, to begin a public interest law firm. In 1970 they established NRDC, as an organization which would be somewhat similar to the Sierra Club Legal Defense Fund (SCLDF)[64] in its activist inclinations, yet more grounded in scientific reasoning. In many ways it was similar to the Environmental Defense Fund (EDF) established 3 years earlier by another Ford Foundation grant to pursue DDT tort litigation. However, NRDC was somewhat different from EDF insofar that it did not give much importance to economic analyses as did EDF. Another key difference between NRDC and SCLDF was that NRDC initiated lawsuits while the SCLDF (or the EJLDF) primarily represented litigants.

For thirty years NRDC evolved into an organization with almost 200,000 members, a professional staff over a 100 including twenty attorneys, and scientists and a n annual budget of nearly $20 million. The organization is internally quite hierarchical with the President commanding considerable authority in policy decisions. There is an extensive board with 40 members, most of who are lawyers or academics.

Since its inception litigation has been the *raison d'être* of NRDC. On the other hand, EDF has tried to avoid litigation and has formed a litigation review committee before initiating adversarial action. NRDC continues to use litigation more freely and is often commended for doing so. A *Wall Street Journal* article quoted a government official as saying: "When you are up against them, you are up against the best team."[65]

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[63] Background information on NRDC is derived from their web site http://wwww.nrdc.org ; Dowie, 1995 and through an informational lecture by one of the founders, Tom Stoel, at Yale Law School: February, 1996.

[64] In 1997 the SCLDF divorced itself formally from the Sierra Club (though even before it was managed separately) and became the Earth Justice Legal Defense Fund (EJLDF).

[65] Surprisingly quoted in a rather nefarious compendium of cornucopian propaganda by Arnold and Gottleib (1993), p. 326. Gottleib and Arnold have become the vanguards of the "Wise Use Movement."

However, like many other legal organizations it has often used a threat of litigation to in fact negotiate.

A particularly trying time in the history of NRDC, and of particular relevance to my research, was when the organization got involved in negotiations on habitat preservation in Ecuador with Conoco, an oil exploration and extraction subsidiary of Dupont. This was a drawn-out external dispute which also led to many internal disputes within the organization. The case involved oil drilling in the Oriente rainforest of Ecuador, which was also home to the Huaorani tribe. Realizing that litigation would be cumbersome in this context, NRDC staff attorney Robert Kennedy Jr. arranged a meeting with the CEO of Dupont. Perhaps part of the enthusiasm which NRDC showed in building bridges with a multinational corporation was sparked by their recent involvement in the Alar controversy.[66]

With the assistance of a Cambridge-based indigenous rights group, Cultural Survival[67], NRDC signed a deal by which the company would invest $10 million dollars in an Ecuadorian NGO that would funnel the money to help the Huaorani. This was ostensibly a constructive way to resolve the dispute, but because all the stakeholders were not properly engaged and consulted, the effort was a fiasco. *La Campana Amazonia por la Vida*, a coalition of 13 environmental groups representing the Huaorani furiously stated that "NRDC had jeopardized two years of work.....In pursuit of their goals NRDC misrepresented the views the Ecuadorian environmental organizations and

[66] Alar was a pesticide used on apples, which NRDC actively lobbied against in 1988-1989. Actress, Meryl Streep became NRDC's spokesperson and 60 Minutes did a special report on the pesticide. Later on several serious errors were discovered in NRDC's Alar study. By that time, however, several million dollars worth of apples had been discarded and farmers were furious. NRDC officials apologized for this incident.
[67] Cultural Survival was founded by the Harvard anthropologist David-Maybury Lewis.

intentionally deceived Ecuador's indigenous people about the true aim and extent of their dealings with Conoco" (Hall, 1993).

The consensus-building process was thrown asunder with this intervention. NRDC and Cultural Survival were severely criticized across the country and across the political spectrum . Cultural Survival suffered even more profoundly with several resignations from an already small staff and necessitating a major organizational change

Nevertheless, NRDC has bounced back and continues to be a formidable force among environmental NGOs.

Friends of the Earth[68]

Interestingly enough, Friends of the Earth was established as result of a heated organizational dispute. The famed environmentalist, David Brower[69] who was the executive director of the Sierra Club in the late sixties had a protracted fight with the board of directors of the Club over budgeting, managerial style and marketing strategies. Needless to say the Sierra club did not have any dispute resolution system within the organization and Brower felt that there was no choice but to leave and form a new organization. He made it clear that the new organizations, which would be called "Friends of the Earth" following a quotation from the Sierra Club's founder John Muir,[70] would be decidedly different from the what he though were the corrupting features of the Sierra Club in the sixties. As Wapner (1996, p. 121) states in his detailed comparative

[68] Background information regarding the Friends of the Earth is largely derived from the web site of the US chapter: http://www.foe.org; through personal observation of the Australian chapter of the organization and from Wapner's account of the organization (1996).

[69] A highly acclaimed biography of Brower has been written by John McPhee (1971). Brower is perhaps bets known for his vehement opposition to the Hoover and Glenn Canyon Dams. When proponents of Glenn Canyon dam argued that the reservoir lake would allow tourists to sail around and see arts of the canyon which would otherwise not be visible, he wrote a highly influential article in many papers entitled: "Would You Flood the Sistine Chapel to See the Paintings on the Roof?"

study of the influence of FOE, Greenpeace and WWF on global politics: "At his resignation speech in 1969 Brower made it clear that the new group (FOE) would be many things the Sierra Club was not. Instead of being merely national, it would be international; instead of delegating publications as secondary to the organization, they would be central; instead of being highly bureaucratized, establishing multiple oversights on individuals' activities, it would be decentralized and more anarchic."

Since its inception FOE has grown into a $15 million organization with almost a million members and offices in over fifty countries – a truly remarkable achievement for an organization that was basically formed out of protest. Unlike most "federalist" environmental groups whose local chapters must get approval from the executive board, FOE allows local offices complete autonomy in decision-making and is genuinely a grassroots organization – it also does not actively recruit membership from localities but rather waits for local groups to contact the international office in London for affiliation. The Coordination Council (which includes one representative from each office) has an approval process for local chapters and meets once a year to exchange ideas and information. There is also a seven-member executive board which coordinates international representation of the organization. The local chapters have complete discretion over their budgets and are only required to send 1% of their annual revenues to the central office.

The most significant internal dispute in FOE's history occurred in 1986, when David Brower once again squabbled with the establishment of the organization, partly for his refusal to cut staff and make the organization for "efficient." Brower once again

[70] Muir, in his opposition to the damming of Yosemite's Hetch-hetchy valley had said: "The earth can do all right without friends, but men, if they are to survive, must learn to be *friends of the earth.*"

decided to not compromise and resigned to spin off yet another organization, The League of Conservation voters and subsequently the Earth Island Institute. Fortunately, this centralized conflict did not affect the organizational structure, partly because of the highly devolved authority which FOE possesses. Brower's role as an intransigent activist may at first seem destructive but in fact he has managed to leave his mark in many constructive ways and allowed for organizations to grow on their own. In an otherwise detailed indictment of current environmentalism, Dowie (1995, p. 209) has commended Brower by saying that when "preserving institutions became a higher calling than preserving the environment," Brower left and that "everything Brower has done has reanimated the movement as a whole." Nevertheless, Brower's departure from FOE was not quiet – there were two law suits which he filed against the board and eventually decided to leave because of a grant to establish the Earth Island Institute.

FOE has traditionally taken a relatively uncompromising stance on most environmental issues and has usually been the last one to come to the negotiating table. A case in point is the North American Free Trade Agreement (NAFTA) coalition of environmentalists that supported the agreement and included the Environmental Defense Fund (EDF), The National Wildlife Federation (NWF), The World Wildlife Fund (WWF), The National Audubon Society (NAS) and NRDC. FOE and the Sierra Club were the only invited groups who repeatedly refused to endorse the agreement despite being courted by the trade representative, Mickey Kantor on several occasions. Jay Hair, the President of NWF wrote a caustic letter to Jane Perkins of FOE in which he characterized this dispute and said that "it was important to question those who use

obfuscation, dissembling, omission, overstatement and occasional fabrication to advance their cause."[71]

FOE has stood firm on many issues which it considers non-negotiable. However, it has also managed to evolve with changing times. Realizing that economic analysis has become the most salient feature policy-making, FOE USA has recently started a separate project entitled "Economics for the Earth." Within this program FOE has launched a "Green Scissors Campaign," which aims to reduce government spending on wasteful programs and has thus far helped to eliminate $20 billion in harmful government spending.[72] As David Brower approaches his ninetieth year, he may look back and think that perhaps the disputes and departures which led to FOE as it is today, were worthwhile after all.[73]

2.2.3 Comparative Lessons Learned

Both FOE and NRDC had to deal with internal and external disputes. Internal conflicts at FOE were more pronounced because of the presence of a provocative personality such as Brower, supporting the claim by many theorists that personality factors play the most important part in inter-organizational conflict.[74] However, because of the diffuse and highly devolved nature of the organization these disputes did not cause systemic conflict within FOE. This observation is contrary to the rational system perspective of organizational conflict where differentiated and diffuse departments are

[71] Qtd. in Dowie, 1995, p. 187
[72] Friends of the Earth, 1999.
[73] Just as the economist Joseph Schumepter called capitalism "a process of creative destruction," perhaps organizations too are formed through a metaphorically similar process.
[74] Mastenbroek, 1987.

considered a cause of inefficiency.[75] Instead, this observation supports the open system perspective of organizations where loosely coupled elements can grant an intrinsic flexibility to the organization in times of crisis.[76] On the other hand the Conoco crisis was far more injurious to NRDC (a more tightly coupled organization) and led to several resignations.

As Cyert and March (1963) have observed, conflicts usually arise within organizations or between groups when there is a divergence of goals. Clearly this is why there was a dispute between FOE and the other environmental groups over the NAFTA debate. This is somewhat linked to the concept of a Best Alternative to a Negotiated Agreement (BATNA) in negotiation discourse. Since FOE does not get any funding from corporations or industry, its BATNA was relatively high, whereas for the other organizations the BATNA was relatively low since by refusing to support NAFTA they would enrage many of their donors, who ostensibly do not play a role in decision-making but in fact have a considerable influence as observed by Dowie (1995)

BATNA is an important way of differentiating conflict and consensus movements which are discussed in sociology and political science. [77]While consensus movements have an important role to play as agents in the enforcement of widely accepted civic goals, they are seldom catalysts for social change. Schwartz and Paul (1992), in their compelling study of the organization MADD (Mothers Against Drunk Driving), illustrate how this consensus movement was unable to achieve its broader goal of social reform, despite being well-funded and having all the conventionally important ingredients for

[75] Lawrence and Lorsch, 1967.
[76] Weick, 1976, Scott, 1998

success. Environmental NGOs are faced with a similar dilemma: to follow the path of least resistance or to remain resolute in their convictions.

The conflict management and dispute resolution literature suggests that there may be a way to remain resolute in value-based conflicts but still improve the efficiency of the process. Some of the key characteristics of this approach are to avoid escalation of adverse sentiment and psychological entrapment[78]; to strategically sequence coalition formation[79]; to focus on principles and not positions, and to work with multiple alternatives, thereby increasing the chances for achieving an optimal outcome.[80] Involving a mediator may help in the realization of these process goals, though cultural factors[81] must be considered in deciding when this is most effective.[82] Apart from being the key players in a dispute, NGOs are increasingly finding themselves as secondary parties who can be agents of dispute resolution. NRDC's involvement in the Conoco venture was an example of an attempt at negotiation and dispute settlement which went awry because many of the principles mentioned above were not followed.

Generally speaking, there isn't a single "best way" to approach these problems and each kind of NGO has its own role to play. As Lisa Peattie states in her anthropological analysis of the aboriginal predicament: "Social movements need both sorts of strategy -- confrontation extremism to stretch the conventional bounds of issue framing, adaptive negotiation to maintain a resource base, a contract with real world

[78] Pruitt and Rubin, 1986. Brower may have been engulfed in such a psychological trap. Though it could be argued that the FOE was similarly entrapped. A classic psychological trap is the difference between willingness to pay and willingness to accept in economic studies (also referred to as the "endowment effect").
[79] Sebenius, 1996.
[80] Raiffa, 1982.
[81] In some cultures it may considered disrespectful to involve a third party in a negotiation (Ross, 1993).
[82] Ross, 1993.

situations, and a sprinkling of real victories."[83] However, what kinds of alliances, if any, should be formed between organizations and communities to achieve certain goals is yet another question, which my research will attempt to address.

2.2.3 The anti-mining establishment: A global social movement

Anyone who has seen the massive 900-page book entitled *The Gulliver File*, will undoubtedly concur that anti-mining activism is a global social movement.[84] The book enlists mining projects and their parent companies around the world in alphabetical order and gives background history and environmental impact information (albeit from a particular activist perspective) about each project. The somewhat ambiguous title refers to a speech made by Charles Barbour, the erstwhile President of the who referred to anti-mining activists in the following terms: "Like Gulliver, the mining industry is a robust giant held down by a million silk strings."[85] Barbour estimated that ENGOs had put an extra 15 cents onto the cost of producing every pound of refined metal in the United States.[86]

The Gulliver File was the product of collaborative efforts among some 90 groups around the world who are working on anti-mining activism. These groups take the form of NGOs, largely funded through private contributions from interested donors. Not only are they opposed to mining because of its immediate ecological impact but also because it encourages the use of non-renewable resources, and in the case of uranium mining, adds to the risk of nuclear weapons proliferation.

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[83] Peattie (1994), p. 7
[84] Moody, 1992.
[85] Barbour, Charles. Annual address to the American Mining Congress, 1981.
[86] Quoted in Moody, 1991, p. 9.

There is also a critical element of anti-corporatism in this movement: an overt rebellion against what is perceived to be capitalistic aggrandizement of wealth and resources. The introduction to *The Gulliver File,* states:

> It is not that this huge sector – with such vast tangential and peripheral operations – is entirely inimical to human needs or unhearing of human demands. Rather the truth is that – by being organized primarily along corporate lines, with decisions taken according to an industrialising, as opposed to conservationist, or rural-revitalisation, agenda – mining cannot support its own best intentions, nor fulfil its most sustainable expectations."

This perception dovetails with the literature on corporate power that is increasingly becoming popular, perhaps best exemplified by David Korten's book *When Corporations Rule the World* (1996). The corporate structure of the mining sector will be further discussed in the next chapter. However, for the purposes of understanding the anti-mining movement it is sufficient to recognize that the concentration of wealth, and resulting power, is itself a cause for resistance by many NGOs.

When I asked Pratap Chatterjee, an activist and former employee of the Berkeley-based anti-mining NGO, Project Underground, for any examples of socially responsible mining companies, he responded by saying: "We don't really give examples of 'good' companies if only because sometimes these companies turn out to be hypocrites and liars."[87] This strong sense of distrust of the corporate world permeates many anti-mining NGOs. It is also a distrust which is shared by many in the native rights movement. However, as we shall see, constructive alliances cannot be built simply on mutual mistrust of a third party. The relationship between ENGOs, such as Chatterjee's, and Native peoples has a rich history steeped in controversy.

2.3 The native / environmental debate

The relationship between indigenous societies and nature has been a source of debate and wonder in academic discourse at least as early as Rousseau's use of the celebrated metaphor of "the noble savage," in his *Social Contract* (1762). Anthropologists and historians alike have struggled with an understanding of how Native Americans have interacted with the environment before the advent of European settlement. It is thus no wonder that ENGOs are often largely uninformed about Native aspirations regarding environmental conservation.

While it is true that ecosystem disturbance was greatly accelerated after the advent of European settlement, historical Native practices of wildlife management are widely debated. For example, the extinction of 73% of large mammal species in North America, some 11,000 years ago was con-incident with a wave of ancestral Indians across the Bering land bridge. By 8,000 years ago, 80% of the large mammal genera in South America were also extinct.[88] The Pleistocene overkill, as it is sometimes called, has been used by revisionist historians to argue against the presumption of a Native environmental ethic. However, these extinctions could indeed have been caused by numerous other factors such as climate change as well.

A slightly more convincing, though acerbic, argument in this vein is presented by Calvin Martin in his landmark study of the fur trade between Native Americans and the Europeans. Given the extent of Indian involvement in hunting and trapping animals for the Hudson Bay Company, Martin concludes in characteristically blatant terms:

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[87] Personal communication via email, Pratap Chatterjee, May, 1998.
[88] Quoted in Ridley, 1996.

> "Even if we absolve him of his ambiguous culpability in certain episodes of despoilation, invoking instead his pristine sentiments towards Nature, the Indian still remains a misfit guru. There can be no salvation in the Indian's traditional conception of Nature for the troubled environmentalist."[89]

However, Native scholars have argued that Martin's own data illustrate the fact that "beyond economic dislocations creating incentives to participate in the trade, Native destruction of animal populations was a means for them to come to terms with epizootics and their potential impact upon humans."[90]

Detractors of native environmentalism also cite the academic manipulation of Native American discourse by Western scholars in the late nineteenth and early twentieth century. The much-celebrated speech which is attributed to Chief Seattle is often shown as an example of how European scholars concocted stories about Native environmentalism. The speech which continues to grace many walls and texts, and has been quoted most recently by an environmental scholar of no less eminence than Jane Goodall (1999) or political celebrities such as Al Gore (1992), is now believed to have been drafted by an ABC screenwriter Ted Perry in 1971.[91]

Historians, such as Sam Gill and John Bierhorst have also questioned the now widely accepted concept of Native association with Mother Earth, as a theological concept. Gill concludes that:

> "While I have been able to find a number of tribal traditions that make references to the earth in personal and kinship terms, there is an absence in the vast in the vast literature on Native American tribes of any identification of the earth or a spiritual personification of the earth as a major goddess. ... she has become so only in the twentieth century."

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[89] Martin, 1978, pp. 187-188.
[90] Weaver, 1996, p. 6.
[91] Recent scholarship has also shown that like George Washington and other American historical celebrities Chief Seattle was also a slave owner and had a highly questionable moral outlook.

Bierhost goes a step further and contends that Mother Earth is little more than a form of political expediency. This point of view is not just held by historians. Indeed, even certain radical environmentalists have notably extricated themselves from Native causes on these grounds. The founder of Earth First!, David Foreman has pronounced Native people a "threat to the habitat."[92]

However, Native scholarship has countered these claims with numerous other citations and oral histories. Vine Deloria has traced references to an ecologically sensitive theology among Natives as far back as 1776, before the times of "corruptibility" of manuscripts that Bierhost, Gill and their colleagues have referred to.[93]

The Cherokee writer and scholar Jace Weaver has summed up the debate eloquently:

> "We are not Moses coming down from Sinai with the Ten Commandments of environmental protection. Indians have been stereotyped far too long by the environmental movement as those with the mystical, ancient wisdom that alone can save the planet. Rather we presented and represented the honest and extremely difficult struggles of indigenous peoples to meet ecological challenges confronting them. Though traditional knowledge and ways play an important part in these battles, so do all the tools of technology, modern modes of communication, and the simple investment of time and sweat."

An appreciation of the salience of this debate is critically important as we try and understand the dynamics of environmental resistance to mining on Aboriginal land. An interesting European comparison to the ostensibly ambivalent environmentalism of certain Native communities is presented by David Rothenberg in his essay on Norwegian environmentalism. On the one hand Norway is the land of Gro Harlem Brundtland (the

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[92] Quoted in Churchill, 1992, pp. 195 –196.
[93] For a detailed and very convincing account of this debate, see Weaver ed., 1996.

famed leader of the World Commission on Sustainable Development) and the home of Arne Naess (founder of the deep ecology movement), but on the other hand Norwegians are adamant about their whaling traditions and mainstream environmentalists (or miljomennesker in Norwegian) are often dismissed as urban elite.[94]

There are indeed voices on either side of the political spectrum. Native people, like all communities have disagreement and dissent regarding the primacy of environmental concerns. However, the discourse of native environmentalism assumes a certain homogeneity – any deviation from which is perceived to be a sign of Western adulteration – from both sides of the debate.

Native environmentalism, is, nevertheless a very real contemporary phenomenon. It is not necessarily embedded in Western environmentalism and has found its own voice in the writings of activists such as Harvard-educated Winona LaDuke (Anishnaabeg), who was Ralph Nader's running mate in the Green Party's Presidential campaign in 1996 (and is again on the ballot in several States for the 2000 election). Native organizations such as the Indigenous Environmental Network or Honor the Earth have a sizeable following. What remains to be seen, is why such groups have selective success in mobilizing resistance while in other cases they are largely ignored.

[94] Rothernberg, David (1995). "Having a Friend for Lunch: Norwegian Radical Ecology versus Tradition." in Taylor ed., 1995, p. 201- 210.

3. Mining Companies and Management Dilemmas

Since the 1999 protests against the World Trade Organization and the 2000 protests against the World Bank and the International Monetary Fund, corporations worldwide have been increasingly on the defensive about their relentless pursuit of profit. While capitalism has clearly triumphed over communism at a global economic scale, there is a feeling in many underprivileged communities that corporations are assuming the erstwhile role of centralized power structures that were the bane of communism.[95] Much of the discontentment with corporations is premised on the environmental and human rights records of companies. The argument is often made that the modern corporation, and indeed the greater neoclassical economic framework, regards environmental and human rights concerns as externalities, that should only be addressed as a means to an end – the end being profitability.[96] Mining companies, in particular, because of their operations in remote under-developed areas, and their relative secrecy of operations are regarded with much suspicion by those who oppose corporate power.

3.1 Why are mining firms being targeted, in particular, by activists?

Whether or not environmental and human rights concerns should be a means to an end or ends in themselves is a timeless normative debate. However, the consequences of corporate behavior can, and should be evaluated on their own merits without any insinuation of motives. Thus, my aim in this chapter is not to paint mining companies as

[95] Korten, 1997
[96] Houck and Williams, 1996.

antagonists, but rather to present them as stakeholders with their own set of constraints and embedded values.

That being said, we must still recognize the historical conduct of mining companies at a global scale and not deny the injustices perpetrated by some mining firms that have led to their contemporary caricature. Perhaps the most persistent negative image of mining companies emanates from the narratives of mining life in Southern Africa where the institution of apartheid was all too often used to the benefit of mining companies and vice versa.[97] Some of the management strategies of large multinational mining companies, most of which have had at least some operations in Africa, were quite secretive. In the words of one De Beers executive:

> "We stride across Africa in a very satisfactory way in all sorts of strange places. Part of the secret is we respect confidences. We don't talk much."[98]

While many of the misgivings about secrecy and human rights violations pertaining to mining companies have diminished since the end of apartheid, there are still recurring examples of some ventures that are notably disturbing – though multinational mining companies are not always involved in these cases. The civil war in Sierra Leone, for example, is largely a resource war between rebels who control much of the diamond mining in the east of the country and the democratic government. The same is largely true of the strife in the Democratic Republic of Congo with its diamond and cobalt mines, and

[97] T. Dunbar Moodie's detailed sociological study of gold mining in South Africa (1995) is perhaps the most authoritative work which gives a balanced account of the lives of miners during apartheid and beyond. For an account of the secretive diamond empire of De Beers and its related companies see Kanfer, 1993. For a somewhat older but highly comprehensive account of mining in Africa see Lanning, 1979.
[98] Quoted in Kanfer, 1993, p. 7.

the continuing civil strife in Angola (one of the most resource-rich countries in the world).

Even the recent war in Kosovo has been described by a notable *New York Times* reporter as being largely about mineral resources surrounding the Stari Trg mining complex.[99] According to the mine's director, Novak Bjelic, "The war in Kosovo is about the mines, nothing else. This is Serbia's Kuwait." Greece's support for the Serbian government may also be predicated on a half trillion dollar five year mining contract. In May 1998, Mytilinaios SA signed a five-year contract, worth $519 billion, with the state-owned RMHK Trepca and the Serbian agency of foreign trade, in which Mytilinaios will forward one third of the mineral production in the international market and also upgrade mining equipment and facilities.[100]

In other cases, activists argue that civil strife may be suppressed by rogue governments. Since mineral resources are a direct source of economic gain for governments, there is a perceived collusion between companies and public authorities and a perpetuation of the old-world colonial infrastructure. Perhaps the starkest example of the perpetuation of colonial control over mining is the continuation of French rule over the island of New Caledonia in the South Pacific, despite vociferous protests and rebellions by the Kanak indigenous population. New Caledonia has among the largest concentration of nickel reserves in the world and has still not been granted independence, probably, for this reason, though a referendum is scheduled for 2014.[101]

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[99] Hedges, Christopher. "Below It All in Kosovo, A War's Glittering Prize." *The New York Times,* July 8, 1998, p. A4.
[100] "Tapping into Greece's Mineral Treasure Chest." http://www.ana.gr/hermes/1998/feb/mining.htm
[101] O'Neill, 2000.

There are also some mining companies with particularly troubling environmental and human rights records such as Freeport McMoRan, a New Orleans-based company, which has been the subject of several lawsuits because of its impact on the lives of the Amungme tribe in Irian Jaya, Indonesia. While the citizen-action lawsuits against the company have been dismissed in the US (most recently on appeal in March, 2000), the firm continues to be under fire from environmentalists and human rights activists. The firm's controversial involvement with the Indonesian military in suppressing rebellion was even profiled as a full-page story in the *Wall Street Journal.*[102]

With such stories making their way to the front pages of business newspapers, it is not surprising that mining companies are regarded with suspicion by many social observers and the general public. In fact, a survey conducted by Praeger (1997) for the *Engineering and Mining Journal,* found mining to be the least favored industry by the American public – even less favored than the much reviled tobacco industry.

Apart from the specific case histories of firms, there is also a general feeling in the activist community that mining is inherently "unsustainable." Large-scale gold and diamond mining, in particular, are targeted by activists because most of these minerals are used for jewelry and, are hence considered a "dispensable" industry.[103]

The aim of this chapter is to understand the systemic issues that may lead to such perceptions. Let us now take a closer look at the organizational and economic dimensions of the mining industry and how they explain the behavior of such firms in environmental negotiations with communities.

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[102] Waldman, Peter (1998). "How Suharto's circle and a mining firm did so well together." *Wall Street Journal,* September 29, 1998, p. A1. Despite all the negative publicity Freeport continues to have a distinguished board including the Nobel Laureate and former Secretary of State Henry Kissenger, who has visited the Grasberg mine in Irian Jaya.

3.2 The anatomy of a modern mining firm

In 1847 a twelve-year-old Scottish immigrant named Andrew Carnegie earned $1.20 a week working in a Pittsburgh cotton mill. Half a century later he received $250 million from the sale of his steel firm to J.P. Morgan and others who were forming U.S. Steel. That firm, known as "Big Steel," was the world's first billion-dollar company.[104] The success of the Carnegies and other major industrial families are emblematic of the concomitant success of mining and mineral processing companies following the industrial revolution.

Ownership and control of world mining is heavily concentrated in a small number of multinational mining firms (most of which are privately owned) and in state mining enterprises (SMEs). There are thousands of small, privately owned mining firms in developed countries and in some of the major Latin American mining countries. However, small mines produce less than 25 per cent of world output and their activities tend to be concentrated in gold, silver, diamonds and other precious stones, and in types of mining where economies of scale are less important. While the primary cases studied in this dissertation involve large multinational companies, the lessons learned are equally applicable to smaller firms and ventures as well.[105] An exception to this may be the "subsistence-level" gold panning operations which are common in South America.[106]

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[103] Interview with Danny Kennedy, Director of "Project Underground," a Berkeley-based NGO which aims to support communities resisting mining development: Brownsville, TX, June 16, 2000.
[104] Hoover's online profile of the mining industry.
http://www.hoovers.com/industry/snapshot/0,2204,29,00.html, accessed May 21, 2000.
[105] An excellent study of smaller mining ventures and the adaptation of indigenous cultures to "artisanal mining firms" is Godoy's study of mining and agriculture in highland Bolivia (Godoy, 1990).
[106] Small-scale mining for gold in placer deposits was of course carried out by the ancient Mayas and Aztecs and is a "tradition" on its own in some parts of the world. However my focus in this study is on industrial mining ventures, which have the most severe environmental impact.

The growth of state-owned mining enterprises SMEs has affected the competitive structure of the world mining industry in three important ways. First, cost elements of SMEs differ from those for privately owned mining firms. Second, the objectives and considerations governing investment decisions of SMEs differ from those of private enterprises. Third, production and marketing strategies of state enterprises tend to be less sensitive to cyclical declines in market demand and price than is the case with privately owned mines. Investment decisions by SMEs are often made on the basis of relative profit-earning opportunities.

SMEs tend to be insensitive to price declines in their production and market strategies for two reasons. First, labor costs in developing countries are more a fixed cost because of termination of pay regulations and government policies to maintain employment. Second, state enterprises generally seek to maintain exchange earnings in the face of low prices despite the fact that their current receipts may not cover total foreign exchange and domestic currency costs.

Therefore, private industry groups contend that the existence of a large segment of the world mining industry in which investment and production/marketing decisions are made more on the basis of government policy than on the basis of private profit maximization has made investment decision-making in the private mining industry exceedingly difficult. Comparative cost advantage and projections of world demand and supply balance no longer serve as reasonably reliable guides for decisions to invest in capacity.

In most countries outside the USA and Canada, mining industries have been recipients of a variety of government subsidies, in addition, and domestic markets have

been protected by import restrictions. However, the USA has low tariffs and no quota restrictions on primary metals. The US mining industry argues that subsidies on foreign production plus the importance of a strong domestic industry for national defense reasons justify government measures to assist the domestic industry. But the US mining industry has had much less success in lobbying for import controls on minerals than have the more labor-intensive industries such as textiles.

Disputes between the developed and the developing nations on mining have also played themselves out at the level of treaty-making The negotiation of the Law of the Sea Treaty brought into conflict the positions of the USA and certain other developed countries with those of Third World countries regarding the control of exploration and development of manganese nodules on the ocean floors.[107] The international community agreed in principle that the manganese nodules were not located on land and thus were a "common heritage of mankind." However, consortia of US and other developed country mining enterprises had spent hundreds of millions of dollars investigating this source of minerals for eventual development by multinational mining companies and thus wanted flexible royalty arrangements. Developing countries insisted that these resources belong to all countries and that exploitation should be governed by an international organization. Also there was considerable danger that trade in nonferrous metals might become subject to the kind of market-sharing arrangements that had characterized trade in steel products. Eventually, an International Sea-bed Authority was established to oversee exploration activities and special allowances were provided to "pioneer investors" -- countries who had already invested resources in seabed exploration.

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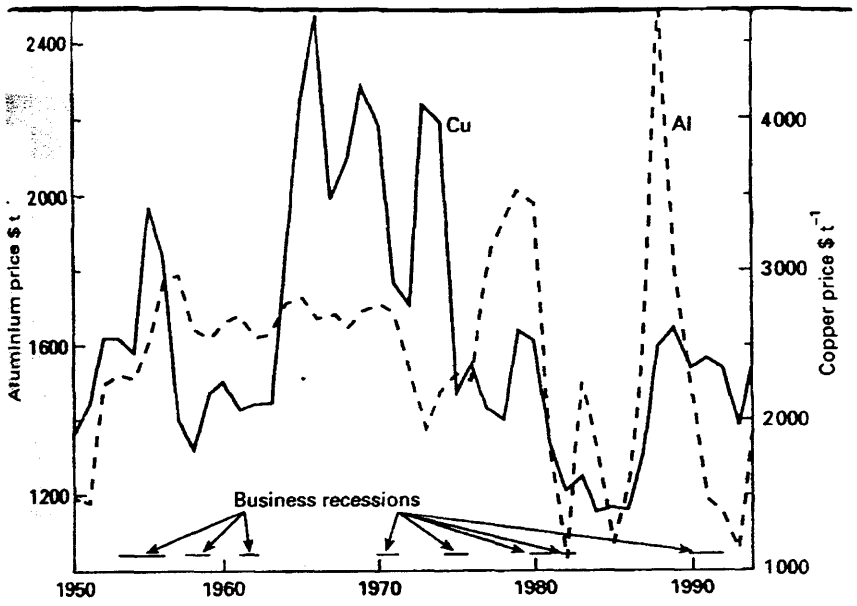
[107] See Sebenius, 1990

3.3 Risk Management in the Mining Industry

Mining projects are among the most risky industrial enterprises. They involve large capital investment at the outset and yet there can be little or no guarantee of profits even in the short-term. While geological prediction based on empirical core studies and remote testing procedures are becoming increasingly reliable, the actual grade and extent of an ore deposit is often not fully recognizable until mining commences. Moreover, the international mineral market system is highly capricious in terms of price fluctuations and this can greatly affect the profitability of a particular mining venture (See Figure 3.1).

Figure 3.1: Price fluctuations in the mineral sector (the case of copper and aluminum)



Source: Evans, 1997.

According to Mikesell and Whitney (1987), the business strategies of mining firms are governed by five key considerations:

First of all mining location is determined by geology, which often means that in order to be profitable the firm must be willing and able to have a presence in various and often remote parts of the world. This may explain why mining firms were the first modern non-financial multinationals.

Second, modern mining is highly capital intensive and requires a long "gestation period" following the initial investment before the product can be produced and sold. This influences the way new ventures are financed and explains why most large mining corporations initiated early in the century were financed by investment houses willing to provide large amounts of venture capital.

A third feature is that most minerals (specially metals) are more or less homogeneous products sold in world markets at prices determined on commodity exchanges, as contrasted with differentiated manufactured products. This means that reducing or limiting costs by introducing better technology and profitability in mining depends on improving management rather than consumer choice. Marketing and developing new products play a lesser role in traditional metals than in manufacturing. An exception is the development of new metals and alloys and their industrial applications; this is a specialization of the materials industry into which some mining firms have entered in recent years.

A fourth characteristic of mining is that every ore body is a depleting resource, the output of which tends to decline over time. Therefore, mining firms must continually discover or acquire new ore-bodies to maintain a relatively stable output over time. Due

to uncertainties in exploration; geographical location of mines may be more a matter of taking advantage of opportunities than of conscious planning. Since exploration is usually not undertaken for only one mineral, product diversification or concentration may also be more a consequence of discovery than planning.

The bottom-line in considering these characteristics is that mining is an unusually high risk industry which has thus necessitated very elaborate means of risk management. Some of the ways by which the industry has tried to manage risk are as follows:

3.3.1 Horizontal Integration [108]

Mining corporations most engage in risk management through horizontal integration, through organizational devolution and intra-industry alliances. Seldom does one come across a mine which is wholly owned and operated by one company. Almost all large mining ventures involve more than one company and constitute a "joint venture." There are sometimes arrangements for royalty proportions and joint liability among firms. For tax purposes and logistical ease, most mine sites have a local management company which is owned by a set of larger multinational mining firms.

Horizontal integration has been the "traditional strategy" for growth in the mining sector. This strategy utilizes the professional skills and managerial experience of the firm and complements its need to acquire and develop new orebodies as existing ones are depleted. Horizontal integration in mining may take place in several ways. The mining firm may undertake exploration to find additional reserves. Alternatively, companies may acquire orebodies or the right to develop them, that have been more or less fully explored or even partially developed by others. However, the geologists of the firm acquiring an

[108] I am indebted to Mikesell and Whitney (1987) for their insights in the following sections on "horizontal integration" and "vertical integration." These two sub-sections are largely derived from their work.

orebody are likely to undertake considerable exploratory work on their own in order to verify the data of others. This strategy is increasingly prevalent across the sector as ore bodies are becoming rarer.

3.3.2 Vertical Integration

Vertically integration in the mining sector depends in part on the volume of mine production and in part on the availability of financing. For example, integration of a copper mine into smelting and refining requires a large volume of concentrates (refined ore) and a substantial capital investment. The degree of vertical integration is also determined by business strategy. Having a smelter near a mine saves transportation costs and avoids the possibility of a shortage of smelter capacity, which is usually accompanied by high fees for custom smelting or lower prices for concentrates if sold to smelters. Locating a refinery near a mine is not important for saving transportation cost, since the metal content of blister metal (crude product) produced by a smelter is usually comparable to that for refined metal. It is frequently more important for a refinery to be near the market for the product than near the mine.

3.3.3 Interlocks:

There are also several "interlocks" between mining companies and other investment agents and non-mining multinationals that can make a final difference. A primary interlock between a pair of corporations occurs when someone holds a seat on the board of both corporations. A secondary interlock occurs when two directors of two companies both hold seats on the board of a third company. Anti-trust law prohibits primary interlocks between competitor companies. However, secondary interlocks are

common and are an important means of networking among mining companies. Such interlocks are also criticized by activists who contend that they can lead to cartel formation and monopolistic behavior as well as the formation of an elitist corporate class.[109] An example of interlocks in the case of the Crandon mine project in Wisconsin is presented in Table 3.1.

The empirical evidence regarding the effect of interlocks on corporate behavior is highly varied. A recent large-scale study of interlocks conducted by Pamela Haunschild and Christine Beckman (1998) at Stanford Business School, revealed that the impact of interlocks on corporate decision-making is largely determined by the flow of alternative information sources. The study revealed that interlocks matter much more so for firms that get large amounts of business press coverage and medium size firms – much of the mining industry falls in this category. The prevalence of interlocks will be an important component of my analysis vis-à-vis perceptions of corporate power among indigenous communities in Part II.

[109] Such arguments have frequently been made in the social sciences by notable authors such as Domhoff, 1983 and Useem, 1983.

Table 3.1: Example of Interlocks at Play in the Mining industry (Source: Soref, 1982)

Companies which have Interlocks with two or more companies exploring in Wisconsin	Companies exploring for minerals in Wisconsin in 1979												
	U.S. Steel	Rayrock Res.	Union Carbide	Kennecott	Getty	Amax	NL Industries	Kerr-McGee	Phelps Dodge	Standard Oil	Inco	Noranda	Exxon
Aetna Life and Casualty	X		X										X
Algoma Central Railway						X						X	
American Standard	X						X						
AT&T	X												X
Atlantic Mutual Life Co.				X							X		
Bank of Nova Scotia						X					X		
Brascan Ltd.				X								X	
Burlington Industries			X		X								
Canadian Imperial Bank											X	X	
Canadian Pacific Railway			X								X		
Chase Manhattan bank			X							X			
Chemical New York Corp.	X						X			X			X
Citicorp	X			X					X				X
Consolidated Bathurst						X					X		
Consolidated Morrison Exp.		X										X	
Continental Corp.			X	X							X		
Discount Corp.	X					X							
Domes Mines Ltd.												X	X
First Chicago Corp.								X		X			
General Motors	X			X									
Hospital Corporation of America	X												X
Ingersoll-Rand				X							X		
London Life Insurance											X	X	
Manufacturers Hanover Trust	X		X			X			X				
Metropolitan Life Insurance	X						X						
Molson Companies						X					X		
J.P. Morgan			X	X			X						
National Trust Co.											X	X	
New York Life Insurance			X				X		X				
Northgate Exploration		X										X	
Rolland Paper Co.						X					X		
Rockwell International Corp.	X				X								
Sperry Rand Corp.					X		X						X
Sun Life Assurance Co.			X	X							X	X	
Union Camp Corp.			X										X
Union-Dime Savings Bank							X				X		

3.4 Industry Responses to Environmental and Community Concerns

While industry's perception of risk is largely figured in economic terms, there is, of course, another very real risk associated with mining ventures – environmental harm. Environmental impact assessment is now considered a routine procedure, specialized consultants having emerged for this very purpose. However, only a few decades ago, mining agreements did not have any provision for environmental considerations. Perhaps the first book to focus on the negotiation process involved in mineral agreements, particularly in developing countries, was written by two Professors at Harvard, David Smith (Law School) and Louis Wells (Business School). This book aimed to give advice to governments of developing countries and corporations operating there about reaching agreements that would be mutually advantageous. Their intention was to bring "an element of realism to a subject that had long been clouded by mythology and misunderstanding."[109] However, this entire treatise despite its merits made absolutely no mention of environmental concerns and how they might figure in these negotiations.

Another study conducted by a Nevada consulting firm in 1987 listed a series of factors responsible for "unsuccessful" mining ventures. Here too, environmental factors were not listed – though the results of this study would most likely be quite different if it were conducted today.

[109] Smith and Wells, 1975, p. 2.

Table 3.2: Sources of Problems in Unsuccessful Mining Ventures:

Problem Category	Percentage of mines with problems
Ore reserves	23
Construction sequence and cost	29
Mine plan	19
Milling	36
Processing	42
Operation management	23
Market analysis	33

Source: Whitney and Whitney Inc., Reno, Nevada, Quoted in Mikesell and Whitney, 1987.

More recently, a study conducted by Roderick Eggert (1995) for the Washington-based think tank Resources for the Future determined that environmental regulation does not play a significant part in the investment strategies of international mining firms. As discussed earlier, mining like other natural resource-based industries does not have as much discretion when it comes to selecting investment areas, and perhaps it is for this reason as well that the industry is particularly resolute in pushing particular mining projects even in the wake of community resistance.

While the aforementioned data illustrate that environmental and community issues may not necessarily affect project selection, they do not suggest the same for project implementation. Indeed, environmental concerns and community issues are all too often a major impediment to implementation of mining projects. Environmental concerns are becoming an increasingly important cost consideration for mining companies and have lead to the formation of inter-industry collaboration on environmental initiatives as well. The Ottawa-based "International Council on Metals and the Environment" is an example of such initiatives.

However, much of the work in this regard has been reactive and the industry has been quite resentful of regulatory pressure in this regard. The following quotation from

Hugh Morgan, the 1999-2000 chairman of the International Council of Metals and the Environment and the CEO of the Australian mining company, WMC illustrates the strong misgivings about community and environmental resistance felt by the industry.

> "The fundamental clash is between the Christian orthodoxy of those who work including the miners, who, as St. Paul told us, are abiding in the same calling wherein we are called, and must perforce find the best ore bodies where ever they may be; and the Manichean style commitments of those who regard rivers, or trees, or rocks, or aboriginal sites as belonging to the spiritual world; who regard such sites as incommensurable, and seek to legislate such incommensurability into the statute books."[110]

While Mr. Morgan's evangelical tone may not be shared by other mining executives, and his views may have changed since he made this remark in 1984, the fact that he has been elected to chair the industry's environmental think-tank and is also a member of the World Business Council on Sustainable Development shows that his views are clearly not considered aberrational.

Mining companies and industry groups believe strongly that the use of minerals is a part of modern living and often use advertisements to show that any challenge to them is a challenge to the modern way of life. A graphic from the National Mining Council in their latest advertising campaign in 2000 illustrates this belief (Figure 3.2). This ad highlights the continuing perception in industry that they are involved in a truly noble endeavor. The non-renewability of mineral extraction is still largely a non-issue for the metal mining industry, unlike other sectors such as energy minerals where companies like BP Amoco are trying to reinvent themselves as energy service companies and not just mineral extractors (hence opening doors to renewable resource management).

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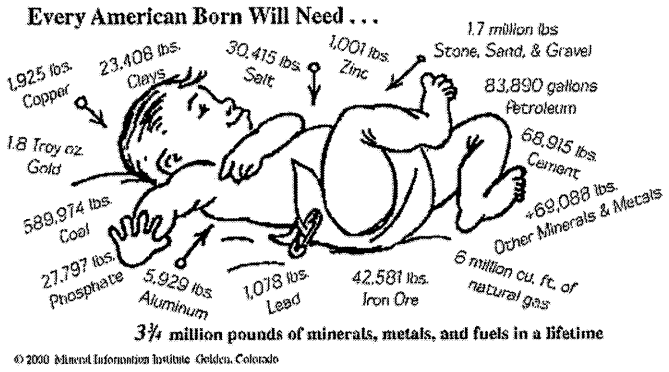
[110] Quoted in Hawke, 1989, p. 60

Figure 3.2: Example of mining industry advertising



Source: Mining Information Institute, Golden Colorado, 2000

Such exchanges between industry and community have led activists such as Al Gedicks (1998, 2000) to posit that apart from the business strategies of the firms (as outlined in section 3.3), the industry also has a separate set of strategies for countering and overcoming local resistance, which follow an "activist" agenda as well. However, my aim is not to be judgmental one way or the other but rather to try and understand how the various characteristics of stakeholders and their manifest behavior in negotiations influences the emergence of resistance.

3.5: Planning for Mines in Remote Areas: Considering Monopsony Power

In much of the public policy literature the concern with firm regulation tends to revolve around the notion of monopoly power. While mining firms in some cases have been accused of monopoly, particularly the diamond mining and processing firm DeBeers, the most significant issue that concerns mining projects in remote areas is not

monopoly power but *monopsony* power. While the former refers to a market that is dominated by one *seller,* the latter refers to a market situation where one *buyer* is dominant. In remote areas, mining companies are often the sole source of income for communities and hence have monopsony power over labor.

Ever since Joan Robinson (1969) first introduced the concept of monopsony in economic literature, it has been viewed with skepticism by economists, and is usually relegated to a sidebar in economic text books. However, recent research has revealed that monopsony may be far more prevalent than previously thought.[111] It is, however, important to differentiate between monopsony arising because the supply of labor to each firm is relatively inelastic; and monopsony caused by employers acting in concert or "colluding." In the case of mining firms either or both models could be operating. However the inelasticsity of labor as a result of limited alternatives is more plausible.

Figure 3.3 shows various economic implications of monopsony power and how it can be manifest. A monopsony would want to choose the most profitable point on the labor supply curve. Given the marginal cost of labor being higher than the labor supply curve in remote areas, the monopsonist would arrive at the most profitable decision shown as L*, whereas under perfect competition, the firm would hire and pay wages at point Lc (where the value of the marginal product of labor equals the wage). Thus, a monopsonist hires less labor and at a lower wage than a competitive firm.

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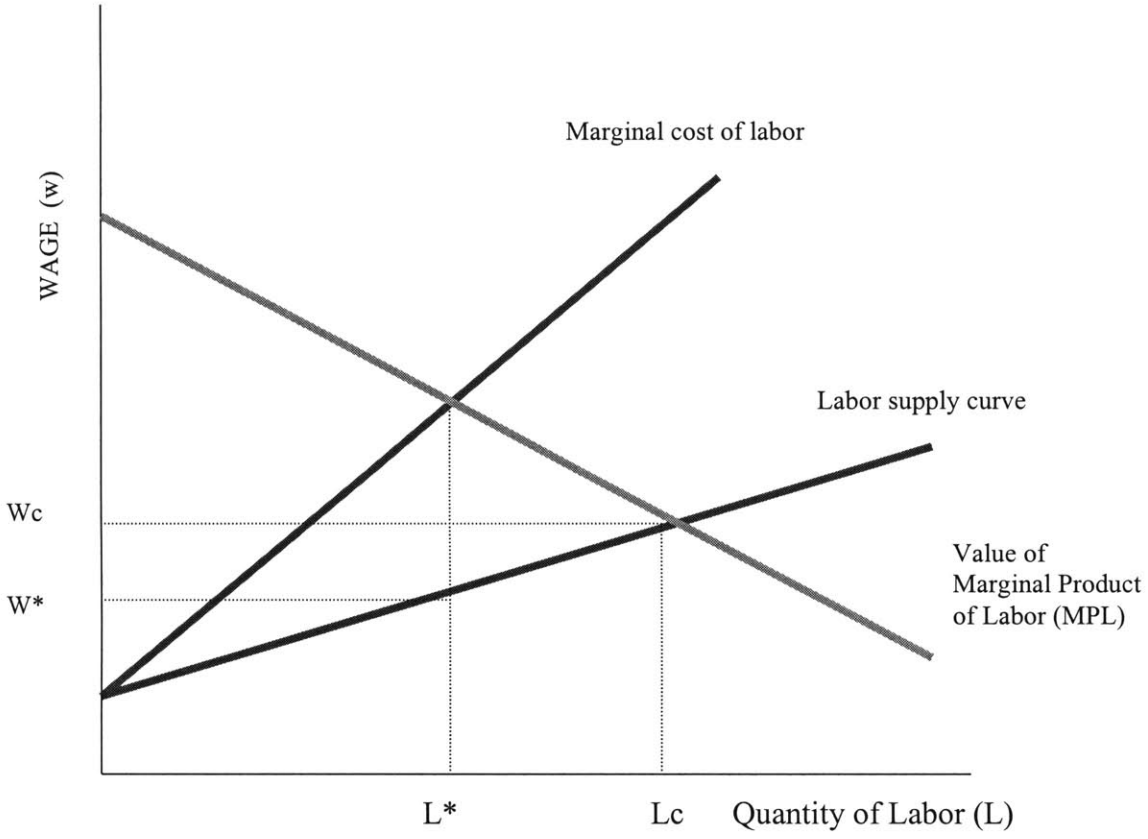
[111] See Blair and Harrison, 1993

Figure 3.3: Monopsonistic competition



The most comprehensive econometric study testing the monopsony hypothesis in the mining sector has been conducted by Boal (1995), in which coal mining data (1897 – 1932) from West Virginia was studied. Boal's study used Bertrand and Cournot coefficients methodology alongside the Lerner index to study the potential for monopsony power using wage and labor supply data.[112] The study does not test whether

[112] Cournot competition here refers to an oligopsony situation in which each firm believes that its rivals are committed to a certain level of production and that rivals will reduce their prices as needed to sell that amount. Bertrand competition refers to an oligopsony situation in which each firm believes that its rivals are committed to keeping their prices fixed and that customers can be lured away by offering lower prices. The Lerner index is a measure of monopolistic and monopsonistic power given by $\lambda = \mathbf{(P - MC)/P = 1/\eta}$ where η is the elasticity of demand / supply for the firm's output / labor.

this power was actually exercised – thus it does not measure the actual gap between the marginal revenue product and the wages. Based on his model, Boal concludes that monopsony power in coal mining during this time only existed at a short-term level and was sharply attenuated if employers "considered the future", that is if they foresaw the effect of current wages and employment levels on their own future labor supply. In the long-run, given discount rates being used by the employers in decision-making, there was no significant evidence for monopsony power of the mining companies. However, these results are by no means translateable to most cases of mining in remote areas.

Indeed, in a subsequent review article, Boal and Ransom (1997) have acknowledged that "monopsonistic exploitation" deserves further study. The current data suggests that monopsonistic exploitation can be categorized as shown in Table 3.3.

Table 3. 3: Types of monopsonistic exploitation (After Boal and Ransom, 1997)

Cause of Monopsony	**Prevalence**
Supply frictions	Widespread but influence is small
Explicit collusion	Rare but effect is large (professional sports)
Tacit collusion or Cournot competition	Inconclusive evidence

Economic theory and some empirical evidence thus suggests that mining companies operating in remote areas may have a significant monopsonistic power, though this is by no means the end of the story. Companies are becoming increasingly aware of the political reality of operating in remote areas and of certain ethical and regulatory obligations to the communities concerned. Community relations consultants, many of whom are anthropologists, are often hired by companies to formulate community relations programs.

Many large mining companies now have environmental health and safety reports which highlight the ways by which impact is being mitigated. While some of these programs are voluntary, most of the efforts that have been made in this regard have been spurred by governments – who, as we will see in the next chapter, are stakeholders in their own right.

4. The Embedded Stakeholder: Governmental Strata in the United States and Canada

Gouverner, c'est choisir: To govern is to make choices.[113]

A little-known French political philosopher Duc De Levis wrote this maxim almost two centuries ago, but its simple message is still relevant and compelling. While democratic governments are, in some ways, a mediating force for conflicting interests in a polity, they must inevitably make choices and hence become an embedded stakeholder. By "embedded" I mean that they express interests of their own, but they do it in less visible ways than other stakeholders and have "divided loyalties."

Democracy has clearly emerged as the penultimate form of government in the absence of any alternative. Much of my analysis in this chapter will acknowledge the primacy of democratic processes in contemporary times. However, given the diverse cultural traditions of Native governance from the Iroquois confederacy to the Apache chiefdoms, I will also try to evaluate Native perceptions of Western governance and its applicability to various social concerns.

This chapter will also attempt to lay the conceptual groundwork for Part 2 of the dissertation by placing much of the stakeholder debate in the context of planning discourse. The eclectic attributes of the issue can often detract cogent analysis and it is important to be reminded that the ultimate goal of the dissertation is to help stakeholders in *planning* for development projects in remote communities in an environmentally sound and economically efficient way.

The recognition of a need to plan, particularly at a state level, has of late been a source of much debate in the literature on sustainable development.[114] While there

[113] Duc de Levis, "Maxims de Politique.", xix, in *Politique* (1764 – 1830).

continues to be much dissent about the definition of sustainability and on the appropriate role of government in this context, there is increasing agreement that sustainability can only be achieved by focusing on the future and relating that to the present.[115] Since planning is inherently a futuristic discipline it provides a means by which governments can work towards sustainability. Whether we like it or not governments do engage in planning at some scale and the ways in which they do so have important implications for the kinds of environmental conflicts that are the subject of this dissertation.

In their recent compendium on "planning sustainability", Kenny and Meadowcroft build on the work of political theorists[116] by suggesting the following:

> "One of the principal implications of planning in liberal democratic contexts concerns the setting of 'meta-social objectives' by the state, or the steering of economic life to meet pre-determined social goals. The state thus looks like one of the most likely candidates for an agency which may oversee the shift to a (more) sustainable society."[117]

The challenge at hand, therefore is to understand the current structure and operation of government institutions and to see how improvements can be made in the exiting framework. In this chapter the current government structures in Canada and the United States will be described as a prelude to the case analyses in subsequent chapters.

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[114] For an excellent overview of this literature see Kenny and Meadowcroft, 1999.
[115] See for example the volumes by Lee, 1993: Glasbergen, 1998.
[116] exemplified in Sckocpol, Evans and Rueshemeyer eds., 1985
[117] Kenny and Meadowcroft, 1999, p. 4.

4.1 The triangulation of power: Delineating Federal, provincial / state and tribal jurisdiction

To borrow a much-celebrated phrase from Thomas Schelling, micromotives and macrobehavior are emblematic of the essential tension between various tiers of government – from local to provincial / state to federal. The situation with regard to tribal governance adds a somewhat perplexing layer of authority since tribes are highly diffuse and quite local in their geography, yet their aspirations for governance are those of a nation-state. The situation is perhaps reminiscent of the United Arab Emirates in the Middle East or the Swiss Confederation in Europe. However, the situation with regard to Native Americans is complicated by the fact that tribes are all too often competing with states or provinces to have localized jurisdiction and authority – hence there are two parallel tracks vying for decision-making power with overlapping geographies. It is thus not surprising to find lawsuits brought by states or provinces against tribes and vice-versa in federal courts.

This triangulation of power is prevalent in both the United States and Canada There are clearly some notable differences in the way the power is wielded in both countries but in general there has been dissatisfaction on both sides of the border about the way in which non-native governmental policies have affected tribal populations. In an interview, Native American scholar and activist, Ward Churchill described the difference between Canadian and American approaches to Aboriginal issues as follows: "The US approach was to concentrate large numbers of people on fewer reservations. The Canadian approach was to fragment the population into numerous small reserves."[118]

[118] Ward Churchill, University of Colorado Boulder, personal communication via telephone, December 1999.

Let us now examine the key organizational structures which are involved in any mineral development project on and around Native land in both countries.

4.1.1 Organizational Jurisdiction for Indian Mineral Development in the US

Apart from instances of state-tribal compacts, much of the regulatory oversight pertaining to Native American trust lands in the United States and Indian affairs in general is relegated to the federal government. A notable exception to this rule is the state of Alaska whose Native population (12% of the total population – the largest state-wide percentage in the union) chose to adopt a corporate system of land administration. Here too there is an exception vis-à-vis the Annette Island band in Southeastern Alaska which chose to remain under federal trust obligations and hence under the jurisdiction of the Bureau of Indian Affairs (the special status of Alaska will be discussed in Section 8.3, in our case analysis of The Red Dog Mine).

A somewhat remarkable feature of the US federal government structure in the context of my dissertation topic is that diverse issues such as mining, native rights, and environmental protection largely fall under the umbrella of one cabinet-level department – The Department of the Interior. The emergence of the department in its current form is a manifestation of the US government's fascination with the Western frontier which has evolved from notions of conquest to conservation. Figure 4.1 shows the organizational structure of the DOI with special reference to office that are of relevance to mineral development on Indian land. Apart from the DOI, there are a few other governmental agencies which are important in terms of governmental involvement in specific situations and concerning certain issues. A more complete picture of federal agency involvement is thus offered in Table 4.1. Unlike most governmental structures, US cabinet-level

departments are extensions of the executive branch and are insulated from the legislative branch of government by the constitutional provision which bars federal government appointees from being part of the legislature.

