Examining Justice and Conflict between Mining Companies and Indigenous Peoples: Cerro Colorado and the Ngäbe-Buglé in Panama

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Mining in indigenous peoples' territories often results in explosive conflict. Yet the management literature has rarely focused on this topic. Our paper explores this gap by examining justice and conflict surrounding decision-making at Tiomin Resources Inc.'s Cerro Colorado copper mine on Ngäbe-Buglé land in western Panama. We introduce an indigenous cultural framework for justice, which builds upon conventional dimensions of distributive, procedural and interactional justice. Our case study of the Ngäbe-Buglé highlights the complexity of the roots of conflict between indigenous peoples and mining companies and their linkages to community perceptions of injustice. We conclude that indigenous cultural (including spiritual, environmental, social and economic) dimensions of justice must be addressed in order to reduce the potential for conflict.

INTRODUCTION

"The people have been trying for twenty years, through various...means, seeking justice.

We are tired, we wish to rest.

We want peace; as everywhere else in Latin America, we are looking for peace."

Marcelino Montezuma, President of the Ngäbe-Buglé General Congress (quoted in Andrews, 1996)

Conflict between indigenous peoples and the international mining industry is widespread, and hostilities can be deeply entrenched and explosive. Community blockades, lawsuits, adversarial negotiations, public protests and non-governmental campaigns are common examples of the conflictual relations that exist between many indigenous groups and mining companies around the world. At the extreme end, such conflict has also resulted in violence, civil war, death, human rights abuses, and sexual assault on indigenous women and girls. While each situation is unique, conflict over minerals can have significant costs to both companies and local indigenous communities. Furthermore, despite their frequency and potential severity, this form of conflict remains largely unstudied by business management

scholars (for exceptions see Banerjee, 2000; Bedford & Warhurst, 1999; Moore, 1998). To date, we have little formal understanding of the roots of such conflict.

Our paper attempts to explore this gap by examining the conflict surrounding decision-making at Tiomin Resources Inc.'s Cerro Colorado copper mine on Ngäbe-Buglé land in western Panama, including an examination of community-company interactions over a company-financed social program. We begin with an overview of the conflict problem and a review of relevant theory. We then develop an analytical framework to examine justice issues from an indigenous cultural perspective, building upon the conventional dimensions of distributive, procedural and interactional justice. Our case study analysis on the Ngäbe-Buglé uses this justice framework to assist in highlighting the complexity of the roots of conflict between indigenous peoples and mining companies, and their linkages to community perceptions of injustice. We then discuss our results and identify key implications and areas for future research.

CONFLICT AT MINING PROJECTS ON INDIGENOUS LANDS

Globally, there has been a continued expansion of minerals exploration and production into areas traditionally occupied by indigenous peoples in both developed and developing countries. The strong international trends towards increased liberalization of markets and the privatization of resource development have encouraged mining investment in less economically developed regions. Technological developments have also meant that companies can now operate economically in more remote areas as well as with lower grade ore. Since the end of the 1980s, international mining companies have focused on three main areas for expansion: Latin America, Asia Pacific, and Africa. These regions have experienced a surge of foreign direct investment in the minerals and metals sector in recent years (Rosenfeld, Sweeting, & Clark, 2000). Latin America is the largest area for new investment and growth (Rosenfeld Sweeting & Clark, 2000).

Yet minerals exploration and production do not occur on empty or unoccupied land; indigenous peoples populate many of these regions. Currently, there are over 350 million indigenous people worldwide, and many inhabit lands with attractive minerals potential (Davis & Soeftestad, 1995; International Work Group on Indigenous Affairs, 2001). Globally, indigenous peoples are actively managing as much as 19% of the Earth's land surface (International Union for the Conservation of Nature Inter-Commission Task Force on Indigenous Peoples, 1997). This roughly translates into 5,000 different indigenous groups or 'peoples,' many of whom will face, or have already faced, natural resource development and potentially conflictual interactions with the minerals industry.

Conflict between indigenous peoples and mining companies is an important global issue, and there are significant organizational and societal costs to unresolved conflicts. From a corporate perspective, conflict with indigenous peoples over mining projects may affect corporate reputation, share prices and investment strategy. A recent PriceWaterhouseCoopers (2001) survey of 27 mining company CEOs found that 56% of respondents had abstained from particular investments due to opposition at the local, national or international level. Negotiations between companies, governments and indigenous peoples are typically conflict-ridden. Companies may also incur significant legal costs and project delays as indigenous

groups are increasingly launching legal challenges to minerals development. Community blockades have also successfully shut down existing mining operations for significant periods of time, and there are numerous cases where mining permits have been rejected due to local community opposition.

From a community perspective, mining operations directly impact the local environment and the lives and cultures of indigenous peoples. Mines have been associated with health impacts, radical social and cultural dislocation, a perpetuation of poverty conditions and inequity, increased violence and community conflict, abuse of human and indigenous rights (including abuses of indigenous women and girls) and ecological destruction. Incidences of violent conflict between indigenous peoples and mining companies have been reported throughout Latin America (World Bank, 1996), Africa (Smillie, Gberie, & Hazelton, 2000; Aoul, Revil, Sarrasin, Campbell, & Tougas, 2000), the Asia /Pacific region (International Union for the Conservation of Nature & World Wildlife Fund, 1999), and North America (Gedicks, 1993; 2001). Not surprisingly, there are many cases of conflict between indigenous peoples and mining companies as local communities increasingly attempt to resist such impacts.

CONFLICT AND JUSTICE THEORY

Conflict begins when one party perceives that its goals, values, attitudes, behaviors or beliefs are incompatible with those of another party (Rahim, Magner, & Shapiro, 2000). Social conflict usually stems from an incongruence of values, worldviews or vocabularies (Agnew, 1989), or claims to scarce resources, power or status (Blalock, 1989; Rahim, 1992). More specifically, environmental conflict has been defined as the "fundamental and ongoing differences, opposition, and sometimes coercion among major groups in society over their values and behaviors toward the natural environment" (Crowfoot & Wondolleck, 1990, p. 18). Environmental conflict often stems from a lack of understanding of the nature of interrelationships between humans and the biophysical environment (Mitchell, 1995). Mining projects on indigenous lands can often be classified as intractable environmental disputes since they present no clear solution (Dryzek, 1983), are often rooted in morality and values, occur over issues of distribution with high stakes, and are influenced by strongly held identity frames (Gray & Hanke, 2001; Gray, 1997).

While not a common topic for organizational studies, the fields of development studies and natural resources management have identified conflict between indigenous peoples and mining companies to be a priority for study (see Klare, 2001; Mitchell, 1995; Pye-Smith & Lee, 2001; Ross, 1995). However, much of this literature focuses on the *outcomes* of mining and the distribution of benefits and impacts on indigenous peoples, etc. (e.g. O'Faircheallaigh, 1998). There has been little attention paid to the *process* of decision-making and conflict issues in minerals development, particularly from an organizational justice perspective. More generally, research on participation in natural resource decision-making has also typically been outcome oriented and not focused on analyzing the degree of perceived fairness of procedures for public involvement (Lawrence, Daniels, & Stankey, 1997).

There is a significant body of work showing that cross-cultural differences represent a significant factor in conflict management (see Lee & Rogan, 1991 for a review; also Fry &

Björkqvist, 1997). While this literature is vast and relatively well established, there are few, if any, examples of organizational justice research on conflicts between companies and indigenous peoples over natural resource decisions. We propose that a better understanding of justice from the indigenous cultural perspective may help unravel the roots of conflict between these groups. For the purpose of our study, we make use of the distributive, procedural and interactional justice theory and examine these dimensions of justice taking into account an indigenous cultural worldview. While identifying different sub-dimensions of justice, we recognize that a complex interaction and relationship exists between dimensions (Rahim et al., 2000). We present a brief overview of indigenous cultural worldviews and then provide a more in-depth discussion.

An Indigenous Cultural Framework for Justice

While each indigenous culture is unique, there are a number of cultural themes or dimensions that are common across groups and may impact perceptions of justice. Indigenous cultural frameworks for the management of natural resources are markedly different from conventional Western perspectives (Deloria, 1992). Indigenous peoples derive their identity and culture from the land (Posey, 1999) and their value systems typically include a strong ecological and societal ethic: "The Earth is our Mother. From her we get our life, and our ability to live. It is our responsibility to care for our mother, and in caring for our Mother, we care for ourselves" (LaDuke, 1995). In general, indigenous approaches to management are socially, spiritually and ecologically embedded (Whiteman & Cooper, 2000).

Most indigenous peoples rely upon a localized form of traditional ecological knowledge (TEK), which fundamentally guides decisions on natural resources use (Berkes, 1999). TEK has been defined as "a cumulative body of knowledge and beliefs, handed down through the generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment" (Berkes, 1995, p. 100). TEK systems are a holistic mix of management knowledge, beliefs, and practices (Berkes & Henley, 1997), which operate in an iterative way over time, and across generations. Indigenous spirituality is key to such decision-making (Berkes & Henley, 1997; Deloria, 1992). In Australia, for example, Aboriginal customary law is based on the "Dreaming" set of beliefs, which determine the set of rules and social norms of a particular locality (Ross, 1995). Aboriginal decision-makers see themselves as bound to traditional law, and activities on sacred sites that counter this law will result in spiritual sanctions.

Traditional law has a vital role to play in the natural resources decision-making of indigenous peoples (Borrows, 1997). According to most cultural conceptions of indigenous traditional law, indigenous management decisions and practices must be firmly rooted in the local ecology, be linked to continuous land inhabitation, and reflect the long-term social, environmental and spiritual needs of the local community. For indigenous peoples, justice is perceived to extend beyond the rights of people to encompass the rights of all life to exist without undue compromise. Ecological respect is central to indigenous belief structures (e.g., Whiteman & Cooper, 2000), and governs all aspects of traditional life. Indigenous conceptions of respect are not restricted to fauna or flora, but also cover broad ecological processes and entities like the wind, rain, rocks, and ice. Ecological respect is also linked to the concept of ecological reciprocity – of giving back to the Earth as you take from it. Many

indigenous groups also adopt a common property or collectivist approach to land management that rests upon unwritten communal property rights (Berkes, 1999; LaDuke, 1996). Consequently, decisions about natural resources often must receive prior informed community consent.

