

Research Articles

Indigenous Struggles, Environmental Justice, and Community Capabilities

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Introduction

Environmental justice (EJ) has become an important frame for understanding battles over environmental conditions and sacred sites on indigenous lands. Native Americans have long been a part of the US environmental justice movement, and indigenous peoples have used EJ language and organizing themes in other countries and regions as well. In the US, tribal groups participated in the First National People of Color Environmental Leadership Summit in 1991, and helped to shape the landmark Principles of Environmental Justice. Many of those participants and other native groups went on to develop the US-based Indigenous Environmental Network, to expand the scope of support for the rights of indigenous peoples and the places they live worldwide.

These movements are part of a global process of native, tribal, and aboriginal consciousness-raising over the past 20 years, replayed from Canada and New Zealand to Peru and Nigeria. Threats to indigenous peoples—their rights, lands, and cultures—have been a powerful catalyst to mobilization, as native communities fight against the companies, governments, policies, and other forces that threaten to fragment, displace, assimilate, or drive them toward cultural disintegration. In battles over environmental degradation, land rights, sacred sites, food security, climate change, local ecological knowledge and more, indigenous groups have embraced diverse notions of environmental justice.

This article argues that the environmental justice struggles of indigenous peoples reveal a broad, integrated, and pluralistic discourse of justice—one that can incorporate a range of demands for equity, recognition, participation, and other capabilities into a concern for the basic functioning of nature, culture, and

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communities. We focus on the ways these movements conceptualize and articulate justice. We first examine various discourses of justice that have emerged from, and been employed by, activists in the US movement for environmental justice. Next, we examine a capabilities-based approach to justice and explore how it addresses communities. We then offer two emblematic indigenous battles from North and South America to illustrate the elements of justice articulated by the groups involved. One case from northern Arizona and another from southern Chile show how indigenous environmental justice claims are embedded in broader struggles to preserve identity, community, and traditional ways of life. These studies confirm that indigenous demands for environmental justice go beyond distributional equity to emphasize the defense and very functioning of indigenous communities—their ability to continue and reproduce the traditions, practices, cosmologies, and the relationships with nature that tie native peoples to their ancestral lands.¹ These cases illustrate the popular use of capabilities in indigenous movements, and the applicability of capabilities theory as a framework for comparative analysis. Moreover, indigenous EJ alters important elements of capabilities theory as articulated in practice, presenting intriguing points of departure for theorists interested in rethinking its bases.

Defining Environmental Justice: Capabilities and Communities

Over the past two decades, the environmental justice discourse has grown with the movements advocating it. Given the contested concept of justice at its core, it is not surprising that the literature surrounding the movement—from both activists and academics—utilizes a number of conceptions of justice. The initial focus in the United States was on inequity in the distribution of environmental bads. Yet equity was never the sole understanding of injustice. The 1983 study by the General Accounting Office and the 1987 report on *Toxic Wastes and Race* by the United Church of Christ (UCC) brought attention to environmental inequity and empowered the movement in its early years. However, this focus was tied to race, oppression, and political disenfranchisement. The head of the UCC's Commission on Racial Justice, Benjamin Chavis, defined "environmental racism" as racial discrimination in the siting of toxic waste dumps and polluting industries, unequal enforcement of environmental laws, and the exclusion of people of color from environmental decision-making.² Other prominent scholars also focused their analyses on the relationship between race and environ-

1. We begin with the caveat that these cases do not entail traditional cultural practices directly harmful to tribal individuals or animals, nor those considered abhorrent to external human or animal rights organizations. Such cases are rare in indigenous environmental justice struggles, though critics raise them to dismiss conceptions of justice or rights that protect minority cultures. Given the relatively innocuous nature of indigenous practices and traditions in the majority of the cases, we avoid the debate about the intersection of multiculturalism versus human and animal rights, such as those that involve human mutilation or animal sacrifice. For cases where this applies, see Barry 2000; or Casal 2003.
2. Chavis 1993, 3.

mental inequity, including the experiences of oppression and political disenfranchisement.³

The concerns and goals of the movement were defined collectively at the 1991 First National People of Color Environmental Leadership Summit, in the Principles of Environmental Justice.⁴ In her attempt to identify an environmental justice frame, Dorceta Taylor examined these 17 principles and identified 25 different issues, including protection from contamination and polluting industries, environmental policy based on mutual respect, and demands for numerous rights and other capabilities: equal participation, self-determination, ethical and sustainable land use, a healthy community and work environment, and social and environmental education.⁵ These original principles explicitly identified indigenous issues, such as treaty responsibilities and relationships between culture and nature. Note that equity was only one among many concerns in these initial attempts to operationalize environmental justice.