Table 4.1: US government agencies of relevance to Indian mineral development

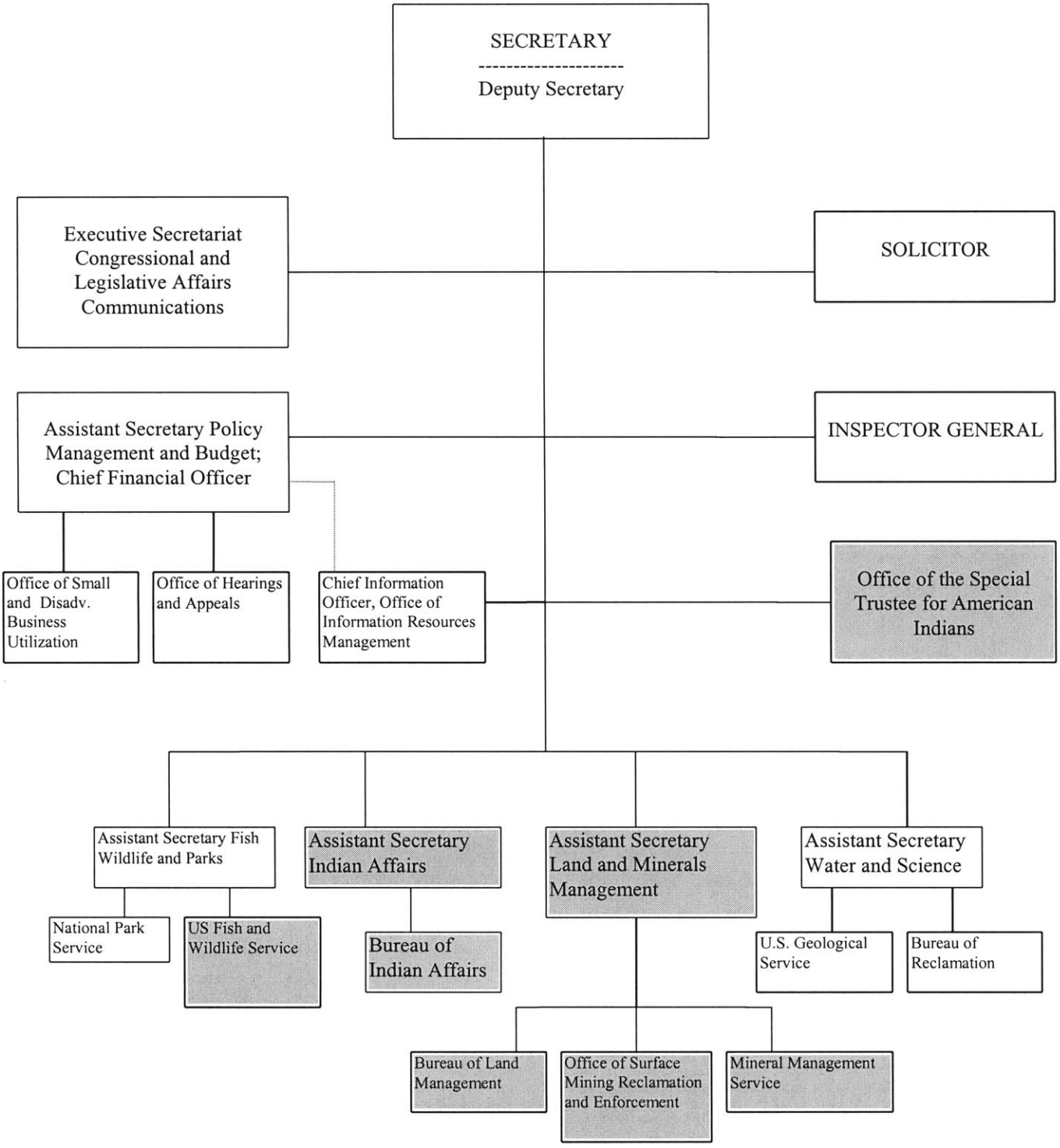
Government Agency	Task
Bureau of Indian Affairs	Leasing arrangements
Bureau of Land Management	Preparation and review of Mining plan
Environmental Protection Agency	Compliance with environmental standards. Review of EIS
Minerals Management Service	Royalty arrangements
Office of Surface Mining Control and Reclamation	Regulatory jurisdiction over coal mining
US Army Corps of Engineers	Wetland protection
US Fish and Wildlife Service	Endangered species protection

Among these various organizations, the one which has the most overarching authority over most Indian development efforts at present is the Bureau of Indian Affairs (BIA). The BIA is a public organization with a chamelionic history of organizational dynamics, which actually predates the formation of the Department of the Interior. Steeped in a history of colonial subjugation, the Bureau is currently the federal agency with primary responsibility for administering and managing 56.2 million acres of land held in trust by the United States for the Indians. The stated mission of the agency in 1998 is to:

> "enhance the quality of life, to promote economic opportunity, and to carry out the responsibility to protect and improve the trust assets of American Indians, Indian Tribes and Alaskan Natives. We will accomplish this through the delivery of quality services, maintaining government-to-government relationships within the spirit of Indian self-determination."[119]

[119] Bureau of Indian Affairs, Employees Mission Statement, 1998.

Figure 4.1: Organizational Diagram of the Dept. of Interior, highlighting offices of relevance to Indians:



The BIA has often been termed "a government in miniature" and in its various incarnations it has been a manifestation of various theoretical models of organizational behavior. By combining various federal, state and local functions, this organization has an unusual set of goals and thus presents many challenges to effective management. As a trustee of Native American interests, the BIA also has a set of duties which are usually found in the private sector. Cultural factors take on a new and more profound meaning in this organization which is supposed to act as a buffer between disparate civilizations.

4.1.1.1 The BIA and Planned Obsolescence

Congress always intended for BIA to be a transient and ephemeral agency. It was meant to serve a purpose and then write its own dissolution. As Steven Novak states in his important paper on the topic:

> "Once natives had taken up their yeoman farms, they would be absorbed into white society, regain their independence and allow the transitional government programs to end. The BIA was meant to be short-lived....The BIA was meant to dissolve once the natives regained their 'independence' and government officials always dreamed that it was near its end "[120]

In 1913, the secretary of the Interior said: "the Indian Bureau should be a vanishing bureau." Congressman George Schwabe, one of the architects of the Termination policy, promised in 1946 "to get rid of the Indian Bureau as fast as possible."

However, none of these plans for obsolescence have come to pass. The Bureau is still alive and well and even though reforms are being considered at this time there is no sign of dissolution of the organization.

There will be even further challenges for the Bureau as tribes gain further legal autonomy and economic development. Several tribes are now drafting their own

[120] Novak, 1990, p. 640.

regulations and the question of sovereignty reigns supreme. Will the BIA's role ever become peripheral? The reason why obsolescence is not given much attention in organizational discourse is perhaps because most organizations strive to prevent their demise no matter how clear their goals of dissolution. Without another recourse of employment or empowerment the individuals that make up the organization struggle to keep it alive -- hence there is seldom any planned obsolescence from within an organization. The way in which Indians have been given preferential hiring is an example of this process. While this led to a form of "captive bureaucracy", it helped to preserve the organization. Many scholars of Indian history have argued that the BIA's Indian employees are victims of co-optation by the system. They are labeled collaborationists and "Uncle Tomahawks," and have to endure considerable censure at the hands of their own kin.

However, Novak has argued that the opposite is closer to the truth. Indians employed by the BIA have been activists for native rights and are beginning to apply their lessons from working at the BIA to tribal government. While preferential hiring has created a form of Indian dependence on the BIA, the long-term effect of this policy on the future of the organization remains unclear. It is notably in sharp contrast to the Canadian Department of Indian Affairs and Northern Development which has less than 20% Native employees in its workforce.[121]

In 1995, the United States Senate held hearings on reforming and downsizing the BIA. Senator John McCain (R, Arizona), the Chairman of the Senate Committee on Indian Affairs lambasted the BIA on several fronts: "As a financial manager, the BIA has

failed miserably...as the trustee of responsible for education of Indian children the BIA has been shamefully neglectful.... [the failings of the BIA] brings new meaning to the phrase 'a parade of horribles.'" Most of the Indian representatives agreed that the BIA should be downsized and more authority given to tribal governments but there was no talk of obsolescence. The restructuring of the Bureau is currently being undertaken. It is clear that there will be some reduction in personnel and that more authority will be devolved to tribal governments, but the organization will still remain alive and will perhaps rise from its ashes with renewed vigor and vitality.

4.1.2 Organizational Jurisdiction for First Nations Mineral Development in Canada

Canada's federalist structure gives considerably more authority to the provinces than the American model – partly because of the Francophone demands for autonomy in Quebec. Therefore, even with regard to Aboriginal affairs, the provincial governments often have just as much, or perhaps more, involvement than federal authorities. Moreover, as discussed earlier, Canada has a lot of "unfinished" business vis-à-vis treaty settlement with certain Aboriginal groups in British Columbia and Newfoundland. The categorization of Aboriginal people into full-blood Indians, Metis[122] (mixed blood) on the

[121] Jean Louis Causse, Department of Indian Affairs and Northern Development, personal communication, Ottawa, January, 2000.

[122] The term Metis historically refers to those people who settled in the Red River area of the Canadian West and were the progeny of Scottish or French settlers and Native women. Under Riel and Dumont they formed a separate government which was ousted by military action by the federal government in the late nineteenth century. However, their Aboriginal title is derivative, not original. Their land base, except for some settlements organized under provincial law, is non-existent. All of these issues are obscured by the question of status. Are all people with some Aboriginal blood, but no other status or entitlement, Métis? Are Métis the descendants of the distinctive society in western Canada -- led in the last century by Riel and Dumont -- who did not take Treaty? Much of this is still a gray area in Canadian law.

one hand, and on-reserve and off-reserve on the other, has added yet another dimension to the policy-making process.

There is also considerably more formality in terms of how mineral rights are exercised in Canada. For a First Nation to initiate mineral activity on its reserve, it must first surrender its mineral interests to Her Majesty, since the head of state is the only "sovereign" entity under British legal tradition. Mineral rights can then be negotiated for sale to third parties for the purposes of mineral exploration or development. A surrender means a First Nation surrenders its mineral interest so that the Minister can deal with that interest, as consented to by the First Nation. This interest could include the exploration, development and sale of metallic minerals.

The Canadian counterpart of the BIA is called the Department of Indian Affairs and Northern Development (DIAND). While DAND has similar roots to the BIA, initially being an extension of the military apparatus, the current structure and jurisdiction of DIAND is quite different from the BIA. The current department was created in 1966 by an act of parliament and is a decidedly ancillary organization. Initially DIAND was involved with directly providing services such as education, housing, road maintenance and water / sewer systems to First Nations. However, in its present mission statement, the department acknowledges that it is "becoming much more of an advisory, funding, and supportive agency in its relations with First Nations, Inuit and northerners."[123]

Table 4.2 shows the various Canadian government departments and agencies that have relevance to mineral development. A notable difference between this table and the corollary US table (4.1), is the presence of a separate cultural heritage organization in the Canadian government. The US has generally been averse to institutionalizing cultural

issues at the governmental level – which lends credence to the proverbial "melting pot" (US) versus "salad bowl" (Canadian) divergence of policy-making. Canada also has a more decentralized structure for its departments with 37 cabinet members as compared to 14 in the US – though unlike their American counterparts, the Canadian cabinet members (following British tradition) may be part of the legislative branch of government as well, and are therefore referred to as "Ministers."

Table 4.2: Canadian federal organizations of relevance to Aboriginal mineral development

Federal Government Agency	Task
Atomic Energy Control Board	Jurisdiction over uranium mining
Canadian Environmental Assessment Agency	Facilitating environmental assessments (process-oriented)
Canadian Heritage	Promoting cultural diversity
Canadian Human Rights Commission	Preventing discrimination and referring grievances to a tribunal
Environment Canada	Compliance with various environmental regulations
Indian and Northern Affairs	Advisory body to assist in Aboriginal development
Indian Claims Commission	Hold public inquiries regarding land claims
Industry Canada → Aboriginal Business Canada	Promote First Nation business enterprises
National Roundtable on the Environment and the Economy	Think-tank on policy reform
Natural Resources Canada → Minerals and Metals Sector	The regulation of natural resource development and
Western Economic Diversification Canada	To promote development in underdeveloped parts of Western Canada

In addition to the federal agencies mentioned above there are also several provincial agencies in each province that can often be quite actively involved in mineral issues, given the greater devolution of authority to provinces in Canada. Provincial involvement will be discussed in Part 2 with reference to particular cases. In Canada the unique issues surrounding mining development on Aboriginal land has led the National Round Table on the Environment and the Economy (NRTEE), an independent federal

[123] DIAND Web site accessed, June 1, 2000: http://www.inac.gc.ca

agency, to launch a task force on *Aboriginal Communities and Non-renewable Resource Development,* which is currently in the process of preparing a report and recommendations on the issues at hand (that will be published in early 2001).[124]

4.1.3: Comparative Organizational Analysis

The changes in public organization have been studied in considerable detail by Denhardt (1993). He uses a classification scheme used by Burrell and Morgan in their important work *Sociological Paradigms in Organizational Analysis.* A refined version of this is shown in Figure 4.2 with my addition of two stages of BIA and DIAND development on the planar axes. The original diagram in this regard was meant to be used for positive categorization of social theories and the assumptions on which they are based. However, these quadrants are also representative of the change in government allegiance to particular kinds of sociological paradigms which led to the changes in organizational behavior. This may still beg the question of why the governments changed their outlook on Indian policy, but aim here is to focus more on the consequences of that change than on the causes of the policy change – a task admirably tackled by numerous historians.[125]

However, The earlier years of the BIA, probably up to the middle of this century are shown by the ellipse marked "BIA 1", whereas the subsequent changes and the future trajectory of the BIA, as discussed in this section is more congruent with the second ellipse (BIA 2).

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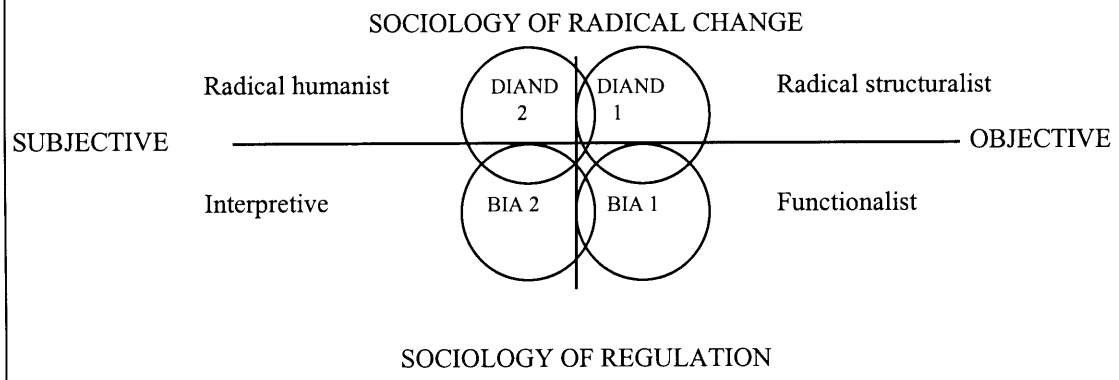
[124] Web site: http://www.nrtee-trnee.ca

[125] See for example the excellent treatise on the history of the BIA by Theodore Taylor, 1984.

The DIAND has a much more diffuse history since it has had several different organizational incarnations and did not exist as a unified entity until 1969 (DIAND 1 in Figure 4.1). However, even during this relatively brief duration of about thirty years DIAND has clearly moved to the left of the horizontal axis in Figure 4.2. It was not meant to be a regulatory organization and hence is situated in the northeast quadrant.

Figure 4.2: Paradigms in Organizational Analysis as Applied to Public Organizations



While this diagram may seem somewhat contrived, it allows us to conceptualize the two dimensions on which theories of public organization can be arrayed. The horizontal spectrum focuses on theorizing and ranges from the objective existence of society as posited by sociologists such as Durkheim (1895), to the subjective realm of institutional anthropology. The second, vertical dimension focuses on assumptions about the nature of society as manifest in the order-conflict debate. The BIA has clearly moved more from the Functionalist quadrant with an emphasis on regulatory control to a more humanist and interpretive organizational domain.

Much of the changes which have occurred towards a less regulated and more culturally sensitive role of government in Native America is directly related to a sense of

contrition which has emerged in North America following the civil rights movements in the 1960s. The government has come to symbolize a timeless connection with the past for many Aboriginal communities and the predominantly white governments of the United States and Canada have recognized that they must try to atone for the injustices of their forefathers. As we shall see this has spawned a series of revisionist attacks on tribal institutions and the questionability of the politics of retribution.

4.2 Land and water claims amidst a politics of retribution or questionable "indigeniety"

At the heart of any political debate in the Greco-Roman system is the question of property, particularly physical property, most notably manifest as claims to land and water and the resources therein. Who "owns" as well as "controls" land and water is a critically important issue for tribes and indeed for governance. Much of the contrition voiced by both the US and Canadian governments with regard to the mistreatment of Natives during the past, is now being articulated through natural resource settlements in various forms. These are in turn tightly tied to the concept of sovereignty which we will dissect in greater detail in Chapter 10.

At this point the important issue to keep in mind is the land claims, particularly in Canada, are being thought of as a means of atoning for past injustices. The most remarkable development in this regard has been the creation of the territory of Nunavut in 1999, which is a hybrid of a territory and province, when it comes to the governance rights that have been accorded to it as shown in Boxes 4.1 and 4.2.

Box 4.1

Highlights of the Nunavut Land Claims Agreement (Nunavut officially joined the Federation of Canada in April, 1999): Source: Nunavut agreement www.inac.gc.ca

- *$1.1 billion in financial compensation, paid out between 1993 and 2007*
- *1.9 million square kilometers of land and water (Nunavut Settlement Area) — within that, title to 355,842 square kilometers of Inuit-owned land, including mineral rights to 35,257 square kilometers*
- *Inuit employment in the government eventually proportional to the number of Inuit in Nunavut's population — 85 per cent*
- *A share of federal government royalties from oil, gas and mineral development on Crown lands equal representation of Inuit with government on lands and resources management decision-making boards*
- *Policies ensuring that federal and territorial government contracts awarded for Nunavut-destined projects see increased participation of Inuit firms. Training and education provided where needed, and labor force hirings within contracted firms to reflect proportion of Inuit in Nunavut*

Box 4.2 Differences between Provinces and Territories in Canada

- *A province exists in its own right, a creation of the Constitution Acts, 1867 - 1982. A territory, however, is created through federal law.*
- *Crown lands in the territories are retained by the federal government in the Crown in right of Canada. This differs from the provinces, which own provincial lands in the Crown in right of the province.*
- *A territory, federal Parliament may enter into provincial-type affairs, such as school curriculum.*
- *Territorial governments are not included in the Constitutional amending formula — the way we decide if we want to change something in the Canadian Constitution. Provinces get a vote when a change is proposed — territories don't.*

While the formal treaty-making process has ended in the United States, there continues to be a cavalcade of congressional requests for tribal recognition and land settlement, particularly following the Indian Gaming Act of 1986. This in turn has led to strong resentment towards Native sovereignty, particularly in states where casinos are otherwise banned or restricted. The enormous success of the Mashantucket Pequot tribe in Connecticut has led to a backlash from many circles who have even gone so far as to challenge the Indian credentials of the tribe itself.[126] This is posing yet another challenge for government institutions that are trying to implement a politics of retribution.

At this point it may be instructive to consider the lament against the Pequot and how it relates to Native politics in general. While it may be true that the Pequot tribe in its current form does not have as much Native "pedigree" as some other tribes, that does not necessarily mean that they are being deceitful. Native people were historically forced to assimilate and were made to feel shameful of their lineage and it is thus not surprising that some of them had claimed to be "white" at some parts of their life. This reality in fact adds to the tragedy of native persecution. Moreover, on a factual basis, the descendents of the Pequot tribe, and some others, started to seek government recognition long before the casino was even an idea.

What is most troubling to Native leaders is that there is an emerging cadre of politicians, such as Washington state Senator Slade Gordon who are suggesting a reversal of governmental policy towards Native Americans in terms of compensation for past injustices. As Gordon warns in a recent interview "making a case out of what happened

[126] See for example the recent book by Benedict (2000).

to your grandfather is not the best way to decide public policy."[127] However, one may contend that Senator Gordon and his supporters are missing the point. It is easy to say that "well we were not the ones persecuting them then, " but the whole point is that there were clear violations of treaties and other agreements by settler governments that are meant to be valid for time immemorial unless otherwise stated. Native activists further argue that even if there were no treaties (as is the case in British Columbia or Australia), there should still be a recognition of past injustices -- isn't that what Western notions of timeless truth are all about?

A related trend in revisionist thought about Native policy is the use of archeology to question the primacy of Native settlement in North America. The discovery of a skull in the Columbia River valley that is morphologically dissimilar to most Native skeletal remains has brought this debate to light. However, much of the revisionist arguments are moot here as well since the Native claims to land and water rights are predicated on treaty violations and not on who was here first – there is no doubt that the Indians were here before the current European immigrants. The Viking visits a thousand years ago did not lead to permanent settlements as documented in their own narratives, and even so, they came long after the ancestors of the current Native people of the Americas.[128]

New Zealand offers an important comparison in this regard, where the Maoris are known to have come to the two islands only a few hundred years before the Europeans (probably in the 13th century). Indeed, it is widely believed that the Maoris annihilated and cannibalized the preexisting archaic Polynesian inhabitants of New Zealand.

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[127] Quoted in Thomas (2000), p. 237.

[128] For an excellent account of the history of anthropological research on Native people in the Americas with particular reference to the discovery of Kennewick man see Thomas, 2000. For a more in-depth appraisal of studies about the settlement of the Americas see Dillehay, 2000

Nevertheless, New Zealanders have recognized that such a history does not in any way diminish the treaty obligations which European settlers accepted upon their signing of the treaty of Waitingi and subsequent commitments.

Interestingly enough, land and water rights were often taken from Indians even in the name of environmental conservation. Mark David Spence (1999) has documented the removal of Indians from present-day Yosemite, Yellowstone and Glacier National Parks in his book *Dispossessing the Wilderness*. Similarly, in Canada The Chapleau Crown Game Preserve in Ontario was created in 1925 under a similar approach. The same sort of arguments which led to the removal of Indians from National Park areas are now also being used in controversies surrounding hunting and fishing rights for tribes. These will come to light in our discussion of the case of native-non-native alliances in Wisconsin. Canadian natives are confronted with similar challenges as well by groups such as the Ontario Federation of Anglers and Hunters, who have a powerful lobbying presence in Ottawa. Ultimately such instances of "backlash" towards Natives are rooted in deep misperceptions of "the other."

4.3 The ambivalence of courts and parliaments

Much of the debate over land rights, and interpretation of the ever-elusive concepts of trust and sovereignty have been played out in the courts and halls of legislatures in both the US and Canada. The vicissitudes of Native policy and legal wrangling in both the US and Canada are too great to be discussed in any detail here (the chronology in Appendix 7 covers most of the significant episodes in this regard). However, there are some landmark cases and some important statutes that have defined

and redefined the meaning and relevant interpretation of Native rights which are discussed below.

4.3.1 Statutory comparison

In both the United States and Canada governments have tried to wrestle with competing notions of how to reconcile the somewhat paradoxical and *sui generis* status of Native people as politically independent and yet economically dependent entities by enacting laws that have almost followed a kind of cyclical pattern during the past century. There have been waves of assimilative policies, such as the two termination episodes in the US or the Canadian White Paper of 1969 followed by a resurgence of Indian self-determination programs, initially enunciated in the US under the Indian Reorganization Act of 1938, followed by the Indian Self-determination and Education Assistance Act (1975) and in Canada under the Indian Act (first enacted in 1876; revised most recently in 1985). Attempts at privatization of Indian interests in the United States, such as the Dawes Allotment Act of 1887 or the Alaska Native Claims Settlement Act of 1971 have been an important aberration in US Indian policy that do not have a Canadian corollary. Finally, we appear to be reaching a steady equilibrium in Indian policy on both sides of the border -- at least a legal framework for how to proceed and resolve the vestigial problems of colonialism appears to be emerging. This equilibrium in both Canada and the United States is predicated on a paramount recognition of Native sovereignty.

Mineral rights are an important legal manifestation of sovereignty for Native people. During the early part of this century, as the US Congress tried to come to terms with the various competing demands on Indian trust lands, there was a move towards separate leasing policy for Indian reservations, which culminated in the passage of the

Omnibus Indian Leasing Act of 1938. For nearly fifty years this law was the only touchstone for mineral leases on Indian land alongside other leasing demands.

In the early eighties, there was a federal US inquiry into the theft of Indian oil, as well as the misappropriation of royalties, prompted by "whistle-blowing" of audit findings by a Cherokee USGS worker named Chuck Thomas. This was an unusual situation where states and tribes were both on the same side of the fence in their outrage. To states and tribes, oil and gas revenues were of vital importance. The states received 50 percent of the royalties from federal leases within their boundaries, except for Alaska, which received 90 percent. The Indians received all of the royalties from Indian Leases. In the peak year 1982 the Indians earned $198 million in royalties from oil and gas production. As a result of the subsequent commission and inquiry, the Secretary of the Interior created the Minerals Management Service in January, 1982. By the end of that year Congress also passed the Federal Oil and Gas Royalty Management Act to implement other recommendations of the commission. Around the same time the Indian Minerals Development Act was also passed.[129]

While the 1982 Indian Mineral Development Act was a turning point for Indian self-determination insofar that it gave tribes the right to directly negotiate contracts, it also added a distinct element of risk to the equation. The 1938 Omnibus Tribal Leasing Act had required competitive lease sales to protect tribes from abuses prevalent at the time. Now the tribes were "on their own." An example of the advantages of government oversight in mineral leases was apparent in 1976, when Interior Secretary Cecil Andrus refused to approve the Burnham mine lease until it had been renegotiated by the Navajo Tribal Council. After the lease was finally approved, the newly created federal Office of

Surface Mining (OSM) took an additional fifteen months to approve the mine plan. Marcus Wiley, Consolidation mine superintendent, later said, "If they [the Navajos] had been sovereign, we would have been in business three years sooner." Yet both federal delays seemed well justified. Later, the Navajo Chairman praised the Interior Department for its role in improving the lease terms. The OSM delay stemmed from serious doubts that the Burnham site, which received fewer than six inches of rain a year, could be reclaimed. When OSM finally issued the permit, it included several rigorous stipulations.[130]

Nevertheless, as many tribes are often quick to point out – it is often better to make your own mistakes and learn from them rather than to follow others. In the words of the oft-quoted jurist and scholar of Native American law, Felix Cohen, self-determination must be redefined:

> Not all who speak of self-government mean the same thing by the term. Therefore let me say at the outset that by self-government I mean that form of government in which decisions are made not by the people who are wisest, or best, or closest to some throne in Washington or in Heaven, but rather by the people who are most directly affected by the decisions.

1982 was a momentous year in Canadian legal history as well – the Canadian Constitution was revised and approved with specific provisions for Aboriginal people (see Appendix 2). While the American constitution only contains oblique references to "Indians" in terms of commerce and tax exemption (Article 1, section 2 and 7), the Canadian Constitution in its present form has a separate segment (Part II), allocated to Aboriginal rights which affirms the pre-existing treaty rights of First Nations.

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[129] Ambler, 1990
[130] Fixico 1999 and Ambler, 1990.

While such rights are clearly outlined in the Canadian constitution, the body of Canadian law pertaining to First Nations is not nearly as rich as in the United States. The key statute is the Indian Act which was initially promulgated in 1876 but which has been revised several times since then (most recently in 1985). Apart from this law there is a Federal Indian Oil and Gas Act (1974) which was enacted to deal with the growing oil industry in Alberta. The Act stipulates that "all oil and gas obtained from Indian lands after April 22, 1977 is subject to the payment to Her Majesty in right of Canada, in trust for the Indian bands concerned, of the royalties prescribed from time to time by the regulations." At the same time the statute states that "nothing in this Act shall be deemed to abrogate the rights of Indian people or preclude them from negotiating for oil and gas benefits in those areas in which land claims have not been settled."

There are also many areas where Canadian laws are more restrictive of Native enterprises as compared to their US counterparts. In the U.S., the more expansive interpretation of tribal sovereignty as a policy-making measure following the Nixon administration (and then reinforced by Reagan) immunizes gaming operations from state legislation, although they are subject to a generally permissive act of Congress. Canada regulates gambling through the Criminal Code and the courts have not recognized any exemption from the relevant provisions on the basis of self-government. Thus, gambling is illegal in Canada unless a license is obtained from the provincial government, which is "a permitted inter-delegation of powers."

In Ontario, the Chippewas of Rama have secured a license for a casino from the provincial government on the basis that revenues will be shared with other First Nations. There are also two current developments of on-reserve charitable gaming facilities: these

are effectively rented out to licensed charities to conduct bingo and casino nights on site. There is no indication that governments will soon encourage or permit on-reserve gaming in Canada to the extent that industry has taken root in the U.S.[131]

Canada's Indian policy received a considerable jolt in 1990 when a group of Mohawk Indians took arms to oppose the construction of a golf course near their Kahnesetake reservation in Oka, Quebec. There was a 78-day standoff between law enforcement authorities, including 3,700 troops, and 63 Mohawk Warriors, which ultimately led to a disarming of the Mohawks. However, during the confrontation one police officer was killed and the country was suddenly given a rude awakening regarding the immediacy of Aboriginal issues. This incident galvanized the government to renew a process of reconciliation which led to the formation of the Royal Commission on Aboriginal People in 1991. The commission published a 4,000 page report in 1997 which cost over C$55 million to prepare (the recommendations of this report will be discussed in Part III of the dissertation).[132]

Legislating a respect for the spiritual beliefs of Aboriginal peoples is also a particularly sensitive issue which American lawmakers first confronted by passing the Native American Religious Freedom Act of 1974, which was subsequently revised in 1994 to make a special exception for the use of potentially narcotic substances (for example peyote was allowed for Native ceremonial purposes). Even so several Navajo families brought forth a complaint regarding religious intolerance to the UN Commission on Human Rights in 1997. The following year Abdelfattah Amor, the UN Special

[131] Henderson Bill. "Virtual Law Office." http://www.bloorstreet.com/200block/brintro.htm
[132] Switzer, Maurice (1998). "All Canadian Issues are Aboriginal Issues." *Globe and Mail,* March 27, 1998.

Rapporteur on Religious Intolerance visited Black Mesa and filed a report which was quite critical of the US government.[133]

Since many Native people also have a strong sense of ancestral linkage, the Native American Grave Protection and Repatriation Act (NAGPRA) was passed by Congress in 1990 to "repatriate" the remains of Native people which had been acquired by museums and also to prevent desecration of any Native burial sites which may subsequently be excavated. This law is currently being tested through various cases in which scientists and museum curators are battling the issue in the courts.[134] Similar laws do not exist in Canada, though considerable caution is exercised by the government in reviewing environmental assessments that include sites of spiritual significance to Natives.

The conflict between mining interests and environmentalists is perhaps greater in the USA than in any other country largely because a high proportion of federally owned lands are areas where minerals tend to be found, and there is a strong public interest in wilderness preservation that has been growing throughout the twentieth century. As of 1979, the US government controlled about 760 million acres (about half of it in Alaska), or about one-third of the land in the USA. Approximately 42 per cent of these acres has been completely withdrawn from mineral activity, another 16 per cent is severely restricted and 10 per cent is moderately restricted.[135] Major areas at issue between environmentalists and mining interests are some 80 million acres designated as wilderness under the Wilderness Act of 1964, plus 174 million acres identified by the

[133] *Navajo-Hopi Observer,* May 5, 1999.
[134] See Thomas, 2000. A notable case which has recently been filed involves a meteor which was sold by Native tribes in Washington to the American Museum of Natural History in the early part of this century, but which is now being demanded back by them on the basis that the rock is spiritually significant.

Bureau of Land Management (BLM) as wilderness study areas (WSA) that are being reviewed for possible inclusion as designated wilderness areas. Exploration and mining activities are not allowed or are severely restricted in wilderness areas and national parks. The US mining industry favors elimination of such restrictions as well as limiting the acreage of new areas brought into the wilderness system.

While the NSF's 1967 suggestion of declaring certain parts of the United States as "national sacrifice areas" for mineral development has been largely dismissed, there is still much room for reform. The basic elements of US minerals policy thus far can be seen in President Reagan's Report to Congress on a National Materials and Minerals Program of April 5, 1982 – a report requested by Congress in the National Materials and Minerals Policy, Research and Development Act of 1980. This report recognized the role of minerals for both national production and national defense. In his report, the President stated that his administration was considering the feasibility of using Title III of the Defense Production of 1950 (as amended) for subsidizing the creation or expansion of capacity of minerals that cannot be profitably produced at current world prices. The USA encourages nonfuel mineral mining by means of tax incentives, the most important of which is percentage depletion. The depletion allowance (which is deducted for determining taxable income) is calculated on gross income at various percentages ranging from 15 per cent for copper, iron ore, gold and silver, to 22 per cent lead, zinc, nickel and tin. The allowance may not exceed 50 per cent of net income, calculated without regard to depletion. Intangible costs of mining development can be expensed as well as exploration expenditures, up to a certain limit.

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[135] Mikesell and Whitney, 1987, Ch. 6.

There is still much room for change in both legal systems and lessons to be gleaned from the legal history of both the United States and Canada. As Native legal scholar Kathy Brock has stated in her recent comparison of Aboriginal policy on both sides of the border:

> "Unlike Canada where Indian Legislation tends to be centralized and systematic, in the United States Indian legislation comprises over 5,000 federal statutes, 2,000 federal court opinions, and nearly 400 ratified treaties and agreements. Although Canadian policy is moving in this direction, it in no way approximates the sheer volume and complexity of the American case. This cumbersome attribute of the American model is worth noting and avoiding in the present era, which emphasizes objectives of government efficiency and responsiveness.

4.3.2 Comparison of Jurisprudence

In the United States the three case decisions enunciated by Justice Marshall in the mid-nineteenth century (known as the Marshall trilogy) are foremost in this regard and established the principle of "domestic dependent nations" and "trust responsibility."[136] The trust responsibility doctrine has evolved from one of a "guardian – ward" relationship (in Marshall's words) to a "trustee" relationship. The wording of a statement issued by the BIA describes the relationship as follows: "The Federal Government is a trustee of Indian property, it is not a guardian of individual Indians. The Secretary of the Interior is authorized by law, in many instances, to protect the interests of minors and incompetents, but this protection does not confer a guardian-ward relationship."[137]

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[136] The three Marshall cases are *Johnson* v. *McIntosh* (1823) *Cherokee Nation* v. *Georgia* (1831), and *Worcester* v. *Georgia* (1832).

[137] Bureau of Indian Affairs web site: http://www.doi.gov/bia/aitoday/q_and_a.htm, accessed, June 12, 2000.

However, this may just be an issue of semantics and the concept of trust continues to be widely debated in the literature.[138]

Another principle in American Indian law that is particularly important and perhaps less ambiguous is the concept of "reserved sovereignty", which was expressed in a 1905 Supreme Court decision (*United States v. Winans*). The court concluded in this case that when signing a treaty with the government the tribes reserved a right that was preexisting the influx of settlement and noted "that a treaty was not a grant of rights to Indians, but a grant of rights from them – a reservation of those not granted."

Canadian legal history concerning Aboriginal people tends to begin with the Royal Proclamation of 1763, which is often called the Magna Carta of Indian rights in Canada. However, much of the case law that is relevant to contemporary times begins with the supreme court's decision in the *Calder* case. This case concerned the claim of the Nishgaa people in British Columbia to the Nass River valley. The significance of this case lies in the legal recognition of Aboriginal title, even though the case itself did not resolve the Nishgaa claim (the claim was ultimately settled in 1998). This recognition has been present in American jurisprudence since at least 1905 in the aforementioned *Winans* decision. In New Zealand, Maori title to the land was recognized as early the Treaty of Waitingi (albeit poorly and unjustly implemented). Surprisingly, Canada was rather late in this recognition, though not as late as Australia which did not have a recognition of Aboriginal title in its legal history until 1993 in the *Mabo* decision. Unlike the United States, where court opinions tend to be highly nationalistic, the Canadian courts often

[138] See Deloria ed., 1985.

refer to cases in other countries with similar legal history, and the *Mabo* decision as well as numerous US court decisions are often cited in Canadian courts.[139]

Another landmark Canadian case which subsequently led to a "test" which is often applied to the resolution of issues respecting ownership and jurisdiction of lands is the *Baker Lake* case. This case concerned a request by the Inuit of Baker Lake in the Northwest territories to obtain an injunction to stop the exploration activities of certain mining interests, based on the view that such ventures would adversely affect Aboriginal rights to occupy the land for hunting caribou. Justice Mahoney denied the injunction on the grounds that mining activities were not interfering significantly with an Aboriginal right to occupy land to hunt caribou. Nevertheless, the decision was important insofar that Justice Mahoney established a set of guidelines which need to be used when considering Aboriginal title, which are as follows:

(1) that they and their ancestors were members of an organized society;
(2) that the organized society occupied the species territory over which they assert the Aboriginal title;
(3) that the occupation was to the exclusion of other organized societies;
(4) that the occupation was an established fact at the time sovereignty asserted by England

Since then, the most significant ruling which is often cited is the *Delgamuukw* decision in which the court made an expansive ruling allowing for oral histories as proof of Aboriginal title alongside looser definitions of historical occupancy. However, the court was quite divided in many aspects of the decision and there is still a sense among Aboriginal communities that they will need to fight for their rights on a case-by-case basis. The same sentiment holds true for Native Americans in the US. There is a strong belief among Native American lawyers, such as Professor Robert Williams of the

[139] See Asch, 1997.

University of Arizona, that the supreme court decisions thus far are by no means indelible and in recent years the Rhenquist court has given Native leader considerable cause for anxiety.[140]

4.4 Reconciling two macro-goals: economic development and Aboriginal rights

The US Secretary of the Interior in 1881 Charles Schurtz once stated: "there is nothing more dangerous to an Indian reservation than a rich mine."[141] This statement was a prelude to the appropriation of land by the US government because of mineral potential. The taking of the Black Hills in South Dakota after General Custer's confirmation of gold deposits in the region is perhaps the most flagrant example of this move. Such practices were given an interesting "sympathetic" twist by Commissioner of Indian Affairs Francis Walker wrote:

> It is the policy of the government to segregate such [mineral] lands from Indian reservations as far as may be consistent with the faith of the United States and throw them open to entry and settlement in order that the Indians may not be annoyed and distressed by the cupidity of miners and settlers who in large numbers' in spite of the efforts of the government to the contrary, flock to such regions of the country on the first report of the gold discovery. [142]

While such statements can perhaps be considered a mark of the times, they also reflect a more lasting tension between the government's role as trustee for Indians and the land in general on the one hand as an agent of economic development and prosperity on the other. Mining, in particular has been an industry that is considered with great respect by governments in both Canada and the United because it is also a source of

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[140] Robert Williams, personal communication, Tucson, Arizona, November 12, 1999. A case in point concerning Indians and mining which was argued before the Supreme Court in 1998 is *Montana v. Crow Tribe of Indians,* in which the court denied the tribe's petition for restitution of tax revenues from Montana from mining operations.

[141] Quoted in Ambler, 1990, p. 32.

[142] Quoted in Ambler, 1990, p. 33.

handsome tax revenues and can bring about sudden surges of wealth within a short span of time – a phenomenon that can serve important political functions as well.

In the United States, one of the oldest laws that has still not been amended or replaced is the General Mining Law of 1872. Under this law miners can still stake claims to an underground ore body by paying a $100 holding fee per year. Powerful lobbying efforts by the mining industry have prevented any reform of the law. The 104th Congress did pass legislation amending the Mining law but it was vetoed as part of a larger package. Secretary of Interior, Bruce Babbit has recently called the law "an obscene example of corporate welfare."[143] Nevertheless, considering the times when it was enacted, there are some positive features of the law for tribes, which Marjane Ambler describes as follows:

> "Although designed primarily to provide access, three positive aspects of the 1891 law should not be ignored: It provided for leasing rather than whole-scale cessions of mineral lands; it represented a significant departure from existing policy on public lands whereby prospectors who found minerals could obtain the ownership of the minerals and the surface land under claim/patent laws (with a few exceptions' Congress did not authorize leasing public energy minerals until 1920): and it required tribal consent."[144]

Apart from this law, the only significant regulations which apply specifically to hard rock mining are the Section 3809 regulations (43 CFR) under the Federal Land Policy and Management Act of 1976. However, these regulations only apply to mining on federal land. The Bureau of Land Management is in charge of promulgating mining regulations under this Act, and is currently soliciting comments for proposed reviews to the existing regulation.

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[143] Quoted in Watkins, 2000, p. 81.
[144] Ambler, 1990, p. 37.

The only area of mining in the US where specific organizational reform has taken place is coal mining. The Surface Mining Control and Reclamation Act (SMCRA) of 1979 was enacted initially to cover all above-ground mining activities but its jurisdiction was largely limited by Congress to coal mining. The Office of Surface Mining Control and Reclamation is the Federal agency which administers the provisions of the Act. The work of OSM will be discussed in further detail during our analysis of the Navajo / Hopi coal mines.

In Canada the laws pertaining to mining have also had to balance economic considerations quite acutely. There is greater dependence on mineral revenues in Canada, particularly in regions such as the Northwest Territories, where mining is the lifeblood of the economy. Although industry has claimed that noncompetitive taxation levels are a significant disincentive for investment in Canada, NGO reports show real rates of taxation, which account for capital cost allowances, deferrals, credits and tax holidays for new developments, make Canadian tax levels in the middle to low level on an international scale. In 1996 tax concessions were granted through accelerated write-off of development expenses for mine expansions.

"Flow-through" shares are another example of taxpayer subsidies of the Canadian mineral exploration community. These shares allow investors to deduct exploration expenses and related depletion allowances against any income. According to the Environmental Mining Council of British Columbia, individual taxpayers seeking tax shelters have made extensive use of this program representing over $150 million of the exploration capital raised in 1996.

Finally, a range of concerns have been raised in regard to Canada's current taxation and subsidy policies which provide a variety of incentives for the capital intensive primary/extractive resource industries such as mining. These incentives, it is argued, are introducing market distortions and present biases against key elements of the sustainable economy growth, including recycled materials markets and the labor-intensive service sector.[145]

In July 1998, Natural Resources Canada, initiated "A Federally Initiated Review of Federal Environmental Regulations Affecting Mining in Canada," with reference to the recommendations for reform made by a Standing Committee of Natural Resources Canada. Of the 50 commitments identified in the Government's responses to the recommendations of the Standing Committee, 31 (62%) have been implemented, and progress has been made on another 16 (32%), for a total of 94%. Action on the remaining 3 commitments has either been delayed or postponed. A year after the signing of the Government's response to the final report of the Standing Committee, 47 (94%) of the Government's commitments have been, or are in the process of being, implemented.

Progress made in relation to the federal acts and regulations covered by the federal-provincial- territorial review, i.e., the Canadian Environmental Assessment Act, the Fisheries Act, the Navigable Waters Protection Act and the Metal Mining Liquid Effluent Regulations. However, as mentioned earlier, the high level of devolution concerning regulations to provinces necessitates a more in-depth discussion for each

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[145] See the web site of the Environmental Mining Council of British Columbia at: http://www.miningwatch.org/emcbc/

mine with reference to provincial regulations. I will cover this ground of provincial regulations during the case analyses in Part 2.

Suffice it to say that non-tribal government institutions in both Canada and the United States have had a daunting task before them to balance economic issues, environmental concerns and native interests. While they may aspire to be neutral overarching authorities, they are inevitably stakeholders in the conflicts that may arise during mineral development ventures. However, they are embedded stakeholders with certain integral responsibilities which are incumbent upon them as democratic institutions.

PART 2: ANALYZING RESISTANCE: PROCESS AND OUTCOMES

5. From Nain to Navajo: The Stories Behind the Scenery

I have studied four primary cases in detail for the dissertation. Each is introduced in this chapter in terms of the general sequence of events that occurred in the story. Analysis within and across cases is presented in subsequent chapters of Part II along with the lessons that can be gleaned about environmental resistance formation in Native communities.

While the motivation for the study is based on certain deductive insights regarding environmental resistance, most of the analysis and theory-building is inductive in nature. Qualitative social science research techniques, most notably deviant case analysis, congruence procedures and controlled comparisons were used, based on in-depth archival research and personal interviews. The case selection is also rooted in counterfactual analysis to clarify the theory-building process.[146] Critics of the small-N qualitative case studies tend to argue that they are inappropriate for theory-building because key variables may be omitted and antecedent conditions are left undefined in the ensuing theories.[147]

However, this study lends itself to qualitative rather than quantitative analysis because many of the insights regarding the dynamics of the negotiation process including community perceptions, organizational behavior and cultural influences would be missed in a large-N or a game-theoretic analysis.[148] Moreover, I have selected cases of resistance

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[146] I have used the case method, and may also experiment with Ragin's Comparative Method approach depending on the scope of the case data (Ragin, 1987).

[147] Achen and Snidal (1989).

[148] As Clifford Bob (1997) has stated in his dissertation proposal, a quantitative approach when examining sensitive issues can leave you with "correlation without explanation." In-depth case studies are thus integral to animate theory development.

"failure" and "success" to avoid selection bias and reduce susceptibility to "omitted variable bias." [149]

5.1 Case U1: Mining in the Four Corners Region: Navajo / Hopi terrain

5.1.1 The Land and the Community

The four corners region of the United States is perhaps more than an accident of geography. It is the terrestrial confluence of the most distant parts of each state (Colorado, Utah, Arizona and New Mexico) that share this desolate yet spectacular terrain. With less than 10 inches of precipitation per year, the area is a vast desert punctuated with occasional resilient bushes and cacti.

While the Hopi people lived in this area for centuries before European conquest, the Navajo moved to the region relatively recently (probably around the same time as the advent of Columbus in the late fifteenth century).[150] The Hopi are believed to be the descendents of the ancient Puebloans (of Mesa Verde fame), whereas the Navajo are Athabascan in origin and thus share much in common linguistically with their Dene relations in North-Central Canada. Apart from linguistic differences, the two cultures are also quite different on other accounts. Many Hopi believe that the Navajo were invaders who drove their relations to the Mesas where they currently reside. However, there is considerable disagreement among scholars about the historical antagonism between the two peoples.

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[149] King, Keohane and Verba, 1994.

[150] There are a few revisionist archaeologists who claim that Navajo may have had a nomadic presence in the region alongside the ancestral Puebloans. However, there is scant evidence to support this view, even though the National Park Service has given credence to Navajo ancestral linkage to the Chaco Canyon ruins. Smith, Christopher (1999). "Navajos and Hopis at Odds Over Remains of Anasazi." *Salt Lake Tribune*, November 22.

Charles Wilkinson (1999), a former attorney for the Native American Rights Fund and a Professor of law at the University of Colorado, has described the differences between the Hopi and the Navajo as follows:

> "To be sure the historical antagonisms between the Hopi and the Navajo are sometimes exaggerated. Many Hopi and Navajo families have lived near each other in amity for generations. Yet the fact remains that these are two very different peoples. The Navajo are a herding and hunting tribe, assertive and aggressive, able to change in order to meet new circumstances, quick to move into new territory and defend it. The Hopi are farmers rooted in one place. Navajo see their tribal personality as firm and strong, the Hopi view theirs as peaceful."[151]

Nevertheless, despite their differences, both communities share a similar environmental ethic as revealed in much of their oral histories and traditions. In the words of Hopi traditionalist Thomas Banyacya, who believes in greater solidarity with the Navajo, "We must not forget who we are. We are red men who live on our red land."[152]

Unfortunately, Hopi-Navajo relations for much of the past century have been characterized in terms of territorial squabbles. The land dispute between the two tribes can be traced back to the late nineteenth century when the Hopi, who had initially not signed any treaty with the US government, asked the federal government for "exclusive" land. They reported incursions by Navajo grazers on what they considered to be their ancestral lands.[153] The Navajo were much more numerous than the Hopis (currently

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[151] Wilkinson, 1999, p. 150.

[152] Quoted in Benedek, 1999, p.9.

[153] In an alternative chain of causality, Emily Benedek (1999, pp. 33-35) has suggested that the creation of the reservation was in fact spurred by a conflict between some white Indian agents over schooling decisions for Hopi Children. The demarcation of the initial Hopi reservation was arguably quite arbitrary given the frenzy surrounding this internal squabble in the bureaucracy. However, it is difficult to establish with any measure of certainty the strength of this causality chain rather than the more common argument that Hopi were disturbed by Navajo grazing incursions and actually complained to the Indian agents.

there are more than 250,000 Navajo and less than 13,000 Hopis), and so the Hopi appeal was given a sympathetic ear by the authorities. Subsequently President Chester Arthur created a reservation for the Hopi tribe by executive order in 1882. However, there was continuing competition for grazing land and water between the two tribes and eventually the matter ended up in court in what was meant to be a "friendly litigation process" initiated in 1958 by Congressman Stewart Udall of Arizona, a great sympathizer of Native causes.

The well-intentioned lawsuit, entitled *Healing vs. Jones* (after the Hopi and Navajo tribal chairmen) was meant to be a formality for dispute resolution purposes, but as is often the case with legal challenges it took on a life of its own. The court issued its ruling in 1962. The Hopi were given exclusive title to the surface and subsurface areas in District 6 which formed the central core of the reservation on the numbered mesas. However, the tribes have joint rights to surface and subsurface resources in the area demarcated in the 1882 executive order outside of District 6 (the diamond-shaped area at the center in Figure 5.1). The squabbles continued because of the ambiguity of the decision regarding the way in which the joint use area was to be administered. In 1974 Congress passed the Navajo-Hopi Settlement Act which officially partitioned Hopi and Navajo lands and allowed for relocation arrangements to commence. While some people accepted the relocation package many others resisted.

The situation continued to fester. Various legal challenges and counter-challenges were brought by both sides until the early nineties when the Navajo and the Hopi were under the leadership of particularly agreeable presidents – Vernon Masayesva (Hopi) and Peterson Zah (Navajo).

There was a particular "utterance" which the Hopis had been waiting for more than a hundred years and Navajo Nation president Peterson Zah offered it to them as an apology during a speech before the Hopi tribal council in 1993. He said "This is your land. I've got people living on it who are attached to it. They'd like to stay there. I'd like to see them accommodated." Former Hopi chairman Vernon Masayesva, a true statesman in his own right, described Zah's eloquent speech as follows: "So, basically, the Navajo president did the Hopi thing. Because that's how the Hopis were admitted into the villages. They asked permission. They didn't just say 'We're here, we're going to stay.'"[154]

According to Benedek (1999) "the federal government, including representatives from Interior and Justice, were also instrumental in keeping the negotiations going." The process also utilized the services of mediators appointed by the Ninth Circuit including former Judge Harry McCue (an MIT graduate) who played an important role in ensuring that the negotiations went forward as the tribes wanted and without any judgmental pressure from the government. This effort culminated in the Accommodation Agreement signed into law by President Clinton in October 1996. While the land dispute was officially over as far as the negotiating parties were concerned, there were still some wrinkles which needed to be ironed out. As we shall see in subsequent sections, mining was presented by some parties as the losing card.

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[154] Quoted in Benedek, 1999, p. 396.

5.1.2 Project history: a tale of uranium and coal

During the last fifty years several mining companies have been involved in activities on Navajo and Hopi lands. Mining was aimed at extracting two different energy minerals – coal and uranium. Much of my analysis will focus on coal mining given its current significance. Nevertheless it is important to keep the uranium mining issue in perspective, particularly when compared to the Saskatchewan uranium industry which is still quite "alive."

Uranium Mining at Navajo

Uranium mining predates coal activity in the region and is now largely in a reclamation phase. Mining on Navajo lands started as early as 1918 in the Carrizo Mountain area, which is just about 30 miles west of Shiprock. At first vanadium was the key metal mined and uranium was considered a byproduct.

In the early 1920s, the first uranium extraction began on Navajo land, when the United States government opened the area to exploration. These initial mining facilities ceased operation in 1923, when rich sources of cheap uranium were discovered in the Belgian Congo (formerly Zaire and now the Democratic Republic of Congo). More concerted efforts at uranium mining began in earnest in the Southwest United States after World War II, when atomic weapons were being developed. Escalation of the Cold War between the US and the Soviet Union sent workers to uranium mines for ore to process into nuclear weapons. More than 15,000 people have mined uranium or worked in ore processing mills in the Southwest since the 1940s . Some 13 million tons of uranium were mined while the mines were in operation. The Vanadium Corporation of America and Kerr-McGee were the principal owners of these mines.

The Navajos were not the only tribe to endure uranium mining. The Laguna Pueblo first signed a lease in 1952 with Anaconda Copper now the Anaconda Minerals Company, a division of Atlantic Richfield Company. By 1980 Jackpile was the largest open-pit uranium mine in the world. Combined Jackpile-Paguate pits encompassed 2,800 acres of the 461,098-acre reservation. When the mines closed down in 1982, one commentator said it would take 400 million tons of dirt to fill the pits – enough to cover the District of Columbia to a depth of 45 feet.[155]

Once the dangers of uranium mining had gradually become clear, a few Navajo began to ask for accountability from the government. Throughout the 1970's, a few people struggled both to put controls on operations in the mines, and to help Navajo victims of radiation exposure find some compensation. In December 1978, one hundred Navajos, most of whom were allottees[156], joined with Friends of the Earth to file suit against six federal agencies, demanding a regional study of the impacts of uranium mining. The federal court declined to issue an injunction, saying that it was questionable whether they wanted to continue their "pastoral way of life" when they could be miners or mill workers. The case was eventually rendered moot since the uranium activity at that time stopped due to a decline in uranium prices.

Even after the mining activities ceased at Navajo, the legacy of environmental harm continued. In the early morning hours of July 16, 1979 -- fourteen weeks after the accident at Three Mile Island – the worst fears of the community were realized when a tailing dam at Church Rock, New Mexico burst sending eleven hundred tons of

[155] Quoted in Ambler1990, p. 210.
[156] Under The Dawes Allotment Act of the late nineteenth century, certain Native groups were Allotted land in an effort to do away with the reservation system and to acculturate Indians in to the market economy.

radioactive mill wastes and ninety million gallons of contaminated liquid pouring toward Arizona – the largest accidental release of radioactive material in US history. What made the Church Rock disaster especially tragic was that it could have been avoided. Soon after the spill an angry U.S. representative Morris Udall (D-Ariz.) told a congressional hearing that "at least three and possibly more Federal and state regulatory agencies had ample opportunity to conclude that such an accident was likely to occur."[157]

Needless to say, the remediation programs for the mines is still far from over. Harry Tome, a Diné from Red Rock chapter, worked throughout the decade to bring relief to Navajo miners. Towards the end of the eighties, former US Secretary of the Interior Stewart Udall intervened on his behalf. The result of this intervention was the Radiation Exposure Compensation Act (RECA). RECA was signed into law in 1990. The intent was to provide "compassionate payments" to victims of radiation exposure.

In February 2000 the Navajo Nation was awarded the 1999 reclamation award for its work in cleanup activities at uranium mines in the Monument Valley part of the reservation. There are some tentative plans for another uranium mine near Crownpoint, New Mexico but the project is stalled because of legal challenges and permitting woes. Interestingly enough despite the historical legacy of uranium mining, on Jan. 19, 2000, the Resources Committee of the Navajo Nation Council reversed the Nation's moratorium on uranium mining. While the 1983 moratorium was affirmed for open-pit and underground mining, the in-situ leaching of uranium is now "welcomed."[158] However, the predominant form of mining in the region continues to be coal, and is hence the focus of my case analysis for this region.

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[157] Quoted in an article on "The Church Rock Disaster."
http://www.ratical.org/radiation/KillingOurOwn/KOO9.html

Coal Mining at Navajo and Hopi[159]

Coal mining in Navajo country commenced in 1963 with the opening of the Navajo mine in the eastern part of the reservation. However, much of my discussion will focus on the Black Mesa and Kayenta mines which are in the Western part of the reservation and are environmentally much more questionable and territorially more complex (and hence a likely flashpoint for resistance movements).