Indigenous peoples typically employ a broad, long-term and historical conception of natural resource development. Perceptions of justice may not be limited to isolated projects. While often not a direct result of a current mining project or company interaction, historical injustices (with the legacy of colonialism, forced assimilation, human rights abuses, loss of land rights etc.) often remain an unresolved factor at the forefront of current conflict over natural resource development particularly with unsettled land claims. Even within a specific mining project, mines often change corporate owners during their lifetime (and through different stages of exploration and production) and historical interactions with previous owners may continue to be relevant to local communities despite the change in corporate ownership and interaction. Consequently, corporate-community relationships need to be examined over long-term time horizons and potentially across multiple parties, including the state.

In consideration of this overarching cultural worldview, we now examine distributive, procedural and interactional justice based on a consideration of indigenous cultural worldviews. Table 1 presents the key aspects of our justice framework, elaborated below.

Distributive Justice

The main concern of distributive justice, which formed the core of the organizational justice research agenda in the 1980s, is the equity, or fairness, of the outcome of a settlement or decision-making process in the eyes of the individuals or groups affected by the decision (Greenberg, 1982). This research has focused principally on pay equity, as well as issues such as job security, degree of challenge, supervision, and working conditions (Schminke, Ambrose, & Noel, 1997). Perceptions of distributive justice can also be applied to relationships with external stakeholders and as a means of evaluating corporate social responsibility (Husted, 1998).

Greenberg and Bies (1992) highlight the importance of philosophical approaches to business ethics in prescribing action, pointing out that approaches from social science perspectives are usually limited to describing attitudes and behaviors, rather than deeper values. However, an individual's ethical framework is important in understanding individuals' perceptions of the fairness of an organization's decisions and actions (Schminke et al., 1997). We propose that an indigenous framework for distributive justice needs to include principles of traditional law and incorporate social, environmental and spiritual dimensions in addition to economic outcomes. Distributive justice over time and across development projects is important to consider since many of the negative impacts of mining continue long after mine closure. We discuss each of these sets of potential outcomes below.

Economic outcomes. Indigenous cultures often rest upon traditional subsistence economies that rely upon the health of the local ecosystem. Subsistence economies are not typically monetarily based, yet these economic systems remain important to local peoples. While providing some economic benefits, mining often results in a serious decline of traditional

TABLE 1
Dimensions of Justice in Conflicts between Indigenous Peoples and Mining Companies

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Distributive Justice:

Economic outcomes:

- Degree of impacts on traditional subsistence economies
- Fair share of the economic benefits of mining

Societal outcomes:

- Health
- Community/culture
- Identity
- Land rights / rights to self-determination formally established

Ecological outcomes

Spiritual outcomes

Procedural Justice:

Land rights and rights to self-determination recognized in the decision-making process

Choice:

- Physical location
- Language
- Gender-sensitive format
- Adequate capacity building mechanisms

Voice:

- Sharing of traditional ecological knowledge
- Two-way dialogue
- Communal approach to decision-making (beyond voice)

Feedback (Explanation/justification of decisions to community members):

- Social, ecological and spiritual reasoning
- Accountability: consistency between 'talk' and 'action'
- Conflict management processes that are culturally-appropriate

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Interactional Justice:

- Social sensitivity
- Degree of cultural respect demonstrated
- Degree of trust
- Historical interactions between community, state, other companies

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economies as a result of the loss of arable land and viable hunting, fishing and gathering areas (O'Faircheallaigh, 1991). Depending upon the location of the deposit, mining operations and the related infrastructure have also resulted in the forced resettlement of numerous indigenous communities, which negatively impacts subsistence activities. Mining has also resulted in the emigration of local indigenous peoples to urban centers (Johnston & Jorgensen, 1994), where they can no longer practice traditional livelihoods. We argue that indigenous perceptions of distributive justice are in part related to the direct and indirect economic impacts from mining, which encompass both the direct costs and benefits of mining as an economic activity as well as the indirect costs on traditional subsistence economies.

Ecological outcomes. The environmental impacts of mining vary considerably from mine to mine, but often include: disturbance of the landscape; loss of habitat, vegetation, and biodiversity; disruption of groundwater hydrology (drainage and runoff patterns, etc.); surface water (increased sedimentation, turbidity, acidification, pollution); destruction of aquatic life; acid mine drainage; atmospheric pollution (from particulates); and noise pollution, etc. (Forest Peoples Programme, Philippine indigenous Peoples Links & World Rainforest Movement, 2000). With the local ecology firmly at the foundation of indigenous management approaches, it is not surprising that with respect to large-scale resource decisions, "policy in relation to land resumption, to environmental controls on mining, and to land compensation are of greater importance than any other issue raised by large-scale mineral exploitation" (O'Faircheallaigh, 1991, p. 244). We suggest that ecological degradation will negatively impact community perceptions of distributive injustice.

Societal outcomes. Medium- to large-scale mineral development on land in or near indigenous communities almost inevitably results in a significant degree of societal impacts, particularly those in remote areas of developing countries. Far-reaching socio-cultural change (including the modification of indigenous social structure) has been cited extensively in many regions of the world (Alban, 1999; Environmental Mining Council of British Colombia, 1999; Stoll & Nakamarra, 1997). Societal impacts can include the modification of community relations, a trend towards individualism within customarily communal societies, a shift to a more class-based or elitist system, family division and strife, and alteration of traditional power structures and hierarchies. Indigenous communities have also suffered serious social disruption as a result of arguments over the distribution of mining compensation money. Societal costs can include the health impacts of mining as well as violence and human rights abuses.

Negative impacts on cultural identity may also be important to community perceptions of distributive justice. Identity is "an abiding sense of the self and of the relationship of the self to the world. It is a system of beliefs or a way of construing the world that makes life predictable rather than random" (Northrup, 1989, p. 55). Since the local ecology forms a central element of the indigenous identity and spirituality, indigenous people may feel their personal identities attacked as a result of the ecological destruction caused by mining (Hyndman, 1994; Roberts, 1981). Northrup (1989) suggests that identity plays a central role in the development, maintenance, and transformation of intractable conflicts.

Formal societal recognition of the rights of indigenous peoples is also important to perceptions of distributive justice, and relate to indigenous peoples' socio-cultural desire to control the ecological outcomes of natural resource development. With respect to unsettled land claims,

many indigenous groups seek legislation that clearly supports their rights to natural resources and evaluate justice in terms of whether or not their rights to land and self-determination have been legally established within the larger society.

Spiritual outcomes. The spiritual impacts of natural resource management are particularly important to indigenous peoples (Burton & Ruppert, 1999; Merculieff, 1995; Ross, 1995; Williamson, 1996), but are often not well understood or recognized by non-indigenous decision makers. We therefore explore this dimension of distributive justice in depth.

Indigenous spirituality is intrinsically linked to the land and traditional law emphasizes the need to satisfy the spiritual and ancestral world, which resides in the local ecology. Consequently, actions that impact the local ecosystem can result in the desecration of indigenous sacred sites, an important factor in conflict situations (Burton & Ruppert, 1999). For example, in 2001, the Quechan Indian Nation in the United States successfully stopped gold mining development on their sacred lands. "You can mitigate for the loss of natural resources, but you can't mitigate the loss of religious resources. This land is our entry to the other world. If it is gone, so are we," explained Lorey Cachora, a Quechan, about the proposed destruction of tribal sacred sites along the southern California and Arizona border (Project Underground, 1998). While project proponent Glamis Imperial Gold offered to relocate one ore heap away from the Quechan's sacred Trail of Dreams, the Quechan opposed the mine because they believed that if the Trail of Dreams was disturbed, then the spiritual connection with their way-of-life would be severed. After the US Secretary of the Interior rejected the mine proposal, the attorney for the Quechan Indian Nation explained that:

> Today's action validates the traditional religious and cultural values placed on this land by the Quechan people since time immemorial. It says that Indian sacred sites and access to them does matter, that unmitigated cumulative impacts to them must stop and that environmental justice now has a seat at the federal land management table" (Mineral Policy Center, 2001).

The Arabunna in Australia displayed similar reasoning when they argued that the sacred Mound Springs of Lake Eyre South were displaying spiritually significant damage as a result of Western Mining Company's (WMC) Olympic Dam uranium mine: "[S]ome have dried up completely while others are dying more slowly." Like many indigenous peoples, the Arabunna believe that if the land is damaged, then so too is their spirit world. This is an important element of distribute justice since the Arabunna believe that the springs are filled with the spirits of their ancestors. Consequently, they perceive the drying up of the water to be a dangerous sign that the spirit world is distraught at the ecological impacts of the mine: [T]he drying up of the sacred Mound Springs is both further gross destruction and proof of the seriousness of the initial breach of the intrusion and the taking [of] the spirits of Arabunna ancestors (the water) (Buzzacott, 2000). Furthermore, by drilling through a sacred site called Lizard Man, the Arabunna claimed that WMC was causing serious mental harm to the Arabunna and other Aboriginal Nations.

Given the indigenous belief in the interaction of the spirit, human, and ecological worlds, negative spiritual outcomes cannot be ignored by the local community. Indeed, the Innu of Canada have developed guidelines for minerals exploration that explicitly state the importance

of addressing the spiritual impacts of these activities (Innu, 1995). This recognition also exists at the international level. For instance, article 7 (3) of ILO Convention No 169 requires Governments to ensure that impact assessments be undertaken "in cooperation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on them of planned development activities" (International Labour Organisation, 1989). The United Nations Working Group on indigenous Populations has also developed guidelines for multinational corporations (cited in Bedford and Warhurst, 1999, Addendum 1), which recognize the importance identifying the direct or indirect impacts of corporate actions on indigenous spiritual life.

We argue that for many indigenous peoples, perceptions of distributive justice in natural resource management decision-making will incorporate spiritual impacts.

Procedural Justice

Procedural justice research emphasizes the importance of perceived fairness in the process used to arrive at a decision or settlement, and is based on the finding that people will be more likely to accept a non-favorable outcome if they feel it was arrived at through fair means (Lind & Tyler, 1988; Thibault & Walker, 1975). Lawrence et al. (1997) suggest that procedural justice issues may be particularly important in natural resource decision-making and can impact the level of acceptance of natural resource decisions (Gibson, 1989; Tyler, 1987), and the degree of confidence people have in decision makers (Tyler & Caine 1981; Tyler, Rasinski, & Spodick, 1985).

Few, if any, studies examine indigenous peoples' perceptions of procedural justice in natural resource decision-making. Yet Cohen (1991) points out that procedural justice may be valued and interpreted differently across cultures. Lawrence et al. (1997) suggest that "if the procedures fail to meet societal standards of fairness, participants' sense of group/societal membership will have been violated and aggregate satisfaction will be less than if the procedures were perceived as fair" (p. 583). We argue that not only are procedural justice issues of potential importance to natural resource decisions affecting indigenous peoples, but also that the perceived fairness of decision processes will depend upon whether procedures reflect indigenous societal standards of fairness, which are encapsulated in traditional law. These may be markedly different than corporate standards of 'good practice.' Indigenous perceptions of procedural justice may also develop over the long term and encompass relations with multiple parties (including national governments).

Husted (1998) highlights three particularly important elements to of procedural fairness: choice (whether or not people can choose to participate in decision-making), voice (ability to influence decision-making), and feedback (explanations given by decision-makers to justify their decision) (see also Thibault & Walker, 1975). We suggest that it may be critical to understand elements of 'choice', 'voice', and 'feedback' from an indigenous cultural perspective. In addition, we argue that the enforcement or enactment of indigenous peoples rights is an important element of procedural justice.

Choice. For indigenous peoples, particularly those who continue to engage in traditional lifestyles (such as hunting, fishing, trapping, and agriculture), the choice of participation in

natural resource decision-making depends in part upon the location of such decision-making. While most corporate decisions are made in the boardroom, most indigenous decisions are made outside in the local landscape (Whiteman & Cooper, 2000). Consultation procedures that require indigenous peoples to attend large formal meetings may arbitrarily reduce participation of important indigenous groups such as elders and traditionalists who may have to travel from remote areas, who may not have the funds to travel, and who may not be comfortable in such settings. The ability to participate also depends upon language skills—indigenous cultures typically follow an oral tradition and local peoples may not have much experience with lengthy technical documents such as Environmental Impact Assessments (EIAs), particularly if they are not translated into local indigenous languages. In addition, public participation procedures that are not gender-sensitive may exclude or reduce the participation of indigenous women, who may prefer or culturally require separate meetings. Finally, indigenous peoples who wish to participate may not have sufficient prior knowledge or experience to effectively analyze and comment upon technical documents. Perceptions of procedural justice may be influenced by the degree to which the process incorporates capacity building mechanisms that can educate local peoples and provide them with a full understanding of mining and its potential impacts, benefits, and mitigation options.

Voice. Indigenous peoples may seek to influence decision-making through the sharing of indigenous traditional ecological knowledge (TEK), which relies upon an oral tradition. Since TEK is often conveyed through stories, this allegorical style of dialogue may be incongruent with less personalized forms of business dialogue (Burton & Ruppert, 1999) and may be misunderstood or dismissed by mining personnel as unimportant stories or myths about animals and the spirit world. Indigenous cultures also tend to emphasize the importance of two-way dialogue and community consensus-building. Additionally, while voice or input in decision-making is important, shared power in decision-making is a key element of procedural justice for indigenous peoples given their communal approach to land management. Hierarchical approaches to decision-making (i.e., by a government or corporation without community consent) may ignore the more communal indigenous process of decision-making. Thus indigenous peoples' conceptions of procedural justice go beyond the right to provide input to include the right to make joint decisions.

Feedback. Lawrence et al. (1997) highlight the importance of providing the public with concrete and detailed justifications for natural resource decisions as well as providing adequate feedback to participants in public participation processes. We propose that procedures for explanation and justification given by decision-makers may also be culturally framed. Feedback that includes social, environmental and spiritual reasoning may influence indigenous peoples' perceptions of procedural justice. Accountability, and the justification of decisions with respect to the tenets of traditional law may be another important element of perceptual justice. For indigenous cultures, public relations are a Western conception.

Processes for conflict management may also be shaped by culture. For instance, Pinto (2000) reports that Navajo perceptions of conflict resolution processes are markedly different than Western legal interventions: this approach is informal and "revolves around the idea of 'talking things out'" (p. 272), where parties in conflict 'talk' until 'good relations' and harmonious balance between them is achieved. While indigenous cultures may differ, an

emphasis on healing, and informal and extended dialogue is common. We suggest that culturally appropriate mechanisms for conflict management may be an important element of indigenous perceptions of fairness.

Indigenous rights to meaningful consultation and participation. The international community has collectively recognized indigenous peoples' rights to meaningfully participate in development plans and to follow their own visions of development (which may not be synonymous with Western conceptions of economic development), in international conventions such as Agenda 21, UN Draft Declaration on the Rights of Indigenous Peoples, ILO Convention 169, (OAS) American Declaration on the Rights of Indigenous Peoples, the Convention on Biological Diversity, and the International Convention on the Elimination of All Forms of Racial Discrimination (CERD). The rights of indigenous women have also been formally recognized through the Beijing Platform. While there is international support for indigenous peoples' rights, many national governments do not incorporate these into national decision-making structures. Even in cases where land rights are formally recognized, they may not be upheld in reality. We argue that local people will evaluate procedural justice in terms of the enforcement or enactment of indigenous peoples' rights to land, self-determination, and whether or not they were meaningfully consulted and participated in natural resource decision-making.

Interactional Justice

Decision-making processes can include elements of both procedural and interactional justice, with the former encompassing the formal structures of decision-making and the latter representing informal interactions between parties (Folger & Cropanzano, 1998). Interactional justice involves the perceived social sensitivity of individuals' treatment by decision makers (Bies & Moag, 1986). An interactionally just decision-making process will ensure that stakeholders are treated with social sensitivity, which includes respect, politeness, kindness, honesty and consideration, and that decision-makers assume a high degree of transparency (Bedford & Warhurst 1999; Rahim et al., 2000). Interactional justice relates, in part, to those aspects of social conduct that affect other people's dignity (Folger & Cropanzano, 1998). Rahim et al. point out that when favourable interaction does not occur, individuals will feel a sense of injustice aroused and their sense of self attacked.

While there is not a great deal of information on interactional justice in cross-cultural contexts, Brockner, Chen, Mannix, Leung, and Skarlicki (2000) found that culture plays an important role in the interaction between distributive and interactional justice. That is, individuals with an interdependent self-construal placed more emphasis on the trustworthiness of social relations and used procedural or interactional justice to assess this characteristic. Since indigenous peoples typically have a communal approach to decision-making and identity, we suggest that their perceptions of interactional justice are particularly important in conflict situations. In addition, perceptions of trust will play an important role.

We also believe that indigenous perceptions of interactional justice rest strongly upon perceptions of inter-cultural respect. That is, do representatives of mining companies seem to respect indigenous ways of life, culture and spiritual beliefs? Are mining company personnel aware of and sensitive to indigenous cultural protocols and traditional law? More specifically,

do mining employees demonstrate behavior that is consistent with indigenous conceptions of 'respect'? For instance, giving back to the Earth is perceived to be a key way in which indigenous peoples engage in respectful and reciprocal dialogue with other living creatures:

> According to our way of looking, the world is animate. This is reflected in our language, in which most nouns are animate. The word for corn is animate; tree is animate; rice, rock and stone are animate. Natural things are alive, they have spirit. Therefore, when we harvest wild rice on our reservation we always offer tobacco to the earth because, when you take something, you must always give thanks to its spirit for giving itself to you. When we harvest, we practice reciprocity, which means, when you take, you always give. This is balance. We say that when you take, you must take only what you truly need and leave the rest. Because, if you take more than you need, you are upsetting the balance of nature (La Duke, 1996).

Folger & Cropanzano (1998) highlight the importance of excuses and justification to interactional justice. Since indigenous peoples rely upon oral tradition, unwritten conversations and promises are particularly important. While verbal conversations may appear 'informal' to Western conceptions of justice, oral commitments are critical to maintaining respectful relations with many indigenous peoples. Furthermore, public relations efforts that seek to "sell" or position a hierarchical corporate decision in favorable terms may appear inconsistent with the behind-the-scenes grassroots reality of community-company interactions. Public relations behavior may thus appear to be illegitimate to indigenous community members.

Historical interactions are also likely to be important to indigenous peoples since they often operate with an extended and circular conception of time. Furthermore, a central focus of indigenous conflict resolution is on healing (Pinto, 2000). Thus, we argue that indigenous perceptions of interactional justice also depend on whether or not previous conflicts over natural resources are acknowledged by corporate and government actors and whether concrete efforts are made to heal and achieve reconciliation. Interactions that ignore past hostilities may appear to be unjust from an indigenous peoples' perspective.

CONFLICT AT CERRO COLORADO

Background

At first glance, Cerro Colorado is a promising porphyry copper deposit located in western Panama. The deposit is one of the largest in the world, with an estimated 32.5 billion pounds of copper averaging 0.64%. If successfully developed, Cerro Colorado will be the second largest copper mine in Latin America. Yet the deposit and its surrounding 2000 hectare concession area is located directly in the center of the legally demarcated homeland of the Ngäbe-Buglé people, who represent almost 2/3 of the indigenous population of Panama (Contraloria General de la Republica de Panamá, 1990). Five districts lie within the Cerro Colorado concession area and have a total population of 94,000, of which 90% is indigenous. If the Cerro Colorado mine is developed, it will result in the forced relocation of five Ngäbe-Buglé communities.