In 1966, the Hopi and Navajo tribal councils signed strip-mining leases with a consortium of twenty utilities that had designed a new coal-fired energy grid for the urban Southwest. The terms of this lease were highly unusual and gave unprecedented concessions to the coal company, for example it allowed company to have control of 40,000 acres of land as compared to the limit of 2,560 acres in the federal regulations for Indian leasing. The royalty rates which the two tribal councils split, was decided at thirty cents a ton, at a time when the government royalty rate for coal extracted on public lands was $1.50 a ton. There were hardly any environmental safeguards, and no provisions for renegotiation. The most problematic provision, however, was the allowance to Peabody to pump four thousand acre-feet (approximately a billion gallons) of water a year to run a coal slurry line which extends 273 miles from Black Mesa to the Mojave Generating station. The company was to pay the Hopi only $1.67 per acre foot for the precious groundwater in this arid land, a number which Colorado law Professor Charles Wilkinson refers to as "laughable."[160]

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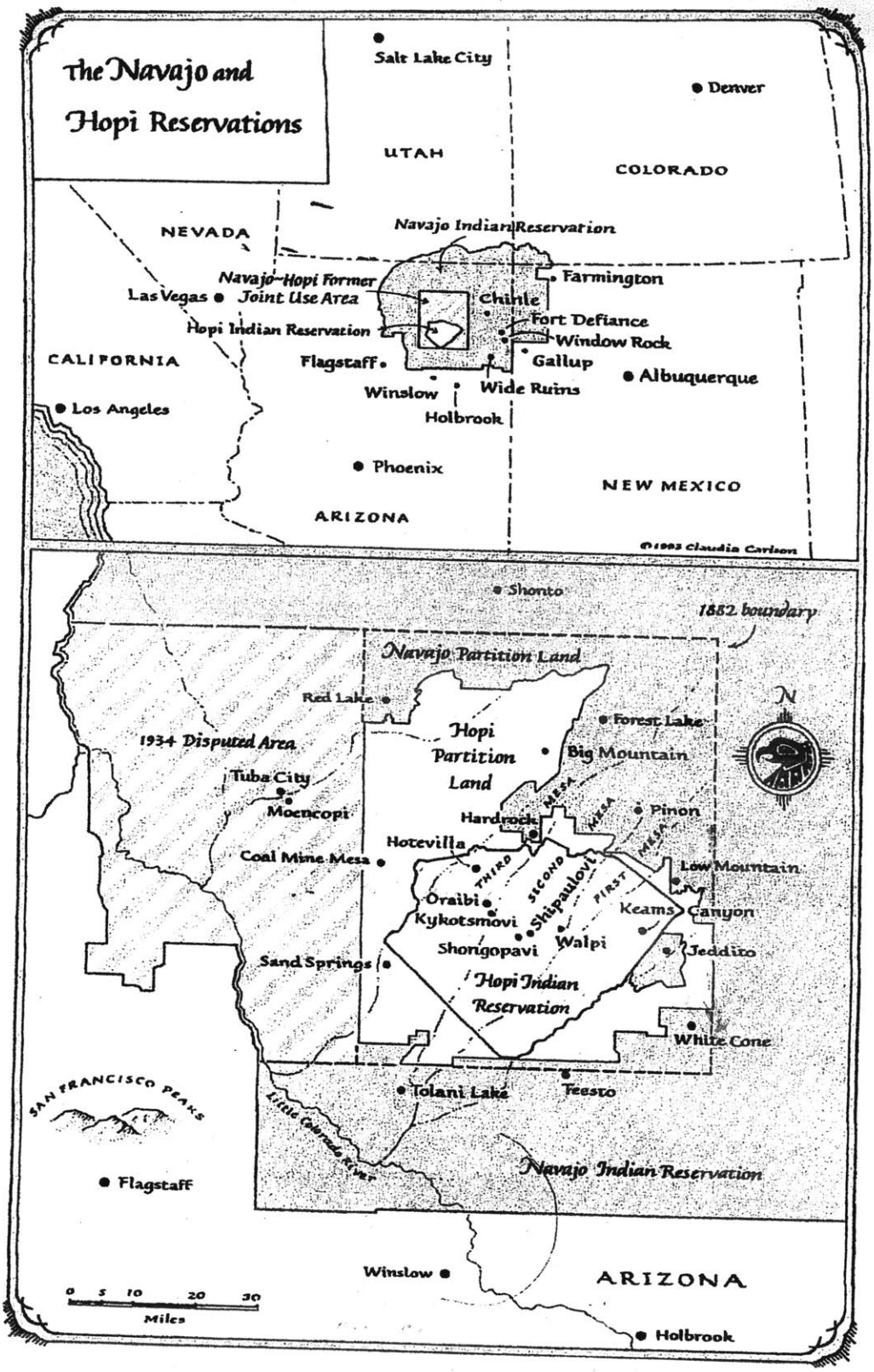
[158] *Navajo-Hopi Observer*, February 5, 2000.
[159] Unless otherwise stated, the statistics quoted in this section are derived from the web site of the Office of Surface Mining Control and Reclamation: http://www.wrcc.osmre.gov
[160] Wilkinson, 1999, p. 301.

FIGURE 5.1


The Navajo and Hopi Reservations
Salt Lake City
Denver
UTAH
COLORADO
NEVADA
Navajo Indian Reservation
Navajo-Hopi Former Joint Use Area
Las Vegas
Farmington
Chinle
Fort Defiance
Hopi Indian Reservation
Window Rock
CALIFORNIA
Flagstaff
Gallup
Albuquerque
Winslow
Wide Ruins
Los Angeles
Holbrook
Phoenix
NEW MEXICO
ARIZONA
©1993 Claudia Carlson
Shonto
1882 boundary
Navajo Partition Land
Red Lake
Forest Lake
Hopi Partition Land
1934 Disputed Area
Big Mountain
Tuba City
Moencopi
Hardrock
Pinon
Hotevilla
Coal Mine Mesa
Low Mountain
Oraibi
Kykotsmovi
Shipaulovi
Keams Canyon
Shongopavi
Walpi
Jeddito
Sand Springs
Hopi Indian Reservation
White Cone
Tolani Lake
Teesto
SAN FRANCISCO PEAKS
Little Colorado River
Navajo Indian Reservation
Flagstaff
Winslow
ARIZONA
Holbrook
0 5 10 20 30
Miles

The lawyer representing the Hopis in this transaction was later accused of also working on behalf of Peabody Coal. John Boyden, has been the subject of major posthumous investigation by legal scholars such as Wilkinson. In archives unearthed by Wilkinson at Brigham Young University, Wilkinson found Boyden's correspondence with both parties. There was clear evidence that showed that the lawyer had been hired contemporaneously by both the tribe and the mining company.[161] John Boyden remained the Hopi's lawyer for thirty years. Although he presented himself as a charitable lawyer working for the Hopi *pro bono*, his fees -- paid by the government out of funds held in trust for the Hopi -- totaled $2.7 million, a figure revealed only after a Freedom of Information Act suit filed by the Native American Rights Fund.[162] While this connection is troubling from an ethical standpoint, activists have used Boyden's incrimination as an indictment for the entire coal mining industry which is also somewhat problematic. A close observer of the Navajo-Hopi conflict, Emily Benedek comments on the activist's misrepresentation of the issue as follows:

> "There is no convincing evidence of a broad-based conspiracy behind the land dispute. The Hopis' unhappiness with the Navajo presence on the land is well-established in the historical record. It is more accurate to say that the energy interests provided the Hopi lawyer with an extremely powerful tool with which to bring attention to the problem, and ammunition with which to push for partition."[163]

Until 1969, the coal around Black Mesa lay untouched, though writer Judith Nies has observed the coal was "so close to the surface that the walls of the dry washes glistened with seams of shiny black."[164] With a long-term value estimated as high as

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[161] Wilkinson, 1999, Ch. 7. When Boyden wrote to the Peabody vice president as a Peabody attorney, he addressed him as "Dear Ed"; when he wrote to him as a Hopi attorney, he called him "Dear Mr. Phelps.
[162] Nies, 1998.
[163] Benedek, 1999, p. 139.
[164] Nies, 1998.

$100 billion, the coal lies completely under Indian reservation lands. The complex consists of two separate but adjacent operations - - the Black Mesa mine and the Kayenta mine and is operated by Peabody. Also included in the complex is the Mesa Preparation Plant, which is operated by the Black Mesa Pipeline, Inc.. Mining at the Black Mesa/Kayenta complex has been in existence since 1970 and the complex currently produces about 12 million tons per year. The two mines cover 62,753 acres of Hopi and Navajo Tribal lands of which 6,137 are Hopi surface ownership and 56,616 acres are Navajo surface ownership. As of January 1, 1999 there has been 17,158 acres disturbed, 65 acres on Hopi land and 17,093 acres on Navajo land.

Individual Navajo residents are not land owners, but instead have certain land use rights arising under the laws of the Navajo Nation. The United States Interior Board of Land Appeals (IBLA) in *Dineh Alliance and Maxine Kescoli v. The Office of Surface Mining and Peabody Western Coal Mining Company* (IBLA 96-294), has held that the consent of the individual land users residing on Indian lands is not required, as the tribes are the land owners for purposes of the Surface Mining Control and Reclamation Act (SMCRA). If it became necessary, the Navajo Nation by its power of eminent domain, has the authority to move these individual land users and require Peabody to provide compensation to these land users for the loss of their land use rights.[165]

The Navajo Nation has established policies and procedures that must be followed in all instances where the Navajo Nation exercises its power of eminent domain. There were 82 individual households within the Navajo Nation lands of the Black Mesa/ Kayenta leasehold. To date, 52 households have been moved as a consequence of mining and an additional 10 households will be relocated if mining operations continue. Peabody

is responsible for compensating the families. Navajo land users have three options -- they can be moved off of the reservation, they can be moved to another location on the reservation or they can be moved within their customary use area as long as there is no coal beneath the area and it is 2,000 feet from active mining. In order to deal with this issue the Navajo Nation established the Black Mesa Review Board in the Navajo Nation Code (2 NNC Article 5. Black Mesa Review Board) to act as a liaison between the people and Peabody. The purpose of the Board is to provide compensation to Navajo families whose economic interests are adversely affected by the mine.

The lease for the mine was renegotiated in 1987 by the tribes and Peabody and an environmental impact statement for the Black Mesa/Kayenta mine was completed in June 1990 through the federal Office of Surface Mining. The EIS took over four years to complete. The EIS process included four public meetings held in the vicinity of the mine. This process resulted in 226 individuals submitting 1035 separate comments that OSM responded to in the final EIS.

It is important to keep in mind that while historically the tribes did not have much leverage or information in making appropriate decisions, they did indeed have an opportunity in the 1987 renegotiation to veto the project, but they chose to go ahead with the renegotiated lease. According to some commentators, the EIS was inadequate and initial reviews by the Environmental Protection Agency were indeed quite "unsatisfied" with the quality of the study.[166] However, OSM argues that comments from EPA were in

[165] See, *Denison v. Tuscan Gas and Electric Co.*, 1 Navajo Reporter 95 (Nav. Sup.Ct. 1974).
[166] See the article by Whiteley anmd Masayesva in Rose Johnston ed., 1998.

fact included in the revised EIS.[167] In any event the renegotiated lease now gives Peabody permission to mine the coal till 2005, at which time the lease will again be negotiated.

5.1.3 Peabody Coal

Peabody Coal was founded in 1883 by the Chicago-based entrepreneur Francis Peabody and is now the world's largest coal company with 1999 annual revenues exceeding $2.3 billion. It is also a leading U.S. power marketer, fueling more than 9 percent of U.S. and 2.5 percent of the world's electricity. With high–grade properties in the United States and Australia, along with the nation's most productive mines, Peabody provides products and services to more than 180 power plants and 40 industrial facilities in the United States, as well as customers in 18 other countries. Currently Peabody is owned by Lehman Merchant Banking Partners L.L.P, who bought it from the British-owned Hanson group in 1998.[168] During 1999, Peabody's U.S. surface and underground mines reported a 4.31 average injury incidence rate, which is 39% better than the industry average.

5.1.4 The mining continues

Environmental activists from around the country have tried to conflate the mining at Black Mesa with the Navajo-Hopi land dispute. As early as the late seventies, Greenpeace and numerous other environmental groups were involved in "fighting" against mining on the pretext of supporting the Navajo residents on Hopi partitioned land. The area on the map (Figure 5.1) designated as "Big Mountain" is the focus of much of the resistance movement since this is the area where the few families who have not

[167] Personal communication, Carl Johnston, Office of Surface Mining, Denver, June, 1999.
[168] Peabody Group Annual Report, 1999

signed the accommodation agreement with the government reside. The details regarding the Big Mountain resistance will be discussed in much more detail in Sections 7.1 and 8.1. Suffice it to say, resistance to coal mining continues to be marginalized by the tribal governments and by many indigenous environmental groups as well. For example the Indigenous Environmental Network has distanced itself from this issue because of their belief that external non-Native environmental groups have caused divisions within the community.[169] Nevertheless, that is not to say that the tribes are satisfied with Peabody Coal's performance per se either.

In a rare show of unity on legal matters, The Navajo and Hopi tribes have both filed lawsuits against Peabody in November, 1999 seeking recovery of $600 million in damages from Peabody Western Coal Company for "unlawful acts defrauding (the tribes)." However, this lawsuit still does not detract the tribal governments from condemning the activists and rendering much of their activities futile. The causes for the relative inadequacy of the Big Mountain resistance will be discussed in more detail in Section 7.2.

Peabody contends that since mining operations began, the Black Mesa and Kayenta mines have injected more than $1.2 billion into Navajo and Hopi tribal economies in royalties, taxes, wages and charitable contributions. Each year, Peabody Western provides the Navajo Nation and the Hopi Tribe with more than $40 million in royalties and taxes generated from the mining operations. The complex employs approximately 750 Native Americans representing 90% of the workforce and additionally supports indirect employment in restaurants, hotels and other American Indian employment

[169] Personal communication via telephone, Tom Goldtooth, Director of the Indigenous Environmental Network, May, 2000.

industries. Royalties and taxes from coal mining provide about 80% of the Hopi general operating budget and about 60% of the Navajo general fund budget.

5.2 Case U2: The Crandon Mine in Wisconsin

5.2.1 The land and the community

Mining is not a new industry in Wisconsin. As early as 1658, mining of lead ore had commenced in the southwestern lead region, and French explorers mined lead throughout the 18th century. During this time Native Americans, particularly the Sauk and Fox, were also involved in mining around this area and in fact invented an innovative smelting process alongside the French.[170] The early miners shaped Wisconsin into a major producer of lead, zinc and iron. In 1971, the Wisconsin legislature passed a bill designating galena - lead sulfide - as the official state mineral. Currently, more than 10,000 people in Wisconsin are employed in mining-related jobs.

However, the area where the Crandon mine is planned lies in a relatively pristine part of the State. The largest industrial base in the vicinity is logging and the town of Rhinelander, which is located some twenty miles from the mine site is a major hub for the logging industry. Indeed, some of the Native tribes including the Menoiminee have their own lumber companies as well.

The community in closest proximity to the proposed mine site is the Sokaogon Chippewa reservation at Mole Lake. The lake and surrounding precincts are the last remaining ancient wild rice beds in the state of Wisconsin. The annual harvest of wild

[170] The involvement of the Sauk and Fox in mining is even acknowledged by current anti-mining and pro-Native activists such as Professor Al Gedicks of the University of Wisconsin, La Crosse.

rice, a staple of the community's diet, has changed very little in the hundreds of years that the Sokaogon have lived there.

Family clans of Chippewa migrated from eastern Canada to Madeline Island in lake Superior a thousand years ago, led by a vision that their journey would end in a land where the "food grows on water" --Manomin or wild rice. The Sokaogon band's journey ended here in this area of abundant wild rice. Competition from the Sioux resulted in the Battle of Mole Lake in 1806. A marker stands on Highway 55 in the Village of Mole Lake to mark the battleground where more than 500 warriors were slain in fierce hand-to-hand battle. The Sokaogon Chippewa reorganized soon thereafter and currently constitute a small tribe of less than a thousand individuals.

Sokaogon means "Post in the Lake" people, because of a spiritual significance of a post -- possibly the remains of a petrified tree - that stood in Post Lake nearby. The Sokaogon Ojibwe are also known as the Lost Tribe because the legal title to the 12 mile square reservation from the treaty of 1854 was lost in a shipwreck on Lake Superior. The band, under the leadership of Chief Willard Ackley, finally and after a long struggle, received federal recognition and reservation status in 1937. The Sokaogon (Mole Lake) Band has access to three lakes either on or adjacent to the small reservation: Mole Lake, Bishop Lake, and Rice Lake which lies at the headwaters of the Wolf River. The river is presently classified as a "Wild and Scenic River" by the Nature Conservancy, and has thus become a cause celebre for many Wisconsin environmentalists.

5.2.2 Project history

The Crandon orebody (zinc, copper and lead), discovered by Exxon in 1975, lies in Forest County, five miles south of the City of Crandon and two miles east of State Highway 55. The boundary of the mine site borders the Mole Lake Sokagoan Chippewa Reservartion. The company submitted permit applications in the early 1980s, but later withdrew them, citing depressed mineral prices. Crandon Mining Company (a partnership between Exxon Corporation subsidiaries and Rio Algom Ltd. subsidiaries) announced the intent to submit new mine permit applications in 1994. Since then, the Wisconsin Department of Natural Resources has been leading the state review of this project. The federal environmental impact review is being led by the Army Corps of Engineers. The Corps is involved as the lead agency because of the mine's likely hydrological impact. In 1998 Rio Algom bought out Exxon's shares in the project and now has sole control over the mining proposal, through its subsidiary Nicolet Minerals Company (NMC).

Opposition to mining in Wisconsin emerged soon after Exxon first announced its discovery in 1976. The first voice of resistance was offered by the Chippewa community itself which realized that the ore body lies in a 92,000 acre tract of land which the US government had promised them in an 1854 treaty. It is important to note that non-native groups became involved in this effort after the resistance voiced by the tribe itself. In 1975, Exxon gave a check of $20,000 to the Chippewan tribal chairperson for the rights to explore on the reservation itself. When the tribal council found out about this they were outraged and the check was torn up at the council meeting.[171]

Following this episode the tribe has been quite resolute and united in its resistance to the project. According to historian and activist Zoltan Grossman, between 1986 and

1992, several important events took place in northern Wisconsin which led to the anti-mining movement gathering force.[172] First, a large movement against Chippewa treaty rights to spearfish garnered support from white sports-fishermen in Northern Wisconsin. Anti-treaty groups appealed to environmentalists to stop spearfishing because of a fear that "the Indians would overfish", but their efforts were largely thwarted by a separate contingent of pro-treaty white groups which formed a coalition called the "Midwest Treaty Newtork" in 1989 (this unusually constructive native-non-native alliance will be discussed in more detail in section 7.3).

Mining activity in other parts of Wisconsin was increasing but not without resistance. In the early 1990s, local environmentalists and the Lac du Flambeau Chippewa managed to stop the Canadian firm Noranda from opening the Lynne zinc-silver mine near the Willow Flowage in Oneida County. The only mine which did end up opening was Kennecott Corporation's Ladysmith copper-gold mine in Rusk County, next to the Flambeau River, partly because the mine was not as close to a reservation and the resistance movement was not as persistent. However, the opening of this mine did lead to greater pan-Wisconsin resolve to stop mining. It was during this time that Rusk County activist Evelyn Churchill proposed a moratorium on sulfide mining. In 1994, the Midwest Treaty Network sponsored a large rally in Madison, and co-sponsored (with the Indigenous Environmental Network) a Protect The Earth Gathering that drew 1,000 people to Mole Lake.

In 1995, the Network initiated the Wolf Watershed Educational Project (WWEP), which quickly mushroomed into a grassroots alliance of about 30 Native

[171] Personal communication, Sylvester Poler, Mole Lake , Wisconsin, April 15, 2000.

American, environmental, and sport-fishing groups. They held monthly strategy meetings around the northern counties of the state. Out of those meetings came a Spring 1996 speaking tour up the Wolf River, and also the Wisconsin River, where Exxon was then proposing to dump its liquid mine wastes. The tour reached 22 communities and 1,100 people, and culminated with a rally of 1,000 people in front of the company headquarters in Rhinelander (which was covered only by northern media). A 1997 tour around other parts of the state increased support for the Moratorium bill which had by then been introduced in the Legislature.

Governor Tommy Thompson signed the Mining Moratorium Law (1997 Wisconsin Act 171) on Earth Day in April 1998. The moratorium law provides an additional requirement that a mining applicant must meet in order to receive a mining permit. In order to meet this new requirement, a mining company must submit data for another similar mine that has been closed for ten years without causing significant environmental pollution, and another similar mine that has operated for ten years without causing pollution. The candidate mines identified by the company must be located in sulfide ore bodies that, together with the host rock, have the potential to create acid runoff. The final decision about whether these sites meet the requirements of the Mining Moratorium Law will be made by the Hearing Examiner and will be based on the record developed at the Master Hearing. However, the law itself was not enough to quell the urge to mine at the Crandon site. Indeed, only a year after the law was enacted, Rio Algom began a new effort to revitalize the Crandon project.

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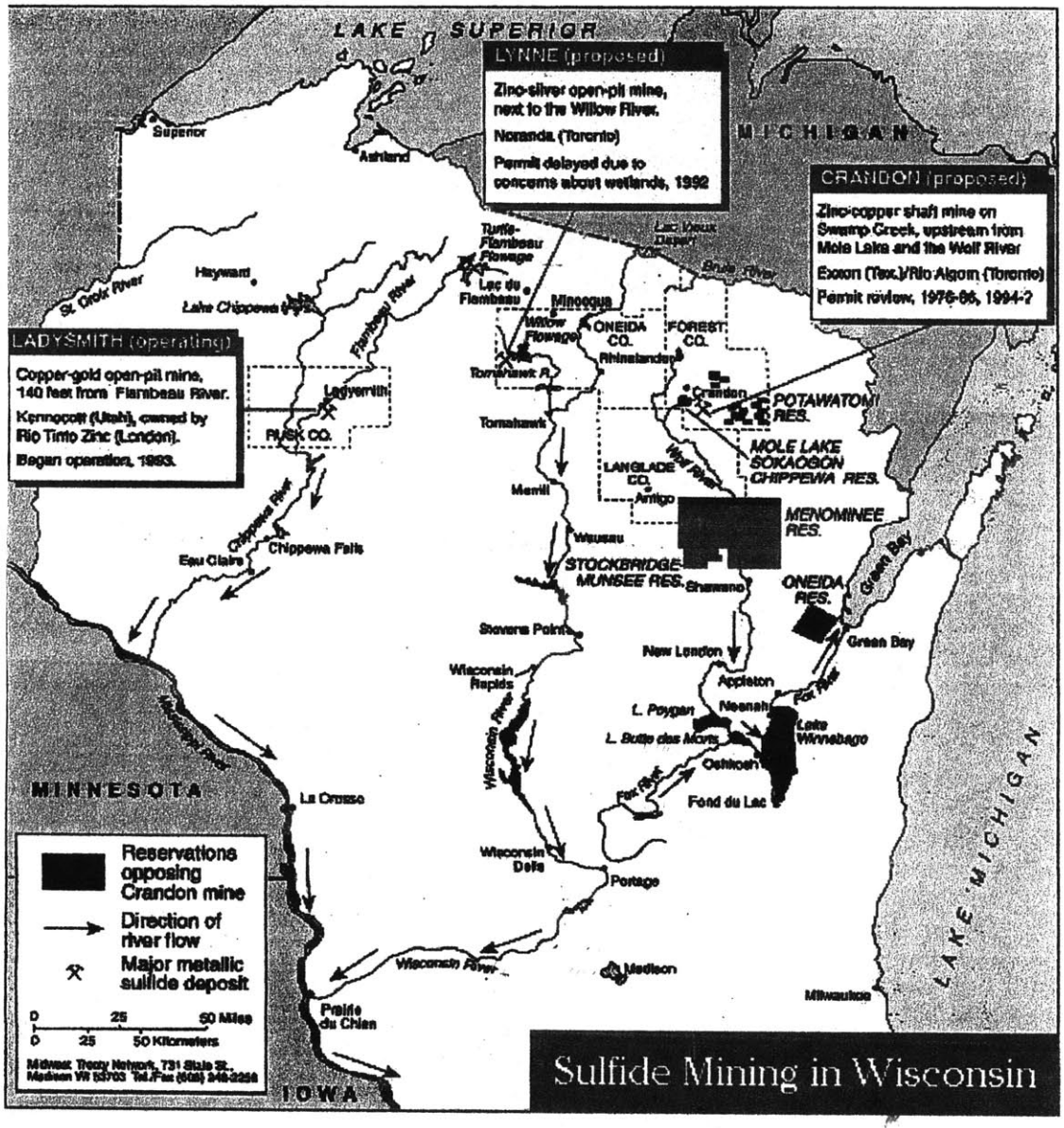
[172] Personal communication, Zoltan Grossman, Madison Wisconsin, April 14, 2000. Web site for his organization is http://www.treatylands.com

FIGURE 5.2


LAKE SUPERIOR
MICHIGAN
LYNNE (proposed)
Zinc-silver open-pit mine, next to the Willow River.
Noranda (Toronto)
Permit delayed due to concerns about wetlands, 1992
CRANDON (proposed)
Zinc-copper shaft mine on Swamp Creek, upstream from Mole Lake and the Wolf River
Exxon (Tex.)/Rio Algom (Toronto)
Permit review, 1976-86, 1994-?
LADYSMITH (operating)
Copper-gold open-pit mine, 140 feet from Flambeau River.
Kennecott (Utah), owned by Rio Tinto Zinc (London).
Began operation, 1993.
Superior
Ashland
Hayward
St. Croix River
Lake Chippewa
Flambeau River
Turtle-Flambeau Flowage
Lac du Flambeau
Minequa
Willow Flowage
ONEIDA CO.
FOREST CO.
Rhinelander
Tomahawk R.
Tomahawk
Crandon
POTAWATOMI RES.
MOLE LAKE SOKAOGON CHIPPEWA RES.
Wolf River
LANGLADE CO.
Antigo
Merrill
MENOMINEE RES.
Wausau
STOCKBRIDGE-MUNSEE RES.
Shawano
ONEIDA RES.
Green Bay
Chippewa River
Eau Claire
Chippewa Falls
RUSK CO.
Ladysmith
Stevens Point
New London
Wisconsin Rapids
Appleton
Neenah
L. Poygan
L. Butte des Morts
Lake Winnebago
Oshkosh
Fox River
Fond du Lac
Wisconsin River
MINNESOTA
La Crosse
Wisconsin Dells
Portage
Madison
Prairie du Chien
Milwaukee
LAKE MICHIGAN
IOWA
Reservations opposing Crandon mine
Direction of river flow
Major metallic sulfide deposit
0 25 50 Miles
0 25 50 Kilometers
Midwest Treaty Network, 731 State St., Madison WI 53703 Tel./Fax (608) 249-2258
Sulfide Mining in Wisconsin

5.2.3 The companies involved

Nicolet Minerals Company (NMC), named after the famed Wisconsin explorer Jean Nicolet, was formed in January, 1998, by Rio Algom -- a Canadian mining and metals distribution company. As mentioned earlier, Rio Algom has been a part of the Crandon project since 1993, it became sole owner when it bought Exxon's share of the project in 1998 (though Exxon is still supposed to receive royalties from ore revenues).

Rio Algom, headquartered in Toronto, is all too often confused with its former parent company Rio Tinto (one of the world's largest mining conglomerates). Rio Algom is a moderate sized company with annual revenues of about $1.5 billion dollars, and operations mostly in North and South America. The company has had to contend with a legacy of old uranium mines which are currently under reclamation, most notably the Elliot Lake uranium complex in Ontario which has cost the company over $74 million. While activist groups have criticized Rio Algom for its record, the company generally has a favorable regulatory compliance record. For example the overall recordable case frequency during the 1999 for lost-time injuries in mining operations was 1.06, whereas the Ontario mining industry average is 10.9.[173]

5.2.4 The plans for development and the prevalence of resistance

The Crandon mine site contains 55 million tons of ore, primarily zinc and copper, with small amounts of lead, silver and gold. The orebody is about 4,900 feet long from east to west and about 100 feet wide from north to south. It begins about 200 feet below the surface and extends to a depth of about 2,200 feet. Rock containing metallic minerals sought by NMC (mainly zinc and copper, with lead and far smaller amounts of silver and

gold) would be finely crushed and ground. The minerals would be separated from the rest of the ore by a process called 'flotation'. Millions of tons of fine rock residue, called tailings, would remain for disposal.

Mine structures will occupy about 550 acres, including mainly forest and also smaller tracts of wetlands and open land. Major facilities on the surface will include the headframe, housing the opening to the main shaft, a mill for ore processing, a tailings management area, a water management and treatment system, offices, maintenance shops, storage buildings and parking. The mine will produce about 5,500 tons of ore per day. Ore will be mined underground by blasthole open-stoping. To reach the ore, miners will construct three vertical shafts and a series of horizontal tunnels called drifts. Ore will be removed from rooms, called stopes, each 100 feet wide, 75 feet long and upward to 300 feet high. The ore will be hauled to an underground crusher, then hoisted to the surface for processing. Mined-out stopes will be backfilled with tailings mixed with cement (technical details concerning the environmental impact will be discussed in the next chapter).

According to Rio Algom, over $20 million have been spent on the environmental impact statement process for the mine site. Officials of NMC claim to have thus far met with over 10,000 individuals for public comments.[174] In January 2000, the company also hired a former tribal president from the neighboring Hochunk Nation to act as a cultural consultant to the company and to mediate the deliberations between the community and the company.

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[173] Rio Algom, *Environmental Health, Safety and Community Report*, April, 2000

[174] Personal communication, Dale Alberts, Nicolet Mining Corporation, Crandon Wisconsin, March, 2000.

However, the resistance continues to be resolute. Most recently the, the Native groups have employed an important regulatory strategy to block the project by promulgating their own highly stringent environmental standards. The state of Wisconsin has subsequently tried to sue the tribes for infringing on its authority. However, in an April 28, 1999 decision, the U.S. District Court dismissed a lawsuit by the State against the U.S. Environmental Protection Agency (EPA) and the Mole Lake Chippewa. The suit was an attempt to deny EPA's authority to grant "Treatment as State" (TAS) status to Mole Lake Reservation. The EPA originally granted TAS status to Mole Lake in 1995, to support Mole Lake's sovereign authority to set its own water quality standards under the federal Clean Water Act. Similar regulatory primacy has also been granted for air regulations to the Forest County Potawotami. At the same time the tribes have also become involved in non-tribal local government bodies, such as town councils. The Town of Nashville now has a Mole Lake member on the town board and has recently managed to rescind an earlier agreement between the mining company and the town. NMC has sued the town for breach of contract and the case is pending.

With such an array of challenges the prospects for the Crandon mine opening are indeed dim. In an interview, the Vice President for Environmental and Community Affairs at Rio Algom, Maxine Wiber, stated that the company was becoming "increasingly pessimistic" about the project going forward because of resistance.[175]

[175] Personal communication, Maxine Wiber, Vice President for Environment and Community Affairs, Rio Algom, Toronto, Canada, January 15, 2000.

5.3 Case C1: The Saskatchewan Uranium Mines

5.3.1 The land and the community

Chipewyan Inuit, Dene and Cree bands comprise 80% of the 30,000 inhabitants in the Northern mining region of Saskatchewan, mostly centered around the shores of the numerous lakes that punctuate the landscape. Even these settlements were artificially created by the Europeans since the traditional societies here were hunter-gatherers that had territories but no permanent settlements. The European settlers often mistook this itinerant lifestyle as a mark of poverty, whereas the communities were quite contented. According to a Native individual "we didn't know that we were poor until we found a Canadian government official on our door with food supplies saying: you need help."[176] The cultural shift led to high unemployment and other social concerns in these communities. For example the unemployment rate for Aboriginal communities in Saskatchewan is about 65%, whereas for non-Aboriginal communities it is around 30%.

By 1995, all the tribal bands in Saskatchewan had settled their land claims with the government and received compensation. Some of these claims had covered land on mining leases as well. The policy of land entitlements was premised on a "willing buyer /willing seller" principle, and not based on traditional land associations. Some bands did indeed want to purchase lands which were under mineral exploration. However, in most of these cases the price being demanded was too high. An exploration area near Dawn Lake, owned by Cogema Resources, was the subject of Native acquisition request but because of the high development costs and the existing investment of the companies, the band was not able to go through with the deal.

[176] Personal communication with a Native individual in Saskatoon, Canada, July 21, 1998.

The development dichotomy is quite stark between Northern and Southern Saskatchewan. Unlike common development discourse, "The North" in this case is the impoverished and underdeveloped region, while "The South" is considered the more affluent and developed part of the province. More than two thirds of the residents of Northern Saskatchewan claim Aboriginal ancestry. Surveys conducted by the company had shown that a majority of the people in the North supported uranium mining. An independent poll of 825 respondents in Saskatchewan conducted in November, 1999 revealed the following support ratios: 13% strongly supportive; 57% somewhat supportive; 10% somewhat unsupportive; 13% not supportive at all; 7% doesn't matter.[177]

5.3.2 Project history

Canada has a long and checkered history of uranium mining. Eldorado Nuclear (one of Cameco's precursor company) was among the earliest mining entities to work with radioactive ores. Originally owned by the gold prospector Gilbert Labine, Eldorado began to prospect for pitchblende ore in 1929 and set up the Port Radium mine in the Northwest Territories (Canada's first uranium-producing operation) four year's later.

When the demand for uranium increased during World War II, Eldorado became involved in further prospecting around Canada. According to the 1968 annual report of the company,

> An urgent need for uranium in quantity arose with the inception in 1942 of the Manhattan Project, the joint British-United States-Canadian undertaking which eventually brought forth the atomic bomb. Canada's role was to supply uranium raw material.....the amount of uranium provided by Eldorado for military purposes.

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[177] These surveys were conducted for Cameco by independent consultants Anderson/Fast Associates of Saskatoon. The respondents were chosen to proportionately represent six regions of the province's 1 million population. The margin of error was plus or minus 3.4 points. Elaine Kergoat, personal communication, via fax, August, 2000.

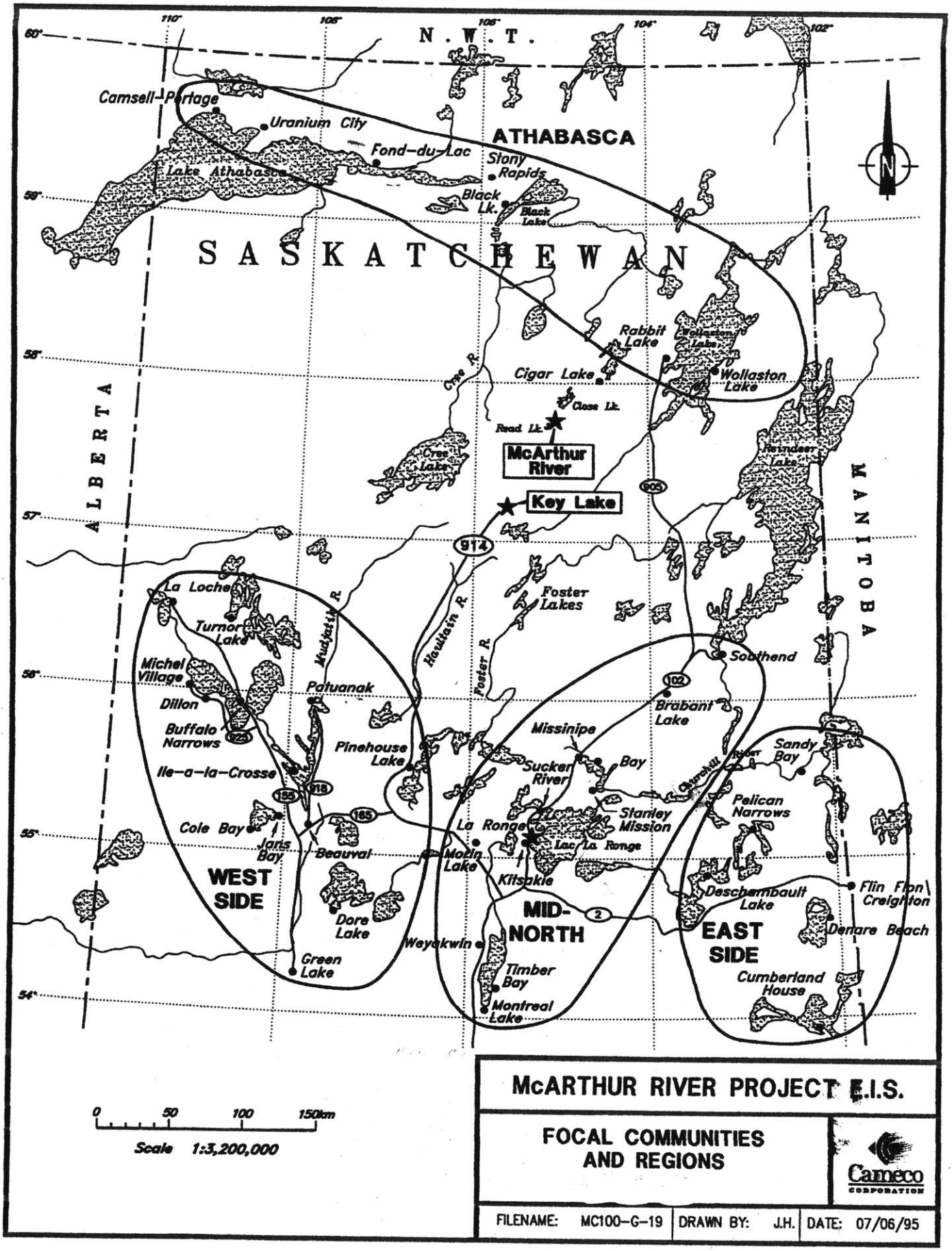
The government nationalized the company in 1944. A year after establishing the Atomic Energy Control Board the government lifted the private prospecting ban and offered incentives to private prospectors in 1946. This ushered in the "uranium rush", leading to over 10,000 radioactive ore discoveries, most notably the deposits n the Athabasca region of Saskatchewan.

Saskatchewan has been called "The Saudi Arabia of the Uranium Industry." Collectively, the province contains the largest known reserves of uranium in the world, with over five active mines within an area of about 200,000 square kilometres. Chipewyan Inuit, Dene and Cree Nations comprise 80% of the 30,000 inhabitants in this region, mostly centred around the shores of the numerous lakes that punctuate the landscape.

In the early eighties Eldorado Nuclear entered into an agreement with the provincial government of Saskatchewan to begin mining activities in the vicinity of Wollaston Lake. The Saskatchewan Mineral Development Corporation was thus formed to organise the mining activities. The native communities of the region felt that their subsistence lifestyles of hunting and fishing would be threatened by water pollution from the mining development. Their opposition at that time was partly due to the past experience of affected communities in Uranium City (one of the first uranium mining regions in Canada, shown in Figure 5.3 in the extreme north west corner of the province).

In the late nineteen eighties, the Saskatchewan government deregulated the uranium mining industry and largely divested its own interests to form a publicly traded company named Cameco. This would soon become the largest uranium mining company

FIGURE 5.3 McARTHUR RIVER SITE



McARTHUR RIVER PROJECT E.I.S.

FOCAL COMMUNITIES AND REGIONS

Cameco CORPORATION

FILENAME: MC100-G-19	DRAWN BY: J.H.	DATE: 07/06/95

in the world with control over two thirds of the world's largest, high grade uranium mines at Key Lake and Rabbit Lake in Saskatchewan. The "best" was yet to come. The McArthur River ore body was explored extensively in the early nineties after a governmental environmental review for underground exploration. The highest grade deposits (as much as 50% of uranium oxide U_3O_8) were discovered 550 meters beneath the surface soon thereafter.

The Environmental Impact Statement for the project was prepared in May, 1995 and circulated for public comment. Cameco and its partners, Uranerz Exploration and Mining and Cogema Resources Inc. proposed to mine the orebody underground ; crush and grind the ore and render it into a slurry suitable for pumping; thicken the slurry into a paste, and transport it 80km south-west to the Key Lake operation for milling. The wastes would be disposed at the existing Key lake Deilman tailings management facility. The environmental impact of this project would thus be spread across two sites. This raised many concerns for environmental groups, most of whom were based in Southern Saskatchewan.

The federal and provincial government convened a panel to review uranium mining activities in Saskatchewan in 1991. This panel submitted comments on various proposals for mining and also held a protracted series of hearings in 1996 in which all the environmental groups participated actively. This was the main forum for informational exchange between ENGOs and native groups. The environmental groups in this case were mostly regional organizations such as the Inter-Church Uranium Committee and the Saskatchewan Environment Center. Greenpeace had been involved in lobbying efforts in the eighties but had since withdrawn for financial reasons. The panel

itself comprised four members , a mining engineer, a biologist, an industrial hygienist and the Chief of the Prince Albert Grand Council, John Dantouze.[178]

In early 1996, the panel began to plan a series of hearings across Saskatchewan in order to have an organized means of pubic involvement in the process and to expedite the reports which the panel was obliged to issue after almost five years of deliberations.

5.3.3 Cameco corporation

The Canadian Mining and Energy Corporation or Cameco, as it is termed today, was formed in 1988 as a result of restructuring of the uranium mining sector in Canada. The company was formed primarily through a merger of Eldorado Nuclear (A Federal Crown Corporation) and The Saskatchewan Mining Development Corporation (A Provincial Crown Corporation).

When it was formed, Cameco was owned by the provincial and federal governments and headquartered in Saskatoon, Canada. However, in 1998, only 10% of the company was owned by the Provincial government and 90% was owned by public shareholders. The company stock is traded on the New York and Toronto Stock Exchanges and has been the focus of research reports by Goldman Sachs and Bear Stearns, which have generally been quite positive about the community relations of the company.

With annual revenues of over C$642 million in 1997, Cameco was considered the world's largest uranium mining company, accounting for one-quarter of both the Western World's uranium production and conversion capacity. The four largest uranium mines,

[178] *Report of the Joint Federal-Provincial Panel on Uranium Mining in Northern Saskatchewan.* Hull,

which the company owned and operated were in Saskatchewan, with two smaller operations in Wyoming and Nebraska. Processing centers for the uranium were located a couple of thousand miles away in Ontario. While the uranium sector of the company accounted for 95% of revenues in 1996, the company continued to expand its operations in the gold mining sector as well. It owned one-third of a gold mine in the Central Asian Republic of Kyrgyzstan and had a gold mine in Central Saskatchewan at Contact Lake. Exploration projects were in progress in the United States, Canada and Australia, in an effort to target the growing Asian market for nuclear fuel.

5.3.4 The mining commences

The first good news for Cameco came on February 28, 1997 when the Environmental Review Panel recommended approval of the McArthur River project. While the panel's credibility had been somewhat damaged by the resignations of two prominent members, there was a general feeling that the communities had been engaged through other means which would not undermine the lack of representation from Chief Dantouze and Dr. Annalee Yassi.[179] The panel's approval for mining was, however, not universal. In fact the Midwest satellite mine at McClean Lake (not a Cameco site) was opposed by the panel on environmental grounds.

The next approval came from the Saskatchewan government on May 5, 1997, followed by the federal approval for the project three days later. The final approval to commence construction was granted by the Atomic Energy Control Board of Canada on August 25, 1997.

Quebec: Canadian Environmental Assessment Agency, February, 1997.

On January 31, 1998 The Athabasca Working group, a collective of Native community organizations, announced that it had reached an agreement with Cameco as well. The agreement covered compensation/indemnification in the event of damage from project emissions, jobs, training and business and approaches to benefit sharing.

On the political front, a planning meeting of Chiefs and the Premier of Saskatchewan Roy Romanow was held in July, 1998. The northern leaders signed a memorandum of agreement supporting the long-term development planing goals of the government, including mining. The venue for the meeting, quite surprisingly to some, was Wollaston Lake, the same area which had been the site of major anti-uranium protests in the early eighties.[180] Meanwhile, Vice Chief Dantouze had asked for some of the Chiefs of Northern bands to sign a letter asking for a moratorium on mining until revenue-sharing arrangements were negotiated. The Chiefs who signed the letter were soon confronted by many of their constituents who were working in the mining industry. The leadership in Black Lake, Fond du Lac and Wollaston Lake (three groups who had opposed mining) were subsequently defeated in elections or were forced to resign by the constituents.

The Vice President for human resources at Cameco, Jamie McIntyre, reflecting on the experiences of negotiating with First Nations summed up the company's perception of the issues as follows:

> On the political front we are still dealing with very high expectations. Expectations which we may never be able to live up to.....The journey which we have taken has taught us much about how to facilitate and

[179] The way in which these resignations were handled by Cameco and the government will be discussed in detail in Chapter 8.

[180] Sinkewicz, Paul. "Planning for northern development gets underway." *Saskatchewan Sage,* July, 1998. The Wollaston Lake area was the subject of a notable activist book against uranium mining entitled *Wollaston: People Resisting Genocide* (Goldstick, 1987)

> encourage the flow of positive benefits to the people of the North. The traveling companions have not always got along during this journey and the road has not always been a smooth one. Probably the most important lesson we have learned is that we achieve our objectives most efficiently when we work in cooperation.[181]

Given that this was a high grade uranium mining project, one might have expected there to be far greater resistance from Aboriginal communities – in fact the resistance from Aboriginal groups was minimal and the resistance from environmentalists was not able to take root.

5.4 Case C2: The Voisey's Bay Project in Labrador

5.4.1 The Land and the Community

The desolate icy coast of Labrador, which the explorer Jaque Cartier called "the land God gave to Cain", has surprisingly been inhabited for over 12,000 years. It is not entirely clear who the first inhabitants were but at the time of European settlement two distinct Aboriginal groups inhabited the area – the Inuit (or Eskimo as they have sometimes been called[182]) and the Montagnais-Naskapi Indians (or Innu as they are now known).

These two communities lived in relatively close proximity but pursued quite different lifestyles. In the words of Inuit mineral officer Chesley Anderson, "the Inuit were a sea people and the Innu were a land people," referring to the different sources of subsistence for the communities.[183] The staple diet of the Innu consisted of caribou

[181] McIntyre, Jamie. Presentation to the Saskatchewan Human Resource Association, March 19, 1998.
[182] The term "eskimo" is considered pejorative since it means "eaters of raw meat" in an Indian dialect. The epithet itself shows that considerable antagonism has existed between Indians and Inuit.
[183] Personal communication, Chesley Anderson, Labrador Inuit Association mineral officer, St. John's Newfoundland, March 30, 2000.

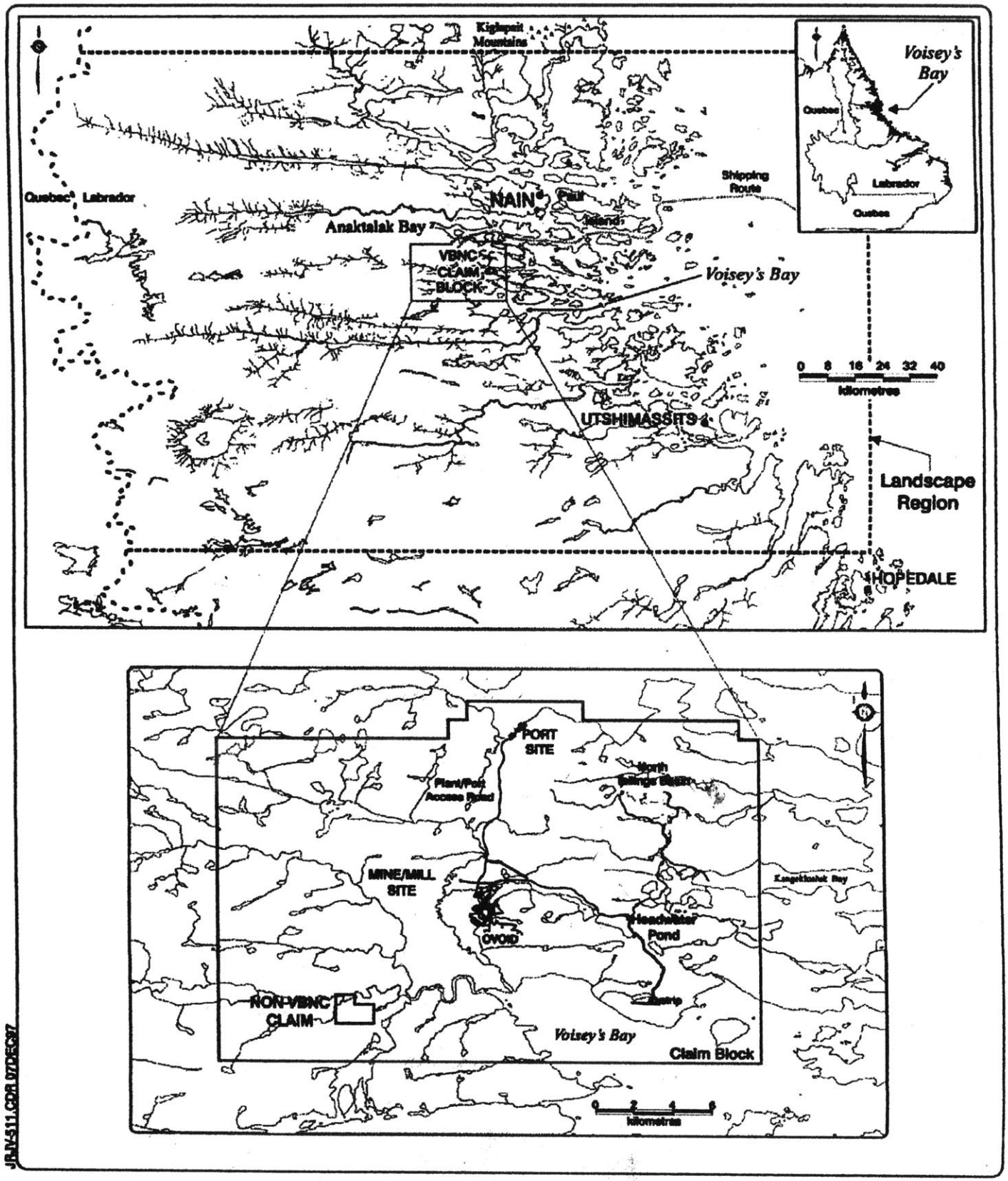
whereas for the Inuit it was fish. The two communities nevertheless had some measure of competition over resources and territory and were not natural allies. In many ways their situation was quite analogous to the Hopi and the Navajo, particularly since the Inuit had also been latecomers to the area (like the Navajo). Here, too, the communities were faced with resettlement under colonial rule. In Navajo country the missionaries were Mormons, in Labrador the missionaries were Catholic and Moravian (a Czech denomination).

During much of the nineteenth and early twentieth century the provincial and federal government tried to concentrate the relatively nomadic communities of Innu and Inuit into permanent settlements, which have not been very successful, given the high rates of suicide, gasoline sniffing and alcoholism within the communities. The two largest Innu settlements Sheshatshiu and Davis Inlet are more than 300 miles apart (see Figure 5.4). The Inuit capital is located in the northern-most town of Labrador, Nain.

Newfoundland and Labarador also have a rather prolonged colonial history, being the last regions in North America to relinquish separate dominion status with the British Crown in 1949 and became the last Canadian province. Interestingly enough, the Innu are among the few Aboriginal communities in North American who thought of sovereignty in terms of a separate nation-state outside the Canadian union. This position was, however, abandoned in 1990 with the election of Peter Penatchiu, who moved the community towards negotiating a land claims agreement with the government.[184]

Nevertheless the community has been particularly strident in opposing low-level flights at the NATO airbase at Goose Bay and also in its opposition to the Voisey's Bay mining project and the expansion of the hydroelectric project on the Churchill River. The Inuit have been somewhat more conciliatory than the Innu but they, too, have asserted

FIGURE 5.4: VOISEY'S BAY SITE



their claims to the land quite vigorously. The dynamic between these two groups will be discussed in more detail in Section 6.3.

The Innu call the land "Nitassinan" and the mine site area for the Voisey's Bay project is called "Emish." They are among the few Native communities in North America for whom English is still a second language. Not surprisingly, no treaties were signed between the settlers and the Aboriginal groups in this part of Canada. The Innu and the Inuit have overlapping land claims to much of Northern Labrador. As we shall see the linkage of land claims and environmental concerns will be an important cornerstone of resistance formation in this case.

5.4.2 Project History

The proposed site for the nickel- copper-cobalt mine and mill development is located on the Labrador coast about 35 km southwest of the Inuit capital of Nain, and 79 km northwest of the Innu community of Davis Inlet. The massive sulfide deposit was discovered by the prospecting company Archean Resources Limited while under contract to Diamond Fields Resources Inc. of Vancouver in 1994. As the enormous size of the deposit became clear, Diamond Field Resources found itself in a major bidding war over the rights to mine the ores. Diamond Fields was a penny stock company that suddenly found itself atop one the major ore findings of the decade, with an estimated potential revenue of $25 billion. The company apparently was unaware that they had started drilling in a region with contested land claims by Innu and Inuit groups. The activity enraged both Innu and Inuits and a series of protests were held at the mine site including

[184] Larry Innes, personal communication, Sheshatshiu, Labrador, March, 2000.

a standoff in February 1995 in which the Royal Canadian Mountain Police (RCMP) had to be called.

The executives at Diamond Fields, which included the infamous investor and entrepreneur Robert Friedland,[185] clearly had little or no incentive to interact constructively with the Native groups because their aim was mainly to sell the company to a larger mineral conglomerate. A bidding war was afoot in the background for the project. Toronto-based Inco Ltd. finally won the bidding over its rival Falconbridge, paying a $4.3 billion price for the rights to develop the deposit in 1996. Inco acquired the Voisey's Bay Nickel Company Limited (VBNC) of St. John's, Newfoundland as a wholly owned subsidiary and continued exploration of the massive mineral deposit while pushing ahead with plans to develop a mine and mill operation at the site.

On September 26, 1996, Voisey's Bay Nickel Company formally announced its intent to file the project for environmental assessment under the Canadian Environmental Assessment Act. Inco was clearly much more professional about its dealings with Native people than its predecessor, even though it did not have much experience in this regard. Subsequently, the Innu Nation, the Labrador Inuit Association, and the governments of Canada and Newfoundland successfully negotiated a Memorandum of Understanding (MOU) establishing a joint, four-party environmental assessment process for the project. The draft MOU was referred for public comment in November, 1996, and it was formally signed by the parties in January 1997. This MOU is a first for environmental assessment in Canada. Instead of the federal Minister making the final decision on the project, a panel would report to all four parties.

A five person panel was appointed jointly by the four parties. According to the MOU, the Panel had 120 days from their appointment (January 31, 1997) to issue Environmental Impact Statement (EIS) guidelines to VBNC. During this 120 day period, the Panel held scoping hearings in Nain, Utshimassit, Hopedale, Postvill, Rigolet, Cartwright, Sheshatshiu, Goose Bay, and St. John's. Following these hearings, the guidelines were released which include recommendations about the application of the precautionary principle and sustainability assurance, as well as directing VBNC to incorporate traditional ecological knowledge into their EIS, or to facilitate its presentation during the assessment process.

The Voisey's Bay Nickel Company released its EIS in December of 1997 and the public review of the EIS concluded on March 31, 1998. Based on more than 300 pages of public and regulatory agency comments submitted as part of the initial public review, the Panel issued a deficiency statement on May 1st, 1998. The Panel concluded that the EIS did not meet the guidelines, and asked the company to provide additional information on issues such as shipping routes, alternative production methods and rates of production, fisheries impacts, socio-economic effects and the impacts of the project on the endangered Harlequin duck. The final report from the Panel was released in April of 1999 and recommended that the project be allowed to go forward provided that a set of 107 recommendations contained in the report could be met, including an agreement on impact and benefits with the Aboriginal groups involved. This was clearly a tall order for Inco Corporation.

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[185] Friedland's infamy largely rests upon his shady dealings in the Summitville mine in Colorado which is now a major Superfund site, and Friedland is under criminal investigation concerning this project (though

5.4.3 Inco Corporation

Inco was incorporated in 1902, created in a merger between Canadian Copper Company and the Orford Copper Company. At the time the potential for nickel was realized by very few and Inco quickly became the world's largest nickel mining and processing company. This was largely the result of both the size of the high quality deposits it controls (particularly in Sudbury, Ontario), and its advanced patented techniques of reducing nickel by pyrolysis and electrolysis. Fundamental to Inco's early growth was its close ties with the consumers of metal, notably the steel and arms industry.

During the past 30 years Inco has gone through a series of very serious slumps due to the caprice of nickel prices and labor issues at its huge complex of mines and smelters in Sudbury, Ontario. The Sudbury smelters were a recurring cause for protest by environmentalists all across Canada and some of the local communities also joined forces to voice their misgivings in this regard.[186]

In 1999 Inco had annual revenues of US$2 billion, with sales of nickel as follows: 24 per cent to the United States, 15 per cent to Europe, 21 per cent to Japan and 35 per cent to other Asian countries. Eight percent is sold in other world markets.

Despite its history, Inco has made a definite effort to improve its environmental performance. Most notably, in 1993 Inco completed the largest environmental project ever undertaken in North America: the rebuilding of their Sudbury, Ontario, smelting complex at a cost of U.S. $530 million to reduce emissions of sulfur dioxide. This change

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he lives in Singapore and hence it may be somewhat difficult to bring him to trial).

[186]In one particularly embarrassing moment for the CEO of Inco, Mike Sopko, a community activist who was being awarded an honorary degree by Laurentian University alongside Sopko, got up and made a

has even received kudos from environmental researchers in Europe such as Alyson Warhurst (1997).

Inco also owns several smaller businesses, including the International Metals Reclamation Company, Inc. or Inmetco, as this company is known, operates the only facility in North America that recovers saleable metals from steelmaking wastes and from nickel-cadmium batteries. Since 1978, Inmetco has recycled over one million tons of materials that might otherwise have ended up in landfills.

5.4.2 Plans for development and the prevalence of resistance

Inco currently estimates that up to 150 million tons of mineral resource, will be developed as part of the Voisey's Bay project. Based on current knowledge of the mineral resources at Voisey's Bay, three primary mineralized areas will be developed: the Ovoid, Eastern Deeps, and Western Extension, including the Reid Brook zone (see Figure 5.4). These zones have different characteristics and require different mining methods. The Ovoid deposit is located near the surface which allows it to be mined from the surface as an open pit. Eastern Deeps and the Western Extension, however, lie well below the surface thus requiring the use of underground mining methods.

The ore to be extracted from the open pit and underground mines will be processed into concentrates at the mill. The main components of the project are 47 km of gravel roads, a port facility, an airstrip, an accommodation complex, sewage treatment facility, diesel generating plant, mill, warehouses and office facilities. Mining facilities will include mine rock and overburden storage areas, and a tailings disposal area. The

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scathing speech about the company and commenting that Inco brings out "the truly nasty parts in people." McNish, 1999, p. 230.

mill is designed to operate at a rate of 20,000 tons of ore per day. The open pit will be approximately 500 metres wide, 1 km long, and 125 metres deep.

Construction and other pre-production activities will generate 7,400 jobs. The open pit phase will generate about $1.1 billion in earned incomes and approximately 19,000 person years of employment. During the underground mining phase, the company estimates that 53,000 person-years of employment will be created and about $2.7 billion of income generated.

The Innu and Inuit sought to ensure through the MOU that the entire mine/mill operation would be subject to a single, comprehensive review through public hearings in each of the affected Innu and Inuit communities. However, in April of 1997, the Voisey's Bay Nickel Company registered with the government of Newfoundland its plans to construct a road and airstrip to support its ongoing exploration work at Voisey's Bay. It was the understanding on behalf of Innu Nation and the Labrador Inuit Association that this type of activity was contrary to the MOU, which was already in place to assess these activities. On the other hand, it was the contention of the company that their activities were outside of the scope of the MOU because they were for exploration purposes and did not affect the plans for operation of the mine.

The Innu and Inuit decided that these advanced exploration efforts should not happen without their consent. This is especially understandable in light of the fact that Voisey's Bay area has never been ceded by treaty or other agreement. The Innu Nation and the Labrador Inuit Association sought an order from the Newfoundland Supreme Court preventing the Newfoundland Minister of Environment from approving the company's plans on the ground that the project was already undergoing an assessment

under the MOU. However, the Court ruled in favor of the government and the company and work on the road and airstrip started in August. The Environmental Assessment Panel established under the MOU expressed strong concern over the government's decision to split the assessment of the project.

The aboriginal groups jointly filed for appeal and engaged in protest action at the exploration site. Finally, in late August, the Appeal Court decided in favor of the aboriginal groups. In a decision praised nationally, Judge Marshall wrote that although the purpose of the road was not for operations, the impact of the road, for whatever reason, would be the same, and the company should not be allowed to construct any further infrastructure until the entire project had undergone environmental assessment.

This judgment was a major victory for the Innu and the Inuit. It reinforced the importance of comprehensive environmental assessment, and slowed the pace of the development down to give the communities more time to digest and understand the changes that are happening as a result of the mining development.

Resistance to the project continues. Following the Canadian Environmental Assessment Agency's conditional approval for the project, Innu Nation filed a case in Federal Court in September 1999 for judicial review of this contingent approval, which is still pending. Meanwhile the province of Newfoundland is trying to get assurance from Inco for a smelter to be built on the island of Newfoundland (in Argentia) During a special broadcast on February 29,2000, CBC radio reporter Michael Enright described the mood over Voisey's bay as follows: "The chances of nickel being mined in Voisey's Bay look about as remote as the location of the nickel mine itself."[187]

[187]Michael Enright. Radio transcript. CBN-AM *This Morning Media*: CBN-AM St. John's Newfoundland: Item # 0229550., February 29, 2000

5.5 Towards Analysis

Now that we have the general "storylines" for the four cases, let us revisit the central research question which we are trying to address in this dissertation and the related sub-questions that can help in planning sustainably for development on Aboriginal land in North America and elsewhere. Table 5.1 gives a schematic of the main themes which I intend to develop to address the central question of "Why does environmental resistance to mining development arise in certain cases of mining development and not in others?" The related prescriptive question which the cross-country comparison will try to address is: "What lessons, if any can be drawn from the Canadian and US government's experience in dealing with such conflicts?" Table 5.1 aims to lay out the road map for the rest of the dissertation as we move forward.

Table 5.1: Framework for analysis and synthesis in the dissertation

Sub-questions	**Issues and implicit hypothesis**	**Related theories tested**	**Relevant sections in dissertation .**
When does resistance arise?	Scientific, economic and cultural determinism (shadow hypotheses); Negotiation process (central hypothesis)	Various reductionist theories of scientific primacy; Powerlessness theory (Gaventa); Theories of negotiation	Chapters 6
When does the resistance prevail?	Issue linkage and strategic alliances	Linkage Politics (Aggarwal); Civil society theories	Chapters 7, 8, 9
Is the resistance environmentally motivated?	Native/nature relations; greening of sovereignty	The "Ecological" Indian (Krech); new pluralism in environmental justice (Schlosberg)	Chapter 10
What advice can we give to stakeholders in both countries?	Planning for sustainable Aboriginal development; role of government and corporate responsibility	Lesson-drawing in public policy (Rose);	Chapter 11

6. Science and Elements of Social Construction: Some Shadow Hypotheses

In this chapter we will test some of the more prevalent hypotheses about the causes of environmental resistance for the four case studies. Environmental discourse has historically been predicated on certain absolute scientific foundations about ecology – in terms of scarcity, distribution and quality of resources. The "debates" in environmental studies for much of this century, such as the classic bet between the late Julian Simon and Paul Ehrlich were premised on predictions that were at least ostensibly scientific.[188] As Connie Ozawa states in her analysis of how science is commonly perceived in environmental conflicts:

> "In the economic and cultural context of the late twentieth century science is looked upon as a source of authority. This authority derives from a popular notion of the scientific endeavor. Science is conceived as a process that yields an objective, rational, politically neutral body of knowledge. Decisions consistent with scientific knowledge therefore command acceptance."[189]

However, much of the primacy of science as a touchstone for objectivity for substantiation of resistance or adjudication of conflict has been challenged by a host of social theorists, most notably Bruno Latour (1999). This group of theorists posit that science is "socially constructed" and hence trepidation is warranted when evaluating ostensibly objective science. This debate has roots in the philosophical distinction between epistemology (our representation of the world) and ontology (what the world really is). By intellectual standards, this is a fairly acrimonious and somewhat circular debate as reflected in the title of Ian Hacking's most recent book *Social Construction of*

[188] For a sound resurrection of this Cassandran /Cornocopian debate see the new edition of Simon's notable work *The Ultimate Resource* (1999), which has an appreciation by Milton Friedman, versus the Ehrlichs volume : (1997)
[189] Ozawa, 1996, p. 221

What? While in certain areas of scientific endeavor there are indeed levels of uncertainty which can potentially give rise to multiple constructions, there are clearly other scientific metrics which can be stated quite objectively and evaluated as such. The real test of science lies in how such data is interpreted by society and what measure of importance is given to its findings. Scientific determinists would argue that the actual environmental impact of a mining venture, as manifest in various contextually sensitive criteria, such as water quantity in a desert or crop quality in an agricultural area, or economic and demographic characteristics more generally determine the emergence of resistance. Let us go through our cases to see if this proposition holds.

6.1 A comparison of "technical" environmental impact between cases

While the word "technical" may seem somewhat reductionistic in its usage, it is important to try and tease out the environmental impact of each project with regard to conventionally accepted criteria of ecosystem viability. In other words, our aim in this section is to understand and compare the asocial impact of the projects on the natural environment in order to test the proposition that resistance may arise based on the severity of environmental impact in a "scientific" framework. In the following individual case analyses I will present data for various levels of environmental impact of each project with particular reference to impacts which have been most notably highlighted by resistance movements and the media.

Case U1: The Black Mesa / Kayenta mine

Coal mining presents a rather interesting management situation for environmental health and safety professionals. From a purely environmental point of view it can often

be deemed relatively innocuous since it usually does not involve chemical extraction procedures. However, from a health and safety point of view coal mining can be very dangerous. Apart from the respiratory ailments caused by coal dust, there is also a danger of coal combustion during operations in hot climates, particularly the combustion of "gob piles" of ore that are often left in the open.[190]

Two principal systems of coal mining are used: surface, or strip, mining and underground, or deep, mining. Strip mining, such as the Black Mesa / Kayenta operation is a form of quarrying, and is possible only when the coal seam is near the surface of the ground. At Black Mesa / Kayenta huge power shovels and draglines are used to remove the earth and rock (overburden) from above the seam. The chief advantage of strip mining over underground mining is the enormous saving of time and labor. The daily output per person in strip mines is many times that in underground mines.

As a supplement to strip mining, or when other mining techniques are not adequate, augers are used to bore horizontally into exposed coal seams. The loosened coal then flows into a conveyor for loading into trucks. A newer development is a boring machine, called a push-button miner, that can tunnel as deep as 300 m (1000 ft) into the coal seam, dumping the coal into mobile conveyors pulled by the machine.

In this regard the Black Mesa/ Kayenta is probably less deleterious than metal mining. Because of the Navajo / Hopi land dispute the mines' environmental performance has come under particular scrutiny. In 1995 and 1996, the federal EPA conducted a compliance review which was prompted by a complaint filed by the Dine Alliance regarding environmental performance. A CERCLA site inspection was also

[190] Personal communication, Erling Brostuen, Professor of mining, Colorado School of Mines, Golden CO, June, 1999.

carried out to focus on future liability issues. These reviews gave the mine a "good" rating.[191]

However, the most critical environmental impact of this operation does not ensue from the actual mining itself but rather the means by which the coal is subsequently delivered to the Mojave generating station some 280 miles to the west of the mine. As mentioned in Chapter 5, the mine utilizes a highly unusual coal slurry pipeline to transport the coal – the only one of its kind in the United States. Most of the slurry water comes from confined aquifers (the N aquifer and parts of the D aquifer) which are also the primary source of water for municipal users within the 5,400 square-mile Black Mesa area.[192] The aquifers also feed some of the terrestrial springs (*paahu)* which have been historically sacred to the Hopi and the water has also been used for terraced agriculture.[193]

Figure 6.1 shows the extent of water usage by the mining operation over the past few years according to the Office of Surface Mining Control and Reclamation. For a water scarce area this water usage constitutes an enormous environmental challenge, which the tribes have decided to absorb, though frequently concerns are raised about the long-term viability of this water-extraction. Interestingly enough, the revised EIS for the mine was completed in June 1990 and the following year witnessed an enormous increase in water usage, though this was apparently due to a water-intensive development project

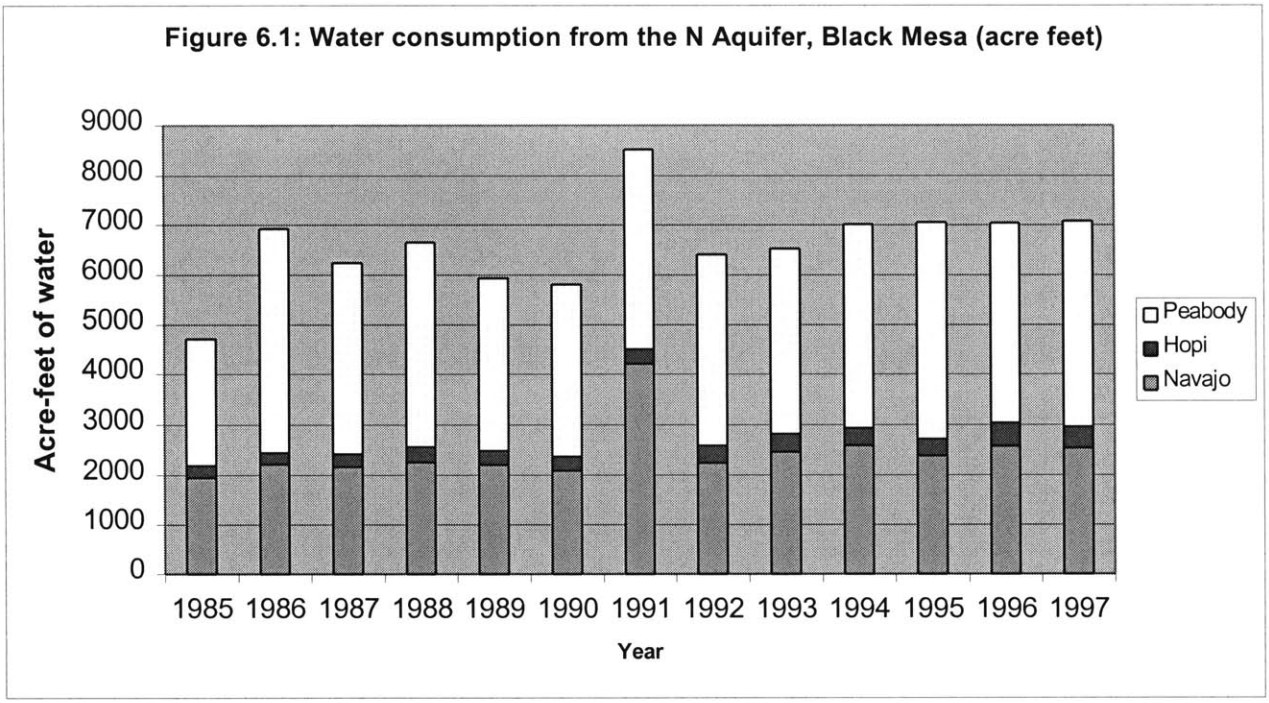
[191] EPA Region IX. *Multimedia Review of the Black Mesa Mine Complex.* EPA Site ID NND 051452654. Prepared by URS Consultants and reviwed by Des Garner, October 18, 1996

[192] United States Geological Service (1999). *Monitoring the Effects of Groundwater Withdrawals from the N Aquifer in the Black Mesa Area, Northeastern Arizona.* Paper prepared in cooperation with the Arizona Department of Water Resources and the Bureau of Indian Affairs. USGS Fact Sheet 064-99.

[193] See Whiteley and Masayesva, 1998.

in Tuba city.[194] While the EPA in its 1996 review concluded that the mine was in good working order, initially when the EIS was presented to the EPA for review, it had classified the project as "EO-2: Environmental Objections – Insufficient Information." The impact of mining on the Pinyon-juniper was also a contributing factor in this evaluation.

Figure 6.1: Water consumption from the N Aquifer, Black Mesa (acre feet)



Source: Office of Surface Mining data set, Denver CO: Western Regional Center, 1999.

Even though OSM now maintains that the recharge rate for the aquifers is enough to sustainably harness the water from the N-aquifer, the government is already beginning to plan for alternate sources of water to meet growing demands in the region. Preliminary plans for a pipeline from Lake Powell and ongoing litigation over water rights to the

[194] Personal communication with Steve Parsons via email (Office of Surface Mining), Denver CO, July, 2000.

Little Colorado river which now has over 11,000 claimants reflects the seriousness of the water scarcity situation.

Thus water quantity concerns constitute an extremely important environmental impact which could have been a major stumbling block in the renegotiations of the lease for the mine in 1990. However, despite these concerns, the project has gone ahead. While resistance has been voiced to water extraction by notable tribal leaders such Vernon Masayesva (Hopi), no one in the tribal establishment has gone so far as to say that the mining should immediately be stopped. In 1979 the Hopi had passed a tribal resolution (H-83-79) which established a moratorium on all *additional* energy resource exploration and development. However, this resolution recognized the existing activity at Black Mesa, and to do away with any further ambiguity regarding the mining, on May 26, 1998, the Hopi Tribal Council, by majority vote, approved mining on the reservation limited to the current leasehold area and the J7 pit. The Navajo have similarly favored mining development despite their collective misgivings about the earlier lease arrangements with Peabody.

The protests which have been voiced in this case pertain to the Big Mountain land relocation dispute, which we will see in the next chapter is yet another story.

Case U2: The Crandon Project

The technical environmental impact of the Crandon project has gone through numerous phases as the company has tried to assuage regulatory and community concerns. While the location of the mine is in a particularly problematic area because of

the high water table, the mitigation measures that are being proposed currently are also quite extraordinary by mining industry standards.

The most important environmental concern from this project is groundwater and surface water contamination caused by acid leaching from the tailings piles and also the depletion of groundwater which would take place as a result of the mine's usage of water in the milling process.

Since Rio Algom owned full ownership of the project, its subsidiary, Nicolet Minerals (NMC) has agreed to much greater environmental mitigation than the earlier owner Exxon had proposed. NMC has agreed to separate potentially acid-generating pyrite from the rest of the mine tailings. The pyrite would be mixed with cement and placed underground in a paste backfill. Ultimately, it would be submerged in the reflooded mine. The balance of the tailings would be placed in a landfill-like Tailings Management Area (TMA). Due to the pyrite separation, the TMA is being reduced in size to about 75% of the originally-proposed 345 acres. Currently, 282 acres are proposed to be used for TMA development. Average tailings depth is expected to be about 90 feet.

Groundwater flow into the mine would be reduced by underground injection of cement grout, in order to minimize the volume of water that would need to be pumped and treated. NMC would dispose of treated mine waste water via a system of groundwater seepage cells, at a location about 2 miles north of the plant site. NMC is reviewing data for site alternatives. Exxon's earlier proposal to pipe this water 38.3 miles from the site, for discharge to the Wisconsin River, south of Rhinelander, has been withdrawn on environmental grounds by NMC and will be discussed in the Department's

Draft Environmental Impact Statement as part of the alternatives analysis required by the Wisconsin Environmental Policy Act.

NMC has also been obligated to provide examples of three mines with similar characteristics that have performed without incidence of pollution for at least ten years. The mines which have been chosen and the criteria which they meet are shown in Table 6.1. Critics of the mine are quick to point out, that the Crandon project would be bigger and in a more sensitive area. However, the company has gone forward with commensurately more stringent mitigation regimes as well. The McLaughlin mine is considered across the industry as a benchmark for responsible mining and was given the nod even by the California Sierra Club. While these submissions are being reviewed by the Army Corps of Engineers and the Wisconsin Department of Natural Resources, the resistance continues to gain pace.

Table 6.1
Summary of mines which are being presented by NMC as candidates for exemplary compliance

MINE	STATUATORY CRITERIA under The Wisconsin Mining Moratorium Law					
	"sulfide ore body" w/NAGP (secs. 293.50 (1) (b), (2) (a) & (b))	>10 Years Operating/ Closed (sec. 293.50(2) (a)/(b))	No "pollution" of groundwater or surface water from acid drainage or release of heavy metals (secs. 293.50 (2) (a) & (b))	Not listed on NPL (sec. 293.50 (2m) (a))	Operator still in Business/Respo-nsible successor (sec. 293.50 (2m) (a))	"No significant environmental pollution" from acid drainage or release of heavy metals (sec. 293.50 (2m)(b))
McLaughlin Mine, California	X	15yrs. / N/A	X	X	X	X
Cullaton Lake Mine, N.W.T., Canada	X	N/A / 13 yrs.	X	X	X	X
Sacaton Mine, Arizona	X	12 yrs. / 14.5 yrs.	X	X	X	X

The company's mitigation measures have been acknowledged by a former tribal leader of the Hochunk Nation, Joanne Jones, of Wisconsin, who has agreed to act as an advisor on Native American negotiations for the company.[195] However, even this effort has not caused any reduction in the resistance of the Mole Lake Chippewa, the Menominee and indeed the greater activist community to the mine site. Here too it appears that scientific and technical criteria are not able to explain the emergence of resistance.

[195] Personal communication via telephone, Ms. Joanne Jones Esq., Madison Wisconsin, June, 2000.

Case C 1: The Saskatchewan Uranium mines

In terms of both short-term and long-term environmental impact, uranium mining is by far the most environmentally problematic of any mining activity – owing to the simple fact that radioactivity of the ore presents an intangible that cannot be chemically mitigated. Moreover, the potential use of uranium for nuclear weapons adds to the arsenal which resistance movements already have towards nonrenewable resource extraction. Perhaps a silver lining to this cloud is offered by the absence of greenhouse gas emissions from nuclear power plants. But this comparative advantage is easily eclipsed by the imponderable task of managing nuclear waste from such facilities. Furthermore, the history of uranium mining near Aboriginal communities in both the US and Canada has given rise to the term "radioactive colonialism" that is often used by activists.[196] Given this backdrop, it is truly remarkable that uranium projects have continued to proliferate in Saskatchewan with relatively little resistance from Aboriginal communities.

While the McArthur River mine, that is the principal focus of my study, is a state-of-the art operation, the environmental hazards of the project, particularly in comparison to other mines where much greater resistance has occurred cannot be overstated.

Owing to the extremely high grade of the ore (and its commensurate radioactivity), planning for the mine was an enormous challenge. All mining methods requiring workers to enter the mining area had to be eliminated. Non-entry mining methods were required due to the high radiation fields from the ore. Other methods were eliminated if not compatible with grouting or freezing techniques for groundwater control. Strict adherence to the principles of limiting the time of exposure, maximizing the distance between the workers and the ore, and placing shielding between the workers

and the ore was necessary in order to limit worker gamma radiation exposures. Radon gas released from the ore and groundwater adjacent to the ore meant excellent ventilation practices were required. The need to capture radon gas at its source has also affected mining method selection. Seven potential mining methods were proposed in the EIS submitted for McArthur River, with final selection dependent upon ore grades and ground conditions. These methods are:

- raise boring;
- box-hole boring;
- remote box-hole stoping;
- blast-hole stoping, including vertical crater retreat;
- remote raise-bore stoping;
- jet boring;
- remote box-hole stoping with 'Viscaria' raise mining.

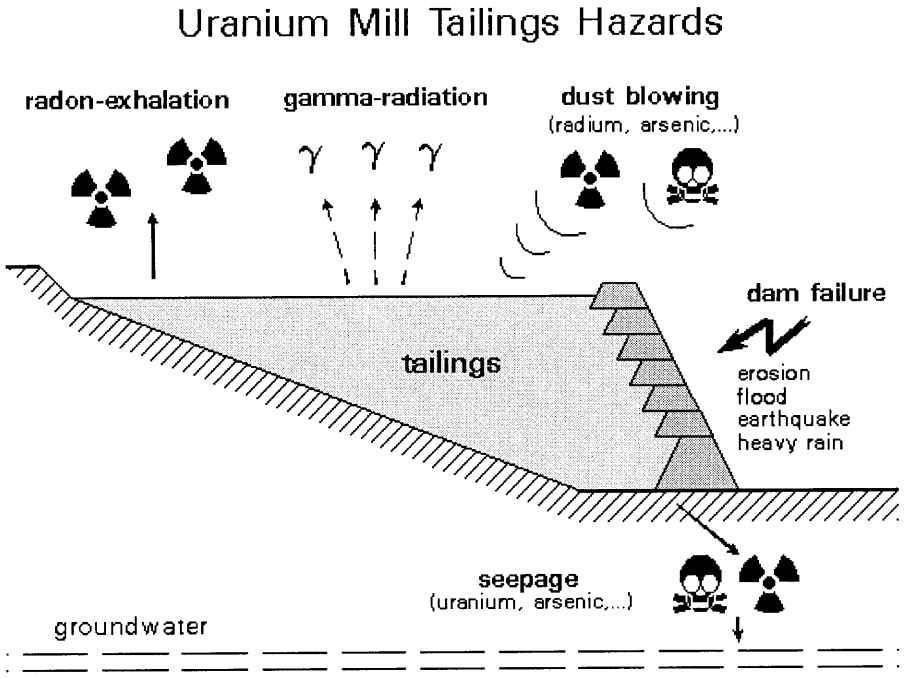
The preferred options for the mining of the high-grade ore are raise boring, box-hole boring and remote box-hole stoping, which the mine has been using since production in 1998.

Waste rock is generated both by mine development and by ore production. The production of waste rock are relatively small due to the low tonnages of ore required to be mined each day. However, the potency of the waste rock in terms of environmental impact is much higher, even in comparison to other uranium mines. Potentially problematic material (waste rock containing >0.03% U_3O_8 or with a net neutralizing potential of less than 3, ie. neutralizing potential to acid-generating potential of <3:1, despite the low pyrite content) is hoisted conventionally via the main service shaft and stored on lined pads at McArthur River. This material is either used for back-fill underground at the mine site, or transported to Key Lake for final placement in existing

[196] See the writings of Ward Churchill, Tom Goldtooth and Winona LaDuke in the bibliography.

approved storage areas. During the development phase, 140,000 tons of potentially mineralized non-ore material, and 75,000 tons of potentially mineralized sandstone were generated. The extensive use of cement grout is being used to mediate any residual pyrite content of the rock. Some of the concerns that ensue from tailings storage (in this case at Key Lake) are shown in Figure 6.2.

Figure 6.2 (Source: Peter Diehl, WISE Uranium project, The Netherlands: www..antenna.nl)



The control of radiation has been the primary factor in determining the designs for the mine and plant layout, equipment selection and the processing of the ore at McArthur River. In order to minimize exposures the following criteria were applied:

- Radon gas is controlled by a dual ventilation system; a primary fresh air flow is always maintained in all active work areas, with a secondary exhaust system to remove contaminated air from particular sources.
- Radon is also controlled by the freezing and grouting techniques used to control ground water.
- During all mining and processing stages the ore is fully contained.

- Gamma radiation is controlled by utilizing the principles of shielding, distance and time. The use of heavy-wall steel pipes, thick vessel walls, concrete and sometimes lead sheeting is standard practice.
- Mining and ore handling and processing are accomplished remotely with computer control.
- Due to the low tonnages required to be mined, there is a long period between scheduled maintenance work.

A total of three shafts are utilized to provide 455 m^3/s of air at full production. Two shafts will supply fresh air (the main service shaft #1, and shaft #2), while a third shaft will exhaust the mine workings. According to Cameco "every operation has been analyzed for exposure time, and distance and shielding calculations have been done to ensure that radiation doses are acceptable. Design calculations have been confirmed by doing physical measurements of radiation fields around pipes filled with high grade ore from the test mining at Cigar Lake, and at the existing Key Lake and Rabbit Lake mills. As a result of these design criteria, the predicted annual doses for the workers are well under the regulatory dose limit."[197]

Nevertheless, the long-term impact of the mine and the risk factor whenever dealing with radioactive material of this nature is highly capricious as indicated by the following calculations estimates performed by an independent consulting firm, Radioactive Waste Management Associates:

> According to the McArthur River EIS, 3.3 x 10^6 Bq/sec of radon will be emitted from McArthur River operations, and annual radon concentrations will increase by over 50 Bq/m^3 at Key Lake. An area 40 km long will have increased radon concentrations as a result of Key Lake operations. A 1979 Key Lake EIS estimated that the total radon release rate from the Key Lake mill, open pits, ore storage, and tailings would be 3.6 x 10^7 Bq/sec. More recent calculations use a source term of 3.8 x 10^8 Bq/sec. Radon levels observed at Key Lake from 1986-1993 were highest in summer (0.289 Bq/L) and were 0.4 Bq/L right over the tailings.

[197] Jamieson, Brian and Stan Frost. *The McArthur River Project: High Grade Uranium mining*. London UK: Proceedings of the Uranium Institute Symposium, 1997.

> If we divide Cameco's estimated 3.8 x 10^8 Bq/sec of radon by the area of Deilmann Pond (580,000 m^2), one gets an estimate of 655 Bq/m^2/sec. Dividing this by a factor of 25, to account for reduced radon emissions through the pondwater cover, one gets 26.2 Bq/m^2/sec emanating from Deilmann pit. This is less than the value RWMA calculated for radon emission from the JEB pit at McClean Lake, which will use a similar subaqueous method. The smaller emission rate is due to the effect of 'blending' the very hot McArthur River ores with Key Lake materials, bringing the Ra-226 concentrations of the tailings down to 325 Bq/g. Without blending, Ra-226 can be up to 1350 Bq/g. If in the future blending does not occur, or if the tailings do not remain underwater, radon emissions could increase dramatically.[198]

This is just an example of the problems of risk management at a uranium mining facility. Thus the technical impact of the mine and the environmental hazards associated with the mined product in this case are once again an insufficient explanation for the relatively low level of Aboriginal resistance.[199]

Case C2: The Voisey's Bay Project

Like the Saskatchewan uranium mines, the Voisey's bay project has also been the subject of numerous environmental reviews by various tiers of government and by independent consultants.

An Environmental Review was begun by the Canadian Environmental Assessment Agency in January 1997, with INCO, the Provincial and Federal Government and the Aboriginal organizations participating and was completed in November 1999. The Environmental Assessment Panel Report included a community benefits analysis.

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[198] Marvin Resnikoff, Kim Knowlton, and Kal Island . *Comments on the Environmental Impact Assessment of the McArthur River Mine.* Radioactive Waste Management Associates, 526 W. 26th Street Rm.517, New York, NY 10001, USA. (Prepared for the Saskatchewan Uranium Coalition, March, 1996.

[199] It is important to note that there has been resistance from non-Aboriginal environmental groups but that has not been supported by Aboriginal people per se. The role of the Inter-Church Uranium Committee in this regard will be discussed in the next chapter.

The Panel conducted hearings in Labrador and Newfoundland and consulted with the Aboriginal organizations and with the Company. It sought and obtained detailed information concerning VBNC's Mining plan, its proposed methods for managing the anticipated environmental problems, as well as the social and economic benefits for the local communities. It examined issues of air quality, shipping and its impacts on aquatic life, tailings management, freshwater fish and habitat, seals whales and polar bears, birds, Caribou and black bears, and general contaminants. It explored the impacts of the mine operation on the traditional economy of the Innu and Inuit, including the disturbance of wildlife, loss of habitat for animals traditionally hunted, contamination of country foods, disruption of travel across, and reduced access to traditionally-utilized resources. The Panel also focused on economic concerns such as employment, the effects on local business, training, families and communities. A number of additional issues were also addressed, namely the size and viability of the relevant ore bodies, the expected mine-life, and the rate of ore extraction, these being the key determinants of the sustainability of the benefits which would flow from the mine. Its report was made public on April 1, 1999.

The most significant environmental impact of the mine according to the panel would be from the finely ground solid tailings remaining after the concentration process, and some waste rock. They are to be "stored under water in two tailings basins made from existing lakes... to prevent .... them from being in contact with both air and water simultaneously which would cause them to release acid"[200] The panel concluded that VBNC's proposed methods of dealing with the tailings were appropriate and that the

[200] Governments of Canada, Newfoundland, Innu Nation, Labrador Inuit Association. *Report of the Environmental Assessment Panel on the Proposed Voisey's Bay Mine and Mill Project*, March, 1999.

"best locations" to reduce environmental impact (starting with Headwater pond and then constructing the North Tailings Basin when the underground phase begins).[201]

The Panel recommended that the project proceed. However this was subject to the terms and conditions spelled out in a large number of specific recommendations. The Panel concluded that: "... the Project could contribute significantly to sustainable social and economic development on the North Coast and in the rest of Labrador, without harming vital ecosystem functions and habitats or the ability of Inuit and Innu to keep using the lands in traditional ways."[202] The rest of the document delineated the conditions that would have to be fulfilled by the Company if it was to proceed with the project.

Perhaps the most detailed technical analysis for the project from a fairly conservationist perspective was carried out by Dr. David Chambers of the Center for Science and the Public Interest, an independent non-profit organization which provides technical services to environmental groups. Dr Chambers made numerous recommendations in a fifty page report which critically evaluated the EIS for the project, the most significant items of which are summarized in Exhibit 6.1:

Exhibit 6.1: Technical Concerns raised by the environmental community regarding the Voisey's Bay Project (Source: Chambers, 1998)

1. Application of the Precautionary Principle to Tailings and Waste Rock Issues:

    - Avoid Using Headwaters Pond as a Waste Disposal Site in Order to Minimize the Potential for Long Term Impacts on the Reid Brook Watershed (An Application of the Precautionary Principle.
    - A Commitment to Backfill Open Pit to Minimize the Possibility Of Acid Mine Drainage

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[201] Ibid., p. 8
[202] Ibid, quoted in Ritter, 1999.

Pit backfilling would be environmentally beneficial in the following ways:
* It could reduce or avoid the need for additional waste disposal space.
* Combined with underground mine backfilling, it could significantly reduce the need for above ground waste storage.
* Backfilling would ensure that the acid generating waste materials would remain submerged in the long-term.
* It could prevent the formation of a potentially toxic pit lake by covering the submerged acid generating waste with less reactive waste to a level above the water table.
* Pit backfilling would be better suited as a landform capable of sustainable use beneficial to both humans and wildlife

2. Development of a Comprehensive Monitoring Plan Outline during the EIS Process including

- Suggested sample locations and sampling frequencies.
- A list contaminants to be tested for water quality monitoring.
- A wildlife monitoring program should be outlined with some detail.
- Duration, funding, and criteria for triggering other actions (e.g. either more or less testing, or remedial actions) should be discussed.

The monitoring plan that should be developed in conjunction with the EIS should discuss:
- who will do the measurements, and the frequency (i.e. when) at which these measurements would be performed;
- where surface and groundwater quality, and air quality will be measured;
- what constituents will be measured for each category;
- what biologic tests will be performed, and the frequency of this testing.

3. Development of a Preliminary Reclamation Plan, which includes Obligations and Standards for Reclamation

- A host of physical considerations are key to defining the reclamation plan, and can specified even before construction of the project has begun. Revegetation criteria should be developed in order to determine whether reclamation/revegetation has been successful. An example of revegetation criteria used for reclamation for the Zortman-Landusky Mine in Montana is 90% revegetation of native species compared to adjacent undisturbed areas of similar slope and aspect.

4. Commitment and a Financial Mechanism for a Reclamation Bond, and a Financial Vehicle to Cover Long Term Monitoring and Maintenance of the Facility Once Reclamation is Complete.

- Bonding for reclamation should be required, and discussed in the EIS. Although the bonding instrument is usually specified by government regulation, the amount of the bond is often an issue.
- In addition, a significant feature of this project is that the potentially acid generating waste will have to remain under a water cover in perpetuity. Even though the dams and other facilities that must remain functional will be "... constructed to provide long term and low maintenance containment ...", there will still be a need for long term monitoring and maintenance (LTMM) after the mine is closed and fully reclaimed.

VBNC has tentatively agreed to address these concerns, in addition to several other concerns about the shipping of material from the site and its impact on the

migration patterns of traditional gaming animals for the Innu and Inuit.[203] However, these technical mitigation measures are still not striking a favorable chord with the Innu and the Inuit. There tends to be a degree of cynicism about the measures being proposed. For example, the LIA mineral advisor, Chesley Anderson commented in an interview that the company's proposed concession to not ship during April and May was motivated not by the Aboriginal concern as it was advertised to be but rather because the melting ice would prevent shipping in any case.[204]

On the Innu side the resistance towards the project is even greater. The Innu have articulated their resistance most potently through protests at the mine site and in Labrador, web sites (www.innu.ca) and articulating the impact of mining on lifestyles of the people, thereby shifting the discussion from the technical environment impact. For example, this is exemplified by the formation of an ad hoc committee on "Aboriginal Women and Mining in Labrador," which has voiced vociferous opposition to the project arguing that the mining may exacerbate the social problems. This organization is particularly interesting since it includes both Innu and Inuit representatives (Tongamiut Inuit Annait) -- historically the two communities have tended to work independently owning to different cultures and territorial disputes (which will be discussed in Sections 6.3 and 8.2).

Similar to the Crandon Case (U2), the technical criteria and mitigation allowances on the part of the mining company do not translate into a concomitant reduction in resistance to the project. However, here the communities are at least willing to talk and

[203] Personal communication, Mark Sheppard, INCO environmental negotiator, St. John's Newfoundland, March, 2000.
[204] Personal communication, Chesley Anderson, Labrador Inuit Assosiation Mineral Advisor, St. John's Newfoundland, March, 2000.

ostensibly negotiate with the company, which is not the case with the Mole Lake community in Wisconsin. This difference will be highlighted in Part III when we focus on prescriptive measures for various stakeholders in the negotiation process.

6.2 Demography, geography and economic clout in all four cases

Let us also consider some quantitative measures which social scientists often use to explain social movements .

Demographic characteristics of a region are often used as a measure of political clout and hence may be linked to the emergence of resistance. Table 6.2 summarizes some of the demographic characteristics of the communities in question. This table shows us that the cases which have large population (and hence larger physical presence and voting presence in a democratic system) do not necessarily have the most pronounced resistance (The Navajo tribe, for example). It may be argued that lower population allows for resistance to be more easily consolidated in communities. However, in that case, the Hopis could arguably have resistance formation more quickly or for that matter the communities in Saskatchewan could also have formed resistance movements more easily. Cross comparison of the cases reveals that neither theory of resistance based on demographic criteria alone can explain the emergence of resistance.

Similarly if we look at the proximity of the mine sites to actual communities, one could hypothesize that the communities which are further removed from the actual mine site would have lesser resistance to the mining. While this may hold for the Saskatchewan case and the Crandon case, it does not hold for either the Voisey's bay case nor the Black Mesa cases . Part of this may be explained by the fact that Aboriginal communities have historically led itinerant lifestyles and while they are now living in

permanent communities, they still consider the greater land base as their territory. The point again is to highlight that geographic location alone cannot account for the emergence of resistance either.

Table 6.2: Demographic and geographic comparison between cases

Criteria / Case	Aboriginal population (within 100 mile radius of mine)	Proximity of nearest community to mine site (miles)	Other sources of private employment (presently)
U1: Black Mesa	20,000	5	Tourism, manufacturing
U2: Crandon	1,000	5	Casino, forestry, tourism
C1: Saskatchewan	5,000	60	Forestry,
C2: Voisey's Bay	2,000	50	Forestry, local airline

Economic considerations are often used as the "bottom line" explanation for much of social science research. While they clearly have an important role to play and may be the way in which concerns are articulated, the comparison across these cases reveals that monetary concerns offer only a partial explanation for the emergence of resistance. In the context of Aboriginal communities, particularly in the United States, the phenomenon of Native gaming, after the Indian Gaming Act of 1982 has certainly created economic alternatives for tribes. The Crandon case may be used by economic determinists to show that when a tribe has an alternative source of income (namely, casinos in this case) then they can "afford" to resist mining. However, a closer analysis of the Crandon case reveals that the Mole Lake gaming operation is not particularly successful. While the tribe is reluctant to release information about the percentage of its revenues that come from gaming or any exact numbers, (and FOIA cannot be used in the case of tribal accounting), the fact that one of its two casinos recently had to be shut down reveals that gaming at this reservation is not a very lucrative proposition.

Nevertheless, that does not prevent them from resisting the mine which could conceivably bring in average salary ranges of $55,000 per annum and additional compensatory payments for environmental and social impact.

Similarly in Canada, the Voisey's Bay project is located in an exceedingly remote area where the communities have numerous social problems and are facing severe economic hardships. However, they too are willing to resist the project despite the enormous economic benefits which it could bring to them. Even the LIA, which is more amenable to negotiate with Inco than the Innu express the non-material aspirations of the community as follows:

> "Today, as in the past, we live in a world where resource industries, governments and other interests groups work to have their beliefs become our rules, their values our way of life and our resources their wealth. But unlike the past, we may not be able to adopt what we find good and reject what is a threat because now it is our land that is being devoured."[205]

Conversely, the Navajo and the Hopi are currently engaged in mining activities that do indeed provide substantial royalties and constitute a major part of their budgets. The same is true of the Saskatchewan tribes. It is difficult to refute causality when the nested dependent variable (economic benefit) is in fact present in the case. However, the argument can be made that these communities also have other alternatives for developing other industries apart from mining. The most comprehensive study of Navajo attitudes towards mining and prospects for alternative development was carried out in the early eighties by Schoepfle et al. (1984) and reveals that mining has been accepted or chosen by various chapters (a Navajo local government unit) and individuals in spite of other economically viable alternatives.[206] It is also interesting to note that these tribes have

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[205] Labrador Inuit Association (1996). *Mineral Devlopment in Northern Labrador.* Nain NF: LIA.

[206] The importance of the ethnographic research model and its particular application to environmental planning will be further discussed in Part III.

decided not to engage in casino gambling, despite the possibilities for additional revenues from tribal gaming. Another point to keep in mind regarding the Hopi in particular, which defies the economic determinists is that since 1979 the tribe has maintained a policy of no additional mining exploration on its reservation despite its enormous dependence on mining revenues. While this has not translated into direct environmental resistance against the existing facilities, it does show that the tribe has certain non-monetary considerations in its decision-making process.

Economic factors no doubt play some role in the decision-making process for tribal leadership but they are again not a sufficient determinant of resistance.

6.3 Culture and conflict: cross-comparison of Black Mesa and Labrador cases

Now that we have dealt with the hypothesis from the natural and quantitative social sciences, let us turn our attention to the qualitative social sciences. All too often we are tempted to use culture as a sort of "residual" category for explaining away phenomena which cannot otherwise be explained. However, my aim in this section is to even test the cultural hypothesis and I will argue that in fact the forces which guide environmental resistance can transcend cultural differences.

The Black Mesa (U1) and Labrador (C2) cases provide us with an opportune set of circumstances to test this hypothesis. In both cases there are two culturally distinct groups which have historically been quite antagonistic towards each other and also have very different approaches to negotiation and conflict resolution.

In many ways the Innu are analogous to the Hopi and the Navajo are analogous to the Inuit given their history and lifestyles – despite the divergent climatic zones in

which each pair of communities is situated. The Inuit are the descendants of the Thule people who migrated to Labrador from the Canadian arctic 700 to 800 years ago. The Innu, formerly known as the Naskapi-Montagnais, are descended from Algonkian-speaking hunter-gatherers who were one of two Aboriginal peoples inhabiting Labrador at the time of European arrival. The Inuit also have separate government designation than the "Indians" and have their own inter-tribal assembly called the Inuit Tapirsat Council which is distinct from the Assembly of First Nations. The Inuit are thus newcomers to the ancestral lands of the Innu and their situation is similar to the Navajo who by most archaeological accounts arrived in the four corners region around 500 years ago – around the same time as the Inuit.

There has been some historic hostility between the two groups in both cases. As discussed in Chapter 5, the Navajo/ Hopi land dispute has been exacerbated (though not necessarily initiated) by this historic rivalry. In the case of the Innu and the Inuit, there are also contested claims to territory and a general feeling among the Innu, similar to the Hopi, that they the "original" occupants. There is even a location in Northern Labrador called "Massacre Island," which is supposed to have been the sight of a battle between the two groups. However, as the executive director of the Okalakatiget Communications Society[207], Fran Williams puts it: "just who massacred whom, I'm really not sure."[208]

The differences between the Navajo and Hopi should also not be understated.[209] Nevertheless, despite these differences in culture and historical antagonism the two groups have had a remarkably similar stance on mineral development – in the case of

[207] Formed in 1982, the OkalaKatiget Society (pronounced O-HALA-HA-TEH-GEET) provides a local, native communications service for approximately 4,500 people of the north coast of Labrador.
[208] Quoted in Lowe, 1998, p. 45.

Black Mesa both tribal governments have generally accepted Peabody's operation, and when misgivings have arisen, such as the recent legal challenge over royalties, they have also worked collectively. The same is true of the LIA and the Innu. Granted that their approaches are somewhat different and INCO has had an easier time talking to LIA than the Innu, they have still managed to work together in organizing protests and sharing a collective vision. An example of "collaboration despite difference" was highlighted in the 1997 protests against INCO, as recounted by the former Innu President Katie Rich.

> "I got a call from the LIA mineral person Chesley Anderson, asking 'Whose your protest coordinator?' A typical LIA question. I laughed and said we don't have one! We are just going to go out there and protest!"[210]

At another level the cultural hypothesis would also suggest that the tribes that are more traditional would likely show the greatest resistance to mining (that could change their lifestyle). While this may partially explain the Innu resistance, it does not explain the vehement resistance at the Mole Lake reservation in Wisconsin, which is probably the most "assimilated" of the tribes among the four case studies.[211]

Cultural differences among Native communities must certainly be recognized and it would be naïve to suggest homogeneity of Native traditions from lands as far apart as Labrador and Arizona. Nevertheless, there are some underlying similarities and common threads of association between all Native Americans and in fact all indigenous people for that matter.[212] Thus culture may be a contributing factor in determining how resistance is

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[209] For a systematic account of social organizational differences between the tribes see: http://www.mc.maricopa.edu/anthro/navajohopi/socialorganiz.html

[210] Paraphrased from a quote in Lowe, 1998

[211] This can be measured by the fact that very members of the tribal community speak their language. The close proximity of the reservation to non-native cities and the casino presence have also added to this.

[212] It is important to keep in mind the somewhat amorphous definition of "indigenous" or Aboriginal or "tribal in international law. There has generally been a consensus that such groupings should be self-defined by the communities, who view themselves as distinctly different from the dominant culture.

articulated but it is not a sufficient means of understanding the dynamics by which resistance may arise.

6.4 Placing the Shadow Hypotheses in Context

The case analyses in this chapter reveal that scientifically determined criteria are by no means a sufficient or even necessary condition for the emergence of resistance. This does not mean, however, that they are of no consequence. Rather, their contribution to resistance formation is indirect and is much more amorphous than is often presupposed by determinists. Scientific facts and objective statistics, can be rendered subjective by how they are selectively used by parties in a conflict. Jasanoff (1990) has also argued that science in this vein has an important role to play in current regulatory regimes which would otherwise be deadlocked:

> "Scientific advice may not be a panacea for regulatory conflict or a failsafe procedure for generating what technocrats would view as good science. It is, however, part of a necessary process of political accommodation among science, society, and the state, and it serves an invaluable function in a regulatory system that is otherwise singularly deficient in procedures for informal bargaining."

She also goes on to state that just as science has an important role to play in the policy making process, so too does the policy process have an important effect on science: "Negotiation commits scientists, no less than other actors, to moderating their views toward a societal mean."

Social construction hypotheses are, however, not just limited to the discrete world of science but have also been applied to the conception of human rights issues per se. Neil Stammers (1999) has argued that by using "the triadic relationship between human

rights, social movements and power as an organizing focus for analysis, we get a very different picture from those offered by the dominant discourses, not only in respect of the origins and development of human rights, but also their potentials and limits."

Thus we have established that while scientific indicators of impact may not adequately explain the emergence of resistance to mining, they can, however, be an important means by which other latent factors are articulated in a negotiation. The same may be said of culturally specific factors as well, which on their own cannot account for the emergence of resistance. Our aim in the subsequent chapters is to gain a better understanding of these "latent" factors that give rise to the emergence of environmental resistance and also the relative prevalence of the movement.

7. Tribal proclivities for resistance: *configuring capacity* and *power*

This dissertation aims to identify the preconditions of resistance among tribal communities and to determine the extent to which environmental criteria are factored into these preconditions. At this point it is important to consider the macroargument which will be further developed and refined in subsequent chapters.

7.1 Configuring capacity: beyond the development planning paradigm

To understand why resistance arises, or conversely, why it may not arise despite provocative circumstances, I am arguing for an approach that transcends scientific or economic determinism about environmental factors in understanding tribal resistance. Rather, my argument focuses on the effectuation of sovereignty as the prime frame of reference for understanding contemporary resistance movements among Native communities in North America. However, sovereignty is a somewhat amorphous term which needs further grounding:

> "Sovereignty is an especially odd phenomenon. Everyone seems to want it. Those who claim to know it all tell us that sovereignty is just what we have, although some may have more of it than others. It seems to have been around for as long as anyone can remember. Even so, for such an established fact of life, and for such a cherished ambition, there is a disconcerting uncertainty as to what it is exactly, or where it is to be found, or who has it and who does not, or where it came from in the first place, let alone what is happening to it now."[213]

Despite its elusive nature, sovereignty is still a very real concept for indigenous people and hence must be understood. Native groups in United States and Canada (at least), are at a critical juncture in history which is often not fully appreciated by planners and corporate negotiators who are involved in development ventures. Non-native

[213] Walker, 1996, pp. 16.

stakeholders tend to focus on micro-level impact concerns or simplistic economic arrangements in order to placate many tribal communities. However, I argue that, at present, tribal communities are evaluating development projects and processes with the purpose of nation-building in mind. They are focusing on long-term viability of their communities with the power to decide upon, or plan, projects on their own. Native people are acutely aware of their status of anachronistic dependency in a postcolonial world and are determined to change their fortunes by invoking the most cherished democratic ideal of self-determination. However, self-determination is perhaps just as ambiguous a concept as "sovereignty" or "inherent right" (as the Canadians like to state it), and such grand declarations have essential prerequisites for realization. Native communities are most concerned at present with developing a capacity to build institutions and power structures that further their goals of governance.

The use of the word "capacity" in this context is perhaps somewhat reminiscent of development discourse and the frequent exhortation from the World Bank and other agencies to "build" capacity. However, my argument is not so much about "building" capacity but rather about "configuring" capacity. The difference is critically important, since my cases are based in countries which are considered developed by all socioeconomic indicators. Building infrastructure and providing for "basic needs" of Native communities has been the preoccupation of government institutions in the US and Canada for much of this century. There are clearly abundant resources within both these countries to achieve these aims and to even delegate these resources to local tribal governments. However, the problem remains that in the long-term such communities are often not able to sustain the outcomes of well-intentioned development planning.

"Capacity-building" is a neutral term that implies some sort of resource transfer of either physical or social capital. However, this still begs the question of "what are we trying to build towards?" It may be instructive to try and understand how capacity can be *configured* instead. Table 7.1 shows the various dimensions of capacity-building approaches which Oxfam has identified in its activities around the world. In this chart, my argument about resistance can be quite simply articulated in the shaded cell.

Table 7.1: Configuring capacity: explaining resistance

(Shaded cell indicates the focus of my argument)

	Capacity-building as means	**Capacity building as process**	**Capacity building as ends**
Capacity building in indigenous civil society	Strengthen capacity of primary stakeholders to implement defined **activities**	Fostering **communication**: processes of debate, relationship building, conflict resolution and improved ability of society to deal with its differences	Strengthen capacity of primary stakeholders to participate in political and socioeconomic arena according to long-term **objectives** defined by them
Capacity-building in NGO	Strengthen organization to perform specified **activities** (one of which may be to build capacity among primary stakeholders)	Process of reflection, leadership, inspiration, adaptation and search for greater **coherence** between NGO mission, structure and activities	Strengthen NGO to survive and fulfil its **mission**, as defined by the organization

Source: Adapted from Eade, 1997.

In essence, the explanation of why resistance may arise in certain cases and not in others is predicated on whether the issues and the stakeholders who articulate them are able to strengthen the capacity of tribes to realize long-term objectives as defined by them. Currently tribes are trying to configure attempts to build their capacity towards governance, and this aim is an end in itself, rather than being a means to an end, as much

of the environment and development literature may presume. In fact, environmental criteria, are means to an end in this context, which is why there is often a disconnect between NGOs and indigenous communities during attempts at alliance-formation. Furthermore, from an operational perspective, NGOs are often constrained by their agenda or mission, which is why Oxfam has delineated separate categories for NGOs and civil society. Often these two terms (NGOs and civil society) are used interchangebly, but it is important to keep in mind that civil society refers to one of three "spheres" that constitute a democratic society, alongside the state and the market. Civil society is the sphere in which social movements become organized. NGOs may emanate from activities within civil society, but their focus tends to be much more narrow -- hence the term "special interests" may often be applied to them.

Within the literature on capacity-building, there is a tendency to focus on meso-level strategies such as strengthening of individual organizations and sectors, or micro-level functions such as human resource development. However, Native people in North America are more interested in macro-level capacity configuration towards nation-building and governance.[214] For this purpose, the locus of reform needs to be the negotiating process through which development contracts are undertaken. Such changes in processes beyond the material attributes of capacity building have interesting parallels in the political economy literature as well. For example Arturo Escobar, in his seminal work *Encountering Development,* presents a compelling argument for how technical training and classic capacity-building efforts failed to improve conditions for the trainees

[214] The European Union has tried to focus on such an approach to capacity-building or capacity "configuration" (as I call it). Much of the work in this regard is being spear-headed by the European Centre for Development Policy Management, an organization funded largely by the Dutch government. See for

or "capacitados" in Colombia. Escobar argues that the exiting power structures, in effect, prevented a realization of appropriate development trajectories.

Native people are appreciative of how the power to decide their own development trajectories is more important than any particular short-term agenda. Their resistance to particular projects is thus inextricably connected to the perception of power that a certain process may engender.

7.2 Perceptions of power and resistance among Native people

> "Indigenous people shall be people living in countries which have populations composed of different ethnic or racial groups who are descendents of the earliest populations which survive in the area, and *who do not, as a group, control the national government of the countries within which they live.*"[215]

The definition of indigenous peoples given above, which was arrived at by a consensus process involving hundreds of indigenous representatives from around the world, reveals a seminal feature of indigenous politics and its relation to the kinds of resistance movements described in this dissertation. Contemporary indigenous societies define themselves in terms of their lack of control and consequentially a struggle for certain basic rights, which may often take the form of environmental resistance movements. The formulation of any meaningful theory that would explain the dynamics of environmental resistance in Aboriginal communities must first come to grips with the self-actualization of power.

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example their paper *Building the Base for Cooperation: Institutional Capacities and Partnerships.* Issue Paper 3, Maastricht, The Netherlands, September, 2000.

[215] The World Council on Indigenous Peoples, 1977.