Subsistence practices have persisted as a primary activity for the Ngäbe-Buglé for over 300 years and swidden agriculture has traditionally been the foundation Ngäbe-Buglé livelihood (Young, 1971). Land scarcity is the most contentious issue amongst the Ngäbe-Buglé, exacerbated by poor soil productivity and rapid population growth (Young, 1971). Ngäbe-Buglé communities in the Cerro Colorado area are ranked low to very low in indices of development, poverty and community health (Instituto Geográfico Nacional, 1988). The Ngäbe-Buglé utilize a communal form of decision-making and discussion, most notably with the enactment of General Congresses—long standing community gatherings that take place once every 3-4 years, in which significant issues are discussed and the voting in of traditional leaders takes place.

The Ngäbe-Buglé have collectively opposed mining development at Cerro Colorado since the discovery of its mineral wealth, and the deposit has had a tumultuous history (Acosta & Aguilar, 1990; Cadiz Franco, 1997; Gjording, 1991). In the 30 years since the mining company Canadian Javelin Ltd. cut the first road in to the area, Cerro Colorado has been under the management of numerous companies, including Texasgulf Inc., Rio Tinto Zinc Ltd., and Tiomin Resources Inc., each of which withdrew as a result of either contractual difficulties or lack of economic viability due to depressions in the copper market. This case study focuses primarily on the conflict surrounding decision-making in the exploration and infrastructure development stages of Tiomin's tenure, which continued from 1996 through to 2001. We also examine community-company interactions during this period with respect to the development and implementation of a company-financed social program.

While our study focuses on the conflict between the local community and the Canadian company Tiomin Resources Inc. during their two-year presence at Cerro Colorado, a brief review of the historical background at Cerro Colorado provides context for analysis of the current relationship. Cerro Colorado has been marked by conflict throughout the more than thirty years of mining exploration and infrastructure development. Gjording (1991) reports that in the early stages of mine infrastructure development, many residents were not aware of development plans until bulldozers commenced clearing their land. Local communities were never involved in concession negotiations, and mining camps were constructed in several communities without prior consent from the communities or their leaders. Exploration and development activities by each operating company resulted in significant ecological destruction, including loss of land and the pollution of waterways, which exacerbated the fragility of the subsistence livelihoods of the Ngäbe-Buglé (Gjording, 1991). Rio Tinto's management phase (1980-1994) was marked by an international NGO campaign against the mine on human rights and cultural survival grounds, undertaken by Survival International, Partizans, and numerous church groups in Panama and Britain (Moody, 1991). While this campaign served to question the mine's reputation internationally, it was financial aspects of the project that eventually led Rio Tinto to withdraw from mine development in 1994. PanaCobre S.A., a wholly-owned subsidiary of Tiomin Resources Inc., negotiated a concession agreement for Cerro Colorado with the Panamanian government in March 1996. While the Panamanian government consented to the mine, local indigenous communities did not. As part of the concession agreement, Tiomin was contractually required to spend US$1.8 million over a two-year period on a social program, in order to contribute to community development in the region impacted by the mine. The same contract required

Tiomin to pay US$42 million directly to the Government of Panama at various stages following the signing of the contract, for rights to the deposit. In May 1998, PanaCobre applied for and was granted a contract freeze for up to five years due to unfavorable copper prices (Tiomin Resources, 1998). Shortly thereafter, Tiomin optioned Cerro Colorado out to Aur Resources, also of Toronto, who fully acquired the Cerro Colorado deposit in February 2001, and began seeking funding partners for mine development.

During Tiomin's tenure, community relations with the local Ngäbe-Buglé people remained poor. In 1996 and 1997, hunger strikes and protest marches were carried out in which hundreds of Ngäbe-Buglé marched over 260 km to Panama City in order both to express their opposition to the mine and call for legal recognition for their homeland. They met with police brutality once they reached the capital (Cadiz Franco, 1997). In 1997, the government of Panama legally recognized the collective rights of the Ngäbe-Buglé to their land; however, this rested on the condition that they allow the development of Cerro Colorado to proceed. While the recognition of semi-autonomy was welcomed after a long struggle, the development of the mine despite community opposition significantly fueled local hostility and anger. When Tiomin applied to the Panamanian government in May 1998 for a stay of their mining contract, employees left the area and the company withdrew support for the social program at this time. Our study examines Ngäbe-Buglé perceptions of justice with respect to decision-making surrounding the development of Cerro Colorado, with additional reference to the implementation of the social program—the main point of contact between company staff and community members.

Methodology

Qualitative field research was carried out by the second author between January and March, 1999 in Panama. Additional interviews in Canada were conducted throughout 2000. Her strategy of inquiry (Denzin & Lincoln, 1994) emphasized field observation, participation, and informal, unstructured or semi-structured interviewing, and also included a community focus group and a review of corporate and government documents (see Mamen, 1999). Mamen followed an iterative research design (Hammersley & Atkinson, 1995) where choice of interviews and observation evolved while in the field. Data were recorded in field notes and taped interviews, which were later transcribed. Analysis with respect to organizational justice occurred subsequent to field research.

A two-hour long focus group (Hammersley & Atkinson, 1995; Heron, 1996) was carried out in February 1999 in Hato Chamí, a hamlet of 260 inhabitants located approximately three miles from the mine site, along the road connecting Cerro Colorado to the Pan-American highway. Hato Chamí is a crucial focal point – it is considered a major center for commerce and trade, and accommodates an abandoned mine service camp constructed in the late 1970s, including an equipment repair shop, a medical center and housing for 100 mine workers. The community is one of the closest settlements to Cerro Colorado but would not be relocated under the current blueprint for mine development. Twenty adult members of the community participated in the focus group, including fifteen men and five women between the ages of 18 and 50, and included the *corregidor*, the community's political leader. Organizing a focus group after a typical community gathering facilitated widespread access to the community and allowed us to gather data on community perceptions from a wide range of community

members. The focus group was carried out partly in the local language, Ngäbere, partly in Spanish, and was facilitated by a Ngäbe cultural worker from Panama City, who also provided translation. Information sought during this session included: (a) general opinions and feelings about the Cerro Colorado mining project, (b) perceived impacts of the mine, (c) reactions to the social program, and (d) attitudes about community involvement in decision-making, both at the level of the mining project and the social program. The focus group was taped and transcribed.

Information gained during the focus group was further supported by a week of field observation during which time several informal ethnographic interviews (Hammersley & Atkinson, 1995) were conducted with community members on an individual basis. The second author spent a week in local villages, primarily Hato Chamí, and informal interviews were conducted in Spanish. Because of the informal nature of the field setting, ethnographic conversations and informal interviews were not taped. Instead, summaries of these interactions were recorded in daily field notes. Semi-structured interviews (Douglas, 1985; McCracken, 1988) were also conducted with regional- and national-level Ngäbe-Buglé leaders.

To gain a broader understanding of company-community relations, additional semi-structured interviews (Douglas, 1985; McCracken, 1988) were carried out with key Panamanian and Canadian government officials, Tiomin executives and employees at the head office in Toronto and at the Panama field office, an industry representative, and with personnel from indigenous rights organizations in Panama City. These interviews lasted between one and two hours. In some cases, discussions continued over time via email contact. This data provided industry, government and NGO perspectives on both the positive and negative aspects of the Cerro Colorado project, community consultation and Tiomin's social program.

Secondary sources were also valuable for obtaining information. Access was granted to corporate documents at Tiomin, in the corporate headquarters in Toronto as well as the Panama field office. Documents included press clippings, background studies, letters, financial documentation of the social program and the mining project in general, promotional materials and mine development plans and blueprints. Other organizations and government bodies provided access to historical files detailing interactions between local communities and the mining companies present at Cerro Colorado, including written statements from the Ngäbe-Buglé General Congresses. Finally, a documentary made about the struggle of the Ngäbe-Buglé in 1996 provides additional testimony to Ngäbe-Buglé community perceptions (Andrews, 1996).

RESEARCH FINDINGS: PERCEPTIONS OF JUSTICE AT CERRO COLORADO

In this section, we present findings on Ngäbe-Buglé perceptions of justice with respect to Tiomin's mine development process and the social program. While the main focus of the field study was to explore local Ngäbe-Buglé perceptions of the conflict, the semi-structured interviews with others (particularly corporate executives) provide multi-dimensional insights into the nature of this conflict. These results are summarized in Table 2 and are discussed in more detail below.

TABLE 2
Summary of Findings: Justice at Cerro Colorado

Distributive Justice:	Community Perceptions	Corporate Perceptions
Economic outcomes:		
• Degree of impacts on traditional subsistence economics • Fair share of the economic benefits of mining	• Concern over potentially significant negative impacts on traditional economies • Exploration activity had already negatively impacted subsistence fishing practices • Belief that jobs from mining would be low-paying, low-skilled, backbreaking • Coffee program had some positive economic benefits • Social program budget focused disproportionately on non-Indigenous projects that benefited 'Latinos' and had little local economic spin-off	• Focus on potential jobs for the local people • Did not discuss negative impacts on subsistence economy • Social program believed to be economically beneficial
Societal outcomes:		
• Health • Community/culture • Identity • Land rights / rights to self-determination formally established	• Concerns about prostitution and increased alcohol consumption • Concern that the mine would affect social cohesion, culture and identity • Forcible relocation of 5 communities • Land rights and right to prior informed consent formally established but not applicable to Cerro Colorado • Positive perceptions of the social program: improved health care and educational facilities, until the program ended • Road infrastructure perceived to benefit Tiomin not the community	• Emphasized the benefits of the social program • Eventual withdrawal of social services provided by the social program perceived to be the government's issue, not company's • Mine development plans perceived to be less impactful than a mining town would have caused
Ecological outcomes:	• Environmental degradation from mining perceived as a serious negative impact • Indigenous TEK perspectives not incorporated into environmental studies	• Focus on mitigation plans
Spiritual outcomes:	• Concern that destruction of the sacred mountain, Cerro Colorado, would deeply impact spirituality and culture • Mining activities and influx of workers threaten to disturb traditions	• Not considered

(Table 2 continues on next page.)