As we have seen throughout the case analysis thus far, the key demand which surfaced, amidst the environmental tenor of the debate, in all the negotiations and protests from the Aboriginal groups was predicated on a strong sense of self-determination – which would necessitate the power to make decisions without external involvement. Negotiating within the confines of the Westphalian nation-state model, the tribes have also repeatedly used terms such as "sovereignty", "control" and "self-determination." At the same time, they do not want to be divorced from the super-state structure – hence the dilemma and the resulting paradox of their movement. Even the Innu, who had at one point advocated non-Canadian citizenship have reconciled to and embraced Canadian citizenship. In the United States, there is a common aphorism among Native people that the distance between "self-determination" and "termination" is only a few letters.[216]

A reconciliation of theses seemingly paradoxical stances on power is offered by the psychologist Edward Deci (1980) in his classic work *The Psychology of Self-determination*. Deci advises readers to keep in mind the difference between "control" and "self-determination." Control is "outcome-oriented" and is often operationalized as "being the boss," whereas self-determination means "the freedom to decide for oneself." The distinction between the two terms may help us understand the demands of Aboriginal people vis-à-vis resource development ventures:

> "Being a boss or succeeding at a task (which is called being in control) will often leave people feeling self-determining, yet one need not be the boss, or succeed, in order to feel self-determining. Further, being in control does not guarantee self-determination, for people often feel trapped in positions of control.....One may at times prefer to be a passenger than to be the driver, even though the driver has more control."[217]

[216] Ambler, 1990
[217] Deci, 1980, p. 112

Another way to think about this imponderable is to consider the two different kinds of freedom which political philosophers often allude to and anthropologists have also used in approaching the study of culture and power. Westcott (1988) believes that there is a dialectical process occurring in all cultures between negative freedom (freedom from) and positive freedom (freedom to) which is spurred by five factors: 1) some external as well as internal strife, contention or dissatisfaction; 2) a perception of incompleteness and some effort to cope with it; 3) opportunities for risk taking; 4) anticipation of change; 5) aloneness within a matrix of relationships. All these factors are clearly present in resource development decisions confronting Native peoples.

In exploring theories of power to explain resistance, it is important to differentiate between subjectivist notions of power which imply the question "who governs"[218] and economic notions of power that ask the question of "how much" a party is able to accomplish. Goran Therborn differentiates the two as "power over" versus "power to." He goes on to differentiate further between utilitarian[219] and sociological approaches[220] to power within an economic framework.

> "Although they can be said to share a common approach to power, inspired by liberal economics, concentrating as they do on non-conflictual "power to", the two main variants of the economic approach also show differences that are by no means insignificant. In the sociological variant, power is generated and operates in social relationships, whereas in the utilitarian conception it is basically a non-relational asset."[221]

Kenneth Boulding (1989) also offers a useful framework to understand perceptions of power, when he describes the linkage between power and the economic

[218] The phrase "who governs" is borrowed from the title of Robert Dahl's celebrated book (1961).
[219] The key proponents of the utilitarian approach are Buchanan and Tullock (1962).
[220] Talcott Parsons (1957) is a key proponent of the sociological approach within an economic framework.

concept of possibility boundaries which divide the total set of future possibilities (or plans) into those which can be implemented and those which cannot. More importantly, Boulding develops the notion of "integrative power" which he defines as "an aspect of productive power that involves capacity to build organizations ... to bind people together and to develop legitimacy." At one level Native decisions to resist mining and other development projects appear to be about this aspect of power. The argument can be made that in order to reify sovereignty Native people are striving for integrative power in order to build their institutions. However, my case analyses reveal that in fact this manifestation of power is embedded in a more basic proclivity for "subjectivist" power -- where "who governs" is often more important than "what is achieved." Environmental issues are usually invoked if they are a means for developing a sense of legitimacy for achieving subjectivist power within the larger federalist state.

These contending views of power are also reflected in the international legal status of Aboriginal peoples. Describing this ambivalence towards indigenous peoples, as well as the environment, Nico Schrijver (1998), writes in *Sovereignty over Natural Resources:*

> " States are increasingly accountable, also at an international level, for the way they manage their natural wealth and resources, but for the time being indigenous peoples, humankind and the environment as such are *objects* rather than *subjects* of international law."[222]

Therefore indigenous people feel that they are often used as a means to an end which again reinforces the need for self-determination.

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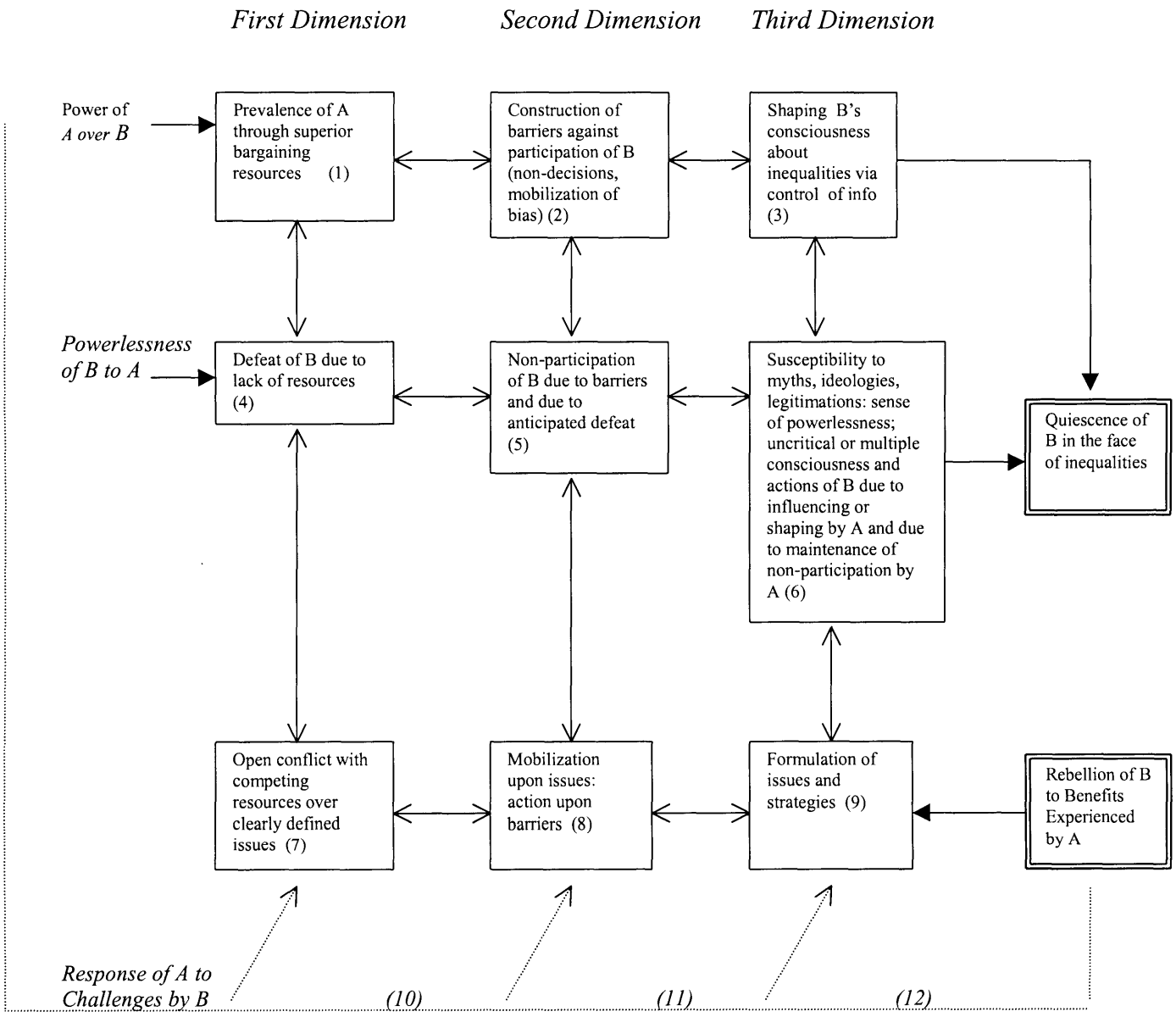
[221] Therborn, Goran (1982). "What Does the Ruling Class Do When it Rules? Some reflections on different approaches to the study of power in society." in Giddens and Held eds., 1982.
[222] Schrijver, 1997, p. 390.

There is thus a perception of power differentials at work which in turn leads to resistance. The preceding discussion of power was about what is desired. The next step is to understand what forms of power are available to Native people, and how the disconnect between desired power and available power can lead to resistance. Gaventa, in his detailed study of social movements in the Appalachian coal mining region has developed a compelling framework for looking at power and resistance which may be instructive in the next phase of my analysis. Unlike many other social scientists who have studied power and social resistance, Gaventa began with the premise of not why resistance occurs but rather why and when resistance may not occur in the face of gross inequalities and perceived injustices. The typology of power which he has developed building on Lukes (1975) are presented in Figure 7.1.

However, I do not fully concur with Gaventa's argument that the absence of resistance is caused by a third dimension of power which "shapes their consciousness," and leads to quiescence (Box 3 in Figure 7.1). My case analysis reveals a remarkable ability of communities be guided by their own imperatives. Indigenous communities who have repeatedly shown their resilience against assimilation. Rather, I am more inclined to believe that the third dimension of power, and hence quiescence, is more about strategy than powerlessness.

Figure 7.1: Various dimensions of power (After Gaventa, 1980)



Let us now turn to how the misperception of powerlessness can translate into behavior at the negotiating table or the emergence of resistance. In his landmark treatise *Domination and the Arts of Resistance,* James Scott reminds us that the adage which advises us to "speak truth" to power does not hold true for much of what is observed in social movements. All too often there are "hidden transcripts" of resistance that can be neglected in cursory analysis. Scott urges us to look at the *infrapolitics* which may exist in a society (Table 7.2). By this he means the "cultural and structural underpinning" of the more visible political action on which our attention has generally been focused:

> "The bond between domination and appropriation means that it is impossible to separate the ideas and symbolism of subordination from a process of material exploitation. In exactly the same fashion, it is impossible to separate veiled symbolic resistance to the ideas of domination from the practical struggles to thwart or mitigate exploitation. The hidden transcript is not just behind–the-scenes griping and grumbling, it is enacted in a host of down-to-earth, low profile stratagems designed to minimize appropriation."[223]

[223] Scott, 1990, p. 188.

Table 7.2: Scott's typology of Domination and Resistance

	Material Domination	Status Domination	Ideological Domination
Practices of Domination	Appropriation of grain, taxes, labor etc.	Humiliation, disprivilege, insults, assaults on dignity	Justification by ruling groups for subjugation
Forms of public declared resistant	Petitions, demonstrations, boycotts, strikes, land invasions and open revolts	Public assertion of worth by gesture, dress, speech and/or open desecration of status symbols of the dominant	Public counter-ideologies propagating equality, revolution, or negating the ruling ideology
Forms of disguised, low profile, undisclosed resistance, INFRAPOLITICS	Everyday forms of resistance, e.g. poaching, squatting, desertion, evasion, foot-dragging	Hidden transcripts of anger, aggression, and disguised discourses of dignity, eg. rituals of aggression, tales of revenge, use of carnival symbolism, gossip, rumor, creation of autonomous social space for assertion of dignity	Development of dissident subcultures, e.g. prevalence millennial religions

Following Scott's theory, Ramachandra Guha's in his seminal study of the Chipko[224] forest movement in India's Himalayan region urges us to distinguish "between the private face of Chipko, which is that of a quintessentially peasant movement, and its public profile as one of the most celebrated environmental movements in the world."[225] The revised edition of Guha's book (2000) also cites examples of various subsequent academic works published in the West which have romanticized the movement beyond its real intent and cautions intellectuals from selectively appropriating various dimensions of case studies such as the Chipko movement. Revisionist critics of the movement have argued that despite all its noble aspirations for ecological preservation alongside regional control, the movement in fact led to forest protection regulations that gave even less

[224] The word "Chipko" means "hugging" which refers to the practice of the adherents of embracing trees en-masse as a way of preventing industrial logging .
[225] Guha, 2000, p. 178

control over resource management to the local inhabitants.[226] However, given the limited resource base of the movement, such policy ramifications are more illustrative of the failure of government to appreciate and understand the movement's demands rather than a failure of the movement itself. Guha responds soulfully to such detractors: "The lack of sympathy is manifest, and unfortunate. This is a classic case of projection of the hopes of the middle class intellectual onto the people....the intellectual seeks total, systemic change, but the task of bringing this about is always left to others."

Like the admirers and detractors of the Chipko movement, the various constituencies that follow Native struggles against mining also have a propensity to swing either way, and the aim of this work is to provide an alternative means of evaluating options.

7.3 The Greening of Red Sovereignty: environmental allegiance and native identity

> "The tribes possess a tenacity – a tenacity stronger than all the technology and guile levied against it, a tenacity that will not, will not ever, let go. If that tenacity is the secret, then the secret inside it is the core value that creates the tenacity: a reverence – think that word through – for the land, for a particular place."[227]

This quotation from *Fire on the Plateau* (the memoirs of the eminent legal scholar Charles Wilkinson, 1999) reflects the strength of conviction which many scholars have about strong association which Native people have with the land. However, while such feelings are certainly true and important, there is also a particular tendency to go the next step and assume that this attachment to the land translates into an irrevocable attachment

[226] See for example Mitra, 1993.
[227] Charles Wilkinson, 1999, p. 20.

to environmentalism. Another example of this tendency is the frequent quotation from the Apache language that the word for "self" and "earth" is the same. However, a closer examination of the linguistic and locational ethos of the Apache reveals that this similitude does not have environmentalist implications. Basso (1996) in his detailed study of the Apache entitled *Wisdom Sits in Places* reveals that in fact the Apache sense of "place" has much more to do with moral attachments to particular "sites" rather than a more holistic view of sanctity for land as envisaged by environmentalists.

It is an amazing irony of history that the current rights to self-determination and sovereignty which are being won by indigenous people at the international level are themselves being made possible because human rights issues have trumped the sovereignty of conventional nation-states. In this section we will try to answer the related question of whether environmental issues have trumped the notions of sovereignty among Native people.

This is a particularly sensitive area for discussion among Native peoples as was recently manifest in the outcry against Sheppard Krech's book *The Ecological Indian: Myth and History* (1999). Krech is not denying that Natives have a particular respect for nature but rather that their actions were often not congruent with the Western notion of "conservation" a la Gifford Pinchot or Aldo Leopold and certainly not the kind of "preservation" ethic articulated by John Muir (the trinity of American environmentalism).

Much of Krech's argument was caricatured by both sides of the political spectrum. The negative reaction from Native peoples occurred because, much to the dismay of Professor Krech, the book was appropriated by right wing activists who thought it was a vindication of their beliefs that Indians didn't deserve "special

treatment."[228] Hence many tribes felt that it may be a threat to their assertion of sovereignty in much the same way as the issue of "who were the first Americans" issue has been perceived vis-à-vis the Kennewick man controversy (Chapter 4).

Some of the disconnect between Native and non-native allegiance to the environment may be also be a result a fundamental misunderstanding about contending views about "sovereignty" and "subsistence." Chamberlain (1997) draws our attention to this gap between Aboriginal and non-Aboriginal understandings of the terms:

> "Sovereignty, for example, is understood on the one hand as underwriting political and constitutional power. In the case of the Americas, this power was historically realized by both European and Aboriginal nations in the circumstances of contact, including contact before Columbus, was then qualified after European settlement by peace treaties and land cession agreements. On the other hand, sovereignty is affirmed as the inviolable expression of a people's collective identity transcending particulars of time and place and the irrelevant polemic of treaties. It does not need anyone else's validation, Aboriginal or non-Aboriginal; and it is inextinguishable, like an individual's conscience."[229]

Therefore in the words of one tribal leader from the Lac Courte Oreilles Band of Chippewas from Wisconsin (before a congressional hearing in 1996): "We define and accept sovereignty as 'Spiritual Sovereignty.' We do not accept the assertion that sovereignty had its origins in the political ideologies of medieval European nations. We believe and accept that we practiced spiritual sovereignty long before the arrival of Europeans on this American continent.....sovereignty cannot be given or bestowed from one nation to another."[230]

The various uses of the Maori words *kawanatanga* [which roughly means governance] and *rangatiratanga* [roughly again, chieftainship] in the Waitangi Treaty in

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[228] Personal communication, Professor Sheppard Krech, Brown University, February, 2000.
[229] Chamberlain's essay in Asch ed., 1997.

New Zealand to deal with questions of sovereignty highlights this from another perspective.[231] *Kawanatanga* in the treaty as well as in modern Maori reconciliation documents refers to the allowance of governance at the state level given to the settler government of New Zealand, whereas *rangatiratanga* refers to self-determination and is derived from the word for "chieftain" – hence having ultimate authority.[232] The relationship is thus different from one between a state and federal government – since in this case it's the Native populace which believes in its ultimate authority – even if it does not have control.

The same dilemma in an environmental context is even more obvious with the word subsistence. It is alternatively a diminishing term, the minimum necessary for survival; and a term used routinely by Aboriginal peoples to refer to all that is essential to their well-being, including their attachment (spiritual as well as Material) to their homeland. This latter conception is not properly acknowledged, indeed often is not even recognized, by an instrumental understanding of the term, which is common in many non-Aboriginal societies, where relentlessly utilitarian habits often inhibit a better appreciation of what is meant when traditional Aboriginal people talk about subsistence that is, about "shaping their lives according to patterns of sufficiency rather than of surplus."[233] For example, subsistence has been at the core of Alaska's Native advocacy efforts since in 1989, the Alaska Supreme Court declared that a "subsistence priority" for Natives was "unconstitutional."[234]

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[230] Committee on Indian Affairs of the United States Senate. *Oversight Hearing on Economic Development.* Held in St. Paul MN: April 9, 1998.
[231] Quoted in Asch ed., 1997.
[232] For a comprehensive discussion of Maori self-determination see Durie, 1998.
[233] Ibid, p. 12.
[234] *Commentary on The Proposal of the Governor's Task Force on Subsistence.* Alaska State Government, January, 1998.

Given this dialectic between contested views of sovereignty and subsistence, let us now try and see how environmental concerns figure into the debate. In order to do so we must also contend with the divergent notions of cultural determinism versus environmental determinism – this is reminiscent of our discussion of social construction of science from Chapter 6. The distinction between these two contending views of the world is critically important in understanding the emergence of resistance and also alliances between Natives and environmentalists. If we assume, for analytical purposes, that environments shape cultures, hence the possibility of asking how cultures shape environments is effectively precluded. Many of the arguments about the preservation of ecosystems to preserve indigenous cultures and the use of the term "ecocide" emanate from this belief. However, environmental determinism in its extreme form is incompatible with the environmentalist concern to protect the environment through human effort. The assumption that human activities are somehow caused by environmental factors, that the environment is the prime mover in human affairs, implies that human beings are helpless in the face of natural forces, in much the same way that some religious doctrines imply that we are helpless in the face of supernatural forces. As Kay Milton (1994) points out that such a view "induces a rationality of fatalism, in which planning is redundant and in which outcomes, good or bad, are simply to be enjoyed or endured but never achieved." Moreover in the context of indigenous peoples, Milton goes on to argue that:

> Environmentalists fail, as anthropologists used to, to distinguish between culture and the things people do. The actual impacts of non-industrial societies on their environments depend on how they use those environments to meet their need..... Without distinguishing between what people think, feel and know about the world (culture) and the things they do, it is easy to make the mistake of assuming that societies which have

> little impact on their environment must necessarily have environmentally benign cultures."[235]

On the other hand the cultural determinist model is incompatible with environmental activism, which depends on the recognition of an independent reality that can be modified by human actions. Activism depends on the assumption that the environment exists independently of our thoughts and therefore presents a real threat to the physical state of the Earth and its inhabitants. Thus, neither the view that environments determine cultures nor the view that cultures determine environments, offers a useful means of advocating the environmentalist/native alliances at this level. On the other hand, the recognition that environmental knowledge varies among cultures, and the description and analysis of such diversity are important resources in the quest for environmental protection and improvement.

William Fisher is among a small group of anthropologists to bring forth a more dynamic approach to understanding human interactions with the environment and to give further "scientific" credibility to his work he uses the ideas of evolutionary biologists Levins and Lewontin (1985) concerning the relationship between organisms and the environment. Their work attempts to explain why the environment cannot be treated as a preexistent 'thing' standing on its own:

> To describe an environment as "rich," 'lush," "forbidding," or, perhaps even "'complex'' involves the fallacy that an environment is simply "there," confronting beings that attempt to survive within it. This imperative to explicitly link description of the environment with specific activities of organisms is associated with a view of evolution and ecology that reintegrates the organism and environment as *processes* actively creating one another. [236]

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[235] Milton, 1996, p. 56.
[236] Fisher, 1996, p. 21.

The key word here is "processes." Environmental interactions for Native people as revealed in the case analyses are all about processes by which communities can be sustained. At present "sustenance" is synonymous with sovereignty, though at some points in Native history sustenance was synonymous with conservation or perhaps even preservation. Native people like all societies have undoubtedly changed through their interactions with the settlers in a way that is not assimilative but truly adaptive in its form. In his more recent works Fisher continues his analysis of the Xikrin Kayapó of Brazil and their adaptive resistance to resource ventures and sums up his findings as follows:

> The indigenous forms that develop do not conform to an inexorable logic of either the market or tradition but are actively created through transforming techniques and organizational forms valued by Indians themselves. Subsistence and organization are never imposed from without in any mechanical sense; as indigenous creations, they have their own dynamic tendencies and contradictions which must be analyzed.[237]

Thus Native people who are willing to have nuclear waste on their reservations, (which as we discussed in Chapter 1 can be articulated as an environmental justice question), should not necessarily be considered a sign of desperation on the part of the tribe or a "sovereignty of convenience,"[238] on the part of the federal government. Rather it should be seen as a self-conscious (perhaps misplaced) attempt to invigorate self-determination, absent other avenues to do so.

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[237] Fisher, 2000, (forthcoming book to be published by Smithsonian Institution Press).

[238] This term was used by Charles Johnson in his essay "A Sovereignty of Convenience: Native American Sovereignty and the United States Plan for Radioactive Waste on Indian Lands." *St. John's Journal of Legal Commentary*, Spring, 1994.

8. The ENGO Hypothesis: External Influence and Resistance Outcomes

In this chapter we will examine yet another factor which can be a component in resistance formation, but more importantly can be a significant determinant of the *prevalence* of the resistance movement in question. Non-governmental organizations or "civil society" are becoming an increasingly important area of social inquiry. The basic theoretical underpinnings of the study of civil society as a stakeholder in such conflicts were discussed in Chapter 2. Our aim in this chapter is to test those insights and theories and insights in the context of the study cases. It must be borne in mind that I am focusing on non-native environmental ENGOs as agents of change in this chapter. Indigenous Rights NGOs such as Cultural Survival or Survival International do not fall in this category, though we will look at some NGOS in the Black Mesa and Crandon cases that have attempted to blend native and environmental causes. Their success at doing so will be evaluated. Again the task at hand is to try and understand the native/environmental relationship and how that can effect the emergence and prevalence of resistance.

There are thus certain peculiarities about environmental NGOs that must be borne in mind as well. In their award-winning study of advocacy networks around the world (movements *inter alia* to combat slavery, violence against women and environmental protection), Margaret Keck and Kathryn Sikkink describe these peculiarities as follows:

> Environmentalism is less a set of universally agreed upon principles than it is a frame within which the relations among a variety of claims about resource use, property, rights, and power may be reconfigured..... Since environmentalists are often talking about public goods such as clean water or air rather than recognized "rights," they have a harder time giving their campaigns a human face -- and must choose whether to do so. Environmental issues are treated in a wide range of institutional arenas. How activists frame an environmental conflict may determine its

institutional location as well as the receptivity of target audiences.[239]

The most salient aspect of Keck and Sikkink's observation is that most environmental groups are all too often challenged by policy-makers for not having a "human face" to their activism, and for this reason they may reconfigure their debate around health impacts, and in our cases towards indigenous rights. They may indeed be genuinely concerned about indigenous rights as well, but whether that cause is the primary or secondary motivation for activism can be critically important in how conflicts emerge and how they may be resolved.

At another level, environmental NGOs that can provide technical knowledge to communities have received accolades from some scholars as a means of catalyzing consensus rather than promoting resistance. Haas posits that since environmental issues are often predicated on scientific knowledge, they can lead to the emergence of "epistemic communities", who are able to dissociate themselves from political bickering and catalyze cooperation. He argues that it was the emergence of such communities of knowledge that led to the Mediterranean Action Plan and also to other agreements such as the Montreal Protocol on Ozone depletion.

Haas has been criticized for inferring too much from his observations about the plan. Zartman (1992) suggests that "the much-vaunted epistemic community is a result rather than a motor of environmental negotiations." Susskind (1994) has argued that Haas's model breaks down when actual policy responses to environmental harms are in fact being negotiated. He goes on to state that this hypothesis has a potential for relegating scientists to the role of another interest group, and that any potential for

cooperation through the supremacy of science is likely to alienate developing countries who are all too often complaining about disparities in scientific and technological expertise.

While Haas makes an important point about the role of knowledge as a source of objective "empowerment", his "epistemic communities" are by no means well-represented in most conflicts involving minerals. As I have argued elsewhere (Ali, 2000), the evidence regarding ENGOs as a source of knowledge-based empowerment is relatively scant with regard to indigenous community conflicts against mining.

These cases also challenge the common perception that international recognition for a cause is important for exerting environmental influence – a view voiced, among others, by Elise Boulding (1993) in her analysis of ENGOs and conflict resolution: "Precisely because ENGOs are transnational, they provide important inputs to national decision-makers in each country where a given ENGO has a national branch." Indeed larger transnational groups such Greenpeace tried to get involved in the resistance efforts in Saskatchewan and at Black Mesa but were marginalized and did not further pursue these causes.

Nevertheless, NGOs come in all shapes and sizes. In order to further our understanding of this phenomenon the efficacy of civil society must be tested at a case level. Only then can we gain an appreciation for the processes by which their involvement in indigenous causes can be constructive or destructive for both stakeholders. In words of Tom Goldtooth, of the Indigenous Environmental Network ,

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[239] Keck and Sikkink, 1998, p. 121.

"we have come a long way in bridging ties with green groups but we still have along way to go."[240]

8.1 Black Mesa Resistance: Redefining Success or Failure?

February 3, 1998 was a momentous day for the small group of families living on Hopi Partitioned Land (HPL) near the Black Mesa / Kayenta coal mine complex. The area, which is known as "Big Mountain" received a visit from the United Nations Special Rapporteur on Religious Intolerance, Abdelfattah Amor. This visit was the culmination of efforts by numerous activists – native and non-Native. However, the role of the non-Native activists in this regard was soon revealed to the visiting Tunisian diplomat when he was informed upon arrival that he was technically trespassing by visiting the HPL without asking for permission, and infringing on a Hopi religious ceremonial month. As a Hopi writer later observed, a non-Native activist named "Marsha Monestersky had, by co-chairing the UN NGO Human Rights Caucus while in New York, seemingly managed to convince, with endless testimony from Navajo resisters, and a wealth of other 'green' testimonials, that the poor Navajo of Big Mountain were being denied their very right to practice their religion by jack-booted Hopi Rangers in thrall to the U.S. Government and the 'nefarious' Peabody Coal Company."[241]

It is thus not surprising that when Mr. Amor eventually wrote his report and presented it to the UN Commission on Human rights regarding his visit to Black mesa, there was not even a mention of the Navajo or Hopi tribes but rather a vague reference which reads as follows: "On the subject of Black Mesa, the Special Rapporteur calls for

[240] Tom Goldtooth, presentation at the Protecting Mother earth conference in Brownsville Texas, June 15, 2000.

the observance of international law on freedom of religion and its manifestations." The involvement of external representatives in articulating the conflict at Black Mesa ranged from Greenpeace to the Methodist Church[242] to a professor at Caltech. Even two European parliamentary officials visited the location and wrote letters of support for the small group of Navajo families that were ostensibly "fighting against" relocation on grounds of coal mining.

Nevertheless the external support being accorded to these individuals led to serious divisions within the community. The situation was particularly sensitive because the conflict involved two tribes and then even within the tribes there was potential for tremendous polarization between the traditionalists and the modernists. It appears that the external non-Native activists in this case , particularly Ms. Monestersky, portrayed the Hopi authorities and the government as villains who were out to get the Navajo settlers. They even tried to attack the archaeologically established evidence regarding the Hopi historical association with the land.[243] Activist literature emanating from the region used the inflammatory rhetoric of division by comparing the Hopi tribes activities to the Japanese internment camp program. In another instance in May 1999, an email was sent to an Arizona judge which accused Hopi authorities and the BIA of shooting down the horse of a Dineh elder. Two days later the accuser admitted that a Navajo neighbor had accidentally shot down the horse – but that the behavior of the Hopi and the BIA was still "genocidal."[244]

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[241] See the following web site in this regard: "Who is Marsha Monestersky": http://hartwilliams.com/no1u1.htm

[242] http://www.umc-gbcs.org/dineh-am.htm

[243] Personal communication via telephone, Marsha Monestersky, via telephone, November, 1999.

[244] *Tutuveni,* Letter to the editor from the Lenora Lewis, Hopi Land Team, June 22, 1999.

While the international attention galvanized by such activists may have given some degree of satisfaction and financial support to the community organizations, it has not prevailed as a resistance movement because the community does not follow the kind of linear decision-making model that is offered by many environmental and labor activists. Thus even the organization for which Ms. Monestersky has worked as a consultant, "The Sovereign Dineh Alliance," asked her to disassociate herself from the Big Mountain cause in 1996:

> Go now, beyond the Four Sacred Mountains of our traditional aboriginal homeland as none of the true resisters on Hopi Partitioned Land will hear from you any longer. The bad feelings, division, and confusion you bring is unacceptable and is not our way. I will continue to pray for you.
> Thank you once again for your assistance that benefited The People...I will also continue to carry on with my labors as I always have, with trusted others who share my vision for the Dine' of Big Mountain and Black Mesa. In prayer, song, and ceremony, we remain strong as traditional Dine', unified in heart and spirit.[245]

At the same time the Hopi government has issued exclusion orders for certain activists. These orders are an unusual step taken by the Hopi authorities to bar certain individuals from entering Hopi land. Perhaps the most disturbing aspect of the activists stance has been the splintering which has occurred within Hopi society as a result of the way in which some of the activists have approached this issue. There are a few Hopi individuals who have allied with the environmental activists and they are portrayed as spokespeople for the entire tribe by much of the ENGO community which has exacerbated the situation. Local community organizations at the village level such as the

[245] Open letter from Louise Benally, Executive Director of the Sovereign Dineh Nation and the Dineh Alliance to Marsha Monestersky. 1996

The Hotevilla Wiwimkyam Assembly have issued press releases to this effect.[246] Such splintering tactics and demonizing of the tribal government by non-Natives has in fact brought some of the Hopi who previously had second thoughts about mining to the defense of their government.

During the exclusion hearing for Marsha Monestersky, some Navajo families who are being relocated also testified against her. Betty Tso, a Navajo Nation employee who works with families, helping them negotiate their home site leases and grazing rites on the HPL said some Navajo families requested she urge the Hopi Tribe to oust Monestersky from the Hopi Reservation. At the hearing, Tso represented the families of Diné Dayikah Ada Yalti, an organization of 300 Navajo families, who have signed accommodation agreements that allow them to remain on the HPL. She told the hearing that: "The families had real concerns and recommended the exclusion of Marsha Monestersky and Arlene Hamilton. Non-Indian people are coming in, trying to provide assistance. With all good intentions, they are trying to help the families. This is not always helpful. ... If something happens, the supporters go away, creating hardship for the families.....The negotiations are complicated, and it is frustrating when some outsider comes along, stirs the pot and disrupts the negotiations. Something is lost."[247]

At this juncture, it is important to note that the activists (or 'human rights defenders," as they prefer to be called) have indeed played a constructive role to a limited degree. For example, Arlene Hamilton has facilitated the a local weaving enterprise for Navajo women and has helped ins securing grants to promote small business enterprises

[246] In a Press Release on Feberuary 4 1997, the assembly identified the Hopi individuals who had been working with the activists and had benefited financially from such activities.
[247] Quoted in a story by Nancy Watson, Dine Bureau, *The Gallup Independent,* Gallup NM, April 1-2, 2000, (weekend edition).

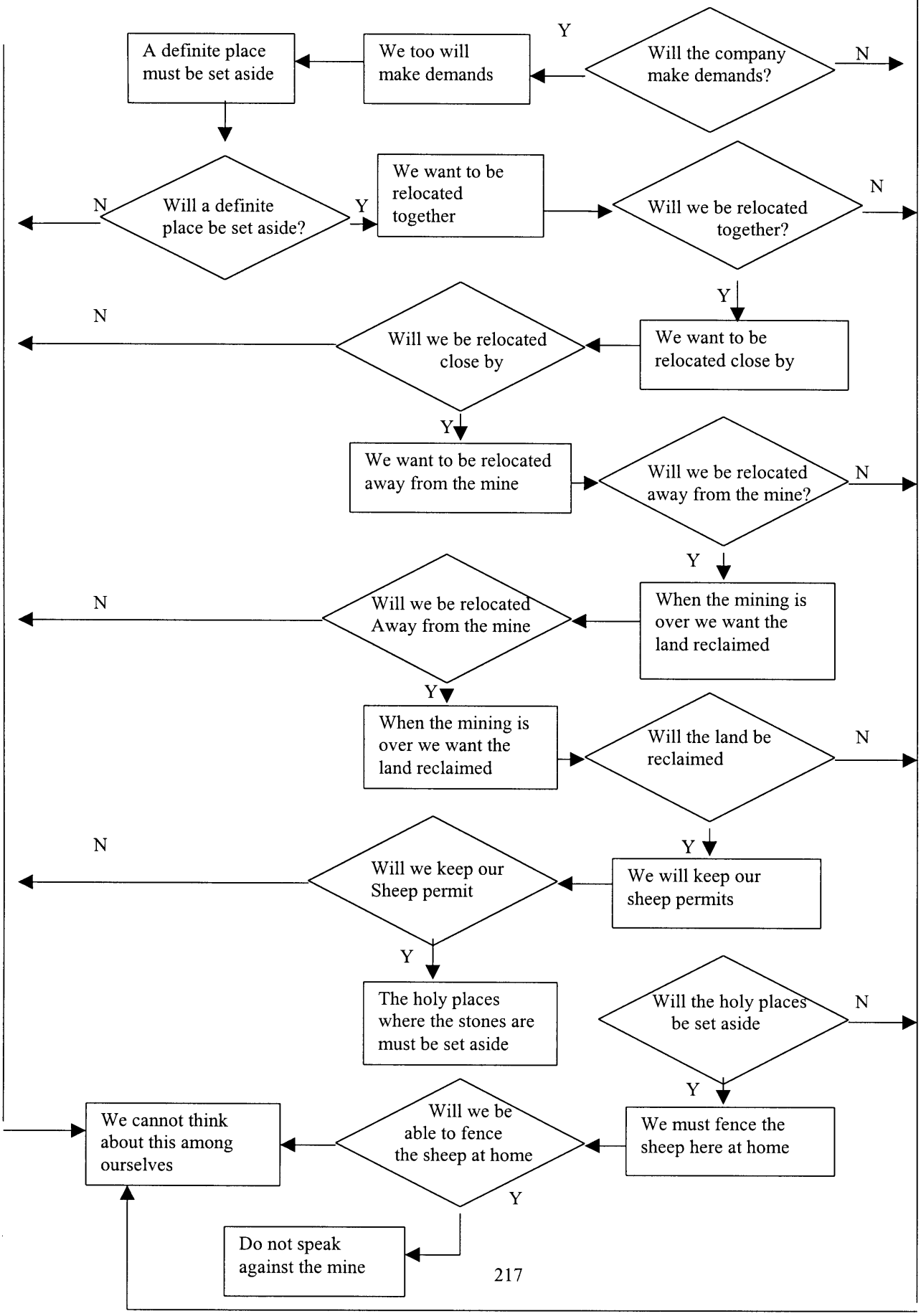
for the Navajo elders. Although some of the families, including the prominent Dineh elder Roberta Blackgoat have supported the activists, particularly Arelene Hamilton, their popularity has waned. Part of the problem is that the activists are not cognizant of the complex pattern of decision-making which is involved in alliance formation among the Navajo communities in this area. The activists adopt a rather simplistic approach to environmental and social resistance.

The ethnographic decision models for Navajo's in the HPL area developed by Schoepfle and colleagues for the EPA in 1984 are instructive in better understanding the decision-making process for the Dineh resistance movement around Big Mountain (Figure 8.1). The researchers used extensive interviews and survey data and methods from cognitive anthropology to develop this model which was also profiled by William Millsap in a volume on *Applied Social Science in Environmental Planning*.[248]

The model shows the non-linearity of the decision-making process that is involved in terms of the community's interaction with the mining company. It is not just a matter of environmental impact or land relocation issues that factor into resistance in such a circumstance.

[248] See Millsap, 1984.

Figure 8.1: Ethnographic Decision Model for Navajos and Energy Development (Schoepfle, 1984)



Thus the Black Mesa case, which at the surface may appear to be a hallmark of environmental resistance at the international level, is actually a story of divisive resistance brokerage within Aboriginal communities that has not had any particular bearing on the mining nor on the land dispute. The linkage between mining and land rights has in effect been quite contentious (this will be further discussed in chapter 8).

8.2 Canadian NGOs and the Saskatchewan Mines: A Matter of Legitimacy

Institutionalized environmental activism on nuclear issues on a global level can be traced back to Canada with the inception of Greenpeace in 1971. Greenpeace was started by a group of Canadian anti-nuclear activists in Vancouver who opposed nuclear proliferation. As Canada became an ever-increasing contributor to the nuclear industry, the pitch of opposition increased but the voice was also diluted by numerous other environmental problems, such as population control, water quality, ozone depletion and global warming. However, as Nova-Scotia based environmentalist David Orton reminds us the native/environmental debate is still somewhat tabooed in Canada:

> The relationship with Aboriginal peoples is an extremely sensitive topic within the environmental movement (more sensitive even than discussions of ecofeminism/gender relations or the relations between workers/the working class and environmentalists); among greens; and in the Canadian Left....Realistic public discussion is usually avoided by environmentalists and greens. Avoidance of contentious Native issues is considered good manners.[249]

In Saskatchewan the most vocal opposition to uranium mining came from Church groups and a few regional environmental organizations. The Inter-Church Uranium Committee and The Saskatchewan Environment Society were the groups that most

actively participated in protests rallies and tried to galvanize support from Northern communities. Greenpeace and other large multinational organizations were more preoccupied with environmental problems such as logging and biodiversity conservation. There were also several individual activists from abroad who had visited the region and developed particular associations with certain groups.

In the early eighties Eldorado Nuclear (now part of Cameco Corporation) entered into an agreement with the provincial government of Saskatchewan to begin mining activities in the vicinity of Wollaston Lake. The Native communities of the region felt that their subsistence lifestyles of hunting and fishing would be threatened by water pollution from the mining development. Their opposition was partly due to the past experience of affected communities in Uranium City. They were also galvanized to action by an activist named Miles Goldstick who had several connections with environmental groups in Scandinavia. The result was a considerable opposition movement which was even supported by some notable chiefs, such as Chief Hector Kkhailther:

> I tried my best to get the government and the mining companies to discuss how it will affect our people for years to come. I tried my best to have a meeting with the people involved in uranium mining, and he people looking after it, running it, the ministers. It seems like those people are only looking out for the money....We have to keep on bugging them until they close the mine. that's what we're after.[250]

A formal protest and blockade was organized in June 1985, involving 150 community members. The protesters blocked the road and received national press

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[249] Orton, David (1995). "Rethinking Environment-First Nations Relationships." Web acces: http://conbio.rice.edu/nae/docs/rethinking.html#top

[250] Chief Hector Kkailther. Statement at the Umperville River Campground before the mining protest on June 14, 1985. Quoted in Goldstick, 1987.

coverage including a brief parliamentary debate which was spurred by a Member of Parliament from Manitoba:

> Members will be aware, I hope, that at this very moment, and since Friday, there has been a blockade going on at Wollaston Lake, in northern Saskatchewan having to do with the concern of people there about the extent of uranium mining going on there and its potential expansion. I think it is high time that Canada got out of the uranium mining business.[251]

Within four days of the blockade, Eldorado met with a number of Dene Chiefs and were successful in garnering their support. The Chiefs were quick to point out that the alliance between the environmentalists and the Aboriginal communities had been opportunistic because of the opposition of the Green groups to traditional hunting and trapping:

> These same protesters up there right now are the same ones involved as well in trying to stop the leg hold trapping.....trying to stop the traditional livelihood of the people that the Chiefs represent. So we cannot sit by and let people run over us like that, whether they are pro-developers or anti-developers. We are going to make a choice about how things are going to move ahead.[252]

Despite all the preparatory work and the media coverage, the blockade was generally unsuccessful in changing policy. Even some of the environmentalists disapproved of the way in which this movement had been organized. Soon thereafter Miles Goldstick published a rather dramatic account of the blockade as a book *Wollaston: People Resisting Genocide,* and subsequently moved to Sweden. According to Jamie Kneen, an activist based in Ottawa who had worked with the Hatchett Lake

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[251] Statement of Bill Blaikie, Member of Parliament (Winnipeg-Birds Hill), *Hansard House of Commons Debates* Volume 128, No. 126, 1st session, 33rd Parliament, June 17,1985.
[252] Press Conference Statement by Sol Sanderson of the Federation of Saskatchewan Indian Nations, Saskatoon, June 20, 1985.

Band in Saskatchewan and the Inuit Taparisat Coalition, the blockade was "premature and extremely damaging to the community."[253]

The environmental review process and the government review of uranium mining ventures in general picked up pace during the early nineties. The Hatchett Lake Band, which had shown the most organized opposition to the mining also hired professional economic consultants at the Economic Resources Group in Cambridge Massachusetts, to help with a cost-benefit analysis of the proposed mining projects. They compiled a report and submitted certain objections to the C/B analysis in the environmental impact statement for the McArthur River project. However, the company and the government largely dismissed these findings in a detailed report and Cameco in particular felt that the consultants had little knowledge of the cultural dynamics and economic predicament of the region and had charged exorbitant fees to an impoverished Indian band for unnecessary services.[254] The company continued to directly communicate with the band and to work through some of their concerns.

Meanwhile, the environmentalists in Southern Saskatchewan, who had been the most vociferous opponents to the mining decided to withdraw from the formal environmental assessment process. The reasons they gave were as follows:

> In September 1996 we reluctantly ended our involvement in the environmental assessment review process for the McArthur River, Cigar Lake and Midwest uranium mine projects....The good faith being expressed by the public was not being reciprocated by industry, government or its many-layered bureaucracy. The process had simply degenerated into a tool of political legitimation. We had no choice but to

[253] Kneen, Jamie, personal communication via email, February 24, 1998.
[254] Meriwald, Rita, Vice President for Human Resources at Cameco Corporation, personal communication, Saskatoon, July 19, 1998.

> uphold our own good faith and belief in public processes by withdrawing from further involvement in these particular reviews.[255]

At this point, there was a distinct lack of engagement between the environmental groups based in the Southern reaches of Saskatchewan and the Aboriginal groups in the North.[256] Indeed very few of the environmental activists had actually visited the mine sites and were actively supported by only a few Aboriginal women living in urban areas, most notably Prescilla Settee at the University of Saskatchewan. As the director of the indigenous studies program at the university she held certain academic legitimacy and had voiced her opposition to mining at conferences around Canada and Europe. However, because of her distance from the actual Native settlements, she did not hold the same clout and authority among the decision-makers in the Native bands. Moreover, the alternatives to mining which were being suggested to the communities were not very lucrative. Ecotourism was the most promising of these alternatives which the environmental groups were suggesting. However, there were very few people who believed that there was a market for perennial tourist activities in the Province. According to Cameco's Jamie McIntyre:

> It's really unfortunate that the environmental groups were not involved in a positive way with the Aboriginal groups. They gave them alternatives but the Aboriginal people told them: If you want to go and pick berries, you go and pick berries we will go and mine. The alternatives, they have are to stay in the community on welfare or move. We have provided them a third alternative.[257]

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[255] Memorandum from Inter-Church Uranium Committee, Saskatoon SK, Canada to the Premier of Saskatchewan and the Atomic Energy Control Board, April 14, 1997.

[256] Unlike the conventional usage of North and South in environmental discourse, "the North " in this case was used synonymously with underdevelopment and poverty while "the South" was synonymous with development and affluence.

[257] Jamie McIntyre, personal communication, Saskatoon, Canada, March, 1998.

The rift between environmental movement and the indigenous rights movement and indeed the government was further widened by the debate on hunting and trapping which continued to gain momentum:

> I think it's time that we as Aboriginal people unite in a place like Northern Saskatchewan where we are really being exploited by these governments. You know we have to force these governments to come to the table to negotiate our land rights.[258]

Cameco and other mining companies kept a safe distance from such debates, which usually worked to their advantage.

8.3 Some Constructive Green/Red Alliances

While the previous two sections challenge the conventional confidence in ENGO–Native alliances that tend to be depicted by the popular media, it is important to appreciate that there are indeed certain constructive alliances which have been forged by certain environmentalists and indigenous peoples. By "constructive" I mean that their collective approach has been met with widespread support and achieved most of the stated objectives for each "partner" thus far. In this section let us try and explore some of the ways by which these alliances have been successful

The Crandon case (U2) is illustrative of such an alliance. This case is particularly interesting since there had historically been considerable antagonism between the Indians, the environmentalists and the sports fishermen of the region over the issue of spear-fishing, which has been a traditional Chippewa means of harvesting fish .

[258] Gerald Morin, President of The Metis Nation. Interview with BBS-TV Saskatchewan: *Hunters and trappers say they are fed up with mining in the North.* March 2, 1997.

When Wisconsin re-instituted spear-fishing in 1985, participation by tribal fishers was somewhat tentative. Public opinion opposing the spear fishery appeared to vastly outweigh public support for treaty rights. Many fishermen preferred not to exercise their rights rather than suffer the verbal abuse and threats of physical violence that they encountered at boat landings. Slogans such as "save a fish spear an Indian" were rife. However during that first season, 2761 walleye were taken in the spear fishery. The fishery grew steadily for the next three years with harvests of 6940, 21321, and 25974 walleye. During 1989, a sudden recurrence of cold weather at the end of the spawning season curtailed fishing activity and only 16053 walleye were taken. In contrast during 1988, all fisheries combined took 698,277 walleye from the waters of the ceded territories. Angling accounted for 672,303 of these fish, 96.3% of the catch.[259] Nevertheless, the conflict continued and became increasingly racist in its rhetoric and during this time, a group of non-Native and Native activists around Madison began a campaign to counter this tide by forming the "Midwest Treaty Network" (MTN) on July 4, 1989.

As defined by its cofounder, cartographer Zoltan Grossman, "The Midwest Treaty Network is an alliance of Indian and non-Indian community groups that support the sovereign rights of Native American nations. While founded in the context of the Chippewa (Ojibwe) treaty struggle, it is concerned generally with defending and strengthening Native cultures and nationhood, protecting Mother Earth, and fighting racism and other forms of domination throughout our region. The Network has taken a

[259] George Spangler (1990). To spear or not to spear, that is not the question. *Minnesota-Out-of-Doors.* Vol. 36, No. 4. Statistics in the article compiled from Defendant's Exhibit Nos. 116, 131, 132, 149 and 151, *Lac Courte Oreille Band of Lake Superior Chippewa Indians, et al. vs. State of Wisconsin, et al.*, together with information from the Great Lakes Indian Fish and Wildlife Commission.

stand against economic and political pressure on indigenous nations to give up their rights."[260]

In 1991, Federal Judge Barbara Crabb issued a permanent injunction against protestors interfering "physically, whether on the lake or at boat landings," with the Chippewa spear-fishing. Subsequently 13 members of "Stop Treaty Abuse-Wisconsin" an anti-treaty group were forced to pay several thousand dollars in damages to the Lac du Flambeau Chippewa and the Wa-Swa-Gon Treaty Association in a case settlement arranged through the American Civil Liberties Union.[261] Subsequently the fisheries issue has also received some surprising support from the US Supreme Court. In May, 1999, by a 5-4 vote, the court said that neither a 1850 presidential order nor Minnesota's statehood in 1858 stripped the Chippewas of the hunting and fishing privilege they received in an 1837 treaty.[262] Such judgements have generally silenced much of the spear-fishing opponents in the midwest and given the MTN an opportunity to focus on other issues – soon thereafter resistance to the Crandon project became a central campaign for the group. It is important to keep in mind, however, that the Mole Lake Chippewa community had already begun their resistance to the mining project in the late seventies, *before* the involvement of the ENGOs. This case is thus instructively different from some instances at Black Mesa where the activists came in after some families had signed for relocation and asked them to resist by giving them assurance of external support.

Even though some of the founders of the MTN have a very strong activist view on mining and are adamantly against any form of non-renewable resource development, they

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[260] See Midwest Treaty Network web site: http://www.alphacdc.com/treaty/
[261] Gedicks, 1994, p. 185.
[262] U.S. Supreme Court. *Minnesota et al. vs. Mille Lacs band of Chippewa Indians et al.* No. 97—1337. Argued December 2, 1998–Decided March 24, 1999.

have not articulated their vision for the group as an "environmentalist" organization. They have strongly adhered to the starting premise that sovereignty must come first. Indeed, the most strident environmental causes have also been lobbied for through a concerted campaign to promote tribal self-determination. This is highlighted by the MTN's logistical and political support for Mole Lake Chippewa's water quality standards and the Forest Lake Potawatomi's air quality standards.

The approach taken by the Wisconsin tribes in trying to formulate their own environmental regulations is the most institutionally astute means of resistance that could be offered. 1974 when the EPA wrote the clean air regulations' the agency suddenly realized that its twenty-seven regulatory programs each had three hundred holes because they delegated authority to the states which lacked jurisdiction on the reservations, "It was a nightmare," according to EPA's Indian coordinator Leigh Price. Indian lobbyists succeeded in 1986 in convincing Congress to add Indian amendments to three laws -- the Clean Water Act, the Safe Drinking Water Act, and the Superfund law-- that recognized tribal governmental authority as being identical to or very similar to that of states. Congressional action over the Clean Air act was delayed because of concerns about acid rain. Nevertheless implementation of this phase is still largely delayed because most tribes do not have the resources or training to promulgate regulations. Moreover, tribes tend to view the environment holistically and resent the compartmentalization of air, water and waste programs.

An even more remarkable aspect of this alliance network is that it includes erstwhile sports-fishers who are not the archetype of environmentalism by any means and had previously been adamantly anti-treaty. Part of the reason for the success of the network has been precisely because it is a network and is made up of dozens of smaller organizations which work on their own with regard to technical issues and meet together for lobbying purposes and information-sharing. This structure allows for differences to exist without acrimony. It also makes the alliance much more difficult to demonize by opponents. As one of the co-founders of the network says:' "we have so many heads, they don't know how to decapitate us."[263]

While the alliances formed between Native and non-native groups were helpful in pitching the issue to the government and the promulgation of the mining moratorium law, their importance should not be overstated. Indeed, as the activists themselves admit the mining moratorium law was quite a "crow in peacock feathers." In reality it only added an extra hurdle to the mining approval process and was not an unequivocal moratorium by any measure.

I would thus disagree with the scenario offered by Professor Al Gedicks in his important book *The New Resource Wars*: "If Exxon could have limited the conflict over the mine to a contest between itself and the Sokaogon, there would not have been a decade-long protracted environmental conflict."[264] Professor Gedicks presumes that without the involvement of external environment NGOs, the project would have gone ahead

[263] Personal communication, Zoltan Grossman, Midwest Treaty Network, Madison Wisconsin, March, 2000.
[264] Gedicks, 1993, p. 63

However, a closer analysis of the situation reveals that the actual factors which have led to the stalling of the project have much more to do with Native regulatory primacy and the inclusion of Native personnel at the local government's decision-making level. The alliance between the Chippewa and the non-native locals was, however, facilitated by some of the work carried out by the Environmental NGOs, particularly EARTH Wins, a one-person organization led by Alice McCombs, who sent out her weekly newsletter to interested subscribers on the internet on a fairly regular basis from 1995 to 1997. The election of Robert Van Zile on the Nashville town council board in 1999 has certainly been a welcome result of such efforts.

This observation is reminiscent of other studies of environmental advocacy networks observed by Keck and Sikkink in Malaysia and Brazil:

> Environmental advocacy networks have not so much gotten the tropical forest issue onto the agenda -- it was already there -- as they have changed the tone of the debate. To the frequent consternation of the epistemic community of scientists and policymakers who had succeeded in placing it on the agenda initially, the advocacy networks deliberately politicized the issues. While the epistemic community had sought to design policies and tried on the basis of their authoritative knowledge to persuade governments to adopt them, advocacy networks looked for leverage over actors and institutions capable of making the desired changes.[265]

There is also an emergent group of ENGOs who are starting from the premise of supporting indigenous movements that are already resisting certain forms of development rather than trying to "convert" pro-mining tribes per se. The alliance between Project Underground, a Berkeley-based anti-mining group and the Indigenous Environmental Network (IEN) is a unique example of such an initiative. While Project Underground has a non-compromising stance on mining issues their director Danny Kennedy states that "we are very conscious of social issues which can lead communities to support

mining."[266] Project Underground has also worked with the Western Shoshone of Nevada in their resistance to gold mining around the Crescent valley region. This case is now being considered by the Inter-American Commission on Human Rights and is being argued for the plaintiffs by the leading Native lawyer James Anaya.[267]

In Canada, there has also been a congruent rise in anti-mining support groups as well as non-Native groups that are prioritizing Native sovereignty concerns. Mining Watch Canada is in some ways the Canadian equivalent of Project Underground. Founded in April, 1999, the organization describes itself as "a pan-Canadian initiative supported by environmental, social justice, Aboriginal and labor organizations from across the country. It addresses the urgent need for a coordinated public interest response to the threats to public health, water and air quality, fish and wildlife habitat and community interests posed by irresponsible mineral policies and practices in Canada and around the world."[268] This organization also shows much promise for constructive Red/Green alliances given its devolved structure and the deferential approach which was exhibited in its recent conference on "Aboriginal Communities and Mining."[269] A notable feature of this conference was that it allowed both pro-mining and anti-mining tribes, and the representatives from the United Steelworkers of America to come together and discuss their mutual concerns in an amicable atmosphere. Seventy three representatives from thirty two Aboriginal communities attended the conference. The non-Native organizers at Mining Watch sought the direct co-sponsorship of the Innu Nation for the

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[265] Keck and Sikkink, 1998, p. 161.
[266] Personal communication, Danny Kennedy, Brownsville TX, Indigenous Environmental Network conference, June, 2000.
[267] Also a Professor of law at the University of Arizona and the author of the book *Indigenous Peoples in International Law.* New York NY: Oxford University Press, 1996.
[268] http://www.miningwatch.ca
[269] Conference held on September 10-12, 1999 in Ottawa.

event and let them set the tone of the event. Interestingly enough, mining companies, government officials from DIAND or Environment Canada and other ENGOS were not invited to the event. The purpose was to get the most closely affected stakeholders to the table to learn from each other – a model that has worked in other settings as well.[270]

The Victoria-based group Settlers in Support of Indigenous Sovereignty (SISIS), which recently disbanded due to the death of key personnel in a car accident, was somewhat similar to the Midwest Treaty Network. However, it was distinct in being a purely non-Native collective with a decidedly non-environmental agenda, that was predicated entirely on indigenous rights. As we shall see in Section 11.4, this group played an important part in defining the debate on tribal sovereignty versus environmental primacy – most clearly articulated in the controversy surrounding the Makah whale hunt.

There are thus clearly examples of constructive alliances between ENGOs and Native peoples. The key to their success has been in allowing the indigenous groups to make their own decisions and establish their own priorities. Zoltan Grossman, the co-founder of the MTN has articulated four steps whereby green/red alliances or native/non-Native alliances have taken followed a four-stage process:

> The evolution (of the alliances) went through four general and often overlapping stages. First, Native American nations asserted their autonomy. Second a backlash emerged from some rural whites over proper resource use. Third, the two groups initiated dialogue over a perceived outside threat to the resources. Finally the groups began to cooperate.[271]

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[270] See Susskind et al., 1999.

[271] Zoltan Grossman (2000).*Geographies of Inclusion: Interethnic Alliances for Rural Environmental Protection.* Unpublished manuscript.

The rural backlash from non-Natives should by no means be considered a precondition for alliance formation. The Wisconsin case rather illustrates that alliances can form in spite of (not because of) such a backlash. Nevertheless there is also tremendous potential for division and harm to both environmental and indigenous causes if the alliances are not carefully crafted and do not represent the underlying values of the people. This is where pluralist views of environmental movements can often be misleading, since they tend to assume that alliances and networks are inherently productive.