Distributive Justice

Our research findings indicated that Ngäbe-Buglé perceptions of distributive justice encompassed economic, ecological, societal and spiritual dimensions. These perceptions were largely negative with respect to the impact of the mine itself. Despite numerous claims by Tiomin that the mine would bring an improved material situation for local people, community perspectives voiced in the focus group and informal discussions illustrated deeply-held doubts by Ngäbe-Buglé people about whether they would see any benefits, economic or otherwise. Community perceptions of distributive justice with respect to the social program

TABLE 2 (continued)
Summary of Findings: Justice at Cerro Colorado

Procedural Justice:	Community Perceptions	Corporate Perceptions
Land rights and rights to self-determination recognized in the decision-making process	• Perception that the community had to trade off land rights for mining • Believed Tiomin worked in collusion with the government	• Perceived to be a governmental issue • Company had a legal right to proceed
Choice: • Location • Language • Gender-sensitive format • Adequate capacity building mechanisms	• The few community consultations took place in the community, though major meetings with more stakeholder groups were in boardrooms in the city, restricting participation • Participation was perceived to be limited or non-existent • Most interactions in Spanish, not local Indigenous language • Women were specifically targeted in public relations programs but not for input • Negative perceptions of capacity building: community did not adequately understand the impact of the mine & most social program subprojects were not carried out with any capacity building worked in	• Getting the women to support the mining project was seen as important • Format and frequency of stakeholder meetings and community consultations perceived to be sufficient
Voice: • Sharing of traditional ecological knowledge • Two-way dialogue • Communal approach to decision-making (beyond voice)	• Company not interested in traditional ways • No forum for two-way dialogue • Not involved in key decisions about the mine • Perceived that Tiomin promised participatory decision-making in the social program but actually made all the decisions themselves • Tiomin did not listen to the peoples' Congress	• Unaware of the need to solicit TEK • Believed that stakeholder meetings were sufficient for consultation • Talked about the participatory principles of the social program • Promised communal approach to decision-making: said that they would not go ahead with the mine without community support
Explanation/Justification of decisions to community members: • Social, ecological and spiritual reasoning • Accountability: consistency between 'talk' and 'action' • Conflict management processes that are culturally-appropriate	• Perception that social, ecological and spiritual concerns were not addressed by the company • Felt betrayed by corporate promises of communal decision-making when company refused to acknowledge conflict and continued with mine development despite opposition • No formal ongoing channel for conflict management	• Consistently argued that the community was in support of the program • Did not acknowledge the existence of conflict • Focus on public relations • No need for conflict management processes since there was no perception of conflict

TABLE 2 (continued)
Summary of Findings: Justice at Cerro Colorado

Interactional Justice:	Community Perceptions	Corporate Perceptions
Social sensitivity	• Community feelings of powerlessness and being marginalized by the government and Tiomin • Tiomin did not understand or follow cultural protocols and thus did not demonstrate cultural forms of respect for the people or the ecology • Lack of company transparency • Tiomin relied on public relations "justification"	• Felt that they had done a lot to be sensitive to social impacts (reasoning behind the social program)
Degree of cultural respect demonstrated	• Perceived to be very low	• Unclear
Degree of trust in relationship	• Tiomin not perceived to be trustworthy; working in collusion with government	• Perceived some sub-groups within the community to be untrustworthy
Historical interactions between community, state, other companies	• Very poor. Not addressed by Tiomin or government	• Perceived to be governmental issue

funded by Tiomin changed over time from relatively positive when the program was initiated, to negative during program implementation and very negative after the social program was terminated. We present more detailed findings on perceptions of justice on economic, ecological, social and spiritual outcomes below.

Economic Outcomes. Community members repeatedly voiced concern that the mine would negatively impact the Ngäbe-Buglé subsistence economy of both current and future generations. Opinions voiced during the focus group and in informal dialogue with residents revealed critical perspectives on mine development activities – individuals felt that both Tiomin and previous mining companies had already severely impacted their traditional way of life. River siltation as a result of exploration and development activities carried out by Tiomin had, according to one community member, disrupted subsistence fishing activities. Historically, road construction and infrastructure development had also affected subsistence farming. One of the key concerns expressed repeatedly during the focus group was the further disruption of subsistence activities by the transportation of heavy equipment and mineral products along the access road, which passed through the community. While impacts on the traditional economy had already been experienced, community members voiced even greater concern over future impacts of the mine if developed.

In contrast, corporate interviews emphasized the economic benefits of local job creation:

> "Our policy …is to primarily use the local work force and to transport the employees from their homes…Tiomin had a 50/50 policy of employment (indigenous/Latino). Depending on how the project goes ahead the direct employment numbers would be between 200 and 300. In Panama, the multiplier effect for indirect employment would be 8 -10 (1600-3000 [jobs])."

However, community perceptions were not heavily influenced by the potential employment. Even though Tiomin made it clear that the mine would bring some employment to the Ngäbe-Buglé, discussions with male community members uncovered the belief that this work would be unskilled, backbreaking manual labor. During an informal conversation, one community member expressed a desire for paid work but was highly skeptical about this type of work, its long-term benefits to the community, and the ability of the company to provide safe and consistent work. He reported that some members of the community had already received paid employment, but that it was poorly paid and consisted of hard labor hauling heavy loads up the mountain. A reservation repeatedly expressed in the focus group was the negative effects brought by introducing a source of income that may lead to economic inequality in communities that are traditionally very equitable and community-based. The mine would be the only foreign-operated enterprise in the area.

Perhaps the most important measure taken by Tiomin to garner economic benefits for the community was the social program, the company's sole contractual commitment to benefit the communities affected by the mine. At US$1.8 million, the social program consisted of 0.00016% of the mining project's estimated capital costs. Corporate documents and interviews with Tiomin employees indicated that the strategy was to finance projects that could bring spin-off economic benefits. One of the criteria established by Tiomin for the social program was that each project should benefit a broad number of people and be financially self-sustaining. While a few of the projects did in fact improve the economic situation of the local communities (e.g., the coffee production project allowed the community to receive a higher price for their coffee), most of the projects in Hato Chamí were unsustainable and ended after Tiomin left the area in 1998. Overall, community perceptions of the economic benefits of Cerro Colorado were negative – the social program had not benefited them economically; they did not believe in the benefits of job creation; and they were concerned about the negative impact on their traditional economy.

Ecological Outcomes. The principal concerns about ecology put forth by community members, both during the focus group and through additional conversations, included (a) the immediate environmental damage leading to disruption of subsistence practices and spiritual needs; (b) poor ecological security facing future generations, including persistent pollution after mine closure; and (c) disruption and noise and air pollution from numerous trucks passing through the community each day. These fears were also related to their experience of poor ecological outcomes during the mine infrastructure development phase, which included degradation to fishing and cropland. People also stressed their direct and almost total reliance on the local ecosystem, and were very concerned about ecological degradation now and in the future.

Societal Outcomes. As reflected by corporate financial documents, Tiomin fulfilled their agreement to spend $1.8 million on the social program. Corporate literature also showed that fifteen percent of the program budget was spent on projects in Hato Chamí, and included the construction of a health center, medical equipment and assistance, equipment for the school, and coffee production projects. During an interview, Tiomin CEO Jean-Charles Potvin stated that he believed that Tiomin's program was highly successful. This perception was also found in other corporate interviews and email conversations. According to Mathew Edler, Vice President of Corporate Development: "In general I think it was a success although

not necessarily in the areas we initially thought it would be. Remember it was planned as only the first two years of a many decade program."

However, field work among the local community indicated that the Ngäbe-Buglé were concerned about a number of key societal impacts of the proposed Cerro Colorado mine. People were concerned about the forced relocation of five communities if Cerro Colorado went ahead under the current plan. People were also worried about negative social impacts such as prostitution, increased alcohol consumption, and demographic change. Some individuals voiced concern about the negative cultural effects of introducing a source of income (via the social program) that may lead to economic inequality in communities that were traditionally close-knit and equitable. A number of community members also felt that the loss of traditional subsistence activities would erode Ngäbe-Buglé cultural identity.

Community members admitted that their perceptions of the social program changed over time. During the focus group, community members reflected that there were times when people felt hopeful about benefits the mining company could bring – electricity, better health care, improved education and economic development through coffee production and agricultural projects. After Tiomin terminated the social program in 1998, the positive changes brought about by the program rapidly deteriorated, and community members had not been prepared for this change in outcome. Electricity was withdrawn from the community, and the company removed doctors, medication and ambulance services. By this time, the solar coffee bean dryer constructed for the community, not built to withstand harsh weather, had been damaged by strong winds. During informal interviews, many residents argued that the social program brought more benefits to the 'Latinos' living outside the Ngäbe-Buglé homeland. Contracts for many of the projects were awarded to non-indigenous contractors from outside the Ngäbe-Buglé homeland. Eleven percent of the total budget was spent on transportation infrastructure such as road maintenance and bridge construction. Very few of the residents of Hato Chamí owned or had access to vehicles, and, given the location of Hato Chamí on the road connecting the mine to the Pan-American Highway, many believed that these projects were carried out primarily in the interests of the company. Many of the proposed agriculture development projects were cancelled. However, in an email exchange, a Tiomin executive argued that the company was not to blame for all of the failures. For instance, "the traditional medicine project, which would have been sustainable, was destroyed by a small group of locals who felt it would not benefit them." Nevertheless, during the focus group session, many complained that: "There are no benefits..." and "there is no capacity-building." Focus group participants concluded that: "There have been more impacts than benefits."

Most problematic was the belief held by many that they had been blackmailed by the company and by the government, understanding that if they wanted an improved standard of living, including health care, education, and electricity, they had to accept the mining project in order to alleviate poverty conditions. Similarly, while Ngäbe-Buglé land rights were established, people perceived this to be a tokenistic outcome since it did not increase their decision-making power over Cerro Colorado and therefore could not influence other economic, social, ecological and spiritual outcomes.

Spiritual Outcomes. During our field research, community members expressed high concern about the potential negative impact on the Ngäbe-Buglé spiritual realm that would be caused

by ecological damage from the proposed mine. Most notably, local people were concerned about the desecration of their sacred mountain, Cerro Colorado, which was home to the spirits of Ngäbe-Buglé ancestors. Cerro Colorado appeared to be central to Ngäbe-Buglé culture and spirituality (see also Gjording, 1991). The mountain was, and remains, an important sacred site. Informal community interviews indicated that people believed that mining activity would irreparably desecrate this spiritual realm and erode the people's sense of identity. Ngäbe-Buglé community members were very concerned about this fundamental impact. Marcelino Montezuma, President of the Ngäbe-Buglé General Congress, explained: "Since 1969, we've been trying to tell you, this is our land. You've taken our riches; what little we have is up in that mountain range—thank God we still have something. We are not going to leave. There are 17,000 souls up there—where are they going to go?" (quoted in Andrews, 1996).

Procedural Justice

Choice and voice. The Ngäbe-Buglé's degree of choice in whether or not the mine project went ahead, and how, was non-existent. Tiomin was granted rights to develop the mine by the Panamanian government without notifying the Ngäbe-Buglé prior to the decision. An interview with the former Canadian Ambassador to Panama revealed that when Tiomin "signed a contract with CODEMIN, a government entity created to develop Cerro Colorado, it was done without any consultations with the local residents. The Panamanian Government later defended its position by saying that the Constitution is very clear. Anything found below the ground is the property of the state."

A senior Tiomin executive explained in an interview that they consulted the Ngäbe-Buglé frequently and consistently after this time in local community consultations, with the aim of keeping locals informed about the project, as well as to solicit input on issues such as employment, labor force and operational aspects. He described the company's perspective as such: "When you have a group of people not even passively supporting you but actively supporting you—your neighbors—it is very difficult for somebody to come in and cause you serious pain... An ounce of prevention is worth a pound of cure." In addition, at least two stakeholder meetings were held by Tiomin in Panama City in their boardroom between 1996 and 1998, at which some Ngäbe-Buglé representatives were present.

Despite Tiomin's claims of an adequate community consultation process, local people disagreed. People expressed feelings that the company selectively chose representatives for the stakeholder meetings that would comply with the company's goals—participation was not open to all, and the location in Panama City ensured low participation. Numerous community members in Hato Chamí felt that community consultations held in the communities served no purpose, and that Tiomin was simply interested in distributing propaganda. As one focus group participant contested: "The company doesn't serve us." Citizens expressed concern that they were not being listened to, and were not interested in further discussions, fearing they would be misunderstood. In general, Tiomin's approach to consultation, according to a Tiomin executive, was to "get them in a room, lock the door and then talk about the project." Locals felt that it was not based on soliciting meaningful two-way input as an ongoing mechanism for collaboration and communal decision-making.

A review of Tiomin's environmental baseline report also indicated that it did not attempt to incorporate Ngäbe-Buglé traditional ecological knowledge into the document. Corporate documents did not recognize traditional law, and the rights of non-human ecology and the spiritual world were not taken into account. Nowhere did Tiomin acknowledge the centrality of the local ecology and Cerro Colorado to the Ngäbe-Buglé people. Tiomin also did not fully complete its EIA requirements: While the Panamanian government required that Tiomin undertake a detailed environmental impact assessment (EIA) prior to mine development, this study had not been completed at the time of the field research in Panama in 1999. The community was not consulted on the EIA in any significant way.

A senior Tiomin official interviewed in Canada stated that Ngäbe-Buglé women were targeted in Tiomin's public relations campaign because "the women are making all the decisions— if you get the women supporting you, the rest is easy." However, community interviews indicated that Ngäbe-Buglé women were not actively consulted on the project in substantive ways except through public relations brochures, nor were other important groups such as elders, youth, and traditionalists. We could find no indication that Tiomin solicited input from a variety of different sectors of the community. According to Sofia Cortez, a traditional leader from Bocas del Toro province (quoted in Andrews, 1996):

> The government has not consulted with us; neither with the leaders or the people. That's why there's been no communication between the government and the people. That's why we feel we are being mistreated... Now they're telling us, first accept the [mining] project. But the people don't agree with that. If the project is to continue, the Ngäbe must be included in the process. Many people, many young people, are prepared for the moment when, if the government doesn't take heed of this, and goes ahead with the project as planned without a negotiation that is acceptable to the people, we are prepared to struggle to the end.

A tremendous gap in capacity also existed within the little consultation that did occur. The Ngäbe-Buglé were poorly equipped to provide input on decisions regarding Cerro Colorado. They had no prior experience with mining and were not provided with information about the nature of Tiomin's contract with the Panamanian government. They had no information on the global market, the mining industry, the potential impacts of mining, and their rights in national and international law. Even the Ngäbe-Buglé representatives who sat on the Commission on Mining and Environment, set up as a contact point for obtaining information for the locals and for acting as representatives on related issues, had very little experience with, or knowledge of, the mining industry, and no means to access pertinent information. During the focus group, participants emphasized the lack of community knowledge and understanding about the potential impacts of the mine: "Our people do not understand what a mine is. They certainly don't understand what will happen at Cerro Colorado." The capacity of many of the local people was so low that, according to the coordinator of an indigenous support organization in Panama City, after a community consultation, one community member asked: "What's copper?" Interviews with company personnel indicated that there were no training or capacity-building programs in place to help the Ngäbe-Buglé understand the scope and impact of the proposed mine. The local community also lacked adequate information about the mine even though such information was available within Tiomin or

government offices. For instance, the detailed environmental baseline report prepared by Tiomin for the government was not available to local residents. Also, the documents that were provided by the company, such as the environmental baseline study, were not translated into the local language, making informed commentary impossible.

Interviews and a review of documents indicated that the stakeholder meetings conducted by Tiomin with the Ngäbe-Buglé did not result in substantive changes to the mine development plan, which continued until financial conditions forced Tiomin's withdrawal. Interviews with Tiomin executives suggest that consultation and community development activities were carried out at least in part to minimize dissent. Nowhere in corporate documents was the issue of community-level opposition explicitly addressed, nor was the conflict acknowledged in corporate interviews. Prior informed consent of the Ngäbe-Buglé was not sought or secured by the company, nor was the community consulted prior to finalization of the concession agreement. No effort was made to consider their traditional laws or to incorporate decisions made by the community through the formal cultural decision-making forum – the General Congress (*Congreso*): "The company does not want to listen to the *Congreso*" (an Ngäbe-Buglé elder, quoted in Andrews, 1996). Marcelino Montezuma, President of the Ngäbe-Buglé General Congress (quoted in Andrews, 1996) summed up Ngäbe-Buglé perspectives on procedural justice: "We are looking for dialogue, so we may say: suspend, or cancel, the new Panacobre [Tiomin] project. Since 1969, we've been trying to tell you, this is our land." Participant observation showed that community members continued to perceive this refusal to allow meaningful community participation in decision-making with respect to the mine as unjust.

However, our findings indicate that Tiomin did, in principle, attempt to establish participatory decision-making procedures in the social program. According to the company's guidelines for the social program, projects had to be solicited by Ngäbe-Buglé community members, benefit many people in the community, be implemented by community members wherever possible, and be financially self-sustaining. A board composed of company personnel and community representatives was created in order to oversee the selection of projects. But many community members expressed derision that the company still managed to exert control over which projects would be selected and how and who implemented them, and that benefits were minimized as a result. One focus group participant described the decision making process of the social program as such: "It is more humiliating than beneficial," reflecting dissatisfaction with the level of authentic participation of local people. Community members were also not consulted about the termination of the social program, and were not aware that it could end as it did.

Feedback. Our research found that Tiomin provided very little direct feedback on its decisions or in response to community criticisms. Instead, Tiomin engaged primarily in a public relations campaign. Cartoons and glossy leaflets promoting the benefits of the mine, aimed at both adults and children, were distributed. In a review of corporate documents, it appeared that the social program was specifically set up so that residents would "understand that mining companies could be good, and so that the generosity could be attributed directly to [Tiomin]" (Shaw, 1997). Interviews with corporate executives indicated that the company hoped that such activities would garner extensive community support.

A review of corporate documents showed that executives at Tiomin publicly stated that the company would not proceed with mine development in the face of strong opposition from the Ngäbe-Buglé. An executive at Tiomin also reported that the company conducted an extensive survey of the local people prior to signing the concession agreement and found that greater than 95% of respondents opposed the mining project. A similar study carried out in May 1997 in a smaller area around the mine revealed that 60% had negative perceptions of the mining company (Atencio & de Ordónez, 1997). A review of the written minutes of the General Congresses of the Ngäbe-Buglé indicated that almost unanimous opposition to the Cerro Colorado copper mine.

Despite documented evidence to the contrary, Tiomin executives persisted in their assertion that the Ngäbe-Buglé were in support of the project, and actively pursued mine development. This was supported by interview data and corporate documents. For instance, in the spring of 1998, Tiomin CEO and President Jean-Charles Potvin stated in a letter: "Our relationship with the Ngobe-Bugle people is excellent and on the best of terms... Our activities generated significant benefits to the local indigenous population..." (Potvin, 1998). Later, in an informal discussion in 2000, Potvin discussed community relations and continued to insist on the positive and harmonious nature of company-community relations.

Our research found that corporate responses to community concerns were perceived to be poor. The local people were aware of, and concerned about, the lack of consistency between what Tiomin said it would do (seek community consent) and its actual actions (proceed without community consent). Interviews with community members and Tiomin staff also confirmed that there were no formal mechanisms for settling conflict.

Incorporating indigenous rights to meaningful consultation and participation. Our research found that the actions of the Panamanian government were a significant factor in the perception of procedural justice by the Ngäbe-Buglé community members. Informal interviews and participant observation confirmed that the Ngäbe-Buglé were keenly interested in having their land rights legally recognized. In the Ngäbe-Buglé protest march from San Félix to Las Lajas, Andrews (1996) captured these sentiments reflecting aspects of procedural justice:

> According to the rights the government owes to all indigenous people; we are asking, without the use of violence. We have nothing against you, nothing against Latinos. We are only reclaiming our rights, the same ones that you have, that all races all over the world have: respect, the right to live, the right to work, just like you. We have nothing against Latinos, neither do we have anything against the government. All we want is to be free.