8.4 Critiquing the New Pluralists version of environmental justice

Environmental justice is clearly becoming an ever-expansive phenomenon (or perhaps cynics may say a "buzzword"). However, a major reason for this occurrence is the growing awareness in communities that environmental causes, apart from their substantive value, are also a means of legitimacy for anchoring discontent within a regulatory framework. By framing resistance within environmental boundaries there is also greater leverage to use scientific information as a means of articulating one's argument (though as we have seen in Chapter 6, this is all too often used selectively by communities).

As noted by Lois Gibbs of the Citizen's Clearinghouse for Hazardous Waste (CCHW): "environmental justice is broader than just preserving the environment. When we fight for environmental justice we fight for our homes and families and struggle to end economic, social and political domination by the strong and greedy."[272] In a recent edited volume entitled *Liberation Ecologies*, Richard Peet and Michael Watts lay out a

framework for how "the mediations between structured contradictions, deprivations, and various forms of sociopolitical actions are now seen as highly significant, rather than contradictions automatically producing organized opposition."[273] In this regard there is a feeling that bridging of "old" social movements, such as unions and leftist parties, to new movements, such as organizations advocating environmental justice is relatively easy – consequently, there is also a move towards bridging the environmental movement with the indigenous rights movement.

Network theorists have found many elegant ways of representing the strength of alliances between different kinds of organizations. There is a particular fascination with the new pluralism which alliances between groups as diverse as gay / lesbian activists, labor unions, environmentalists and indigenous rights groups may embody. Most recently Schlosberg in his book *Environmental Justice and the New Pluralism* has used the botanical metaphor of a rhizome to describe the organizing of groups such as those in the Wisconsin case study: "Rhizomes connect in a way that is not visible on the ground – they cross borders and reappear in distant places without necessarily showing themselves in between...The rhizome metaphor may be helpful in discussing situations that may be localized but still be shared by people in different places."

Their "unity" it is argued "does not emphasize uniformity." Interestingly enough Schlosberg cites Brecher and Costello (1994) and their use of Jonathan Swift's metaphor of Gulliver (which was also used by a mining industry representative, as discussed in Chapter 2) being held down by the diminutive Lilliputians through a mesh (or network)

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[272] Quoted in Schlosberg, 1999, p.127
[273] Peet and Watts, 1997, (Introduction).

of strings connecting them at different *positions*. The argument contends that the strength of the mesh comes from the different vantage points of each individual.

However, I think that one must be cautious in presuming that such a network of alliances with different positions is necessarily beneficial. To carry the analogy further, the different positions of the Lilliputians may help in keeping Gulliver anchored in one place but it is of little use in actually *moving* him anywhere. Therefore while such networks of resistance emanating from different vantage points may be effective in maintaining the status quo, they may not necessarily be useful in promoting lasting change. In order for change or *movement* to occur all the individuals must concur on moving in the same direction. The new pluralists do not adequately address the efficacy of such movements in actually resolving disputes or administering change.

I concur with Schlosberg insofar that "a network, then, is not simply the connection between issues and groups, but is a particular method and practice of that connection as well. Function, in this case, follows form."[274] However, after making this statement, he moves on like many other environmental justice analysts to applaud the extent of networking alliances without presenting data on efficacy in achieving lasting or "sustainable" reform. Part of the problem lies in the propensity for political theorists to summarily cite negotiation literature without fully appreciating the core of the latter's argument. At the heart of negotiation discourse is the notion of differentiating positional from principled bargaining positions.[275]

[274] Schlosberg, 1999, p. 120.
[275] See Fisher, 1990.

In any alliance formation, stakeholders must be fully appreciative of the kinds of issues which can in fact be conducive to linkage and those which can lead to deadlock as explained in the previous chapter.

An important characteristic of successful native-non-native alliances on environmental concerns have also been those in which the environmental groups have played a supportive role which is decidedly ancillary to the actual decision-making structure. For contemporary native societies, sovereignty is the touchstone for judging any other endeavor, and sovereignty is most clearly manifest in exclusive control over decision-making. In the words of Larry Innes, a non-native environmental advisor to the Innu Nation, "we (non-natives) have a role to play as translators, but the ultimate decisions are theirs."

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9. Ambiguous property: The linkage politics of land claims

This chapter will continue to explore factors which can lead to the prevalence of environmental resistance and focus on the hypothesis that issue linkage, particularly the linkage between land claims and environmental conservation, can play an important role in resistance formation and prevalence.

We can try and glean some lessons about how to link issues from the field of linkage politics, that has its roots in international relations. The first organized effort to understand issue linkage in political science was initiated by James Rosenau (1969) and culminated in a volume entitled *Linkage Politics.* However, this book and subsequent work in the arena of linkage theory and field theory,[276] were largely focused on understanding the linkage between domestic politics and international relations.

At the broadest level, we can think of issue linkage in catalyzing consensus through Thomas Schelling's "focal points", which he defined as "intuitively perceived mutual expectations, shared appreciations, preoccupations, obsessions, and sensitivities to suggestion."[277] Environmental concerns could certainly be conceived as having the characteristics of focal points if appropriately articulated and understood by all players in a conflict.

Linkage can also be thought of in terms of a substantive means of enlarging the zone of agreement between parties. This area of negotiation theory has been admirably studied by James Sebenius (1983, 1993), building on the analytically rigorous work of Howard Raiffa and colleagues at the Rand Corporation. Sebenius presented his insights

[276] Field theory may be considered a branch of the linkage politics literature that posits that linkage should can be understood in terms of behavior space (conflict behavior) and attribute space (eg. economic development). It is a rather abstract formulation involving vector geometry to explain relative position of

about "negotiation arithmetic" in a paper by the same title in which he uses vector analysis to show how issue linkage can lead to constructive and destructive engagement in negotiations. This was a prelude to his later work on the sequencing of issues in negotiations.[278] Clearly there are times when linking a certain intractable issue can lead to deadlock in negotiations. A sterling example of this phenomenon is the linkage of Jerusalem's independence in the Middle East Peace Process. The parties agreed earlier on to delink this issue to avoid deadlock and stalemate. However, there are also numerous instances when issue linkage can clearly increase the zone of agreement and in fact allow for agreement between conflicting parties who would otherwise not achieve a resolution

Figure 9.1 shows a stylized representation of how the linkage of two issues within an environmental context can lead to a zone of agreement whereas a separation of the issues would lead to deadlock. Debt-for-Nature swaps are an interesting example of such issue linkage that can be constructive.[279] If we consider the issues individually, developed countries value conservation efforts along the vector segment OA. On the other hand developing countries value debt relief along segment OC. Individual consideration would not lead to any zone of agreement. However, linking the issues, or taking their vector sum leads to the segments ABC, and this allows for a Pareto-optimal zone of agreement to emerge in the north-east agreement quadrant, shown by the bold segments.

However, this approach basically reflects a bargaining outcome which does not necessarily mean that potentially adversarial parties could agree upon issue linkage per

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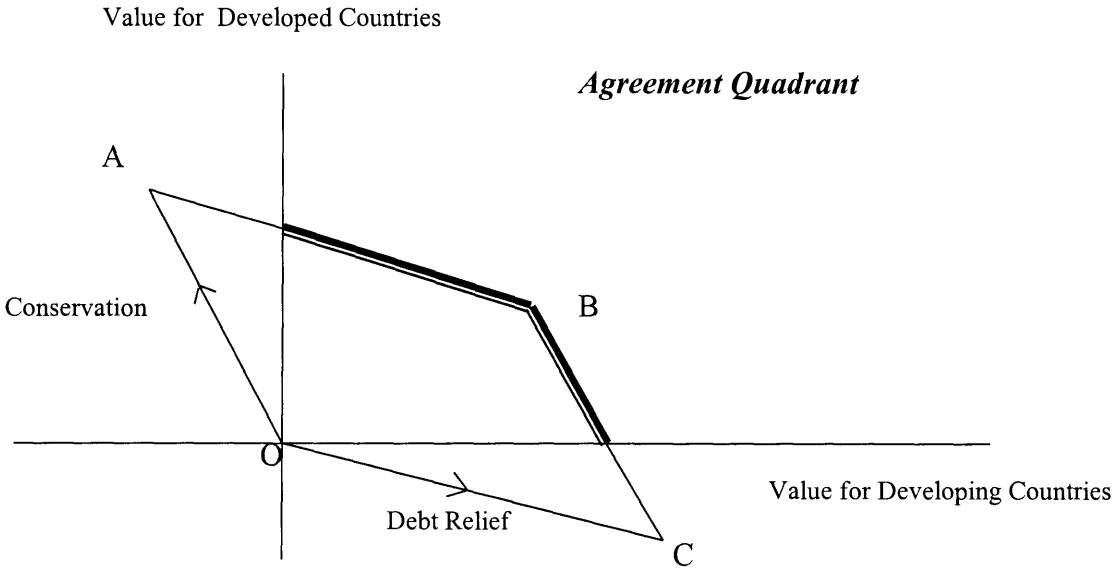
stakeholders in fields of behavior and attributes (see van Atta, 1973 and Rummel, 1973 in Wilkenfeld, 1973).

[277] Schelling, 1980

[278] See Sebenius 1996.

se, particularly if their BATNA (Best Alternative To a Negotiated Agreement) is relatively high – in other words the opportunity cost for no agreement is relatively low.

Figure 9.1:



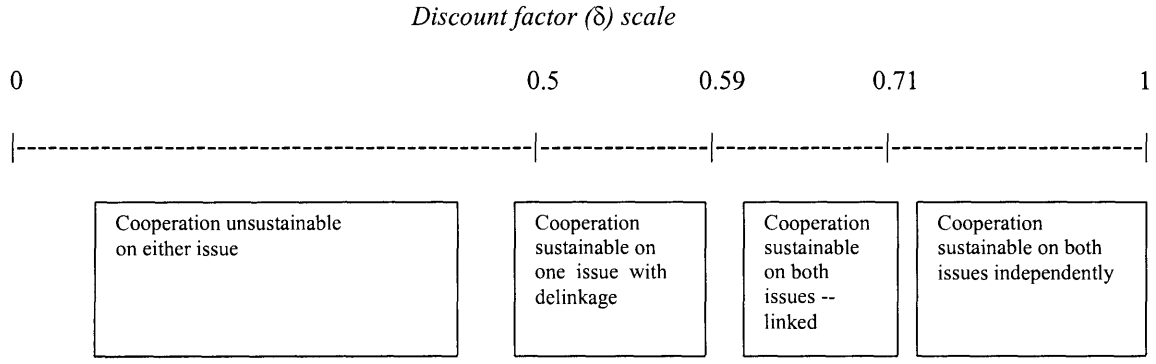
Moreover, we still need to understand the factors which can lead to sustainable cooperation beyond such bargaining regimes. In order to do so, we must turn to a discussion of time horizons and discount rates. To test the sustainability of linkages, Susanne Lohmann, has done an elaborate study of issue and player linkage to provide a conceptual framework within which to think about sustainable cooperation. Lohmann predicates the sustainability of cooperation on a "discount factor' (δ), which essentially measures, how much the future is valued by players relative to the present. A lower value of a discount factor indicates a higher discount rate (future is more heavily discounted

[279] An example used in Susskind, 1994. The work of Ernst Haas (1980) is also notable in the area of issue-linkage in international treaty-making.

relative to the present) and vice versa. The scale which she has formulated is quite instructive in understanding the dynamics of cooperation and could indeed be a starting point for further investigation of her theory within a environmental framework.

Figure 9.2 shows her scale for issue linkage reflecting the challenge for potential adversaries to cooperate relative to their perceived discount factors. More importantly it shows us that there are times when issue linkage works and doesn't work, all within a spectrum of discount factors – simply how much we value the future. Issue delinkage is likely to be more successful at lower discount factors and issue linkage is sustainable on both issues with slightly higher discount factors.

Figure 9.2: Issue linkage and sustainable cooperation (After Lohmann, 1997)



The key is to find out where on the spectrum parties lie and how to move them in the direction of constructive engagement. In order to move from our discussion of linkage to a discussion of how environmental cooperation may bring ostensible "adversaries" together, let us also examine the framework for issue linkage presented in Table 9.1. This is largely derived from the work of Vinod Aggarwal, who is interested in studying ways in which institutions bargain with each other. Since many environmental issues are

handled institutionally, this may be a particularly prescient framework for us to consider. The key problem in cases of environmental linkage arises when stakeholders do not perceive a substantive link (A) and instead think that environmental issues are tactical and opportunistic (B). In most cases, environmental issues are never in categories C or D, particularly if one is willing to take a long-term view of economic and social problems.

Table 9.1: The Dynamics of Issue Linkage (Aggarwal, 1998)

Linkage Type	Objective Reality	Target decision makers' perception	Basis for issue connections	Outcome
A: Substantive Link	Connected	Connected	Knowledge	Stable Issue Area
B: Failed Substantive Link (perceived as tactical)	Connected	Unconnected	Power	Temporary solution to externalities
C: Tactical Link	Unconnected	Unconnected	Power	Unstable issue area
D: Failed tactical link (perceived as substantive)	Unconnected	Connected	Misunderstanding	Contingent (to unstable issue-area if consensual knowledge changes)

Let us now return to our cases and see where on this spectrum various issue linkages lie and how that can lead to the emergence and prevalence of resistance to mining development.

9.1 Land and mining disputes in Labrador and Arizona: Linking disputes (Hopi/Navajo vs. Innu LIA)

The Black Mesa case presents us with a situation where the linkage between mining and the Navajo/Hopi land dispute has been made time and again by the activist community, and of course the Dineh settlers on HPL. Even some respected journalists have tried to push a sort of conspiracy theory that there is a linkage between the displacement of the Navajo and mining activities, assuming in some way that the Hopi would encourage mining. This linkage has brought forth activists of all sorts to the site – many of whom would not have been attracted to the issue without the mention of a mining company in the midst. In a January 30, 2000 article in The Boston Globe, Gary Ghioto describes the scene as follows: "Buddhist nuns and monks from Japan are joined by Native Americans, Europeans, and college students from across the United States chanting prayers and carrying traditional peace pipes." The linkage between mining and the land relocation has become "accepted" and embraced by the activist community and mentioned in forums across the globe. Peabody's record from thirty years ago and the nefarious dealings of the attorney John Boyden (as described in Chapter 5), have been sloppily paraphrased into linkages with the current dispute with remarkable zeal, as shown in Exhibit 9.1.

Exhibit 9.1: Examples of the "mining – land dispute" linkage (mis)used by activists

"To aid Peabody Coal in their plans to strip mine, the U.S. government has been relocating the Dineh to less valuable land, downstream from the largest uranium contaminated site in the U.S."[280]

"Today, there are about 1,000 Dineh (Navajo) elders and their families resisting U.S. government efforts to forcibly remove them from their ancestral homeland in Big Mountain, Arizona. The reason behind the relocation: an estimated 22 billion tons of coal, which Peabody Coal is eagerly seeking to stripmine"[281]

"A struggle is occurring on Black Mesa between two divergent viewpoints on the relationship between humans and their environment. One group, led by male-dominated mining corporations and tribal council governments, view land as property, whose title-holders should exploit for the maximum profits regardless of the impact on the land, or on people who currently inhabit the land."[282]

"The reason the US government has given for the relocation is a so-called Hopi-Dine land dispute. However, the real dispute is between traditional Indians who wish to protect their land and the tribal councils and outside forces that support intense mineral extraction."[283]

"For a hundred years, Navajo and Hopi people have jointly lived on the land. However energy companies discovered rich minerals under the soil. They inflamed a "Hopi-Navajo land dispute" as an excuse to have traditional Navajo people expelled from this land."[284]

"Ever since it was discovered that Big Mountain sits over the largest coal deposit in the country, our government has done everything in its power to relocate the reservation's residents and open up land for mining by Peabody Coal Company. Congress passed a law authorizing relocation in 1974."[285]

"Elders of the Sovereign Dineh Nation have been resisting relocation at the hands of the United States government and major energy corporations including Peabody Western Coal Company. "[286]

This linkage however, is by no means substantive and would fall into Category C of Aggarwal's typology. Despite the legacy of unfair lease arrangement, there is no evidence to support that the land dispute has been motivated by the mining itself. Indeed, as discussed in Chapters 5 and 6, the Hopi have already passed a resolution which prevents new mining projects from taking root.

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[280] Action Resource Center web site: http://www.arcweb.org/campaigns/big_mountain/
[281] Greenlink web site: http://www.greenlink.org/affinity/120196/bigmt.html
[282] *The Case of the People of Sovereign Dineh Nation.* Submitted to Women's Environment Development Organization (WEDO) by the SDN, April 27, 1998
[283] Statement from Ableza: A Native American Arts Institute. http://www.ableza.org/bigmtn.html
[284] *Revolutionary Worker* #959, May 31, 1998
[285] Masek, Steve and Patrick Reinsborough. "Help Save the Dineh Nation at Big Mountain" (Op/ed piece). *Minnesota Daily,* May 20, 1997.
[286] Julia Butterfly Hill (lady who lived in a redwood for a year) and Earth First! Statement: http://csf.colorado.edu/bioregional/2000/msg00046.html

Marjane Ambler, who has been a vociferous critic of the mining industry and the US government's policy towards comments on this linkage as follows:

> Those who prefer simple black-and-white explanations argue that Navajos and Hopis could have continued to live peacefully in the Joint Use Area if the mineral companies had not insisted upon clearing title to the minerals.[287]

Ambler goes on to quote Navajo history scholar Peter Iverson who argues persuasively that the Hopis would have demanded relocating the Navajos to make room for the Hopis even if minerals had not been involved: "Even though energy companies complicated the issue and had a stake in the outcomes they should not used as a convenient explanation for the policy that was implemented." The division was inevitably controversial because it resulted in the biggest relocation of people since the internment of Japanese Americans during World War 2.

However, both tribes have been immersed in mining activities and there is no firm indication that even under Navajo control mining would in any way be discouraged. In the aftermath of repeated activist allegations concerning Peabody's involvement in the land dispute, the presidents of both the Hopi and Navajo nation have written to the company, categorically denying that there is any such linkage (Exhibit 9.2), despite their misgivings regarding the leases with the company (that are now being argued in court).

The linkage of the mining to the land dispute has been an attempt on the part of environmentalists to give a human face to their crusade against mining, while for the Big Mountain settlers, it has been a means of injecting an internationally recognized norm, such as environmental protection, into the debate. This is not to say that the attachment which elders such as Roberta Blackgoat have to the land is strategic. However, the

linkage between their proposed relocation and the assumed "de-facto" land use to be mining is not substantive. It is thus not surprising that even The Indigenous Environmental Network (initially founded at the Navajo reservation) and Honor the Earth (founded by Winona La Duke), the two largest indigenous environmental organizations in North America, which generally oppose mining, have distanced themselves from the Big Mountain activists.[288]

Exhibit 9.2: Navajo and Hopi President's views on the linkage

Quotation from a letter by Albert Hale, President of the Navajo Nation to Howard Carson, President of Peabody Western, November 5, 1997.

"Certain activist groups have erroneously accused Peabody Western of being the cause of the Navajo-Hopi land dispute and the hardships brought to the Dine people caused by the relocation from the disputed area. The tragedy of forced relocation is a direct result of the United States government's failure to deal in good faith with either the Navajo or the Hopi people, and has nothing whatever to do with Peabody Western."

Quotation from a letter by Ferrell Secakuku, Chairman of the Hopi Tribe to Howard Carson, President of Peabody Coal, January 25, 1995.

"Peabody Western is in no way acting in concert with the Hopi Tribe and the United States Government in attempting to reach a resolution of this long-standing problem. Any statement to the public to the contrary made by any individual or group of individuals is simply untrue and amounts to nothing more than misinformation and an attempt to illicit unwarranted public support for the continuing denial of Hopi rights to Hopi lands."

Such linkage politics are clearly destructive because they reduce the credibility of both the environmental movement and the indigenous rights movement which could on their own merits, argue quite convincingly for their own motives. Moreover, false linkages can also lead to divisions within the community that are widened with each aspersion that is predicated on misinformation. In this case the linkage has also widened

[287] Ambler, 1990, p. 145.
[288] Personal communication , Faye Brwon, Director of Honor the Earth, Minneapolis, MN, March 2000.

the rift between the tribal governments and the mining companies and has gone to reinforce negative stereotypes about environmentalists and Native groups among representatives of the mining companies. Clearly the past conduct of Peabody vis-à-vis the lease arrangements has been quite reprehensible but so too has been the past performance of almost every development enterprise dealing with Native issues during the past century. The linkages that have been established in this case may have helped to galvanize resistance initially, but they have not succeeded in allowing for resistance to prevail because of the shaky ground of the linkage being posited in the case of the land dispute. Interestingly enough, there is an important linkage between the mining activity and the water depletion of the aquifer, a technical linkage (which was discussed in Chapter 6), but then that should be tackled on its own merits, rather than being linked to an inter-tribal land dispute.

If the Big Mountain settlers and the environmentalists felt that the key reason for their reluctance to relocate is in fact the fear that the Hopi will allow Peabody to mine on their ancestral graves, then they should have articulated it as such. Through a process of engagement they could directly ask the Hopi, the government and the company about this particular issue and use that as the principle for the negotiation process. If the process were articulated in such a fashion, then the linkage would still hold some ground and could be expressed constructively. But instead, there has been a presumption of a preexisting linkage that has no substantive merits and conspiracy theories have been built around it.

The Voisey's Bay case presents us with yet another example of issue linkage which has played an interesting, and markedly more constructive role, in resistance

emergence and prevalence. The key issue here for the Aboriginal groups has been a linkage between land claim settlements and environmental impact assessment for the mining itself. Like the Navajo and the Hopi, here too we have overlapping claims to the land between the LIA and the Innu and there is a history of antagonism between the two groups (as discussed in the previous chapter).

However, the linkage between land claims and the assessment process were institutionally anchored through a negotiation process which was overseen by the government. The special panel on the Voisey's Bay project recognized this linkage in its recommendation as follows:

> That Canada and the Province conclude and ratify land claims agreements in principle with the Inuit of Labrador, represented by the LIA, and the Innu of Labrador, represented by the Innu Nation, before issuing any project authorizations, or, failing that, negotiate equivalent alternative measures before issuing any project authorizations, which must provide for Innu and Inuit consultation and compensation in respect of the project in keeping with the fiduciary obligations of the Canada and the province.[289]

The Innu and the Inuit have remained resolute and united in their assertion that the land claims should be settled before the project goes forward and have even gone to court in this regard. Another important feature of this process which has led to a constructive linkage of issues has been the Memorandum of Understanding which was signed between the government of Newfoundland, the federal Canadian government, the LIA and the Innu Nation in 1997 which led to the panel process and has been an anchor for much of the ensuing negotiations.[290]

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[289] Governments of Canada, Newfoundland, Innu Nation, Labrador Inuit Association. *Report of the Environmental Assessment Panel on the Proposed Voisey's Bay Mine and Mill Project*, March, 1999.

[290] *Memorandum of Understanidng on ENvironmental Assessment for the Proposed Voise's bay Mine and Mill Project*, Candian Environmental Assessment Agency (1997): Web access: http://www.ceaa.gc.ca/panels2/voisey/mou_e.htm

The Innu are very conscious of the fact that their connection with the land has been highly romanticized and that their conservation ethic is different from that which most non-Native environmentalists may espouse:

> "We walk on the land. The Akeneshau (white man) is different. His feet never touch the ground. He walks on the pavement, and his feet are off the ground all the time. Then he comes to Labrador and says what a beautiful country."[291]

In 1995, the Innu Nation decided to set up a task force on mining activities. The aim of this task force was to provide information on mining issues to the two Innu communities at Sheshatshiu and Davis Inlet. The result was a report entitled *Ntesinan, Ntshiniminan, Nteniunan: Between a Rock and a Hard Place.* The document reflected strong misgivings about the Voisey's Bay project but concluded with 24 recommendations for the Innu Nation, the mining industry and government. The most pervasive theme throughout this report was a feeling that they had not been accorded due respect by the other stakeholders. There was a major cultural divide which the Innu felt was not being understood. In the words of Katie Rich, the former President of the Innu Nation:

> "First declare a six month shutdown at Voisey's Bay. Then come and stay in our community for six months and ask the people's permission for what it is you want to do. You'll be surprised how many people will react if you ask permission."[292]

In their own way the Innu tried to reach out to the mining industry as well. A professional guidance brochure was produced by the Innu Nation entitled *Mineral*

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[291] Akat Piwas, Innu elder Quoted in Lowe, 1998,
[292] Katie Rich, quoted in Lowe, 1998.

Exploration in Nitassinan: A Matter of Respect: Innu Nation Guidelines for the Mining Industry. The document clearly reflected the apprehensions which the Innu felt so strongly about the project. However, it ended on a conciliatory note: "The Innu Nation is committed to working with mining companies who are prepared to respect our rights, our land and our way of life." While both groups are resisting the mining, they have brought forth constructive linkages that are credible and improve their negotiating stance.

9.2 Delinking royalties and the Panel process: The Saskatchewan experience

On account of strong pressure from lobbying groups in Canada and abroad, the government of Canada and the Provincial government of Saskatchewan decided to form a panel to review the various uranium mining projects in August, 1991. The panel was entrusted with the duty of looking objectively at the environmental and social impact of the mining projects which were being proposed and present its recommendations to the government. The panel comprised five members who were chosen on account of their scientific expertise and their experience in working with Northern communities.

The Chairperson of the panel was Professor Donald Lee of the Chemistry department at the University of Regina. Other panel members were: Dr. Richard Neal of the Biology department at the University of Saskatchewan, Dr. James Archibald of the Mining Engineering department at Queens University, Dr. Annalee Yassi of the School of Public Health at the University of Manitoba and Vice Chief John Dantouze of the Prince Albert Grand Council of Saskatchewan.

The mining companies were not directly involved with the deliberations of the panel. However, the panel did confer with the companies to procure technical information

and also to ascertain the terms of employment assurance and other social impact indicators. The panel also held sessions to get input from the public.

In early 1996, the panel began to plan a series of hearings across Saskatchewan in order to have an organized means of pubic involvement in the process and to expedite the reports which the panel was obliged to issue after almost five years of deliberations.

Despite its small size there was considerable dissent within the panel as to the nature and timing of these hearings. Dr. Annalee Yassi, was particularly opposed to having the hearings held at a time when the public was not completely informed of the various impact measures.

> I want to reiterate that I think it is cynical to be proceeding to 'Public Hearings" when the public will not have the information they need to properly evaluate the EIS. It was clear to me at our meeting that there is a political and industrial agenda that we must follow.[293]

The majority opinion of the panel was that the environmental impact statements for the various projects had been available for several months at all public libraries and public notices had been sent informing people of their availability (this had been preceded by a formal EIS review public notice as well). The hearings for Cameco's projects (McArthur River and Cigar Lake) were held from September 4 to October 11, 1996 at 11 different locations across Saskatchewan. However, because of certain misgivings between the panel members and some of the Northern leaders, the hearing meetings at Wollaston Lake were canceled because the community's disapproval.

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[293] Yassi, Annalee. *Request for additional Information for the MJV Project.* Message to Don Lee, Chairperson of the Joint Panel on Uranium Mining, April 12, 1996.

The Resignations

Dr. Annalee Yassi, the epidemiologist on the panel had for some time felt isolated in the deliberations of the panel. She was insistent that more emphasis be given to occupational health exposure on a long-term basis. Her reluctance to hold the hearings on account of insufficient public awareness further estranged her from the Panel chairperson and various government regulators. According to the Panel report, she official resigned on August 15, 1996. However, in her correspondence with another panel member she claimed that "as there was no resolution, I was effectively pushed off the Panel."[294] In fact she had written in an earlier communication:

> As much as I am tempted to quit on principle, I realize that this would be exactly what some 'stakeholders' would want, and having spent almost 5 years in this process, having had to fight attempts to get me to quit all along, I am not about to do so now.[295]

Perhaps emboldened by Dr. Yassi's resignation Chief John Dantouze, who had also expressed misgivings about the panel regarding revenue sharing, announced that he would also resign from the panel on October 1, 1996. Chief Dantouze's resignation had the potential of severely damaging the negotiation process in Northern Saskatchewan. The panel was scheduled to hold hearings soon thereafter and with the announcement of his resignation, a few Northern leaders also announced that they would not like to host the public hearings in their communities, most notably the hamlet of Wollaston Lake. While Cameco was not directly involved with the activities of the panel, the resignations were undoubtedly a matter of concern to the company. However, in Cameco's assessment Chief Dantouze did not have the constituency to make a difference in the cause and in

[294] Yassi, Annalee. Letter to Chief John Dantouzie, Prince Albert Grand Council, September 30, 1996.

fact his departure would probably make the process more objective and less politically charged.[296] This was a delicate time for Cameco since the direct contact with the community members had to be maintained and strengthened to dispel the negative publicity which statements such as the following from Chief Dantouze would generate.

> Their allegation demonstrates that the fundamental problem in the panel process is not any conflict between my political obligations to the Athabasca First Nations and my mandate on the Panel, but the pressures from the federal and provincial governments and the mining industry to proceed prematurely with decisions in their favor. The Premier and the Panel Chairperson have sated that our request for direct negotiations is inappropriate at this time....This delay tactic is transparent... To employ the Premier's hockey analogy: I and other northerners have never been in the game, we have either been in the stands or the penalty box. We have a team and we want ice time.[297]

The panel was now down to three members and there was a serious credibility problem. Nevertheless, the chairperson of the panel continued with the panel's activities and the government continued to support them. A statement on the resignation was quickly issued by the panel and faxed to various stakeholders, including Cameco:

> We are sincerely sorry that the northern leaders have decided to withdraw invitations to hold public hearings in their communities. Despite the departure of Vice Chief Dantouze, I have absolute confidence in the ability of the remaining panel members to finish this review in a completely reputable fashion.....The Chiefs inferred that their withdrawal will discredit the review process. We are, however, of the opinion that allowing the panel to be deterred from its duty by political maneuvering on the parts of the chiefs would cause greater discredit to the review process..... As indicated in our previous report, we share many of the same general objectives expressed by the Northern Leaders and we have no objections regarding to discussions concerning the

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[295] Yassi, Annalee. *Request for additional Information for the MJV Project.* Message to Don Lee, Chairperson of the Joint Panel on Uranium Mining, April 12, 1996.

[296] McIntyre, Jamie, Manager for Human Resources, Cameco Corporation, personal communication via fax, July 24, 1998.

[297] Prince Albert Grand Council Press Release from Vice Chief John Dantouze after resignation from the Panel, October 3, 1996.

> principle of revenue sharing; however, the specifics regarding the projects and their impacts should not be negotiated at this time.[298]

Jamie McIntyre, the Manager for Northern Relations had his work cut out for him in trying to overt a serious lack of trust and a breakdown in communication. He had lived in Northern Saskatchewan for many years and was generally well-liked by most of the communities there. However, he knew that the problems in the panel's ranks were the government's business and by staying away from the conflict between the government and the panel members, the company could maintain a certain degree of objectivity which would be available in the future. The most critical issue in this regard was revenue-sharing.

Revenue Sharing

The panels recommendations for the McArthur River project (in which Cameco had the greatest interest) were published in February, 1997. The government issued a response to the panel's recommendations soon thereafter in which most of the 31 recommendations were endorsed. On the most critical issues of employment and revenue sharing, the government stated that it "supports the objective of increasing the employment of northerners by 1% annually until a level of 67% is reached."[299]

However, this was not enough to assuage the long-term concerns of the community members. They felt that a certain percentage of the revenues which the government was getting from the mining should be directly funneled back to the communities. The issue of revenue sharing first came up when the panel began its

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[298] Statement issued by the Joint Provincial and Federal Panel on Uranium Mining in Saskatchewan, Saskatoon, October 1, 1996.

[299] Government of Canada Response to the Joint Panel Recommendations on the McArthur River Uranium Mining Project, 1997.

scoping meetings in late 1991. In its report on the McArthur river exploration project, the panel stated in 1993:

> Although formally on Crown Land, several of the Aboriginal peoples who appeared before the panel referred to it as "our land" and indicated they had assumed a traditional right to use it for gathering purposes. As a consequence, it seems to be a matter of natural justice that the Aboriginal people should share in any revenue provided by development and that they should logically benefit from mining operations in larger proportion than do the people living in the southern part of the province.[300]

The issue was, however, being negotiated primarily between the government and the community. Cameco made it clear that they were paying all the legally requisite royalties and taxes to the government and they had no control over how the money was subsequently distributed. The Northern communities did not press the company to give additional or separate revenues to them since the technical "owner" of the land was actually the government. Cameco distanced itself once again from any lobbying efforts and continued to work on other proactive initiatives with the communities. According to Jamie McIntyre:

> Several meetings with the government, however, dissuaded us from tabling any of our ideas or actively supporting, in any obvious way, the concept of revenue sharing. The issue of revenue sharing involved much more than the uranium industry and they [the government] saw any attempt to facilitate it in this circumstance was the thin edge of the wedge, and they would be faced with pressure from other constituents to share revenue from other resources. So essentially Cameco backed off and let the debate continue with no real comment.[301]

The Athabasca Working Group

Bernard Michel and top executives from the McArthur River and Cigar Lake operations met with 23 community leaders and representatives, including Wollaston Lake

[300] Joint Federal-Provincial Panel on Uranium Mining. *McArthur River Underground Exploration Program Review.* Saskatoon: Government of Canada Publications, January, 1993, p.4.

in March, 1993. The aim of this meeting was to improve communications between the company and the community. According to the review panel, the discussion identified three major issues:[302]

- a desire for more opportunities for jobs, training and business, but not at the expense of the environment (see Figure
- a need for a written guarantee stating that companies would protect the environment and compensate for any damage that might result from mining activity; and
- a desire to receive benefits and revenues beyond those jobs, training and business opportunities.

To address these issues it was decided at this meeting that an Athabasca Working Group would be created which would ultimately draft an agreement of understanding between the communities and the companies. Cogema joined the process in 1994.

The Working group consisted of two members from each of the six Athabasca communities, and at least one representative each from Cameco, Cogema and Cigar Lake. The members of the working group were the elected leaders of each Athabasca community and a designated community representative chosen by the elected leader. To remain free of any political involvement, it was decided that government agencies or officers of the Federation of Saskatchewan Indian Nations, the Prince Albert Grand Council or the Metis Society would not be included, except by invitation.

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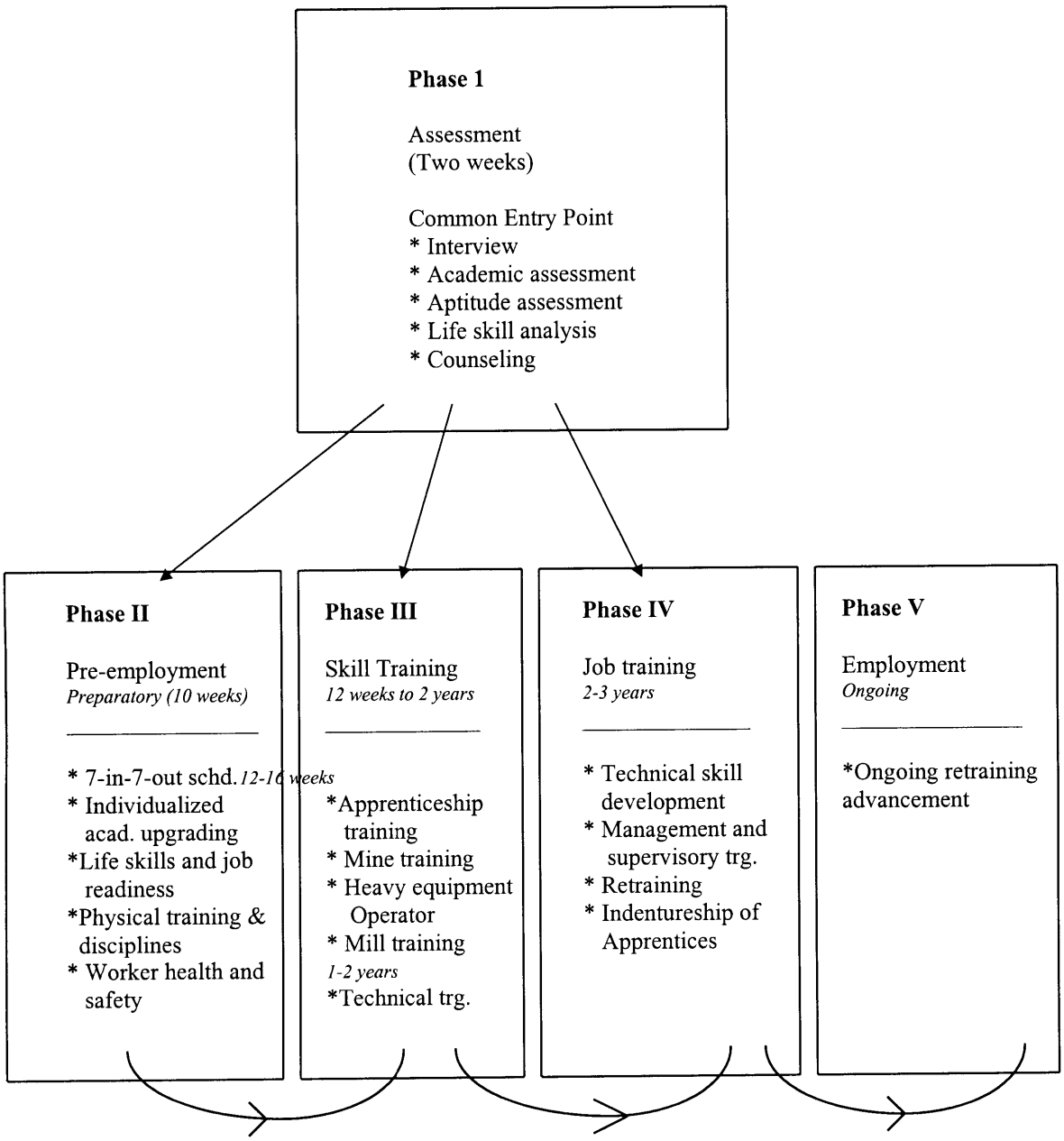
[301] McIntyre, Jamie, Manager Human Resources, Cameco, personal communication via fax, July 24, 1998.
[302] Joint Federal-Provincial Panel on Uranium Mining. *McArthur River Mining Project Review.* Saskatoon: Government of Canada Publications, February, 1997, p 43.

Figure 9.3: Multi-Party Training Program in Northern Saskatchewan



The meetings of the Working Group, particularly meetings in crisis situations, such as the resignation of Vice Chief Dantouze, were often animated. Cameco perception and behavior at these meetings was described by Jamie McIntyre as follows:

> The discussion and debate would get emotional and heated very quickly and escalate into these long 30 -35 minute dissertations, particularly by elders. They are particularly eloquent in their own language. After what could be a 7 - 8 hour meeting the meeting would break, sometimes in the wee hours of the morning. Everyone then gathered around and just shoots the gab, we used to talk about all sorts of things, often not at all related to the discussion that took place. It would literally switch into this very friendly conversation with some of the most genuinely nice people you would ever want to meet. And you always had to keep that in mind and not take things too personally or seem too defensive. They just wanted us to listen and once we got good at that, the meetings were generally very productive and rewarding experiences.[303]

In 1993 the Joint Panel on Uranium Development recommended that a consultation mechanism be set up by the government "for the people of Saskatchewan to be reassured that the mines are operating in compliance with all regulations and that northern economic benefits are being maximized." The provincial cabinet subsequently authorized the establishment of a Northern Mining Monitoring Secretariat and three regional Environmental Quality Committees. The committee's aim was to garner community opinions on mining developments and provide information on the projects on a regular basis. They were profiled in the Eighth Annual Report on Aboriginal Participation in Mining as follows:

> The EQCs are a bridge between northerners, government and the uranium mining industry-- a bridge based on trust, respect, consultation and involvement. The NMMS is an administrative support structure for the

[303] McIntyre, Jamie. personal communication via email, August 23, 1998.

does fall within traditional hunting grounds for the Aboriginal communities, the impact is much more indirect.

Second, both mines are situated in areas with somewhat unique jurisdictions, which would thus prevent broader applicability of the lessons drawn to other Aboriginal areas. However, in this regard both projects, even though they are located in two different countries share an important common feature – they both involve agreements with "Native corporations," rather than tribal governments.

Alaska is of course the only state in the Union which has a series of Native corporations that were set up under the Alaska Native Claims Settlement Act. Similarly, the Ungava peninsula (Nunavik territory) of Quebec falls under the special regulatory regime of the James Bay and Northern Quebec agreement, which created the Makavik Corporation of Inuits with whom the Raglan mine's agreement was signed.

Despite their unique characteristics, we can still glean some important lessons from these agreements which can have broader applicability. Incidentally, Raglan is owned and operated by Falconbridge, a close competitor of Inco (Voisey's bay project) and Red Dog is operated by Cominco, a competitor of Rio Algom (owner of the Crandon project).

An important difference between the two agreements concerns employment guarantees. While the Red Dog agreement stipulated a target for employment of 70% by 1999, the Raglan agreement did not stipulate any particular percentage of employment, given the skill level of the workforce. The Raglan case reveals that while employment opportunities and training are an important linkage in such agreements, they should not become an essential prerequisite to consensus. Instead the agreement has focused on

profit-sharing and contributions to an Inuit trust fund which over 18 years (projected life of the first phase of the project) could total $70 million.

For the Red Dog operation NANA receives 4.5% net smelter return as a royalty. After Cominco recovers its capital investment in the mine, NANA will receive 25% of the net proceeds, increasing 5% every 5 years until NANA and Cominco share equally in the profits. NANA qualified shareholders in the NANA region (Alaska Natives) receive first preference on all Red Dog jobs. Approximately 400 people are employed at the mine and port facility, with slightly over 200 of these being NANA shareholders.

Raglan has a less acrimonious history than Red Dog, which may provide some lesson-drawing regarding the US versus Canadian experience in such matters. In the early history of the Red Dog project Cominco filed a lawsuit against the Secretary of the Interior, the Bureau of Land Management, the state of Alaska and the NANA Regional Corporation to gain full tenure of the Red Dog site. However, in 1980 President Carter signed the Alaska National Interest Land Conservation Act which securely established NANA's right to select land in the region for claims. This decision led Cominco to move towards direct agreement with the NANA corporation.[305]

NANA receives 4.5% net smelter return as a royalty. After Cominco recovers its capital investment in the mine, NANA will receive 25% of the net proceeds, increasing 5% every 5 years until NANA and Cominco share equally in the profits. NANA qualified shareholders in the NANA region (Alaska Natives) receive first preference on all Red Dog jobs. Approximately 400 people are employed at the mine and port facility, with slightly over 200 of these being NANA shareholders. NANA is unusual among Native corporations in its emphasis on employment over profits. As early as 1976,

NANA's erstwhile president John Shaeffer told an interviewer that the mission of the corporation was "to provide people with an opportunity to participate in Western culture at whatever pace and degree they feel is possible for them."[306] Stephen Colt in his detailed analysis of the comparative economic success of Alaska's 12 regional Native corporations comments on this distinctive feature of NANA, and perhaps a hallmark of its relative success as compared to the other corporations, many of which have languished close to bankruptcy:

> "NANA saw itself as a bridge to Western society which no one had to cross if they did not wish to. From this basic self-conception followed a number of operating practices that appear to be unique among all regional corporations. These include the early and consistent separation of ceremonial leadership from day to day operations, a continuing emphasis on pride in culture, and an almost fanatical pursuit of employment on terms compatible with traditional Eskimo (Inupiat) subsistence."[307]

NANA was the first regional corporation to merge with its villages, and when the question arose in 1991 of whether to issue new stock to younger Natives, not originally included in ANCSA, the shareholders changed the bylaws to grant new shares to all subsequent descendents of current shareholders. The major concern thus far has been the tendency of NANA shareholders to move from the North down to Anchorage (and commute to the mine) because of the free transportation which is currently provided to shareholders on a fortnightly basis between the mine and Anchorage. This is contrary to the effect which is often hoped for in mining ventures which are marketed as a means of preventing community flight to urban centers by providing employment in remote areas.

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[305] Koehler and Tikkanen, 1991, p. 270.
[306] Colt, Stephen G. (1999). *Three Essays on Native American Economic Development.* Doctoral Dissertation, MIT, Department of Economics.
[307] Quoted in Colt, 1999, p. 112.

On the other hand the Raglan project, has not focused as much on employment as a means of leverage but rather on direct payments and royalties as well as environmental mitigation arrangements. For example as part of the agreement negotiations, Falconbridge agreed to clean up a neighboring abandoned asbestos mine (which had no corporate connection to Falconbridge). Given the location of the project within the James Bay region, the approval process had to go through the Kativik Environmental Quality Commission. Like the Voisey's bay case, here too there was a Memorandum of Understanding signed *before* the negotiation process commenced.

A key aspect of the Raglan case is that the negotiations with the Makivik corporation spanned a period of five years from the late eighties to 1993 when the memorandum of understanding was signed. During this time the reduction of nickel prices allowed for the project to lay fallow for some time during which the negotiations could be carried out without any external pressure for hurried results. The company made some substantial compromises on the work shifts, shipping schedules (to prevent disturbance of wildlife migration patters), as well as regulations on firearm usage, exclusively for the Inuit workers at the mine site. Falconbrigde does not have a special "Aboriginal policy" like several other mining companies, but it does have a sustainable development policy which has been closely followed. In June 1998, the President of the Makivik Corporation, Pita Aatami, described the relationship between the Inuit and the company as follows:

> "This project represents a vivid illustration of how development between a major mining corporation and Aboriginal communities can take place. Makivik is proud to have signed the Raglan Agreement with Falconbridge."[308]

[308] Quoted in International Council on Metals and the Environment (1999). *Mining and Indigenous Peoples.* Ottawa, Canada: ICME.

Both these cases illustrate the possibilities for cooperation which may arise under certain circumstances while also revealing some of the constraints of cultural difference that remain despite the ostensible "capitalization" of the two Native communities at Raglan and Red Dog. Even here we see that the key linkage which resulted in a clear agreement was the linkage of the issue of land rights and property. Various other factors such as the cultural "match" of negotiations between a Native corporation and a mining corporation also played a part in facilitating dialogue. Environmental concerns that the communities raised and addressed were a manifestation of this lasting commitment to property but not vice versa. At the end of the day, these projects gave the communities a pivotal role in decision-making, and hence reaffirmed their sense of sovereignty – which as we shall discuss in Part III is ever so important to Native peoples.

PART 3: THE PRESCRIPTIVE SYNTHESIS

10. From Analysis to Synthesis: Evidence and Claims

For native communities the primary issue at stake in the planning process is a reassertion of their sovereignty. Environmental conservation is subservient to this larger objective and hence resistance based on environmental grounds can only take root if it is articulated within a framework of tribal self-determination. At the end of the day, tribes decide on whether to go ahead with a mining project or to resist it on environmental grounds based on which of the two options is a greater threat to their sense of sovereignty.

The preceding statement sums up the argument which I have tried to make throughout this dissertation. Given the discursive nature of the topic, the key claims, and the evidence on which they are premised, are widely dispersed throughout the manuscript. This chapter aims to present the key attributes of this argument and how they are supported by the cases in a concise and coherent form, thereby providing the basis for theory-building and policy advice in the subsequent two chapters.

Before discussing my key arguments, I would like to revisit the initial puzzle which led me to focus on this research. My starting point for this project was the observation that scientific criteria alone could not explain the emergence or prevalence of resistance. If scientific measures of impact were the primary motivation, one would have found greater resistance to mining in the uranium mining case in Saskatchewan and the mines in the Four Corners region. If economic concerns were an issue, then the Innu and Inuit would be expected to show least resistance to the mining given their remote

location and lack of alternative options for economic development. Similarly the Mole Lake tribe in Wisconsin would have much to gain economically from the mining given their relatively impoverished condition at present. Comparative review of impact criteria in Chapter 6 aimed to provide evidence in this regard, thereby opening the way for a test of alternative hypotheses. Given these observations the alternative hypotheses focus less on the product (environmental impact and amelioration) but rather on the process by which stakeholders are collectively engaged.

10.1 Framing the Argument

The process by which stakeholders in a mining development project are engaged, particularly with reference to environmental impact, can largely be understood within the framework of institutional negotiation analysis.[309] I have tried to articulate my argument about the causes of resistance prevalence among Native communities by focusing on two particular elements of a negotiation*: issue linkage* and *player linkage.*

With regard to issue linkage, the focus of my research has been on the linkage between land disputes and environmental impact negotiations. At the same time, my analysis of player linkage has focused on the interactions between environmental NGOs and Native people, given that these two groups have most frequently been perceived to be strategic allies.

My analysis has sought to understand whether these linkages are:

a) *synergistic:* combining the issues or having certain coalitions of players increases the opportunities to create value and promote agreement – thereby reducing the level of resistance.

[309] For a concise, yet incisive, discussion of linkages in negotiation see Watkins and Passow, 1996.

b) *antagonistic:* combining the issues or having certain coalitions of players decreases the chance of an agreement and thus promotes resistance.

Antagonistic linkages deserve further analysis, often missing in much of the commercial negotiation and planning discourse, that tends to start with the premise that "any agreement is good." Instead, I tend to focus on how to arrive at an agreement that is sustainable, if at all possible, by seeking ways in which the negotiation process can better incorporate causes of resistance.[310] In this regard my approach may be categorized as "conflict resolution," whereas the former approach may be categorized as "conflict management." Jay Folberg and Alison Taylor differentiate between these two approaches as follows: "Conflict resolution creates a state of uniformity or convergence of purpose or means; conflict management only realigns the divergence enough to render the opposing forces less diametrically opposite or damaging to each other."[311]

There may be certain kinds of proposed agreements which may well be worth resisting. In such cases, antagonistic linkages might be the optimal route to take until, and unless, the agreement can be better crafted to meet the desires of all the stakeholders. Nevertheless, there are clearly some parties in a negotiation for whom there is no zone of possible agreement (ZOPA). When establishing player linkage, an appreciation of this dynamic is essential. The following sections present the key claims of my argument and to synthesize the evidence from the case studies that was presented in Part II.

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[310] It is important to keep in mind that just as I have presented a case for why promoting resistance may be good, the flip case can also be made that certain agreements that may occur without resistance are perhaps flawed because they indicate a kind of co-optive mechanism at work. Such an argument is very difficult to evaluate empirically since it presumes a kind of psychological game of "brainwashing" being played between the stakeholders.

[311] Folberg and Taylor, 1984, p. 25.

10.2 Player-linkage: Claims and Evidence

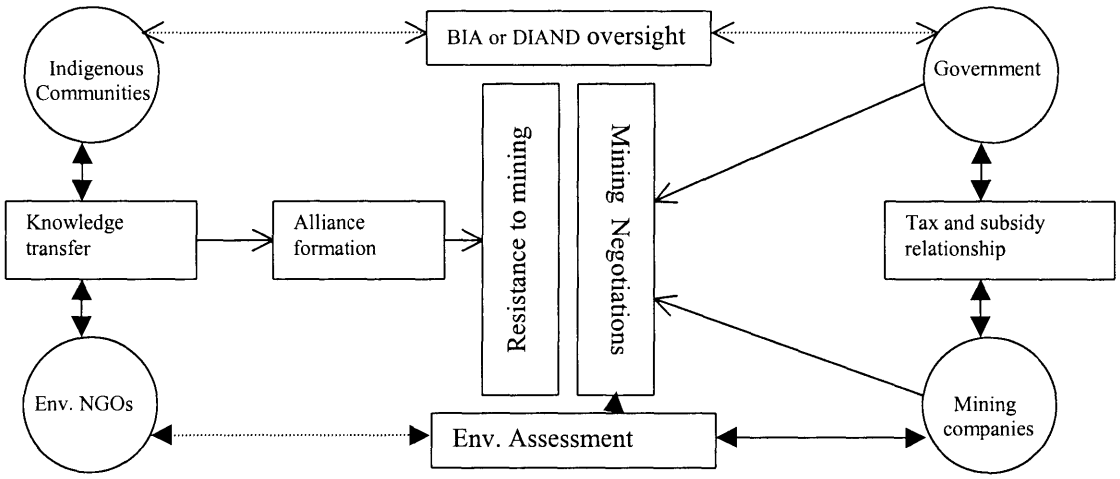
The term "player-linkage" can be used in various connotations depending on the scale of the analysis. For the purposes of this dissertation, I have tried to focus on the player linkage at the level of institutional alliances. In particular, I have explored alliances between environmental NGOs and Native communities, given the usual articulation of resistance movements to mining in environmental terms. This focus also questions the common assumption that native peoples have some inherent environmental proclivities.

There are two separate but related claims which I am making in this regard. The first claim questions the role of NGOs as a source of empowerment, and hence resistance formation, among Native communities. The second pertains to the essential ingredients for any constructive alliance between Native peoples and environmentalists:

Claims: **The role of environmental NGOs in amplifying Native resistance is quite limited, and alliance formation between NGOs and indigenous communities is only effective, and constructive, when the alliance is predicated on tribal sovereignty over natural resource usage.**

To better understand this claim, it may be instructive to look at various perceptions of linkages and what are, in fact, supported by the evidence. Figure 10.1 shows a model of player-linkage which reflects the common perception that indigenous people are empowered by civil society through knowledge transfer, while providing environmentalists with traditional knowledge about ecosystems. I am referring to this as the "resource wars" model which is espoused by most activists. However, the evidence from my case analysis challenges many of the key attributes of this model.

Figure 10.1: The "resource wars" model of player linkage for mining development



Note: → (filled arrow) indicates transfer of material , whereas ,⇒ (lined arrow), indicates progression to a new step in the process. Dotted lines represent an interaction that may have repercussions on the negotiations in certain cases depending on how the negotiations unfold.

This model is largely predicated on notions of resource dependency and presumes that indigenous communities are deficient in certain essential resources that are needed to form resistance. Knowledge about environmental harm is often presented as the key missing link for resistance formation by many of the key proponents of this model, who argue that NGOs and indigenous people have an epistemic relationship. At the same time, this model, which often ensues from the activist world, also configures mining companies and governments as allies who have a mutually advantageous relationship based on tax revenues that the government can collect from the government as well as certain subsidies which the government often gives to primary industries to promote economic development.

Compelling as this model may seem to many activists and social critics, the empirical evidence from my cases does not support many of its features.

First of all, in all four cases, I found little evidence to support any substantive knowledge-transfer taking place from the NGOs to the indigenous communities. Much of the information concerning environmental impact was directly collected by the tribes through either governmental channels or through their own initiatives to hire particular consultants and environmental specialists. Second, the texture of the alliances, if any, that formed in the cases was not one of unified resistance against a common foe but rather independent action taken by indigenous groups and environmentalists on their own. The only case of more institutionally organized alliance formation was observed in the Crandon case (Case U2), and here too the indigenous communities most effectively resisted through individual regulatory initiatives. Finally, the evidence in my cases *does* support a strong relationship between mining companies and various tiers of government. However, this too is not bilateral by any means, as activist groups often propose in their campaign literature. Any collaborative efforts are presented through the mining development negotiation process. With the exception of the Black Mesa case (U1), this process was fairly transparent in both the United States and Canada.[312] Even at Black Mesa, the historically surreptitious behavior of the government and Peabody Coal is now widely acknowledged by the government and the renewal of the permit in 1990 was fairly transparent.

Table 10.1 enlists some of the key points of evidence from each case with regard to player linkage.

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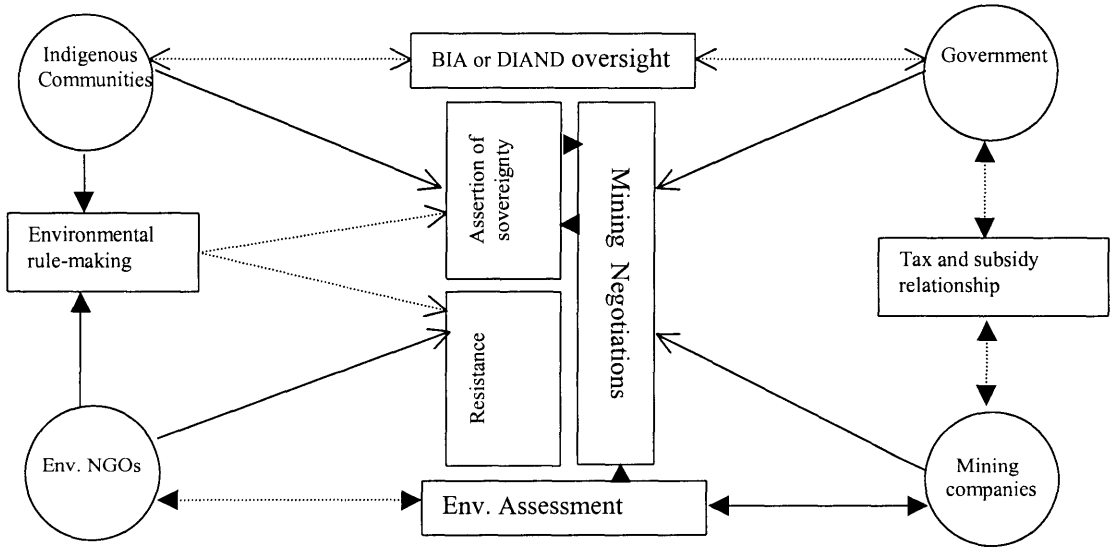
[312] In fact the least transparent process was the interactions between the mining companies and the tribal governments – the reasons for which will be discussed in the next section (9.2.2).

Table 10.1: Summary of evidence from cases regarding player-linkage claim

	Cases where resistance did not prevail		*Cases where resistance prevailed*	
Attributes of player-linkage claim	**U1: Black Mesa/ Kayenata mine**	**C1: Saskatchewan uranium mines**	**U2: Crandon mine**	**C2: Voisey's Bay mine**
Knowledge-transfer between NGOs and indigenous groups	Lobbying efforts at UN agencies and 'consulting' services provided by some individual activists but no organized NGO backing.	Involvement of Inter-church groups was limited to informational sessions in the urban southern areas, with low Aboriginal population.	Some information exchange between tribes and NGOs but this was not the cause of resistance since tribes independently began protests before NGO involvement.	Information exchange through consultants hired by the tribes through government grants. Tribes published their own guidelines for industry and conducted scoping studies.
Alliance formation between NGOs and indigenous groups	No alliance formation with either Hopi or Navajo governments. Protest alliances between certain activists and a small group of elderly resistors at Big Mountain.	No alliance formation despite a history of environmentalist involvement at Wollaston lake. Only a few urban Aboriginal professors joined NGOs in protests	Alliances formed on the basis of treaty rights through the Midwest Treaty Network, leading to the passage of the mining moratorium law	No formal alliances formed, though logistical support for conferences offered by Mining Watch Canada -- on the basis of land rights rather than environmental issues.
Relationship between government and mining company	Federal govt. historically complicit in flawed leases between tribes and company. OSM's supervision repeatedly questioned by tribes	Historically, uranium mining was a federal government-owned enterprise. Provincial and federal government generally support mining	State government has supported mining, despite passage of moratorium law.	Provincial government supports mining; would also like company to build a new nickel in NF, which has deadlocked negotiations.
Environmental assessment process	Individual activists routinely involved in letter-writing campaigns to govt. Participation in the EA process for the permit renewals was limited. Tribal govt. directly negotiated with company.	Inter-government panels established to augment EA process. NGOs participated in public sessions with panels. No collective campaigning with tribes. Company established independent review committees with tribe.	NGOs and tribes submitted comments to EA independently and collectively. Tribes refused to have any communication link with company. Tribes encouraged by EPA to draft their own regulation.	Inter-government panels established to augment EA process. Tribes initiated their own environmental assessment through indep. consultant. NGO initiated unsuccessful legal action. regarding EA process.
Case-specific player linkages	The Hopi and the Navajo have been historic adversaries due to a land dispute, but the tribal govts. have both favored existing mining. The Hopi have proposed a moratorium on future mining. NGO involvement has exacerbated tensions between tribes	The involvement of John Dantouze in the review panel and his subsequent resignation ostensibly indicated that there was player linkage with NGOs. However, a closer analysis reveals that the resignation was completely motivated by	Environmentalists and fishermen who had opposed tribal sovereignty during the spear-fishing controversy became proponents of tribal sovereignty when they realized how tribal influence could help their cause. The Midwest Treaty Network was instrumental in this regard.	The Inuit and the Innu have overlapping land claims similar to the Navajo/Hopi. However, the two groups worked collaboratively on mining issues and some protests. While the Innu have been more resistant, the govt. has encouraged bilateral exchange between the two groups unlike the Navajo and Hopi case.

The case analysis reveals that the presumed "natural alliances" between NGOs and indigenous communities are more illusory than initially thought. While there is potential for alliance-formation, the basis for such alliances is usually not knowledge-transfer. Moreover, alliance formation is not an essential prerequisite for resistance formation, nor is resistance channeled through NGOs per se. Tribal decision-making regarding environmental issues in North America is in fact much more sophisticated than the "resource war" model. Figure 10.2 shows my model of player-linkage as supported by the evidence in the cases.

Figure 10.2: "Sovereignty is first" model of player-linkage in mining development



In this model the key difference is that resistance is not a monolithic outcome on the part of the indigenous communities. The primary stake for indigenous communities is an assertion of their sovereignty which can sometimes manifest itself as resistance movements to development ventures, such as mining. This was observed in both the Wisconsin and Newfoundland cases (U2 and C2). Environmental issues are a means by

which tribes may want to assert their sovereignty but that should not necessarily mean that the underlying values are in synch with the NGOs. Indeed, the only form of environmental alliance-building between NGOs and indigenous communities has been predicated on this acknowledgement of Native self-determination. In practical terms, the relevant field of engagement which has worked well for these two groups is environmental rule-making. NGOs that have channeled their alliance-building efforts through a support of tribal environmental laws (tribal primacy or 'treatment- as a state' rule-making).

Another notable feature of Figure 10.2 are the arrows leading from the "assertion of sovereignty" field to the mining negotiations. This connection illustrates the empirical observation that mining negotiations within federalist states can also reconcile concerns of Native sovereignty if they are appropriately undertaken by the government and the companies. The Saskatchewan case (C1) illustrates such an interaction, which has resulted in a relatively successful mining venture. In the Saskatchewan case the sense of sovereignty of the bands was reinforced by the mining company through various forums such as the Athabasca Working Group, the direct involvement of top management with the tribal negotiators (including the appointment of a tribal leader to the board of the company).The failure of environmentalists to garner native support in Saskatchewan, despite a history of deleterious mining activity, showed how Native communities were able to discern the lack of legitimacy which urban environmentalists often have when advocating preservation in remote areas.

In the Wisconsin case (U1) where constructive alliances were observed, the axis of alliance-formation was not environmentalism but treaty rights. It is also important to

note that in this case the Natives initiated the protests without necessarily being galvanized by the NGOs. Alliances did form later on but they were brought about through the Midwest Treaty Network rather than by a particular environmentalist agenda.

Apart from appreciating the limitations of Native-NGO alliances and the ingredients for making such alliances productive, I have also tried to recognize the negative effects of certain misconceived alliances. This aspect of my player-linkage claim is exemplified by the Black Mesa case, where environmentalists allied themselves with certain elderly Navajo residents in a disputed land area and diluted the efficacy of their claims, while also antagonizing the neighboring Hopi tribe. The environmental activists, despite their good intentions, tried to form alliances with Navajo resistors by presenting the mining company as a common foe. However, in this regard they circumvented layers of tribal authority and due process, and approached the issue with a presumption that the tribal authorities and the government authorities were beholden to mining interests. Thus, their rhetoric was targeted at discrediting tribal leadership and pitching one tribe against the other. The lesson in alliance formation or player-linkage is to appreciate the difference in BATNAs between parties before forming alliances.[313] In other words the opportunity costs for various stakeholders are quite different and the way in which they present issues in the negotiation process or as a resistance movement are consequentially different and have a strong bearing on the outcome.

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[313] This point pertaining BATNA (Best Alternative to a Negotiated Agreement) is discussed in Chapters 2 and 8.

10.3 Issue-linkage: Claims and evidence

While alliance formation can have a significant impact on the way parties organize themselves and the degree of power which they can leverage, the linkage of issues plays a pivotal role in determining the zone of possible agreement (ZOPA). My analysis, once again, does not seek to assume that a larger zone of agreement is necessarily good, but rather, seeks to understand how the linkage of issues can help or hinder the attainment of the ultimate objectives for each stakeholder.

The three key issues that were conceivably at stake for the indigenous communities (though not to the same degree in each case) were: land rights, financial benefits (employment and royalties) and environmental protection. The way in which each of these issues was linked to the mining development negotiations, and to each other, determined the degree of resistance from the community as well as the prevalence of any resistance movement. While negotiation processes ostensibly present issues collectively, that does not necessarily mean that the issues are linked. Formal issue-linkage requires parties to consciously use issues for bargaining, contingency and commitment.

At the start of this chapter, I briefly discussed how linkages could be synergistic or antagonistic, depending on whether they increased or decreased the zone of agreement. With regard to issue-linkage it is also important in our context to consider *competitive* versus *reciprocal* linkages.[314]

Competitive linkage occurs when agreement in one negotiation precludes agreement in other linked negotiations. While competitive linkage is often operationalized in the context of bidding contracts for small businesses, it can be a useful

frame of reference within the context of development ventures. As discussed in Chapter 3, mining companies have very little leverage about where they establish a mine, since much of their decisions are based on geology. They don't have many options for site location as do manufacturing businesses. Hence they are not really in a position to establish competitive linkages among communities. However, communities may, in certain cases, have the option to choose between different development options. For example, a competitive linkage may be made between mining and tourism within the context of a development plan.

Nevertheless, the more prevalent form of linkage within the context of indigenous communities in remote areas, where mining concerns are most prevalent, are reciprocal linkages. Often competitive linkages are not even an issue because there may not even be a competing development alternative. The alternative is often a status quo (which in certain cases may also be more desirable). Reciprocal linkage implies that agreement must be reached in all issue areas in order to gain an overall agreement. Table 9.3 shows the various issues and how they were linked in each of the cases, largely from the perspective of reciprocal issue linkage, though some possible attributes of competitive linkage are also enlisted.

[314] Watkins and Pasow, 1996.

Table 10.2: Evidence of issue linkage in the case analysis and its outcome

	Linkage Attributes			
	Cases where resistance did not prevail		*Cases where resistance prevailed*	
Issue	**U1: Black Mesa/ Kayenta mine**	**C1: Sask. uranium mines**	**U2: Crandon mine**	**C2: Voisey's Bay mine**
Environmental Protection	Water extraction linkage established by some tribal officials, particularly by the former Hopi chairman Vernon Masayesva.	Environmental agreement based on community consultations which circumvented NGO involvement	Key linkage established by tribes. NGOs supported this through tribal primacy rather than issue based activism	Three-track process in which environmental issues linked to final outcome alongside impact/benefit agreement and land claims settlement.
Financial Remuneration	Law suits filed by tribes against mining company to recover past royalties but that is not linked to ongoing mining activities.	Revenue-sharing negotiations linked to agreement, which the Company let the govt. negotiate bilaterally with the communities.	Not discussed. Mining company tried to offer compensation for exploration rights but the offer was declined.	Not explicitly discussed. Employment and training efforts are
Land Rights	Environmentalists have unsuccessfully tried to link the Navajo/Hopi land dispute to the mining activities.	Settled before mining commenced. Federal govt. instrumental in settling claims beforehand.	Land rights determined through treaties. Tribe moving to the "next step" of lawmaking rights	Land dispute between Innu and Inuit negotiated through a multi-party process. Panel suggests settlement of claims before mining.
Competitive linkages	Gaming and ecotourism are possibilities. Navajo tribe has currently not permitted Tribal gaming but has given individual chapters discretion.	Ecotourism suggested by southern Sask. NGOs. Feasibility studies have not yet been performed. Service economy may form after mining (catering and aviation)	Gaming operations exist, though with small profitability. NGOs eager to promote fishing and riparian sports.	Some timber operations are possible, but their profitability is very limited and not comparable to mining revenues.

How issues are linked, and by whom, are both key determinants of resistance formation and prevalence. For example, issue linkage was a salient factor in the failure of environmentalists to galvanize support across both Hopi and Navajo tribes (which are in fact mutual adversaries on most issues but relatively united when it comes to positions on mining). As documented in chapter 8, the environmental groups often caused serious divisions within the community and by posturing non-substantive linkages between mining, the ecology and territorial disputes, they reduced the credibility and legitimacy of their own cause, as well as those of the land disputants. However, cross-case comparison revealed that the linkage of land claims to the mining negotiations in the case of the Innu and the Inuit made sense since there was no treaty settlement in the area. This was also supported by the peripheral Raglan and Red Dog cases, which are heralded by the mining industry because there are existing land agreements in place (ANCSA and JBNQA respectively) However, in the case of the Navajo and the Hopi land dispute the linkage was not substantive since the decision regarding the allocation of Hopi territory was made by the federal government and conspiracy theories linking Peabody to the Hopi did not hold ground, particularly when articulated in an environmental framework.

The linkage of financial concerns, may seem fairly obvious to some economic observers. However, there were clearly different approaches to internalize financial considerations within the negotiation process and their relative impact on the tribe's decisions. In the Saskatchewan case, revenue sharing was a key issue that sparked resistance from Chief Dantouze and led to his resignation from the federal/provincial uranium review panel. Environmental groups attempted to link the resignation to environmental concerns but were not able to garner support on this basis. The mining

company distanced itself from the revenue sharing negotiations and let the government deal with the political concerns of certain tribal leaders, while focusing on the community consultation process through the Athabasca Working Group. In the Wisconsin case, financial remuneration was dismissed by the tribe, who had an uncompromising resistance to mining. While a tribal leader briefly accepted some monetary compensation for exploration rights, the check was torn up at a tribal council meeting, and no further financial offers were entertained. In this case, the money was perceived by the tribal members as a sort of a "bribe" since Exxon, the original owner of the project, had not interacted positively with the community and not conducted prior consultations, thereby poisoning the views of the tribe towards mining prospects. A sudden financial overture thus appeared contrived and insincere.

Within financial linkages, employment guarantees are often used as a development incentive by mining ventures. In the Saskatchewan case, the mining company offered employment targets and a plan to achieve them to the tribal leadership. This worked well but is not a necessary prerequisite to a workable agreement. At the Raglan mine, employment was de-linked from the negotiation process and still a workable agreement was achieved.

The Canadian experience of direct bilateral negotiations between the tribe and the company for impact-benefit agreements in the Labrador case alongside a supervisory panel process was able to deescalate the conflict. Therefore, even though the resistance to mining in the Labrador case was just as pronounced, the government was able to prevent the communities from "walking away" from the negotiating table. The three-track process, which may initially seem somewhat inefficient, actually worked well in allowing

for negotiations to continue -- linkage between land claims, mining and environmental harm was made but the issues were not confounded.

From another perspective, the constructive ENGO-Native alliance in Wisconsin was exemplified by the fact that the ENGOs articulated their struggle purely in terms of treaty rights, and acknowledged that if the tribes decided to go ahead with mining they would respect their decision. Moreover, they articulated their opposition by lobbying for tribes to get 'treatment as a state' environmental regulations, thereby reinforcing a sense of sovereignty for the tribes.

The competitive linkages were not developed by any of the stakeholders in each of the cases. This is an area of further inquiry in other case studies where clear development options are presented before tribal communities. Indeed, for environmental NGOs seeking a constructive role in indigenous development planning and lasting alliances, this may be an area to explore further. It is not enough to suggest competitive alternatives to mining but to be able to present them with analyses that can be useful in decision-making.

10.4 Towards a Typography of Environmental Resistance among Aboriginal Communities

> "We must move away from the sterile question of whether efforts to cope with ecological problems erode or bolster some reified conception of sovereignty to the more interesting question of how such efforts lead to a reconfiguration of political space."[315]

Following this advice from Karen Litfin in her volume *The Greening of Sovereignty in World Politics,* I focus on the reconfiguration of political space, quite literally. The case analysis in Part II clearly shows that the phenomenon of environmental

resistance on the part of Aboriginal communities (which was presented in general form in Part I) exists because of a fundamental disconnect between the perception of goals between stakeholders as played out in their respective interactions, rather than any particular differences in technical environmental impact of mining. This is manifest in strategic alliances which often exacerbate divisions rather than generate consensus among the communities, due to misplaced issue-linkage. Keeping these lessons in mind let us try to formulate a "typography" of the three key stakeholders with reference to their goals -- a static corollary for what is at stake for each stakeholder. Figure 10.2 shows my typography in its simplest form. The lay out should be considered a conceptual map rather than a Cartesian plane. It is also important to appreciate that this diagram is only meant to present a two-dimensional view of outcomes and the underlying power dynamics which were discussed in the earlier part of this chapter lead to this ultimate outcome. From a prescriptive point of view, I would argue that a more reciprocal view of power as developed by Emerson (1962), and exemplified in much of the contemporary dispute resolution literature is needed. As mentioned, in the introduction, it is possible to move beyond zero-sum views of power, and to focus on ways in which specific needs and resources of each stakeholder can be negotiated. This process requires an appreciation for how interdependence can allow parties to mutually gain power.

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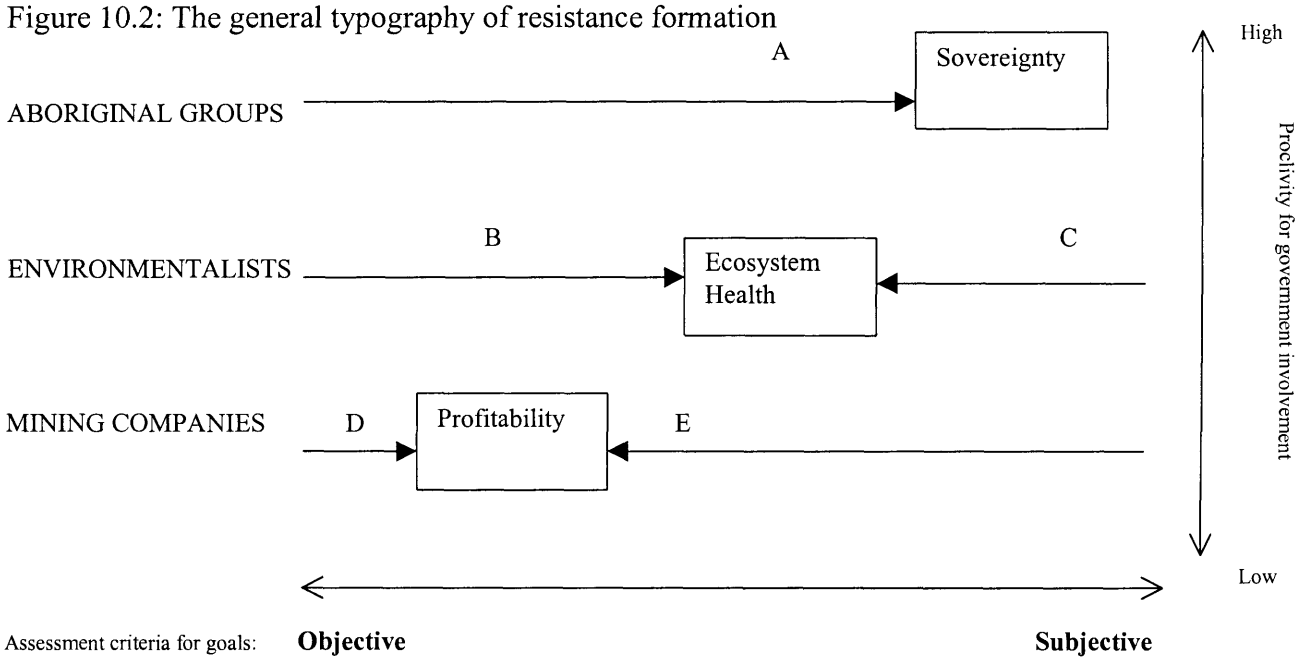
[315] Litfin, 1998, p. 2

Figure 10.2: The general typography of resistance formation



The rectangular boxes are the goals for each stakeholder that are positioned horizontally along a continuum of assessment criteria for those goals, ranging from objective to subjective. I am using these terms (objective and subjective) in the classical sense where the former implies a relative unity of measurement parameters whereas the latter implies multiple measurement parameters. This range is meant to indicate the degree to which the assessment criteria can have multiple interpretations and also takes into account the perennial tension between the constructivist notions (the subjective end of the spectrum) and realists notions of discrete data and empirical observation (the objective end of the spectrum), as discussed in Chapter 6.

The primary goal of mining companies, profitability, is assessed in high realist "currency", hence it is near the objective end of the spectrum. However, it is important to

note that here too there are some important subjective issues at play regarding how to account for one's profits – therefore, the companies' goal rectangle is not at the extreme end of the range (hence arrow *D*). Environmental goals rely on objective criteria such as scientific studies but also have an important normative dimension based on judgments about consumerism and social justice, hence they are somewhere in the middle. The primary goal of Aboriginal groups, sovereignty, is operationalized through highly subjective assessment criteria and hence it is on the other end of the spectrum.

The more interesting feature of this diagram are the arrows which depict predominant strategies for reaching the desired goals. The length of the arrow indicates the general prevalence of the strategy and the direction indicates the part of the spectrum towards which that particular strategy is inclined. However, in this analysis it is important to keep in mind that attaining the full measure of the goal in question requires an application of both arrows. In comparing the situation of the goals across stakeholders, these arrows can be considered vectors and thus a difference in direction indicates a subtraction *across* stakeholders of total efficacy where a similar direction indicates a re-enforcement of strategy.

Arrow *A* indicates the overwhelming desire for Aboriginal groups to attain sovereignty. This is the frame of reference for this analysis (hence only one arrow leading to it) since there is so much unanimity among Aboriginal communities about achieving this goal. There is only one arrow here also because achieving sovereignty is not predicated on a balance between different approaches, as is the case with the other two goals.

Arrow *B* has the same direction as *A* and refers to those issue areas whose strategic use can indeed lead to sovereignty as well as ecosystem health. This refers to initiatives such as the Midwest Treaty Network in the Crandon case or the role of environmental activists such as Larry Innes in the Voisey's Bay case. This arrow also embodies the normative attributes of environmentalism that advocate small-scale economies (a la Schumacher) that are often congruent with Native aspirations for sovereignty.

However, the goal of ecosystem health is situated in a place on the typography that also requires certain actions that undermine native sovereignty (Arrow *C*). These are the issue areas which can lead to tensions between Natives and non-Natives, such as the Makah whaling controversy, or issues which were raised in the Saskatchewan uranium mining case.

Arrow *D* reflects those practices in the mining industry which support indigenous sovereignty through employment and self-sufficiency, and can be effectively harnessed as reflected in the Saskatchewan case and to some degree in the Black Mesa case. However, the profitability goal of mining companies is often directly incongruent to the sovereignty vector *A*. This is related most acutely to the issue of royalties and land claims. As we saw in our discussion of even the most widely acclaimed Aboriginal mining agreements such as the Red Dog case, there was a history of litigation and an initial attempt to get title to the property.

In the vertical dimension, I have aligned the cases along a continuum of a "proclivity for government involvement." You may have been wondering where our "embedded stakeholder" (a la Chapter 4) is in this framework. Well the answer is that the

government is a stakeholder with multiple goals that are truly embedded across both dimensions. The vertical scale is meant to indicate what degree of "government involvement" each of the three stakeholders prefer.

Aboriginal groups are at the top here because they are in fact aspiring for their own government, and hence have a very strong proclivity at that level. There is also the love-hate relationship which they have with the federal government and the difference between self-determination and termination which we have already discussed. Environmental groups certainly want government involvement at some level to regulate pollution, but are also skeptical about centralized authority and hence are in the middle again. Mining companies have the least proclivity for government involvement as is to be expected of a private corporation and hence are at the bottom of the spectrum.

10.5 Analytic Applicability

In this chapter, I have attempted to present a coherent social science analysis derived from the more detailed case ethnographies of Part II. However, there are still some questions which cannot be entirely explained by the evidence, and for which I can only offer some measured speculation. A key issue in this regard pertains to the applicability of my claims to other cases. My analysis has been confined to institutionally developed countries, and hence the applicability of some of the findings to the developing world may be questionable. My interest in studying resistance movements in the developed world was spurred by a recognition that conflict and dissatisfaction with institutional processes can arise even in countries which are often considered role models for developing nations. Hence an understanding of the causes of resistance formation and

its importance in shaping mining development in developed countries could perhaps lead us to a better understanding of conflicts elsewhere. However, there are clearly key differences in the dynamics of stakeholder interactions in countries which have stronger environmental laws and a more effective judicial system in general. Thus environmental harm being inflicted by mining companies in developing countries may necessitate environmental concerns at a far more fundamental level . In such a circumstance, environmental NGOs may well be forming alliances based on mutual need and similar goals.

The applicability of these findings to non-Native communities is perhaps even more problematic, since much of the analysis has assumed a *sui generis* status of Native people, both historically and legally. However, the elements of decision-making power that Native people articulate as a struggle for sovereignty are present in all communities at some level. I would argue that participation in the negotiation process and the formation of appropriate alliances and issue-linkages are integral to any corporate-community interaction within a democracy. In order to provide a firmer foundation for such broader inferences, and in order to delineate the limits of analytic applicability, the following section will present a model that may explain the underlying causes of resistance formation.

The aim of the typography presented in this chapter is to distil the insights gleaned from the analyses in preceding chapters, and how these observations can help in theory-building. The next and final step is to see how these insights can lead to concrete recommendations for the stakeholders within a planning context – presented in the next chapter.

11. Planning for sustainable development on Aboriginal land: Some advice for stakeholders on both sides of the border

> "It seems that resistance is a mirror image of planning. Every technoenvironmental change project has both costs and benefits; in some cases, these are represented in the form of a cost/benefit ratios. Resisters tend to focus upon the costs of a project, while planners tend to emphasize its benefits. Resistance begins with the identification of threats posed by a project and planning begins with the identification of needs."[316]

It is precisely the kinds of views about planning and resistance noted above by Schweri and van Willigen which prompted me to pursue this dissertation. Indeed the "internalization" of resistance efforts within the planning process is essential in the "new" wave of planning towards sustainability.[317] However, such a process is undoubtedly much more complex and implementing it requires a fundamental shift in the way stakeholders interact with each other. In this final chapter, I will try to present some of the lessons learned from the cases in question, with particular reference to any policy differences between the Canada and the United States which provide a mutual base for lesson-drawing.[318]

Aboriginal policy posits a challenge to policy-makers because acceding to Native demands for greater self-determination in the minds of many politicians has the propensity to generate anarchy, which is of course anathema to the modern nation state. This challenge resurrects the concerns which were raised more than a century ago by the British philosopher Matthew Arnold in his seminal work *Culture and Anarchy.*

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[316] William Schweri and John van Willigen (1984) " Community resistance to Environmental Change Projects" in Millsap, 1984.

[317] See Michael and Meadowcroft, 1999 and Dobson ed., 1999.

[318] Richard Rose (1996) is among the few political scientists who has drawn attention to important analytical ways of lesson-drawing between countries. It is important in his view to keep in mind a sense of time and place in drawing such lessons, but that being said, the potential for using such analysis as a means for introspection and policy reform is immense.

Anarchy to Arnold was embodied in excessive materialism - what he contemptuously refers to in one of his chapters as 'Doing As One Likes' - and, most profoundly, in what he considered the "subversive pluralism" to which he felt his society had surrendered. This pluralism, for Arnold, meant the disintegration of a sense of shared, permanent values, and a corresponding collapse of cultural standards.[319]

Around the same time thousands of miles and traditions away Aboriginal peoples in the Americas were thinking along similar lines.[320] Indians also shaped their politics and their statecraft around maintaining a community, and a continuity of cultural values. It is important to keep in mind that they too were deeply suspicious of any convenient pluralism, and they believed, no less than Arnold did, that culture must maintain an orderly balance between convention and change, or else anarchy will take hold.

In trying to understand the Aboriginal notions of law and sovereignty and proposing resolutions to current conflicts, we can also glean some important insights from the writings of the nineteenth century political philosopher Henry Maine who argued that law and order, like art and culture, depend upon a sense of tradition. Maine drew his examples from across the world, most notably from the ancient tribal hamlets of India.

One aspect of Maine's argument is especially relevant to our discussion — the way in which he related tradition and authority. J. Edward Chamberlain has summarized Maine's argument as follows:

> Traditions accommodate change - resistance and innovation, as well as appropriation, are their stock-in-trade. But they do not easily tolerate

[319] I am indebted to Professor J. Edward Chamberlain of the University of Toronto for bringing Arnold's work to my attention in one of his writings, cited below.
[320] The Iroquois among others had a fairly well-developed political system. See Debo, 1976.

> competition. Authority, on the other hand, thrives on competition and is often quite comfortable with contingent power relationships, provided only that boundaries are clearly established. Traditions, for their part, always want the field to themselves, though they accept - indeed sometimes even encourage - periodic changes in boundaries.[321]

That is why many post-Renaissance European societies could strictly separate the traditions of church and state at the same time as they continued to acknowledge contingencies of secular and sacred authority within each tradition. However, Chamberlain along with numerous other scholars of Aboriginal history and politics then make a rather astounding and erroneous leap by asserting that for Indians: "the contingencies of authority were always negotiable. Traditions, on the other hand, could never be contingent, and therefore could never be negotiated. Coherence and continuity were absolutes threatened more by pluralism than by power." [322]

While this perception concerning the negotiability of authority may well be true during the sixteenth and seventeenth century, that is certainly not the case at present. Indeed, authority as manifest in the tribal insistence on self-governance is the unequivocal demand in all our case analyses. The issue at hand is how do we reconcile these divergent perceptions about the environment and development amidst what is fundamentally a continuing "clash of cultures."

The most violent conflicts in human history are ostensibly generated by a perception of difference that tends to be based on lines of ethnic differentiation. Before looking at specific "lessons" and "recommendations" for stakeholders, it may be useful to look at cases where ethnic differences have existed with the emergence of violent conflicts and compare those cases with other instances of ethnic difference in societies

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[321] J. Edward Chamberlain. "Culture and Anarchy in Indian Country." In Asch ed., 1997.
[322] Ibid, p. 6.

where conflict has not been manifest in any violence. Louis Kriesberg (1998) presents such a comparison of conflicts in the former Yugoslavia and compares it to the successful attempts of deescalating destructive conflict in Quebec. He presents a matrix of policies that can successively lead to de-escalation of conflict as shown in Table 11.1.

Table 11.1: Policies to Prevent Destructive Conflicts (After Kriesberg, 1998)

Phase	Preferred Goal				
	A: To Correct underlying conditions	B: To Prevent Destructive Acts	C: To Prevent Escalation	D: To End Fighting	E: To Move Toward Resolution
1: Conflict Emergence	Economic Growth; dialogue; reduced inequality; integration, shared identity	Use legitimate institutions; dialogue; conflict resolution training	Crosscutting ties; nonviolent training; unofficial exchange	-----	------
2. Threat of isolated destructive acts	------	Deterrence; reassurance; external mediation or intervention; crisis management; precise policies	Non-inflammatory information; limiting arms; tit-for-tat; humanitarian assistance; peace-keeping	Negotiation; reframing conflicts; confidence-building measures; mediation	Negotiation; mutual reassurance; unofficial exchanges; superordinate goals;
3. Extensive Destructive Acts	-------	-------	Changing expectations of victory / defeat; intervention; constituency opposition; limiting arms	Mediation, external intervention; limiting arms; negotiation	Superordinate goals, inter-dependence; confidence-building measures; problem-solving workshops
4. Protracted and Extensive destructive Acts	------	-------	-------	GRIT*; problem-solving workshops; unofficial exchanges; step-by-step negotiations; constituency opposition	Acknowledging hurts; superordinate goals; no humiliation; external enemy; mutual recognition; shared identity

*GRIT: Graduated Reciprocation In Tension-reduction strategy (originally, presented by Osgood, 1962; studied in further detail by Goldstein and Freeman, 1990).

A major problem with contemporary conflicts involving Aboriginal groups is that Aboriginal people feel that they are at Stage E of the 'old' conflict between the natives, whereas the government and industry, while acknowledging past issues, are framing their interactions with the aboriginal groups vis-a-vis mining agreements more in terms of the present-day business contract and working on Stage A and B.

Norman Dale, in his insightful analysis of a resource planning conflict in the Queen Charlotte Islands of British Columbia (or Haida Gwaii to the Natives), also alludes to this fundamental issue of "stages." Quoting from Edward Said's work *Beginnings,* Dale points out that "the point at which a storyteller chooses to begin is the first step in the intentional construction of meaning."[323] In his case, as with most cases involving Native communities, the Haida "begin" their story much earlier than the non-Natives. Many of the preferred goals stipulated in this table are dependent on a degree of dispassionate involvement on the part of stakeholders with an appreciation for all the processes at each stage that are needed to prevent escalation of conflict.

11.1 Contested visions of Aboriginal development in the US and Canada

Efforts at drawing lessons between the Canadian and US experiences with Aboriginal policy have been few and far between. While both policies emanate from a common source, namely the Royal Proclamation of 1763, the policies diverged considerably because of a mutual repugnance between the governments in the nineteenth century. Legal scholar Michael Asch reflects this divergence eloquently:

> Architects of Canadian confederation were determined to demonstrate their faith in the country's future by establishing a common culture that

[323] Dale, Norman, "Negotiating the Future of Haida Gwaii." Case chapter in Susskind et al eds., 1999, p. 924.

> was based on something other than the revolutionary rhetoric of the American Declaration of Independence - whose phrases about 'life, liberty and (especially) the pursuit of happiness' sounded almost as hokey to them as 'the mother of all battles' (a la Saddam Hussein) does to some of us. The authority of the ' monarch' along with the celebration of the Victorian virtues of industry and thrift, seemed one good antidote to republican indulgence, extravagance, and anarchy; and a rhetoric of obedience and duty a wise part of the national discourse.[324]

It was thus not until the early part of the twentieth century that the first concerted effort was made by academics on both sides of the border to learn from each others' successes and mistakes in dealing with the common concern of Aboriginal policy. In 1939, The University of Toronto and Yale University organized a seminar to discuss ways of learning from the experiences of both countries. However, the tone of this seminar, given the times, was decidedly "assimilationist." Professor Charles Loram of Yale's erstwhile Department of Race Relations declared at the opening meeting that "that the Indian Problem was one of Acculturation."[325] The problem at present is still one of acculturation. However, now it is becoming more a matter of how the federal government, environmentalists and industry acculturate to Aboriginal concerns. Aboriginal society is clearly the most inertial of the other stakeholders (I mean that in a neutral way) and is increasingly in a position to leverage power. Mining negotiations are an example where this change is being played out, and both countries are still trying to grapple with ways of most appropriately planning for such projects in the most efficient and equitable way.

Much of the overview of governmental and regulatory differences between the two countries were discussed in Chapter 4. Considering what has been discussed in the

[324] Asch, 1997, p. 10
[325] Loram and McIlwraith, 1943.

context of the case analyses of Part II, let us now discuss some of the specific lessons which can be gleaned by both countries and their general applicability elsewhere:

11.1.1 Lessons which Canada can learn from the US

Canadians have taken some truly monumental steps in furthering the cause of Aboriginal people. The establishment of Nunavut in 1999 was emblematic of their success. Nevertheless, there are still some areas where they may glean some lessons from their Southern neighbor. In a speech before a Native American conference in Arizona, the Canadian Minister for Aboriginal Affairs Shirley Serafini made a remark which sums up a key lesson for the Canadians: "sovereignty is a far more tabooed word in Canada than here in the United States. The most we like to say is 'inherent right.'"[326] She was alluding to the important historical path which US Aboriginal policy has taken in recognizing the concept of self-government and not being embroiled in the somewhat archaic British legal regime of the sovereignty of the monarch and the primacy of "Crown" land. Kathy Brock describes this important distinction as follows:

> "American policy tended to regulate external aspects of tribal life while Canadian policy tended to extend into the internal life of tribes as well. Canadian policy was predicated on a disregard of first nation and Metis governance while American policy was founded upon a begruding acceptance of tribal governance."[327]

In the Crandon case (U2) this difference becomes starkly evident in the willingness of the Environmental Protection Agency against all the misgivings of the Wisconsin state legislature to encourage the Sokagoan Chippewa and the Forest County Potawotami to form their own environmental regulations (which would of course be at

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[326] Remarks at the Native American-Nation-building conference, Tucson AZ: University of Arizona, November, 1999.

least as stringent as the federal regulations). Particularly after the passage of *the Indian Self-determination and Education Assistance Act* (1975) and the *Indian Mineral Leasing Act* (1982), the government made a conscious effort to reaffirm the Nation-to-nation relationship between the US government and tribes.

This brings us to another important distinction between the US and Canada which may be instructive to Canadians. The US Congress has passed an enormous corpus of laws and legislations regarding Indians. While this may have in some ways made matters more cumbersome, the willingness to legislate changes and enact new statutes to deal with new concerns is something which Canada has not exhibited. The Canadians tend to be more adept at mega-level changes such as the constitutional amendments in 1982 which incorporated Aboriginal issues within the constitution (see Appendix 1). However, in terms of economic development planning, it is often the more small-scale measures that can be most helpful. The US Congress has approached the issue through a series of statutory revisions to facilitate self-government on reservations, most recently the *Indian Tribal Economic Development and Contract Encouragement Act* of 1999. Under this new law, Section 81 of the US Code will be amended to not require the BIA to sign off on industrial contracts. The oversight of various other government agencies vis-a-vis environmental protection will remain intact but it will prevent any misuse of BIA authority. According to Ambler (1990), one of the most blatant examples of BIA's catering to industry rather than Indians occurred in 1980 during the uranium boom in the San Juan Basin. In this incident the BIA repeatedly tried to force Navajo families to accept a lease agreement with Mobil, despite several more lucrative bids from other

[327]Kathy Brock: Finding Answers in Difference: Canadian and American Aboriginal Policy Compared." In Thomas, David M. ed. 2000.

companies. Subsequent legal action resulted in a federal ruling in which the judge concluded that the BIA had acted illegally and unconscionably stating that "The BIA and Interior generally seem to have been more concerned throughout the leasing process with their relationship with Mobil than their relationship with Indian owners."[328]

A similar concern exists in Canada with the DIAND's dual role as a department of "Indian Affairs" and "Northern Development" (which some would argue can be a conflict of interest). Furthermore, Canada has made important steps in Indian policy regarding *off-reserve* land-claims, but has been relatively inertial when it comes to *on-reserve* policy.

Thus the US government has tried to make the BIA increasingly an Indian organization over the past several decades. The budgets for both departments are comparable, though Canada with its higher taxation rates has a commensurately larger budget – around $2 billion for the BIA and around US$ 3 billion for DIAND. The Bureau currently has over 80% Native employment, whereas the Canadian DIAND has less than 15%. [329] This difference in employment levels has an extremely important symbolic value for many tribes in the United States and is particularly important in cross-cultural negotiations such as those involved in mineral leases. The President of the National Congress of American Indians in a recent testimony before Congress quoted a frequent refrain in Indian country: "The BIA is a son-of-a-bitch, but it is OUR son-of-a-bitch!" Through Indian employment the BIA has carved a niche for itself which may mean that it will not be an obsolescent organization as many had perceived:

> "The BIA has functioned as the American embassy to Indian Country, and as a concrete symbol of the existence and continuation of a special

[328] Ambler, 1990, p. 234.
[329] http://www.inac.gc.ca and http://www.doi.gov

> relationship. It may be that some would like to see the end of the BIA. But, if the non-Indian forces, determine there is no longer a reason for the continued existence of the BIA, they may also conclude that there is no longer any reason for the continued recognition of Indian tribes.[330]

The emergence of this feeling of diplomatic association concerning the BIA is something which is missing in DIAND's experience and is an area where Canada may have some lessons to learn from the United States. In the long-run the role of the BIA and DIAND is likely to become one of an exclusive consulting agency for tribes to provide them with particular technical expertise, or perhaps in the even more remote future the organizations may take the form of a "National Endowment for Native Americans."

At the level of environmental regulations and mining law, the US and Canada are generally at par with each other. The one area where the Canada can learn from the US experience is the enactment of a strong remediation law such as CERCLA. Canadian environmentalists, particularly those working on mining issues have frequently lamented the fact that there is no comprehensive clean-up law in Canada. Indeed, such a law is important given the huge number of mining clean-up sites in Canada. On January 11th, 2000, Mining Watch Canada presented a plan for dealing with Canada's abandoned mines crisis to the eight members of cabinet most responsible for finding solutions to this issue. The plan calls for:[331]

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[330] W. Ron Allen, President, National Congress of American Indians. "Testimony on the Mission and Capacity of the BIA." Before the Senate Committee on Indian Affairs, April 28, 1999.

[331] Mining Watch Canada, "Mining's Toxic Orphans – Abandoned Mines represent over $1 Billion Federal Liability." *Mining Watch Canada Newsletter,* Winter, 1999.

- A national inventory of sites for which the federal government carries responsibility, and incentives for the provinces to create compatible databases on sites under their jurisdiction;
- Physical and chemical assessments of all abandoned mines to verify hazards;
- Provision for resources to clean up the worst sites first with a plan to establish the priorities and more research dollars to figure out how to do this best ;
- Establishment of a funding mechanism to recover costs from industry to pay for cleaning up the sites.

The clean-up issue all too often becomes a major stumbling block in contemporary mining contracts as well. Indeed, the successful Raglan agreement which was discussed in Chapter 8, was partly a result of the mining company's offer to clean-up an old asbestos mining site (this was entirely a good-will gesture, since the current company did not have any connection with the previous mining company).

11.1.2 Lessons which the United States can learn from Canada

Among modern nation states the Canadians have shown a remarkable ability to balance cultural differences as exemplified by the "the Quebec phenomenon." At a smaller scale, the Canadian government has, of late, tried to embrace a similar stance on Aboriginal issues. Canada's handling of the land claims has been particularly instructive, specially given the added complexity of provincial involvement. In many ways they have learned from their own mistakes with the reserve system and tried to follow a much more institutionally sound process of handling land claims as illustrated by the landmark Nunavut agreement of 1999. It is the success of the agreements in Saskatchewan, in Raglan (Quebec) and the agreement in Principle in the Voisey's Bay case which have

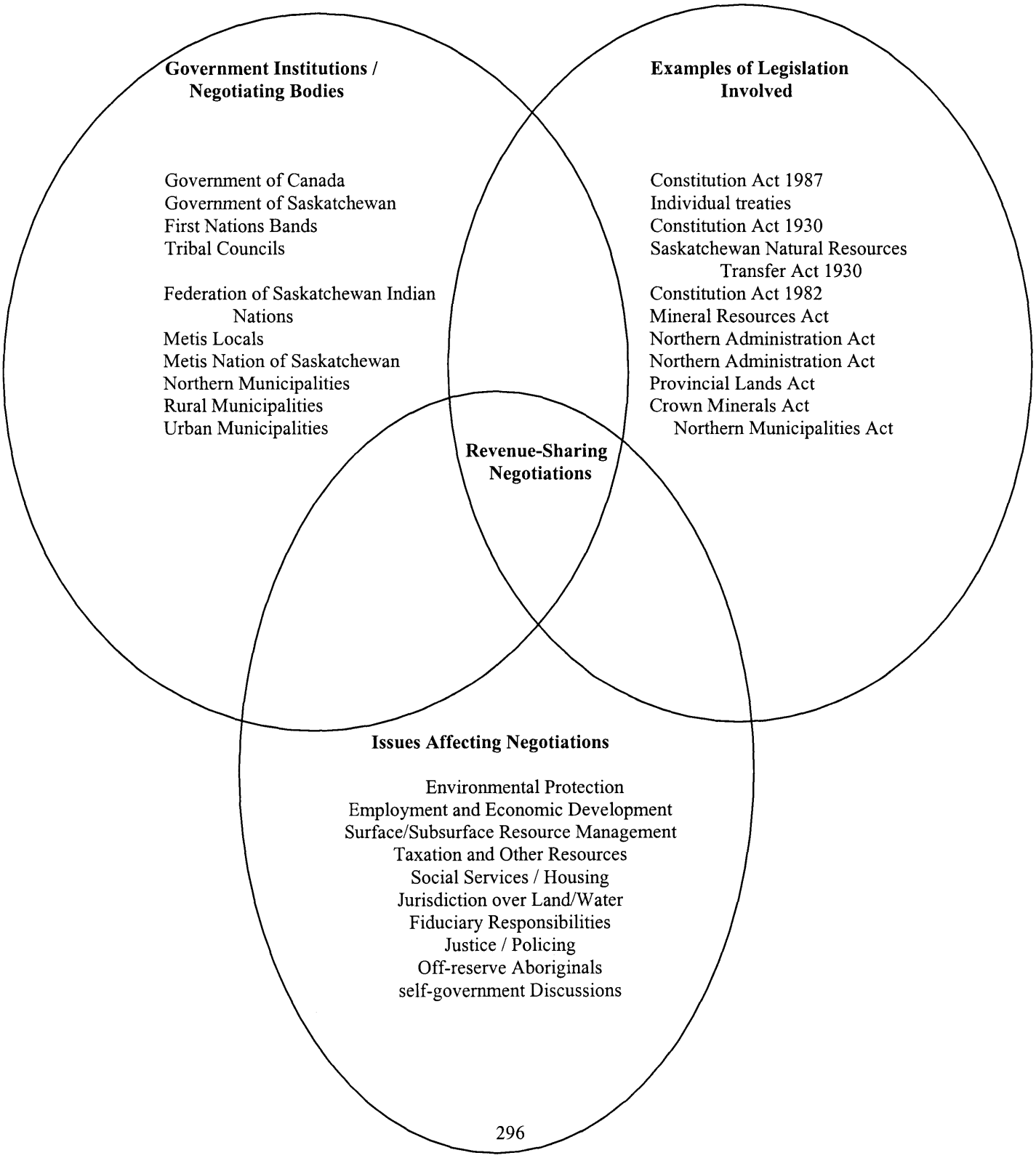
allowed for conflicts to be contained. The Canadians have achieved this through an inclusive process of bringing together stakeholders and not taking sides with any particular party, unlike the unfortunate debacle in the Navajo/Hopi land dispute which the US government partly created by "deciding" on its own that certain territory was Hopi and certain territory was Navajo.

Mining agreements between Aboriginal groups and industry in Canada usually follow a two-track approach which has also been somewhat successful in terms of clarifying issues and avoiding destructive linkages, as discussed in Chapter 8. Such linkages were a major problem with the Black Mesa case. There is an environmental assessment process which is carried out under the Canadian Environmental Assessment Agency and as separate Impact Benefits Agreement process which is carried out between industry and the Aboriginal groups directly. The Impact Benefit Agreement (IBA) process (IBA) arose as a voluntary effort facilitated by the federal government in the 1980s and has since then become a sort of "best practice" within industry. These agreements can be regional in scope or project-specific depending on the context of the project. The IBA negotiations give Aboriginal people "the power of process" which they often feel is missing in the conventional environmental assessment process with their somewhat perfunctory hearings and town meetings. Alex Kerr in his detailed analysis of IBAs across Canada for the National Round Table on the Environment and the Economy (another uniquely Canadian organization), concludes that "the strength of IBAs appears to lie in their ability to deliver economic benefits locally, through jobs, commercial opportunities and fiscal benefits." [332] Figure 11.1 shows the way in which the Canadian

[332] Kerr, Alex (2000). *Impact Benefit Agreements as Instruments for Aboriginal Participation in Non-Renewable Resource Development.* Compass Consulting.

government handled the highly sensitive revenue-sharing negotiations in the Cameco case (C1).

Figure 11.1 Some Factors Affecting Revenue-Sharing in Canada
(Joint Panel Report on the McArthur River Uranium Mine Project, February, 1997)



Often there is a third parallel process of land claims agreements as well which, as observed in the Voisey's Bay case, can be a major stumbling block for mineral negotiations. This is a much more delicate process than the IBA and the environmental assessment because in Canada it involves the federal and provincial governments and often involves overlapping claims. The most positive relationships between Aboriginal groups between mining companies and First Nations have been those where the land claims had been previously settled before going into the IBA negotiations (for example the Saskatchewan case, the Raglan agreement and the Musselwhite accord). The BHP Ekati Diamond mine is an example of a case where the land claim has still not been settled and the IBA was signed and mining has commenced. However, in a review of the project The Canadian Institute of Resource Law in Calgary concluded that "the lack of resolution of critical land and resource ownership and jurisdictional issues necessitated the creation of ad hoc mechanisms, some of which may ultimately be included in land claims agreements."[333]

Such 'ad hoc' arrangements were facilitated by pre-exiting institutions in the Northwest territories such as the Water Boards. These boards were created under the Northwest Territories Act as quasi-judicial tribunals "to provide for the conservation, development and utilization of waters in a manner that will provide the optimum benefit for all Canadians and for residents of the Northwest territories in particular." Such boards are now being tested by DIAND across the northern region as a means of further devolving authority to the communities, and may prove to be a useful model to emulate. Their performance thus far in the Ekati project has received positive acclaim from

[333]Canadian Institute of Resource Law (1997). *Independent review of the BHP Diamond Mine Process*. Calgary: University of Calgary.

Aboriginal groups and environmentalists.

Part of the reasons for the success of Canadians in land-claim disputes, in particular, is the important constitutional changes of 1982. In the US political culture the constitution is a much more immutable and 'sacrosanct' document and the amendment process is too cumbersome for such changes to be initiated. However, such allowances in the constitution would have been greatly beneficial to tribes that have not yet been recognized, or for large-scale land claim settlements such as the Alaska Native claims settlement in the 1970s.

Despite the regalia of British and French traditions, Canada has also tried to circumvent a lot of extraneous governmental approval processes and paperwork. In 1985, the director of the U.S. Office of Surface Mining, Jed D. Christensen, shocked states and tribes by trying to take $24 million from the tribes Abandoned Mines Land accounts to reclaim high-priority, non-Indian sites in the East. Christensen did not notify the tribes of the plan nor invite them to attend with the states the meeting where the reclamation was to be discussed. He claimed the money was going to waste because the tribes had failed to get congressional authorization. Christensen promised his agency would clean up the worst Indian sites anyway, using the federal funds. To the surprise of the Interior department, states backed the tribes and unanimously opposed Christensen's idea, stating that they considered the proposal an 'absolute travesty' and 'almost criminal.' The General Accounting Office (GAO) later found that the surface mining office had the legal authority to take the money without congressional action, but that doing so would greatly limit the prospects for reclamation of Indian mines. Such debacles have not occurred in Canada because much of the funding is directly administered by

tribes. The Native Development Corporations in the North have been generally quite successful in this regard. In the words of McGill Management Professor Leo Paul Dana, they have provided a "means for a socialist culture to participate in a capitalist economy."[334] Unlike their Alaskan counterparts, these corporations do not preclude future land claims settlements.

The Canadians have also managed to focus specifically on mineral development and Aboriginal activities as a "phenomenon" that involves multiple stakeholders. They have done so at two levels. First, at the federal government level a special program was created in 1999 to focus on "Aboriginal Communities and Non-Renewable Resources Development." This program is in the process of compiling a detailed report which will be presented to the National Roundtable on the Environment and the Economy, another uniquely Canadian institution which is self-described as follows:

> The NRTEE was legislated by an Act of Parliament in 1994 to serve as a catalyst in identifying, explaining and promoting the principles and practices of sustainable development. Working with stakeholders across Canada, the NRTEE carries out its mandate by identifying key issues with both environmental and economic implications, fully exploring these implications, and suggesting action designed to balance economic prosperity with environmental preservation.[335]

Second, the Canadian government has established an Intergovernmental Working Group on Mining (among the federal and provincial governments) which has a special committee on Aboriginal Participation in Mining. This group publishes an annual report which is sent to Aboriginal groups all across Canada. Such efforts which may seem initially to be "talk about talk" actually create important "fields of engagement" which

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[334] Dana (1996). "Indigenous organizations for development in the Canadian North: Native Development Corporations." In Blunt and Warren eds., 1996, pp. 214-219.
[335] NRTEE web site: http://www.nrtee-trnee.ca/eng/overview/overview_e.htm

are particularly important in cross-cultural dispute resolution.[336]

As far as mining regulations are concerned the Canadian government is going through a major revision of its mining regulations which will be completed by the end of 2001. The government is using the "Whitehorse Mining Initiative" as a touchstone in terms of multi-stakeholder involvement. Interestingly enough, this initiative was initiated by the mining industry as a means for facilitating mining contracts with communities in Northern Canada, particularly Aboriginal people. Since then the Canadian Department of Natural Resources and a few other departments have become "trustees of the process."[337]

Conventional wisdom, or cynicism, about government may lead one to believe that such a proliferation of government departments and agencies with an panoply of Ministers creates bureaucratic deadlock. However, if it is properly managed, the segmentation of authority in this form can actually prevent some of the inter-organizational competition for funding which has plagued many US Departments. For example, within the Department of Interior, there are agencies as diverse as the Bureau of Indian Affairs and the Bureau of Land management. In his recent testimony before Congress, former Assistant Secretary for Indian Affairs, Ross Swimmer, alluded to this issue as follows: "We are constantly having to defend tribes and tribal reservations, tribal lands from the rest of the Interior."[338] Thus the Canadian model of departmental organization may also hold some lessons for the United States and elsewhere.

The expert panel process, which we discussed in the case of the Saskatchewan projects and the Voisey's Bay project, is also an interesting feature of the Canadian

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[336] See Duryea et al, 1992.
[337] Natural Resources Canada (1998). *The Whitehorse Mining Initiative.* Ottawa: Canadian Government Publications.

experience. This process allows for an overarching supervisory role to be delegated to an interdisciplinary group of leaders. The texture of the panels in Saskatchewan and Newfoundland was quite different – the former comprising mostly scientists, while the latter comprising decision-makers from various constituencies. Part of the reason for this distinction being that the Saskatchewan panel was addressing the broader issue of uranium mining at a regional level, whereas the Voisey's Bay panel was focusing on local environmental impact. Despite their short-comings, the panel process provides yet another measure of legitimacy to the process which can act as a buffer against cross-cultural tensions.

The Canadians have also been much more forthcoming in embracing "culture" as a policy imperative. The United States has no counterpart to the Canadian Heritage portfolio within the government which is centered around the theme of culture. The introductory statement of the department (a cabinet-level department with its own Minister), quite remarkably mentions the word "sovereignty" as follows:

> The Canadian Heritage Portfolio was created to consolidate national policies and programs that maintain Canada's *cultural sovereignty* and promote Canadian identity.....In 1971, Canada became the first country in the world to adopt a Multiculturalism Policy. Canada's approach to diversity has evolved over the years and is embedded within a broad policy and legislative framework.[339]

In the US, culture is still a tabooed term at the public policy level. Indeed, the closest the US comes to such an organization is the National Park Service, but here the emphasis is much more on site-specific preservation and conservation rather than human-centered cultural exchange. The Smithsonian Institution, which is a quasi-governmental

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[338] Swimmer, Ross O., President, The Cherokee Croup LLC., "Testimony on the Mission and Capacity of the BIA." Before the Senate Committee on Indian Affairs, April 28, 1999.
[339] Canadian Heritage Web site: http://www.pch.gc.ca

organization is working towards a National Museum of the American Indian, but again the focus is project-specific curatorship rather than the broader vision concerning cultural education and promotion of cross-cultural dialogue, which the Canadians have achieved.

11.1.3: Continuing the learning process

To sum up the lessons learned, in many ways the United States was initially on a more progressive trajectory than Canada because of the American recognition of Indian self-government. However, the path soon became riddled with court cases and challenges and a poorly organized bureaucratic framework. Therefore, Canada despite its initial marginalization of Indian peoples, and the immense complexity of dealing with the highly devolved provincial government structure, was able to "catch up" with the Americans, because of a more efficient and malleable political framework, most notably through the 1982 revisions to the Canadian constitution and a willingness for the Canadian government agencies to make *sui generis* arrangements such as assessment panels and impact benefit agreements which their US counterparts have failed to achieve.

Nevertheless, both countries have a common problem of an increasing divide between perceptions of Aboriginal people among the larger settler populace. Publication of books such as Thomas Flanagan's *First Nations: Second Thoughts* (2000), in Canada, or Jim Benedict's *Without Reservation* (2000), in the United States, both by mainstream publishers, reflect a persistent resentment among settler communities, largely because there are still so many misunderstandings about the plight of Native people. A need for a comprehensive education program about the nature of Aboriginal sovereignty is

absolutely critical in both countries so that the policy decisions are anchored in public understanding.