However, people felt that the pressure of large-scale mining development by external companies made such self-determination difficult: "The problem with mineral resources here in Panama, and above all in Ngäbe-Buglé territory, is that Canadian and other companies have laid claim to our land with the intention to explore and exploit the resources" (quoted in Andrews, 1996).

Prior to 1997, the Ngäbe-Buglé did not have recognized land rights. To a limited degree, our field research suggested that improvements in procedural justice were made when the Panamanian government granted legal land rights and semi-autonomy to the Ngäbe-Buglé over their 700,000 hectare homeland. Documents analysis indicated that both the law establishing the semi-autonomy of the Ngäbe-Buglé *Comarca* (homeland) and the 1998 General Law of the Environment required that commercial exploitation of mineral resources located on indigenous lands proceed only with the authorization of the appropriate indigenous authority. However, neither this law, nor the General Law of the Environment passed in March 1997 that requires authorization of the indigenous group for mineral development on communal lands, applied to Cerro Colorado because the concession agreement predated the passing of both laws.

Participant observation indicated that numerous community members believed that the land rights negotiations with the Panamanian government were used as a bargaining tool in order to quell community opposition to the mine. However, a company employee felt that Tiomin played a more neutral role:

> Tiomin was in a somewhat difficult position in that they had a perfect legal right supported by the government of today to develop the project but also had an obligation to the people in the area as they were the ones that would be affected by the project. There was a lot of politics going on which of course we could not become involved in...The [Ngäbe-Buglé] Congresso used the project to successfully pressure the government into creating the *Comarca* (after 22 years). Our stance was that we would not officially support or oppose this movement...

Community members seemed to disagree. For instance, in the Andrews documentary (1996), a Ngäbe-Buglé man confronted a Tiomin company official with what subsequent participant observation confirmed was a commonly-held belief:

> Things are not just economics; everything you're doing is political too. You can't say that the government and the company are not in this together. That's all a lie. "Let the company start mining first, and then you'll get your agreement with the government." That's all a lie.

Participant observation indicated that while community members were aware that Tiomin and its predecessors did not have the institutional power to grant such rights, people felt that the government and the companies acted in concert, using Ngäbe-Buglé land rights as a coercive bargaining chip. Feelings of injustice surrounding this issue were high.

Interactional Justice

During the focus group, many community members indicated that they felt humiliated by the way Tiomin had treated people. One participant argued: "There is no respect. We are being treated like insects." Field research also indicated that when community members reflected on the negative impacts they had already experienced as a result of the mining project, they expressed anger and humiliation at how they had been treated. People did not felt that Tiomin

or the Panamanian government acknowledged or attempted to reconcile previous problems or impacts.

People felt that Tiomin did not recognize and respect the Ngäbe-Buglé culture, and ignored the potentially negative impacts of the Cerro Colorado mine on this way of life. While reciprocity is an important dimension of Ngäbe-Buglé interactions with the Earth, it was widely believed by community members that Tiomin did not acknowledge this or demonstrate any understanding of the need for ecological respect. Data collected during the focus group and in informal conversations in the village of Hato Chamí indicated that people had a fundamental concern with Tiomin's lack of cultural respect for their sacred mountain. The company did not publicly acknowledged that Cerro Colorado was sacred to the Ngäbe-Buglé and that mining this sacred site may have significant ramifications on the local people, in particular the five communities who would have to be relocated should mine development proceed. Data suggest that no attempts were made to understand Ngäbe-Buglé spirituality or relationship to land, and interviews and document analysis indicated that Tiomin did not acknowledge the cultural protocols of the Ngäbe-Buglé. Furthermore, Tiomin officials did not acknowledge that the Ngäbe-Buglé perceived the local ecology to be animate, nor did the company recognize that traditional law requires ecologically respectful interactions.

Participant observation found that resentment and frustration towards Tiomin were widespread. The few citizens who were interested in trying to obtain unbiased information about the potential impacts of the mine, complained that they could not get adequate information. Interviews and participant observation indicated that many people felt that Tiomin was not giving an honest and full account of the dangers of mining and instead offered glossy public relations brochures. People felt that Tiomin was clearly not being held accountable for, nor were they being transparent about, local concerns regarding the mine. People did not trust Tiomin or the government and believed that these actors worked in collusion against the desires of the local people. Many people said that they felt marginalized and powerless, and it was difficult for them to maintain their own sense of dignity during interactions with the company. During the focus group, participants repeatedly spoke of the humiliation they felt as a result of the company's actions, and of their lack of trust in the company's promises. Interestingly, interviews with corporate executives also suggested that they had concerns about the honesty of some of the Ngäbe-Buglé.

With respect to the social program, numerous residents of Hato Chamí reported positive perceptions while it was being carried out. However, after its termination, people felt that Tiomin showed a lack of respect and commitment to the local people, which resulted in perceptions of low interactional justice. This in turn seemed to exacerbate negative perceptions of distributive justice. During the focus group, a resident commented on the social program: "There can be no benefits if there is no respect from the beginning."

ANALYSIS

At Cerro Colorado, the conflict with the Ngäbe-Buglé was not simply over resource (i.e. mineral) allocation and land per se. It was also related to power inequities, the clash of cultures and a lack of respect for these differences. Tiomin stressed a legal basis for procedural justice (they had a contract with the state), while at the same time promising but not delivering

participatory approaches to decision-making. The company also emphasized a narrow economic conception of distributive justice through local job creation, and used public relations as a central part of their community interactions. Taking into account the perspective of the Ngäbe-Buglé, their relationship with Tiomin and the Panamanian government was fraught with inequities in terms of outcomes (distributive justice), decision-making structures (procedural justice), and informal interactions (interactional justice). Perceptions of injustice were related to violations of traditional law and also to the significant amount of past injustices committed by the Panamanian government and by previous companies. We analyze our findings in more detail below.

Our data suggest that Ngäbe-Buglé perceptions of distributive justice extended beyond an assessment of the potential financial benefits of minerals development, and also incorporated impacts on traditional economies as well as ecological, spiritual and social dimensions. Yet mining development plans rarely consider the significance of traditional subsistence economies for current and future generations (Gedicks, 1997). At a basic level the economic, social, environmental and spiritual issues that were important to the Ngäbe-Buglé were not addressed by the company's approach to decision making. While such oversights (especially spiritual) may be due to cultural misunderstanding, or by design, these dimensions significantly added to local perceptions of injustice and fueled the conflict between the company and community.

Procedural injustices were also problematic from the community's perspective. Ngäbe-Buglé approaches to decision-making are traditionally highly communal (Gjording, 1991; Young, 1971). Tiomin's approach with the local people diverged significantly from traditional norms and thus presented a procedural justice issue. At no time did Tiomin openly acknowledge the extent of the conflict that existed at Cerro Colorado, despite hunger strikes, protest marches, and documented widespread community opposition. Statements from Tiomin officials consistently claimed that the community was in support of the mine. Our data suggest the opposite and this is supported by other research, both before and during Tiomin's tenure (Acosta & Aguilar, 1990; Bort, 1980; Cadiz Franco, 1997; Candanedo, 1982; Gjording, 1991). No formal channel existed in which the Ngäbe-Buglé could voice their ongoing concerns to Tiomin (or their shareholders).

While 'stakeholder meetings' may have been implemented as a tool to avert conflict, in reality, this procedure created additional conflict because the Ngäbe-Buglé believed that Tiomin was trying to manipulate local acceptance of the mining project, which fostered mistrust and additional resistance. After the two stakeholder meetings (where participation was restricted), the company did not conduct any evaluation or follow-up. Tiomin consistently downplayed the level of conflict with community members and emphasized public relations efforts focusing on the benefits of the social program. The company did not adequately develop procedures (in terms of choice, voice, and feedback) to solicit meaningful consultation on potential negative economic, ecological, social and spiritual impacts, nor did they develop adequate mitigation plans. While Tiomin argued that it was engaged in participatory decision-making, our data indicated that community members did not perceive this to be the case with either the mine development or the social program.

The social program, while aiming to improve relations and benefit local people, also appeared to have had the net effect of deepening local indignation and crystallizing both opposition to the project itself and distrust of outsiders, particularly those associated with the mining company. This strongly suggests that corporate expertise in development activities was low. In the beginning, community members believed Tiomin's commitment to implement a participatory social program that would benefit local people. But most projects did not appear to have sustainable benefits for the community, and people felt that 'Latinos' living outside the homeland benefited more directly. There was also very little capacity building. Community members were not involved in the decision-making surrounding program closure. This caused considerable conflict since most benefits of the program for the community were removed when Tiomin left the site, and the community had no mechanism to participate in closure decisions. Feelings of procedural injustice were magnified by the fact that many of the Ngäbe-Buglé felt that the social benefits of the mine were used as a bargaining tool by the government and Tiomin. That is, in order to alleviate their poverty conditions and get basic health care, electricity, etc., they had to consent to the mine.

In practice, community members felt that they did not receive any lasting benefits (low distributive justice) from the social program and that the process was not participatory—members felt that Tiomin ultimately made all the decisions (which decreased perceptions of procedural justice). This shift in perceptions of justice resulted in a significant degree of frustration and feelings of betrayal among the Ngäbe-Buglé, who felt that the company did not deliver on its promise in a distributive and procedural sense. The social program is particularly noteworthy because Tiomin placed such a strong emphasis on fair process, yet procedure was a main contributor to community resentment resulting in a frustration effect (Lawrence et al., 1997).

Community members also perceived Tiomin to be working in collusion with the government and felt that their land rights were used as a coercive bargaining ploy to receive community consent to the mine. While our data do not confirm or deny this assertion, interviews with Tiomin confirm that they felt this was a governmental issue, despite the fact that they benefited from the Ngäbe-Buglé's lack of negotiating power and marginal decision-making position. Our data also indicated that the land rights issue fueled resentment and added to the conflict between the community and Tiomin. While the Ngäbe-Buglé did eventually get their land rights recognized on paper, the impact on decision-making at Cerro Colorado was negligible. Cerro Colorado was excluded from these rights by the Panamanian government since mine development started prior the land rights recognition. In effect, the Ngäbe-Buglé believed that they were granted land rights on the condition that they allowed Cerro Colorado to proceed under Tiomin's management. While our data could not determine if Tiomin was a direct party to these negotiations, this structural aspect of procedural justice affected their community relations and added to the conflict.