Another important lesson which can be gleaned collectively is that there are indeed certain cases which are 'non-negotiable.' One can try all of the most elegant and elaborate negotiation strategies but in some cases the community simply does not want the mining, or other development ventures, to go ahead. The Crandon case (U2) illustrates this starkly. In this case Rio Algom has tried to even involve another well-respected tribal chair-person from a neighboring tribe to act as a mediator to simply open communication channels (and remaining neutral on the mining per se). However, the tribe has refused to even talk to her. As Brock Evans of the National Audubon society stated in an address to the mining industry : " Just because an ore body is discovered does not mean that it has to be mined."[340] Mining companies and governments have to realize that just as a mining deposit under New York City would certainly not mean that mining will go forward, the same may be true for other places as well. This is where environmental justice arguments may start to creep in, despite the geological determinism of mining in general.

In the Crandon case it may well be that at an earlier stage if Exxon had been more adept at negotiating with the community that there may still have been a chance for community approval for mining. But the key lesson to capture in the context of Native negotiations is that beyond a certain point the articulation of sovereignty takes root in resistance – in this case the wild rice fields of the Chippewa became a symbol of "environmental sovereignty," in direct contrast to mining.

On a positive note I think Canada and the United States provide an excellent example for much of the world, where indigenous people are in far worse circumstances. Even developed countries such as Australia, and Japan (where the Ainu are largely assimilated) have much to learn from the North American experience in terms of a commitment to engage the past.[341] New Zealand's situation is somewhat more advanced than in any of the other three Anglo-majority nations because the Maori constitute a much larger percentage of the population.

With high population growth rates, in many parts of the world, indigenous peoples are becoming an increasingly important presence which governments will no longer be able to ignore. However, in order for lasting reconciliation to occur there are also some areas where indigenous people need to show some signs of change as well. Some suggestions in this regard are given in the next section.

11.2 Tribal Sovereignty but what's next?

While governments have a major responsibility for facilitating efficient and equitable negotiations, some of the onus for allowing productive communication to occur

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[340] Evans, Brock (1994). "An Environmental Perspective on the National and Global Mining Industry." Paper presented before the Society of Economic Geologists Symposium in Honor of Charles Meyer, Seattle, October 25, 1994.

[341] In 1986, the Commonwealth of Australia Commissioned a special study comparing the Australia and North American experiences vis-à-vis Aboriginal policy . The difference between north America and Australia is that even if Title is granted to Aboriginals to certain land areas in Australia they do not have veto power. For example, under the Northern Territories Land Rights Act, traditional Anangu owners of Ayers Rock (known to Aborigines as Uluru) and The Olgas (known as Kata Tjuta) filed a claim of ownership. They were disallowed because the land was within a national park and thus alienated. The court struggle raged for several years and only after two acts of parliament was this region handed back to the traditional owners with the condition that it be immediately leased back to the Australian Nature Conservation Agency (formerly the Australian National Parks and Wildlife Service). They were thus forced to grant land access to a conservation agency and thus had no standing for further negotiations -- though monetary compensation was accorded by the lessee (the government). See Appendix 5 for further details regarding the Australian Aboriginal experience with mining.

also falls on the native communities themselves. There has been a tendency for tribes to posture and take ambivalent positions regarding mining negotiations. The Voisey's bay case is an example of such a situation. As Ambler (1990) reminds us tribes often seek "symbolic coups in contracts," even if it means giving up monetary returns. Companies consequently worry about the symbolic importance of contract terms, fearing their peers might think they are too generous. One tribe's bluff can become industry's stereotype of what the Indians really wanted. In one instance, for example, The Navajo director of economic development, told a room full of energy attorneys that he advocated tearing up contracts, not because he really planned to do so but because he believed that overstatement was a valid tool in bargaining.[342] In another instance from the Makah whaling controversy the captain of the Makah whaling vessel Wayne Johnson told a SSCS representative: "well if nothing else, we piss off the white man."[343]

Such "positional" attitudes on the part of Native peoples are not helpful achieving either contracts or moving towards sovereignty. They lead to a fundamental distrust on the other side and reinforce negative. Native leaders are also beginning to appreciate that demands for sovereignty cannot exist in a vacuum and sovereignty must be followed by a strong sense of accountability within the Nation's decision-making apparatus.

Indigenous people have shown much more proclivity for international forums than national ones – in such arenas their positions and roles become analogous to a lot of developing or "Southern" countries.[344] For Native people, there appears to be far greater trust in international regimes than in national ones. However, alongside other legal

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[342] Ambler, 1990, p. 221.
[343] Quoted in a statement by Paul Watson. "Response to SISIS Declaration Against Racism." Email sent to various listservs on July 9, 1999.
[344] See Dallam, 1991.

doctrines which reaffirm their rights to self-determination, they must also consider the time-tested maxim in international law: *sic utere tuo ut alienum non laedas* (use your own property so as not to injure the property of others). By this measure Native people are increasingly realizing that there are certain pan-global issues which transcend, or perhaps "transform," sovereignty – such as human rights, and in some cases even environmental concerns. The Native American lawyer James Anaya has suggested that Native Americans in should embrace "a modified integrationist" vision of sovereignty which acknowledges certain inherent connections between groups and hence acknowledges the imperative for collective decision-making.[345]

Native communities also need to reorganize among themselves to exchange best practices and "gather strength." The Council of Energy Resource Tribes (CERT) has been an attempt to achieve this aim in the United States and the Canadian Aboriginal Mineral Association (CAMA) has attempted to do the same in Canada. CERT's highest budget thus far was in 1981 -- $3.9 million, with the federal government providing 74% of the total and the tribes providing the rest. However, both these organizations have been beholden to the federal government or industry (respectively) and have not managed to develop as a strategic resource for Native peoples. They have had their respective accomplishments but given the tremendous resources of tribes at present they have still not been able to reach their full potential. Their work has been particularly deficient in the area of environmental planning, which is all too often the way in which tribes articulate their decision-making authority. Donald Fixico (1998) in his detailed studies of CERT found that out of more than 100 reports on various ideas and projects

[345] James Anaya, lecture given at the Cultural Survival Working Group Session on sovereignty, Cambridge MA, May, 2000.

prepared by CERT only 5 focused on environmental issues; the rest were about uranium potential, resource inventories, coal mining, power plants, synthetic fuels and nuclear power plants. It is thus not surprising that many splinter groups within Native populations end up resorting to environmentalist literature.

While we have established that Native views about environmental issues are clearly distinct from mainstream environmentalism, there is a spectrum of opinion even so within Native communities. One can argue that the more environmentally inclined Aboriginal groups are, in fact, the modernists who are espousing contemporary environmental inclinations, even though they are often labeled as "traditionalists." Native governments have to get over the fear of these groups as being "indoctrinated" by the environmental community. In fact by embracing the divergence of opinion they can perhaps prevent destructive splintering that can occur when such individuals have to grasp whatever source of empowerment which they can muster (as we observed in the Big Mountain resistance).

Finally, I would like to add that regarding mineral contract negotiations, tribes should get involved at the exploration stage of a project and work through the details of each contract preferably using the two-track impact benefit and environmental assessment models which have been relatively successful in Canada. I also concur with the suggestions for mineral contracts proposed by the eminent lawyer Charles Lipton (given in Appendix 3).

11.3 The Market and its Meritocracy: the new age of corporate responsibility?

Mining can be classified as a kind of "windfall development" similar to the establishment of a casino in an impoverished neighborhood, ushering in a sudden influx

of wealth to a community. However, mining represents a kind of windfall development that is very different from other projects, such as casinos, stadiums or army bases, because of its inherent obsolescence.

Therefore, in order for such a windfall development to be successful, in the long-run, it must be coupled with some other development strategy, otherwise the result is a proverbial "mining ghost town" that is sadly the scourge of many pristine landscapes.

In my opinion, the mining sector can only provide an opportunity for sustainable development if it is viewed as a proximate solution to day-to-day technological necessities, and not an end in itself. Historically, primary resource extraction industries have been considered sacrosanct by many governments and have received numerous subsidies. Clearly this has not provided mining companies an incentive to diversify and think in the long-run about alternative services which they could provide in terms of recycling materials and investing in alternative material science research which employs renewable resources. This move would be congruent with the oil industry, which is now shifting gears to be considered an "energy service" industry and investing in solar and other renewable forms of energy research.

Clearly these issues need to be addressed at all levels of governance. However, I think that the international level is most salient in this context to prevent the proverbial "pollution havens phenomenon." Given the multinational nature of most mining companies, there need to be some way of standardizing best practices in the mining sector. I think that there should be a series of ISO standards for non-renewable resource extraction industries, given their unique and obsolescent nature. Meanwhile regional, national and local oversight of mining operations is also essential. Just as human rights

are nowadays trumping the past primacy of "sovereignty." it is also likely that environmental issues will follow a similar path.

Mining is often a "leading sector" in the area where it exists and should therefore be used to encourage other businesses to invest in the region. Since mines are usually located in remote parts of the world, it is difficult to get other manufacturing or service businesses in the area. A usual solution that is proposed is to develop a tourism industry (often in its most green incarnation as "eco-tourism"). This is of course limited to the kind of terrain where the mine is located and is often not feasible.

Perhaps a preferable way of approaching this question is to first study and evaluate the lifestyle of the people before the mining activity, and to see how that "pre-development" lifestyle could be improved *without* the "windfall development." Such an analysis would highlight some of the limiting factors which could be preventing a more sustainable yet inchoate sector from developing. For example a poor agricultural economy may be deficient in appropriate farming technology to make it develop. Now, once this evaluation has been conducted, the "windfall developer" can institute measures to specifically target that sector for improvement through direct financial means or through technology transfer. Education is a critical issue in many areas where windfall development is to occur and the establishment of schools and other vocational training programs independent of their utility to the developers is critical. Hence a contingency development plan would be essential, particularly for projects of planned obsolescence, such as mining. However, I think plans for alternative development strategies should be strongly encouraged for any risky "windfall development." Such a system will likely require regulatory enforcement as it is a classic externality for the developer. However,

the specifics should remain flexible given the highly diverse nature of alternatives which may exist for various communities.

Clearly some of the process issues, stakeholder involvement in decision-making, organizational dynamics and implementation would need to be ironed out in order for such a system to be effective. However, the take-home lesson in this study is likely to be that any windfall projects must not take place in a vacuum and should be catalysts rather than reactants in the synthesis of development.

Mining companies are beginning to consider the environment as a cost of doing business and less so as a regulatory hurdle. There is also a move towards having temporary infrastructure and not establishing permanent settlements thereby making remediation and cleanup much easier and also preventing the "ghost town" scenario.
For example, Homestake's McLaughlin mine in Lower Lake, California has received commendation from unlikely quarters such as the Sierra Club. According to Raymond Krauss the mine's environmental manager, "When we look at the total environmental cost, it is roughly 2% of our capital cost for the whole project. We want to protect our stockholders' investment. Creating an environmental liability doesn't serve their interests or ours."[346]

In 1994 and again in 1996 KPMG Management Consultants conducted surveys of over 300 businesses and municipalities in Canada questioning them about their environmental management programs. In both surveys, over 90% stated that their primary motivation for establishing environmental management systems was compliance with regulations. Approximately 70% cited potential directors liability, a factor also

[346] Quoted in Watkins, 2000, p. 92.

related to environmental laws. Only 25% claimed to be motivated by voluntary programs.[347]

Another interesting dimension of this debate is the perception which companies engender in culturally disparate stakeholders (who are often *not* stockholders). Resistance movements have a tendency to either dehumanize corporations and make them a sort of apathetic entity without a human face. On the other hand, communities in rural areas can also "humanize" corporate motivation and react accordingly as illustrated by the following observation from of a landmark study of coal mining in West Virginia:

> They (the miners) have had little experience with relatively impersonal urban and bureaucratic relationships. Consequently, they tend to perceive coal company operations as if the company were a person. They tend to judge the company's motives by the characteristics of people whom they know to be associated with the company. As a result, opinions of the coal companies and their operations tend to be highly individualistic and strongly polarized, not necessarily related to socially objective criteria.[348]

These cultural nuances are still seldom appreciated. The *modus operandi* tends to be that an anthropologist is hired to "deal with" cultural issues rather than educating company officials about the delicacy of interactions in the negotiation process itself.

We also need much more informed debate between the government and the mining sector, both of which often need to be galvanized to action by NGOs.

The environmental movement's response to mining has been particularly uncompromising because of the nonrenewable nature of the resource extraction process. While some contention regarding mining ventures will always remain, there is some potential for consensus if the sector is manifestly identified as transitional – that mining

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[347] KPMG Management Consultants, *Canadian Environmental Management Survey 1996,* Toronto, 1996

[348] Weller, 1965, p. 120.

companies are perceived as materials service providers who are searching for better ways to provide for the material needs of society and are open to suggestions.

11.4 Civic society and strategic alliances: beyond opportunism

Environmentalists, like native groups, must come to a more clear realization of their goals and as the case analysis has revealed strategic alliance formation must be based on the goals which are set – otherwise the results can be a mutual lack of legitimacy and efficacy.

A notable case in which many environmental groups had to adamantly distance themselves from tribal governments has been the Makah whaling controversy in the Pacific Northwest. Interestingly enough, here too, there has been a clash of forces between environmental sovereignty versus tribal sovereignty, both within and outside the tribal community. However, the environmental groups have been quite clear in terms of their objectives in the campaign and kept a somewhat tenuous balance between their support of self-determination of tribes and an overarching concern for the environment. The group has come under attack from certain pro-treaty collectives, such as the Canadian-based Settlers for Support of Indigenous Sovereignty (SISIS). As the founder of the group Paul Watson has stated in his reply to

> The Sea Shepherd Conservation Society categorically rejects any accusations of racism, and notes that our accusers are themselves demonstrating a basic tenet of racism by implying that the Makah, because they are Native American, cannot be criticized or opposed, even when engaging in an activity that is illegal under the definition of international law. Attacking conservation groups with accusations of racism serves only to benefit the powers that be, who oppose both conservation and

> indigenous rights. Should we let them drive a wedge between two movements that have so much in common?[349]

The approach taken by Watson has been particularly astute since he has also stated that if the International Whaling Commission can officially recognize this hunt as being done for subsistence purposes (as allowed for by the international law on whaling) then he and his colleagues would not oppose the Makah hunt – thus he has made his argument principled rather than positional. So far the IWC has refused to give the full "go-ahead" for the hunt in this way and a recent court decision in the US has remanded the case back to the previous judge for a new environmental assessment. Another interesting dimension of this case is that some Makah elders contacted the Sea Shepherd Conservation Society on their own expressing their opposition to the whale hunt. They contend that the hunt is being done primarily as a symbolic gesture to assert their treaty rights – again the primacy of sovereignty is eclipsing environmental issues or for that matter cultural necessity as well. [350] Unlike the Black Mesa case where there was a direct linkage between the Big Mountain resistance groups to the land relocation, the tribal elders in this case do not have any larger agenda vis-à-vis the tribe itself.

In referring to a debate between the Jicarilla Apache and various stakeholders, Ambler (1990) observes that "although some environmental and industry interests tried during the debate to pigeonhole tribes as either anti- or pro-development, the tribes defied classification. Like the states, the tribes' primary interest was in protecting their options and their land base."[351]

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[349] Statement by Paul Watson. "Response to SISIS Declaration Against Racism." Email sent to various listservs on July 9, 1999.
[350] Personal communication via phone interview, Andrew Christie, Sea Sheppard Conservation Society, Communications officer, June, 2000.
[351] Ambler 1990, p. 230

Opposition to mining and other development beyond Indian jurisdiction is far "safer" territory for alliance-building. For example in June, 2000 The Sierra Club joined 13 American Indian tribes fighting desecration of San Francisco Peaks, a mountain sacred to them that is scarred by pumice mining. The struggle to preserve the sanctity of the mountain led Hopi runners to conduct a sacred run in May. Starting at the edge of the White Vulcan Mine, Hopi runners ran to a public hearing in Flagstaff. Urging protection of the Navajos' sacred mountain to the west, Navajo Nation Council Speaker Ed T. Begay gained council support to oppose mining on San Francisco Peaks as well. Begay, with support from Hatathlii (Navajo medicine people), said San Francisco Peaks are prominent in Dine' origin, clan and ceremonial stories. It is one of the Four Sacred Mountains and a place where Dine' make offerings to have a good life.[352]

New strides are certainly being made. Some constructive alliances such as the MTN in Wisconsin are paving the way for a better understanding of the issues at hand. The key take-home lesson for environmental groups is to make sure that the goals are clear at the start of any strategic alliance formation and that there is a keen appreciation that there may be a profound difference of what is at stake for Native communities.

[352] *Indian Country Today,* June 15, 2000

11.5 Concluding Thoughts

> "Planning is always positive – for the fulfillment of some program – but democracy may negate its execution. This dilemma requires an understanding of the possible unanticipated consequences which may ensue when positive social policy is coupled with democratic procedure."[353]

This quotation from one of the classics of public administration sums up the challenge at hand when approaching any development project. In the case of mining development on Aboriginal land Selznick's dilemma is even more potent because of the enormous gulf in perception and cultural difference about what constitutes environmental impact. Through the case analysis we traversed various theories to arrive at process-centered hypotheses for explaining resistance. We discovered along the way that resistance is a much more malleable form than may be initially evident – it has many "hidden transcripts," that may often elude planners. It also became clear that environmental concerns are perceived and articulated quite differently by Aboriginal people than they are by environmentalists and alliance formation between these groups must be cognizant of their differences. Environmental resistance in the context of contemporary Aboriginal societies that are trying to define themselves in terms of territory and decision-making power, has much to do with environmental sovereignty. Such dynamics of power are all too often misunderstood or ignored in the negotiation process.

In this dissertation I have tried to explore ways of "internalizing" resistance within a planning framework in order to build consensus. At the same time, I have tried to embrace the realities of cultural difference. The key is to have a process which is

[353] Selznick, 1949, p. 4.

judged to be appropriate by all stakeholders, rather than begin with a pre-conceived notion of what the substance of the negotiation will center on. Planning, and environmental planning in particular because of its larger vision of ecosystem interactions, by this measure may be likened to Torgenson's view of *The Promise of Green Politics* (in his book of the same name). Environmental politics, he argues is an art but not just an artifact of "scientism" – rather it is a "performing art" where sheer performance (or process) possesses value.[354] By examining the processes by which environmental conflicts in the highly polarized realm of mining on Aboriginal land are handled by two leading "developed" countries, I have tried to draw lessons that can hopefully ameliorate the planning process on, and around, Aboriginal land.

[354] Torgenson, 1999. Much of his theory builds upon the work of Hannah Arendt presented in her landmark work *The Human Condition.*

Appendices:

Appendix 1: Canadian Supplementary Information

Aboriginal Provisions in the Canadian Constitution Act of 1982

General

25. The guarantee in this Charter of certain rights and freedoms shall not be construed so as to abrogate or derogate from any aboriginal, treaty or other rights or freedoms that pertain to the aboriginal peoples of Canada including

(*a*) any rights or freedoms that have been recognized by the Royal Proclamation of October 7, 1763; and

(*b*) any rights or freedoms that may be acquired by the aboriginal peoples of Canada by way of land claims settlement.

RIGHTS OF THE ABORIGINAL PEOPLES OF CANADA

35. (1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.

(2) In this Act, "aboriginal peoples of Canada" includes the Indian, Inuit, and Metis peoples of Canada.
(3) For greater certainty, in subsection (1) "treaty rights" includes rights that now exist by way of land claims agreements or may be so acquired.
(4) Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons.

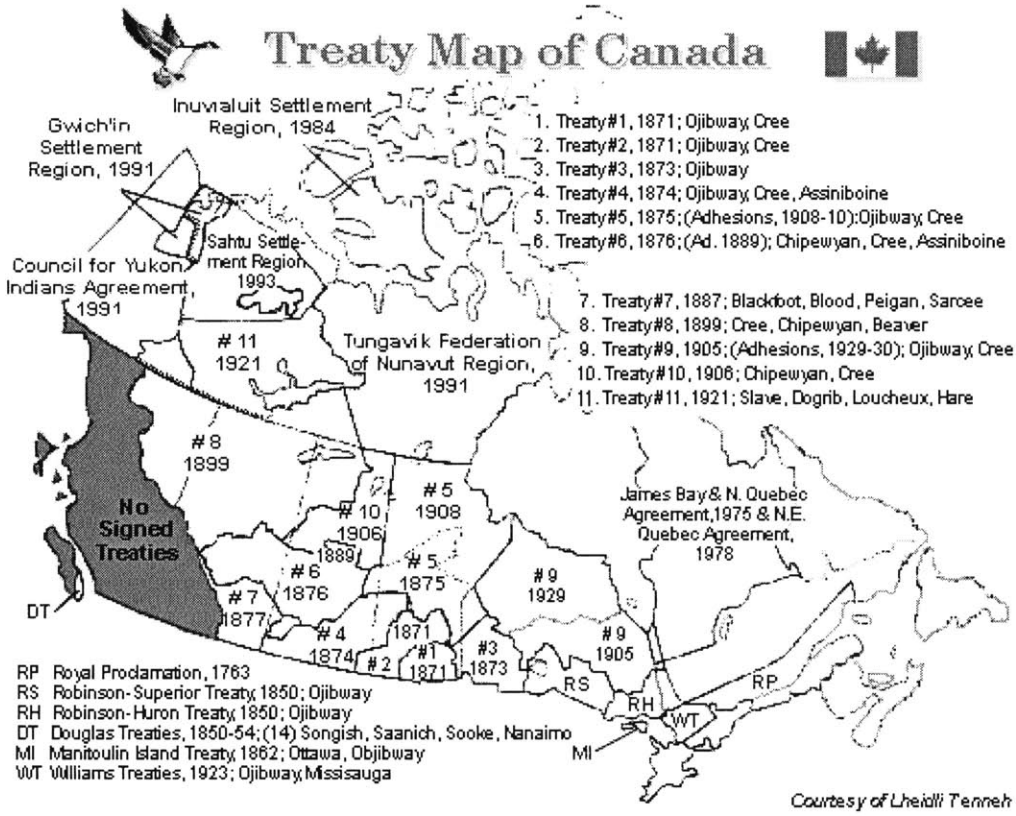
35.1 The government of Canada and the provincial governments are committed to the principal that, before any amendment is made to Class 24 of section 91 of the "Constitution Act, 1867", to section 25 of this Act or to this Part,

(*a*) a constitutional conference that includes in its agenda an item relating to the proposed amendment, composed of the Prime Minister of Canada and the first ministers of the provinces, will be convened by the Prime Minister of Canada; and

(*b*) the Prime Minister of Canada will invite representatives of the aboriginal peoples of Canada to participate in the discussions on that item.

Treaty Map of Canada

(Note that the Atlantic Provinces also do not have any treaties thus far)

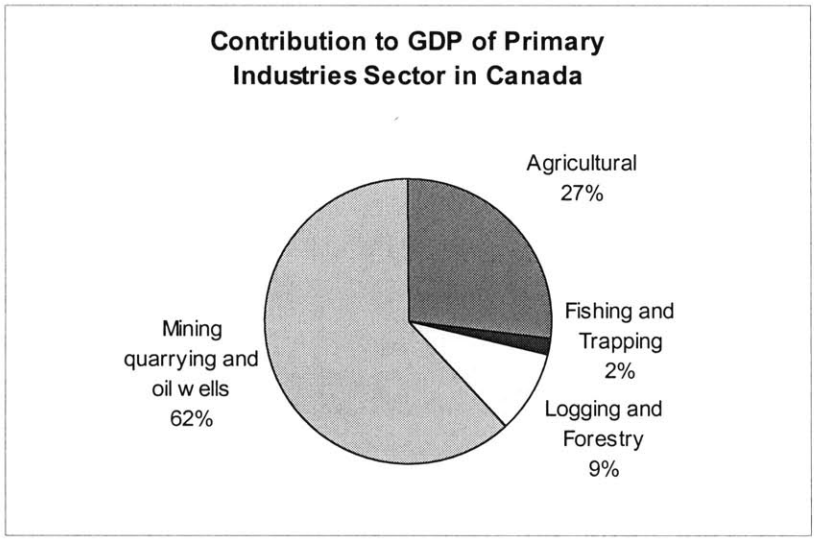


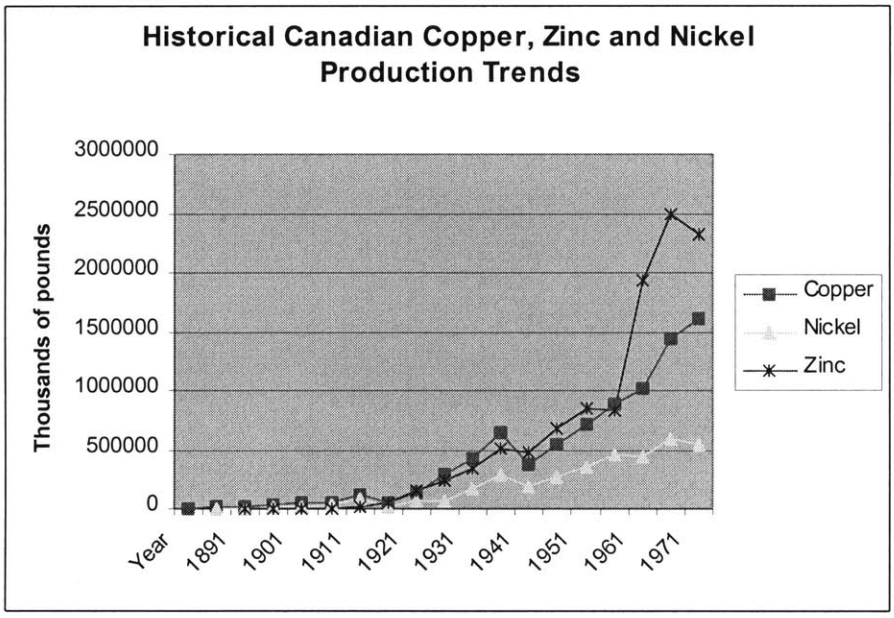
Demographic Information

(Statistics Canada Web site: http://www.statcan.ca, based on 1996 Census data)

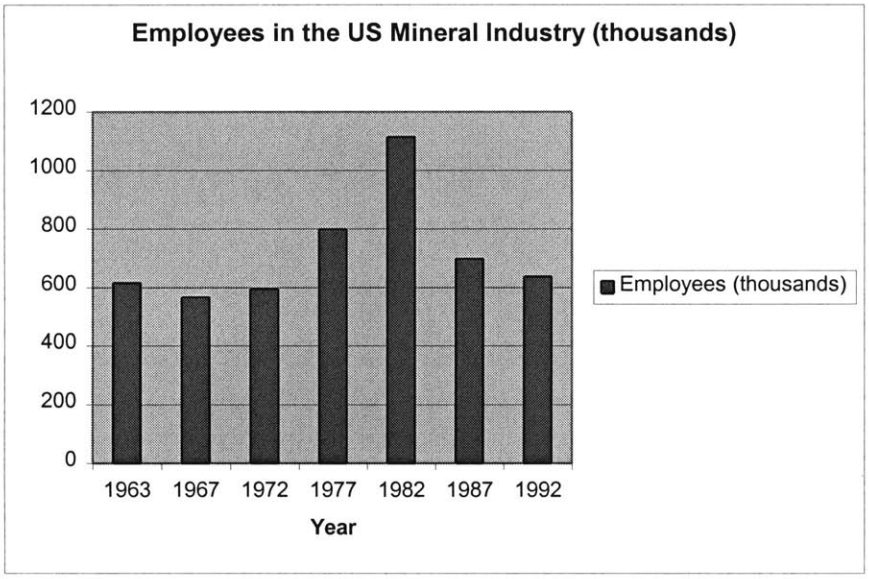
	Total Population	Aboriginal Population				Non-Aboriginal Population
		Total (%)	N. American Indian	Metis	Inuit	
CANADA	28,528,125	799,010 (2.8%)	554,290 (69%)	210,190 (26%)	41,080 (5.1%)	27,729,115
Newfoundland	547,100	14,208	6,400	4,000	4,200	
Prince Edward Island	132,855	950	825	120	15	131,905
Nova Scotia	899,970	12,380	11,340	860	210	887,590
New Brunswick	729,630	10,250	9,180	975	120	719,380
Quebec	7,045,080	71,415	47,600	16,075	8,300	6,973,665
Ontario	10,642,790	141,525	118,830	22,790	1,300	10,501,265
Manitoba	1,100,295	128,685	82,990	46,195	360	971,610
Saskatchewan	976,615	111,245	75,205	36,535	190	865,370
Alberta	2,669,195	122,840	72,645	50,745	795	2,546,355
British Columbia	3,689,755	139,655	113,315	26,750	815	3,550,100
Yukon	30,655	6,175	5,530	565	110	24,480
Northwest Territories	64,120	39,690	11,400	3,895	24,600	24,430

Note: The total North American Indian, Metis and Inuit do not equal the total Aboriginal population because 6,415 persons reported identifying with more than one group.

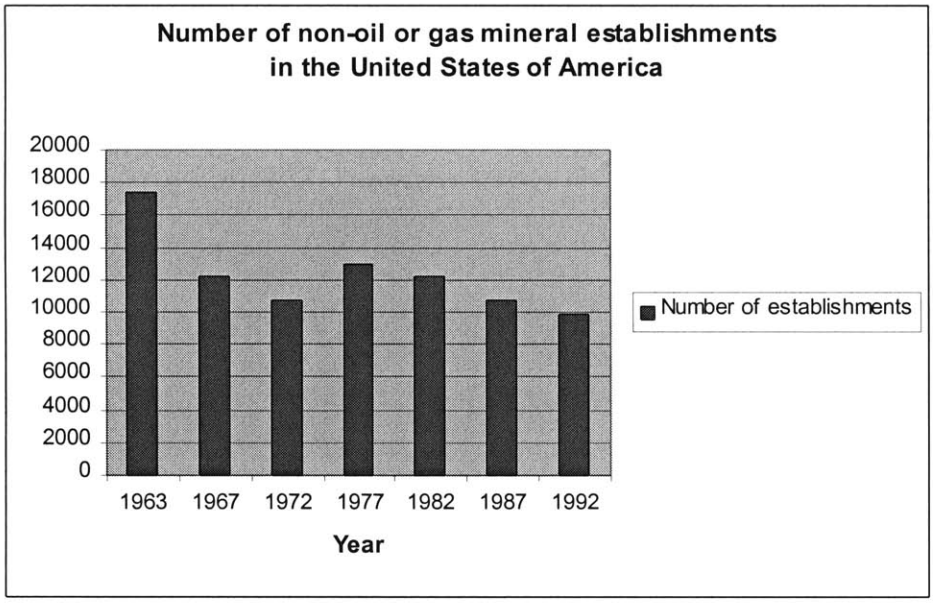



Historical Canadian Copper, Zinc and Nickel Production Trends
Thousands of pounds
3000000
2500000
2000000
1500000
1000000
500000
0
Year
1891
1901
1911
1921
1931
1941
1951
1961
1971
Copper
Nickel
Zinc

Appendix 2: United States Supplementary Information



Source: U.S. bureau of census, census of Mineral Industries, 1972, 1977, 1982, 1987, 1992



Appendix 3: Charles Lipton's Eighteen Points on Indian Mineral Leasing

(Source: quoted in Ambler, 1990)

1. *Limited period.* An agreement should be for a fixed period, preferably 20 to 25 years, not for 'so long as minerals can be profitably produced,' as the 1938 Minerals Leasing Act provides.

2. *Exploration work program.* A work program should detail what work is to be done including drilling, and when it will be done and should require spending a specified minimum amount.

3. *Data delivery.* A tribe should obtain all information resulting from exploration, including interpretation. A tribe should have the property rights to that information subject to confidentiality for a limited period and ; subject to the operator's right to use the information for carrying out the agreement.

4. *Prospect size and relinquishment.* If the agreement covers a large area, it should include a provision requiring the operator to relinquish percentages of the exploration area over a certain period. The area can also be divided into a number of blocks and specific blocks reserved for the tribe (traditionally in a checkerboard pattern) for future development should a discovery be made, which would increase the value of the reserved blocks.

5. *Sharing real profits.* The tribe should share in the true profits, including tax credits and allowances and other direct and indirect subsidies. The tribe's share preferably should increase on a sliding scale based upon revenues or profitability or after the operator has recovered its original costs. A tribe should be sure that an operator does not siphon off profits by over-pricing or under-pricing affiliated company transactions.

6. *Limitation of recovery rates.* Where a tribe shares in profits, the op-orator's recovery of its original costs should be computed within certain limits: Either the number of years should be specified or each year's costs should be limited by a specified percentage of the value f production.

7. *Royalty.* A tribe should be assured of a royalty equal to a percentage of the fair market value of production each year, regardless of profitability, preferably on a sliding scale that increases with price or revenue.

8. *Minimum cash payment.* A tribe should also be assured of a minimum annual revenue, as a rental or minimum royalty.

9. *Payments for surface and water rights.* The tribe should charge fair market prices for water and for the use of surface rights. Where a fixed annual charge is agreed upon, provision should be made for automatic adjustments according to a price index for changes in the cost of living.

10. *Bonuses.* Cash bonuses should be considered on signature, on discovery, and perhaps at different production levels' keyed to the value rather I than the quantity of production. A tribe should focus on long-term benefits' however, It should not trade off a share of the profits or a higher royalty for front-end money if it is not to its long-term economic advantage.

11. *Employment preferences.* Tribal members should be assured of genuine employment and promotion preference in all employment categories, including supervisory administrative, technical, and managerial. This preference should be combined with commitments to provide educational opportunities and on-the-job training.

12. *Preference for tribal enterprises.* Enterprises owned by a tribe and tribal members should be preferred for providing goods and services through mechanisms such as prequalification, advance notice, and a 15 percent edge in competitive bidding (This 15 percent edge is required by the World Bank for local companies.)

13. *Tribal concurrence in basic decisions affecting the reservation and its resources.* These decisions should include: location of drill holes or wells, plant, equipment, offices, and access routes; size method's and rate of operations; impact on air, surface and subsurface water, and community facilities; conservation, reclamation, and restoration programs; marketing arrangements; and annual operating budgets if the tribe shares profits.

14. *Indemnification.* A tribe and its members, officers, employees, and agents should be fully indemnified against all liabilities arising out of operations.

15. *Record keeping and reporting.* All pertinent information on exploration, production. and sales should be recorded on a regular basis, with financial information recorded in accordance with agreed-upon accounting principles (not just those "'generally accepted"), and reports should be rendered at least quarterly to tribal officials.

16. *Inspection and monitoring procedures.* Tribal officials and their advisers should be assured the right to inspect all operations and books and records at all times.

17. *Assignment.* Tribal consent should be necessary for any assignment of any interest in the agreement.

18. *Insurance, guarantees, and performance bonds.* Operators should be required to carry appropriate insurance in adequate amounts for all operations. Performance bonds should also be required unless the operator's performance is guaranteed by parent corporations with adequate assets, including cash reserves.

Appendix 4: Marjane Ambler's suggestions on Aboriginal negotiations for the minerals industry

1. Do not generalize about tribes based upon your own-or worse, someone elsels-bad experiences on one reservation. Before ever going to the reservation, recognize that the days are over when companies could deal with Indian lands as if they were federal lands and tribal governments as if they were rubber stamps for BIA contracts.
2. Be prepared to adjust your attitude, Tribal sovereignty is a reality that has to be faced. Rather than launching litigation, companies should try to determine compatibility of interests between the tribe and the company. Do your homework before negotiations begin. Visit the reservation Try to undelstaI1d the problems there. Look at each tribe's treaties, constitution, tribal newspaper, and ordinances to see how it views its powers. Analyze tribal courts.
3. Contact the tribal energy department. On most reservations you do not need to "know somebody" to get in the door. Find out if the tribe still holds lease sales and, if not, the process for making a proposal, which usually entails getting on the agenda for a tribal council meeting. On other reservations, you must contact the tribal attorney.
4. Be prepared for delays. It may take time to build trust and under- ding. Because many tribes try to reach a consensus among council members-and sometimes among all tribal members-their decisions may take longer. Consensus can protect enterprises from future delays, however.
5. Avoid unnecessary delays by involving BIA in negotiations from the beginning, Although BIA under law has six months to review proposed agreements, the contracts are often approved faster when BIA is already familiar with them.
6. Do not align with any factions or take advantage of factionalism.
7. Expect unusual requests for funding and accept reasonable requests corporation's social responsibilities. Remember that Indian people often do not benefit from the more generalized giving of mineral corporation's foundations. Tribes will ask for assistance with education and job training and may also ask for help with supporting tribal infrastructures (such as tribal courts), paying for ceremonials, and clarifying lease records.

Appendix 5: Some Lessons from Australia

(From a study conducted by the Commonwealth Scientific

Table 1: Understanding the Mining Industry / Aboriginal Context

	Aboriginal Perspectives	**Mining Industry Perspectives**
General	• Some acknowledged positive changes, and expressed optimism. Other less confident, continue to hold negative views. • The majority not opposed to mining. General desire to establish positive relations. Perception in established mining areas that few benefits have flowed to Aboriginal people. • Company size not really important -- company philosophy determines whether or not consultation occurs. • Communities want greater consultation with mining companies	• Acknowledgment of past issues. Range of current approaches with mixed successes. Some optimism; other less confident due to increasing political complexity • Criticism that attempts are sometimes made to cast industry in the role of social welfare providers. • Personal relationships with a few people preferred.
Land issues / Sacred Sites	• Want to be recognized as legitimate stakeholders with legitimate rights. • In reality, few mining applications refused due to sacred sites. • Perception that the mining industry does not genuinely accept the legitimacy of land rights.	• Suspicion that sacred sites are "created" to thwart mining. May be associated with inequality of negotiating power.
Timing / decision-making	• Increasing pressure on Aboriginal groups to understand and respond to multiple external demands. • Language difficulties make it hard to respond in a short time (this problem is less significant in South Australia)	• Concern over increasing uncertainty exacerbated by increasing involvement of third parties. Triangular consultation increases prospect of miscommunication • Aboriginal politics, group rivalry and changing social structure impeding communications and decision-making.

Table 2: Perceptions and Requirements of the Negotiation Process

General Impressions	• The disparate beliefs and cultures of the mining industry and Aboriginal people is at the root of communication failures. • Inconsistencies in attitude and action perceived between management, field operatives and contractors. • Positive references made to the oil industry's successful "quiet and genuine" site avoidance approach" during the 1970's and 1980s • Both parties attributed blame to the other regarding time delays and lack of feedback. • Some said mining companies should apply the same rigor to heir social investigations as they do to their technical investigations.
Preferred Approaches	• Mining company communicators held in high regard showed

	"respect" for Aboriginal law and culture • Successful communication requires patient and thorough consultation by mining companies. Agreements should not be made with one group at the expense of others' during ownership disputes. • Mining companies should talk to traditional owners of the land, while being careful not to exacerbate any Aboriginal conflicts over boundaries. • At some point, the whole community should be consulted to achieve proper consensus for lasting decisions.
Future outlook	• While it may simplify communication for the mining industry and high profile Aboriginal bodies, presently there is mixed confidence in the notion of a "peak body" representing the community's interests. •

Table 3: Key Principles Emerging from the Analysis

General Principles	• Apply the same principles as would occur for a non-Aboriginal community. eg. do not assume one person could speak for the entire community. • Involve all affected communities. "Solutions" should be equitable. i.e. not have gains for one group traded against another. • Needs, history, resources and experiences vary for both mining companies and communities. There is no checklist available but a number of generic principles to observe. • Mining industry activities can have substantial cumulative impacts. Must be prepared to discuss and negotiate these impacts.
Justice and communication	• Trust, respect, listening and communication • Do not exacerbate power struggles within communities • Extensive and open community consultation essential as widespread rights exist • Mining industry expressed frustration at pace, but acknowledged good consultation provided longer term certainty.
Applying the principles	• Industry must use people with appropriate cultural and communication skills • Dialogue with the community should be ongoing to both give and receive feedback. • A communication framework is outlined which should apply to exploration and mining activities

Appendix 6: Transcripted interviews conducted

Case U1: Black Mesa

Bahe, Kenneth, Mining Specialist, The Navajo Nation, interviewed in Windowrock AZ, November, 1999

Hamilton, Arlene, Weaving for Freedom Inc., Navajo Reservation, interviewed by phone, August, 2000

Masayesva, Victor, Hopi, Interviewed on phone, March, 2000.

Monestersy, Marsha, activist, Interviewed by phone, February, 2000

Tulley, Earl, Navajo, Interviewed at the IEN conference, Brownsville TX, June, 2000.

Tuwaletsewa, Phillip. Hopi Geologist, Interviewed in Kykotsmovi, November, 1999

Sutton, Beth, Community Relations Director, Peabody Western Coal, Interviewed at Kayenta AZ, November, 1999.

Zah, Peterson, former President of the Navajo Nation, Interviewed at Native American Economic Development Conference, Tucson AZ, November, 1999.

Case U2: Crandon

Alberts, Dale, Human Relations officer, Nicolet Minerals, Crandon, WI,Interviewed by phone, April, 2000.

Gallinger, Ross D., Director of Environment, Rio Algom, Interviewed in Toronto, January, 2000.

Grossman, Zoltan, Director and founder, Midwest treaty Network, Interveiwed in Madison, WI, March, 2000.

Jones, Joanne, former Hochunk chief and mediator for the Crandon project ,Madison WI, Interviewed by phone, April, 2000.

Poler, Sylvester, Mole Lake Chippewa, Mining coordinator, Mole Lake, WI, March, 2000

Smith, Lawrence, Manager, Project Evaluation, Rio Algom, Interviewed in Toronto, January, 2000.

Tans, William, Project Manager, Wisconsin Department of Natural Resources, Interviewed in Madison WI, March, 2000.

Van Zile, Robert, Mole Lake member and Nashville town board member, interviewed in Mole Lake WI, April, 2000.

Wiber, Maxine, Vice President, Environment, Rio Algom, Interviewed in Toronto, January, 2000

Case C1: Cameco

Barsh, Russell, Dept. of Native American Studies, University of Lethbridge, Alberta, Canada, Interviewed by phone, May, 1998.

Henderson, James Youngblood, Native Law Center, Saskatoon, interviewed by phone, May, 1998.

Kergoat, Elaine, Director Community Relations, Cameco Corporation, Interviewed in Saskatoon, March, 1998 and June, 1998.

Kneen, Jamie, Mining Watch Canada, Interveiwed in Ottawa, January, 2000.

Michel, Bernard, CEO of Cameco Corporation, Interviewed in Saskatoon, March, 1998 and June, 1998.

Penna, Elisabeth, Inter Church Uranium Committee, interviewed in Saskatoon, March, 1998.

Shpyth, Al, Uranerz, corporation (acquired by Cameco), interviewed in Saskatoon, March, 1998.

Wong, Alice, Director, Director Investor Relations, Cameco Corporation, Interviewed in Saskatoon, March, 1998 and June, 1998.

Case C2: Voisey's Bay case:

Anderson, Chesley: Mineral Resource Advisor and Negotiator, Labrador Inuit Association, Interviewed at St. John's NF: March, 2000.

Boychuck, Robert, Environmental Analyst, Voisey's Bay Project Team, Department of Industry Trade and Technology, Government of Newfoundland and Labrador, Interviewed at St. John's NF: March 2000.

Carter, Ruby, Senior Negotiator, Labrador and Aboriginal Affairs Secretariat, Government of Newfoundland and Labrador, Interviewed at St. John's NF: March, 2000.

Feiner, Stuart: Vice President and Legal Counsel, Inco Corporation, Interviewed via telephone in Tornoto ON: January, 2000.

Innes, Larry, Environmental Advisor, Innu Nation, Interviewed at Sheshatshiu, Labrador, March 2000
Penaschue, Peter, President Innu Nation

Sheppard, Mark: Chief Negotiator, Inco Voisey's Bay venture

Miscellaneous other interviews

Aubertin Don, Branch Chief Geological Engineer, Bureau of Indian Affairs, Division of Energy and Minerals, Interviewed in Denver, CO, June, 1999.

Brostuen, Erlin, Director, Energy and Mineral Field Institute, Colorado School of Mines, Interviewed in Golden CO, June, 1999.

Casselman, Caroline, Director, Communications and Public Affairs, Falconbridge Ltd., Interveiwed in Toronto, June, 2000.

Causse, Jean Louis, Senior Project Manager, Environmental and Natural Resources Division, Department of Indian Affairs and Northern Development, Interviewed in Ottawa, Canada, June, 2000.

Cohen, Ronald, Associate Professor of Mining Engineering, Colorado School of Mines, Interviewed in Golden CO, June, 1999.

Echohawk, John, Founding Director, Native American Rights Fund, Interviewed in Boulder CO, June, 2000

Goldtooth, Tom, Director of the Indigenous Environmental Network, Interviewed in Brownsville TX, June, 2000.

Guilette, Elizabeth, Research Scientist, University of Arizona, Interviewed at the IEN conference in Brownsville TX, June2000.

Haberfeld, Steven, Associate Director, Indian Dispute Resolution Services, Sacramento CA: Interviewed at Native American Economic Development Conference, Tucson AZ, November, 1999.

Houston, Scott, Vice President, Public Policy, International Council on Metals and the Environment, Interviewed in Ottawa, Canada, June, 2000.

John, Wendy. Treaty Commisioner, British Columbia, Interviewed in Boston, May, 1999.

Kennedy, Danny, Director, Project Underground, Interviewed in Brownsville TX, June, 2000.

O'Hara, Charles, Planning Director, Swinomish Indian Tribal Community, La Conner, Washington. Interviewed at Native American Economic Development Conference, Tucson AZ, November, 1999.

Paget, Doug, Chief Special Projects, Mineral Resources, Department of Indian Affairs and Northern Development, Interviewed in Ottawa, Canada, June, 2000.

Pickard, Beverly, Coordinator for Environmental Services, Falconbridge Ltd., Interviewed in Tornoto, June, 2000

Robins, Nick, Raporteur, Mining and Sustainability Study, International Institute for Environemnt and Development., Interviewed in London UK, June, 2000.

Serafini, Shirley Wolff. Deputy Minister, Canadian Department of Indian Affairs and Northern Development, Interviewed at Native American Economic Development Conference, Tucson AZ, November, 1999.

Wharton, Donald, Attorney, Native American Rights Fund, Interviewed in Boulder CO, June, 2000

Whiteman, Gail, Senior Researcher, Markets and Social Equity, Interviewed in Ottawa, Canada, June, 2000.

Zaferatos, Nicholas, Assistant Professor of Planning and Environmental Policy, Western Washington University. Interviewed at Native American Economic Development Conference, Tucson AZ, November, 1999.

Appendix 7: Chronology of Important Events in Indian and Mining History in North America

Compiled from various historical texts and Dwayne Champagne ed., 1996

Time period	**Events**
50,000 BC	Bering land bridge exposed allowing for migration of North Asian peoples to the North America.
700BC	Dorset Inuit culture develops in the region north of Hudson Bay
AD 400	The Ancient Puebloan (Anasazi) tradition emerges in the Four Corners region
1004	Thorvald Erickson killed in the first Indian-European skirmish in the New World
1025	Ancestral Navajo migrate from Athabasca to the Southwest
1492	Christopher Columbus touches ground on Guanahani (San Salvador) – the beginning of permanent European settlement in North America
1511	Bartolome de las Casas writes *Destruction of the Indies* in which he chronicles the cruelty of the Spanish conquistadors against Native peoples.
1534 – 41	The French explorer Jacques Cartier explores the Saint Lawrence River, making contact with Natives in the region.
1539	Marcos de Niza, Estvanico and the Zuni explore the region now known as the Southwest searching for the fabled "Seven Cities of Cibola."
1609	Henry Hudson, sailing for the Netherlands, opens a lucartive fur trade with the Lenape, Wappinger, Manhattan and Mohicans of present-day New York.
1620	Pilgrims arrive in the New World
1626	The purchase of Manhattan
1661	The Spanish raid the sacred kivas or prayer chambers of many Pueblo Indians, destroying hundred of kachina masks.
1670	The Hudson Bay company is chartered
1680-90	The Pueblo revolt expels Spanish from Southwest
1690	Reconquest of the Pueblos
1740	The Danish explorer discovers Alaska for the Russians.
1754-63	The French and Indian war (the seven years war) In 1760, New France fell to the British

1776	First "scientific" study of race by the German anthropologist Johann Blumenbach
1776 - 81	American revolution
1783	Massachusetts Supreme Court outlaws slavery.
1786	On August 7, the first Indian reservation is established.
1789	In the United States, Indian affairs moved to "War department"
1790	The first "trade and Intercourse Act" is enacted in the United States in order to establish firm relations with Indian Tribes.
1806-09	Tecumseh and Tenskwatawa attempt to unite Indian people from numerous tribes in order to halt the westward expansion of US settlers.
1812-14	The War of 1812 between the US and Britain.
1823	*Johnson vs. McIntosh* decision, a case before the US Supreme Court, in which Justice Marshall recognized the Indian right to property with dealing only with the federal government.
1825	After visiting the United States, the French historian Alexis de Toqueville wrote: "they kindly take the Indian by the hand and lead them to a grave far from the lands of their fathers."
1829	Gold is discovered on Cherokee land.
1830	- Upper Canada establishes a system of reserves for Indian people - Congress votes in favor of the Indian Removal Act and authorizes $500,000 to relocate Indians to "Indian territories."
1831	*Cherokee Nation v. Georgia.* Landmark supreme court ruling in which Justice Marshall referred to Indians as "domestic dependent nations with an unquestionable right to the lands that the occupy, until that right shall be extinguished by a voluntary cession ton our government."
1832	*Worcester v. Georgia* decision, in which Justice Marshall ruled against the State of Georgia's Indian removal policy. However, the federal government under Andrew Jackson supported the plan and ignored the Court's decision.
1836-70	Small pox epidemics in the Plains. The Mandan and Hidatsa lose as much as 90% of their population.
1838-39	The Trail of Tears: Forced removal of the Five Civilized Tribes from their ancient homeland to present-day Oklahoma (Cherokees, Choctaws, Chickasaws, Creeks and Seminoles).
1846	- The annexation of Texas adds more than 100,000 Native people to the US population. - Mexican- American war begins, leading to the eventual US control of the Southwest as we know it today. The Gadsden purchase two years later finalized the losse eneds from the Treaty of Gudaloupe Hidalgo which ended the war in 1848.
1848	California gold rush spurred by James Marshall's discovery of surface gold while constructing a mill on the American River, near Sacramento.

1849	Treaty with the Navajo at Cheille.
1850 – 80	Genocide of Californian Indians. Fearing widespread Indian uprisings, non-Indian Californians kill thousands of Indians. The population declines from over 100,000 in 1850 to less than 16,000 in 1880.
1858 -63	The Navajo War eventually leading to the "Long Walk" in which the Navajo were forced to walk to a reservation Fort Sumner New Mexico.
1864	Sand-Creek massacre: Seventy Cheyyenne and Aprapaho are killed by Colonel Chivington and his soliders near present-day Lamar Colorado. The US government condemned the incident but no official censure resulted.
1866-68	The Montana Black-hills Gold Rush
1867	The United States buys Alaska
1868	New Navajo treaty signed and Navajo allowed to return to their ancestral lands.
1870	McKay v. Campbell. The U.S. Supreme Court holds that Indians born in tribal allegiance are not born "in the United States" and are therefore not U.S. citizens.
1871	US Congress formally ends treaty-making with Indian tribes. US frotiermen begin wholesale destruction of the buffalo leading to a slaughter of 10 million buffalo in the next 15 years
1872	The General Mining Law is passed by the US Congress: one of the oldest land laws still in the books.
1876	Battle of the Little Big Horn.
1877	The Nez Perce War
1879	*Standing Bear v. Crook* : A federal judge rules that "an Indian is a 'person' within the meaning of the law of the United States.
1880	Sun Dance is banned by the US Government; founding of Carlisle Indian Boarding School in Pennsylvania, the first non-reservation Indian school. The objective in the words of its first director, Henry Pratt, was "to kill the Indian and save the Man."
1882	- Creation of Indian territory by US Congress. - Hopi reservation is set aside -
1883	*Ex parte Crow Dog* ruling that federal criminal code does not apply to crimes on reservations (Indian against Indian in this case).
1884	-Helen Hunt Jackson publishes *A Century of Dishonor*, an indictment of Indian policy. -Despite safeguards in the Bill of Rights, President Chester Arthur authorizes the secretary of the Interior to forbid "rites, customs … contrary to civilization." - Northern Cheyenne reservation is established in Montana
1886	Apache resistance under Geronimo
1886	*United States v. Kagama* ruling that protection of Indians requires witholding the power individual states.

1887	General Allotment Act (Dawes Act, named after the Massachusetts Senator) is passed by the US Congress.
1888	White Men and Indian Women Act regulates cross-cultural marriages and prohibits white men from intermarrying to obtain tribal rights and to protect property.
1890	-Wounded Knee Massacre -Ellis Island immigration depot is opened
1893	US troops gather Hopi children and punish their parents for resisting enforced education.
1897	The Intoxication in Indian Country Act is passed by the US congress forbidding the transportation of ardent spirits, ale, beer, wine or intoxicating liquor.
1889	-The United States annexes Hawaii -In *Stephens v. Cherokee Nation* the US Supreme Court holds that Congress has a "plenary power of legislation" over Indian tribes subject to the Constitution.
1901	Citizenship Act passed by Congress for the Five Civilized Tribes.
1903	*Lone Wolf v. Hitchcock* decision in the US Supreme Court which essentially gave the US Congress
1905	Provinces of Alberta and Saskatchewan are created in Canada
1908	*Winters v. United States* decision in which the Supreme Court held that tribes have the right to land and water to fulfil their purposes and reserve to themselves every aspect of ownership and implicitly sovereignty, not relinquished to the federal government.
1917	First recorded year in which Indian births exceed deaths in the United States.
1919	US grants citizenship to Indian veterans of WW1
1923	Formation of the Navajo tribal Council
1924	All Indians are given US citizenship
1926	National Congress of American Indians is formed
1928	Meriam report is published by a group of leading social scientists. Officially entitled "The Problem of Indian Administration", the report singled out the US governments allotment policy as the greatest contributor to Indian impoverishment.
1930	Kidnapping of the Navajo children
1931	Native Brotherhood of British Columbia is formed
1933	John Collier appointed Commissioner of Indian Affairs
1936	Alaska Native Reorganization Act is passed
1941	Felix Cohen's "Handbook of Indian Law" is published
1944	National Congress of American Indians is established

1950s	Relocation of Indian peoples into Urban areas
1953	Termination resolution passes
1963	Native American Movement started
1965	Social inequality triggers Watts riots
1968	American Indian Civil Rights Act is passed; Poor people's march on the Bureau of Indian Affairs
1969	Alcatraz island occupied by Indians of All Tribes Inc.The Union of British Columbian Indian Chiefs is established
1970	Indian Brotherhood of Northwest territories (DENE Nation) is established First "Earth Day"
1971	Native American Rights Fund is established
1972	Indian occupation of Alcatraz ends. Trail of Broken Tears march on Washington DC begins
1973	*Calder versus Attorney General if British Columbia* ruling that Canadian Native claims to the land preexisted European settlement. This case ended the government's move towards a policy of assimilation towards Native people initiated in the 1960s.
1974	Hopi and Navajo Relocation Act is signed
1975	Indian Self-determination and Education Assistance Act is signed in the US. James Bay and Northern Quebec Agreement is signed in Canada
1978	American Indian Religious Freedom Act is signed in the US
1978	Congress awards Lakota Nation (Sioux) $122 million for illegal taking of the Black Hills. Lakota Nation refuses the award.
1980	Second Hopi and Navajo Relocation Act is signed
1980	Helsinki conference reviews US treatment of American Indians
1981	Navajo-Hopi Joint Use area is partitioned
1982	Canadian Constitution is revised
1982	Indian Claims Limitation Act of 1982
1990	Mohawk Blockade in Oka Quebec; Native American Grave Protection Act is passed in the US
1991	*Delgamuukw v. British Columbia* decision
1993	Year is designated "International Year of Indigenous Peoples."
1998	The Kennewick Man controversy erupts
2000	BIA reform discussion in Congress

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