Decisions at Cerro Colorado existed within a socio-political arena where the Ngäbe-Buglé had divergent beliefs to the company about spirituality, land ownership and stewardship, yet lacked the power to influence decisions that would impact their traditional lands. The Ngäbe-Buglé had been arguing for decades that to proceed with developing Cerro Colorado would threaten their very identity since it would severely damage their traditional way of life and

their sacred mountain. But these concerns were not addressed by Tiomin or by the Panamanian government. When the Ngäbe-Buglé finally received legal recognition of their land rights, they still lacked the power to apply these to Cerro Colorado.

Tiomin and the Panamanian government may argue that the development of Cerro Colorado was primarily an economic and geological issue. Yet Bullard (1993) suggests that the "[d]istribution of burdens and benefits is not random. Reliance solely on 'objective' science for environmental decisionmaking, in a world shaped largely by power politics and special interests, often masks institutional racism" (p.203). Certainly, Tiomin's environmental impact baseline report did not identify negative impacts on the traditional economy, on the social and cultural system, on the local ecology or on the spiritual world. To the Ngäbe-Buglé, Cerro Colorado was a sacred mountain, a critical part of their culture and identity. To Tiomin and the Panamanian government, Cerro Colorado was Latin America's second largest copper mine, waiting for development. At the crux of the issue was a power imbalance with Tiomin and the Panamanian government controlling the agenda, and the Ngäbe-Buglé disproportionately receiving the economic, ecological, societal and spiritual burdens of such decision-making, a situation reminiscent of old colonialist practices (Banerjee, 2000).

We recognize that incorporating indigenous spirituality within natural resource decision-making is difficult. But other situations have shown that it is not an insurmountable challenge for non-indigenous decision-makers (e.g., see Burton & Ruppert, 1999). Certainly within a largely secular corporate culture, spiritual outcomes of decision-making (particularly the desecration of sacred ecological sites) may seem unreasonable. But to put this into a broader context, we may ask ourselves what happens when gold, diamonds or copper deposits are discovered under non-Native religious or cultural sites? According to Vanden Berg (1999):

> When assessments for compensation are made in projects that involve involuntary resettlement, religious institutions that maintain churches, mosques and temples are routinely included. Although the compensation may not adequately cover the loss, the fact that a loss of such facilities has occurred is readily acknowledged by the resettlement agency. In the case of traditional religious systems, however, there may never be an acknowledgment of loss, let alone any compensation (p. 273).

While such omissions are due, in part, to the 'amorphous' nature of such sites (non-economic, unwritten, ecological entities not manufactured or constructed), Vanden Berg also argues that many development agents have a biased attitude that perceives traditional religious systems as "interesting cultural artefacts" (p. 274) but insignificant to project development plans. Yet the desecration of sacred sites like Cerro Colorado is often a critical factor in conflict between indigenous peoples and mining companies and stems from the clash between different worldviews. While it may be very difficult for Western businesspeople to comprehend the indigenous animate understanding of the world, an authentic recognition and acceptance (at the very least) of this different worldview is fundamental to establishing respect, and in turn minimizing conflict. Indeed, consultation processes that explicitly incorporate spiritual matters into natural resource decision-making have been shown to result in innovative compromises (Burton & Ruppert, 1999).

Despite the low levels of both distributive and procedural justice, community members seemed most concerned with interactional justice. The Ngäbe-Buglé felt marginalized by their face-to-face interactions with Tiomin , and also felt marginalized in a broader public sense since the company consistently ignored their opposition yet publicly promoted that they would not go ahead with mine development if community opposition existed. Such perceived double-talk added to the levels of mistrust and hostility. Tiomin did not demonstrate any awareness of, or interest in, Ngäbe-Buglé culture, spiritual beliefs or tenets of traditional law, which the Ngäbe-Buglé found disrespectful. The way in which officials at Tiomin related with local people fostered a lack of trust and made them feel that their concerns were not being taken seriously and that they were not respected. This contributed to very strong feelings of interactional injustice, which influenced negative perceptions of distributive and procedural justice. Our data also suggest that Tiomin executives felt certain sub-groups within the community had actively subverted the traditional medicine project of the social program, which contributed to the poor performance of the social program. While our data cannot confirm or deny such accusations, it is also important to note that indigenous communities are not homogeneous and that sub-groups may act out of self (not community) interest, thereby complicating community-corporate interactions.

CONCLUSIONS

The conflict at Cerro Colorado is not unique —. many mines have notorious reputations. While Tiomin may never acknowledge the reality of the conflict with the Ngäbe-Buglé, the company has encountered similar situations in other geographic regions and the cost has been high. For instance, Maumba and Nguluku village farmers in Kenya successfully stopped titanium mining by Tiomin through a legal challenge at the High Court in 2001. Encouragingly, other mining companies have begun to recognize that conflict with indigenous peoples is an important area to resolve. But companies typically lack analytical frameworks for understanding the conflict.

Increased consultation and participation of local peoples in decision-making is often forwarded as key to quelling conflict (Bedford & Warhurst, 1999; Johnston & Jorgensen, 1994; Pye-Smith & Lee, 2001). In theory, consultation results in communities' concerns being incorporated into planning, which can reduce the source of conflict. Benefit agreements that attempt to share the financial benefits of mining with indigenous peoples are also offered as mechanisms to improve community relations. Yet the Cerro Colorado case study highlights how the roots of conflict are not simply in the degree or lack of consultation (one element of procedural justice) or in the financial outcomes of mining (one element of distributive justice) but can stem from numerous cultural dimensions of distributive, procedural and interactional justice. Our study also suggests that mining companies need to move beyond legalistic and economic conceptions of justice and to also consider spiritual, social, and environmental dimensions of justice. In particular, indigenous notions of ecological respect and spirituality were important factors in the Cerro Colorado conflict. Furthermore, our findings demonstrate that mining companies need to build culturally meaningful interactions with indigenous community members and not simply rely upon public relations to "smooth" intractable conflict situations.

Future research on the resolution of conflict with indigenous peoples is critical since intractability cannot be resolved simply through negotiation (Agnew, 1989). Under high levels of mistrust and cynicism, Lawrence et al. (1997) suggest that increasing levels of procedural justice over the long term may result in an "increasing spiral, where procedural fairness would lead to increased trust, which would in turn lead to perceptions of increased procedural fairness and so on." (p. 586). Daniels and Walker (2001) also suggest that a learning based approach to collaboration and decision-making is a valuable means of working through environmental conflict that is complex and value laden. The focus of such an approach is on 'improving the situation' through learning rather than unrealistically expecting hard and fast 'solutions' to conflict. In addition, consultation processes which recognize the need for cross-cultural education and employ a cross-cultural 'broker' (who 'translates' indigenous spirituality and allegorical communication approaches to non-indigenous people) are important methods to improve the interaction between indigenous peoples and other stakeholders in natural resource decision making (Burton & Ruppert, 1999). The results of our study confirm that process issues (including informal interaction) are important and also suggest that conflict management will require an in-depth understanding of traditional law and the incorporation of social, ecological and spiritual dimensions into more participatory decision-making processes and outcomes.

Further research is also needed to examine how conflict management processes can incorporate or emerge from indigenous peoples' approaches (see Pinto, 2000; Ross, 1995). For instance, Merculieff (1995) argues for a reconnection with the sacred as foundation to conflict resolution. Multi-level research that explores the role of the state and international trade in conflict processes at the domestic level (Starr, 1999) will also be valuable. We particularly encourage indigenous researchers to undertake such studies. We also recognize that the justice framework developed in this paper is limited in the sense that it comes out of a reductionist tradition (Capra, 1996) and may not adequately represent the more holistic indigenous perspective on justice. Future research is required to gather direct feedback from indigenous people on the validity of our framework and to explore local frameworks for justice.

On-the-ground realities like those at Cerro Colorado suggest that the road to just relations will be complex and difficult. Nevertheless, Bush and Folger (1994, p. 81) argue that conflict is a "potential occasion for growth" that occurs through "strengthening the self" and "reaching beyond the self to relate to others." By openly and authentically addressing sources of conflict in decision-making, companies and governments may learn new rules for governance that emphasize more collective (Berkes, 1999) and ecologically, socially and spiritually embedded (Whiteman & Cooper, 2000) approaches to natural resource decision-making.

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END NOTES

[1] Indigenous peoples, through the World Council of Indigenous Peoples, have classified themselves as "population groups who from ancient times have inhabited the lands where we live, who are aware of having a character of our own, with social traditions and means of expression that are linked to the country inherited from our ancestors, with a language of our own, and having certain essential and unique characteristics which confer upon us the strong conviction of belonging to a people, who have an identity in ourselves and should be thus regarded by others" (IUCN Inter-Commission Task Force on Indigenous Peoples 1997, p. 27).

[2] For instance, in Irian Jaya, the local Amungme tribal council successfully sued Freeport in a US court for US$6 billion over the infamous Grasberg-Ertsberg mine. In January, 2001, the Quechan Indian Nation in the southern US successfully stopped gold mining development on their sacred lands proposed by Glamis Imperial Gold. Local communities in Papua New Guinea have also filed a civil action suit in the USA against Rio Tinto for environmental damages and crimes against humanity caused by the now-closed Bougainville Copper Mine—the courts are currently hearing the case. The PNG indigenous communities are using an interesting US law, the Alien Tort Claims Act, which allows foreign nationals to undertake a lawsuit in the US against companies that violate international law.

[3] Also known as Aboriginal law or Natural law.

[4] See community action website. Accessed: June 27, 2002. http://www.earthrunner.com/4winds/glamis.html

[5] "WMC The Environment and Us." Keepers of Lake Eyre website. Accessed: June 27, 2002. http://www.lakeeyre.green.net.au/wmc_the_environment_and_us.html

[6] Also sometimes called Guaymí or Ngöbe.