Bunyan Bryant offers a definition that incorporates numerous conceptions of justice, illustrating the potential of EJ to revitalize and reconstruct functioning communities. In Bryant's formulation, environmental justice:

refers to those cultural norms and values, rules, regulations, behaviors, policies, and decisions to support sustainable communities, where people can interact with confidence that their environment is safe, nurturing, and productive. Environmental justice is served when people can realize their highest potential, without experiencing the "isms." Environmental justice is supported by decent paying and safe jobs; quality schools and recreation; decent housing and adequate health care; democratic decision-making and personal empowerment; and communities free of violence, drugs, and poverty. These are communities where both cultural and biological diversity are respected and highly revered and where distributed justice prevails.⁶

While Bryant includes distributive justice, he presents it as contingent upon first having met a variety of other conditions of justice. He therefore offers a broad, integrated notion of environmental justice that goes beyond mere distributive equity.

Indeed, EJ groups and scholars have offered a variety of notions over the years, and nearly all of them go beyond a consideration of justice defined primarily as equity. These definitions certainly include discussions of inequity in the distribution of environmental goods and bads.⁷ But they also address recognition of the various cultures and races that have been at the receiving end of that inequity,⁸ authentic inclusion and political participation of a broad array of peoples and interests,⁹ and various capabilities necessary for individuals and

3. See Bullard 1994.

4. See <http://www.ejnet.org/ej/principles.html>.

5. Taylor 2000, 539–540.

6. Bryant 1995, 6.

7. See Bryant and Mohai 1992; and Bullard 1994.

8. Figueroa 2004; LaDuke 2002; Peña 2005; and Pulido 1996.

9. Hunold and Young 1998; Lake 1996; and Shrader-Frechette 2002.

communities to be free, equal, and functioning.¹⁰ Many discussions embody a number of these notions simultaneously, supporting a diverse and pluralistic understanding of the definition of environmental justice.¹¹

The Capabilities Approach

We argue that the capabilities approach to justice offers just such a broad and inclusive definition, and one particularly applicable in cases of indigenous environmental justice. Furthermore, the relationship between the capabilities approach and the critiques of neoliberal development commonly referenced in the capabilities literature, makes the concept particularly well suited for framing indigenous EJ concerns, both North and South. Before getting to the case studies to illustrate these arguments, we outline here a capabilities approach to justice and development.

Amartya Sen and Martha Nussbaum have developed a theory of justice that focuses on the capacities necessary for people to function fully in the lives they choose for themselves.¹² Their central argument is that we should evaluate the justice of arrangements not simply in distributive terms, but more particularly in how those distributions affect the ultimate wellbeing and functioning of people's lives. This means that the focus of justice is not simply on the distribution of various goods, but on how those goods are transformed into the capacity for individuals to flourish. Sen asserts that the "focus has to be, in this analysis, on the freedoms generated by commodities, rather than on the commodities seen on their own."¹³ Nussbaum explains that the central question is not how satisfied someone is, or how many resources she commands, but instead what she is actually able to do and be: "we ask not just about the resources that are sitting around, but about how those do or do not go to work, enabling [her] to function in a fully human way."¹⁴ Sen's and Nussbaum's approaches expand on a purely equity-based notion of justice, yet they remain squarely liberal, focusing on the freedom and functioning of individuals. Capabilities theory examines what is needed to transform available primary goods into the potential for a fully functioning life, and considers what might interrupt that process. This theory of justice gives ethical significance to human functioning and flourishing, and finds harm—injustice—in forces that limit that potential.

There are differences between Sen's and Nussbaum's approaches. Sen's original focus was on broadening quality of life assessments, as manifest in the *Human Development Reports* of the United Nations Development Programme (UNDP). Sen remains expansive on the capabilities that individual agents should have in order to enable their own functioning; he emphasizes the

10. Schlosberg 2007.

11. Cole and Foster 2001; Pellow and Brulle 2005; Carruthers 2008a and 2008b; and Schlosberg 1999, 2003, and 2007.

12. Sen 1999a, 1999b; Nussbaum and Sen 1992; and Nussbaum 2000, 2006.

13. Sen 1999b, 74.

14. Nussbaum 2000, 71.

basic freedoms that help advance the general capability of people: political liberties, freedom of association, economic facilities, social opportunities, transparency guarantees, protective security, and a variety of economic and social rights.¹⁵ Understanding development in the context of freedom, rather than GDP, Sen focuses on the underlying conditions necessary for people to have fully functioning lives and to be free to choose those lives for themselves. Rather than offering a specific, universal set of capabilities to be met for all people, he insists on public reason and deliberation—a community-based approach—to develop more specific, contextual, capability sets:¹⁶

[the] problem is not with listing important capabilities, but with insisting on one pre-determined canonical list of capabilities, chosen by theorists without any general social discussion or public reasoning. To have such a fixed list, emanating entirely from pure theory, is to deny the possibility of fruitful public participation on what should be included and why.¹⁷

For Sen, it is essential that people have the opportunity to determine the capabilities necessary for functioning in their own communities. In our view, such community-based definitions of capabilities are inherent in indigenous EJ—a point to which we return below.

In contrast, Nussbaum proposes the capabilities approach “as a foundation for basic political principles that should underwrite constitutional guarantees.”¹⁸ Relying more on a conception of universal rights than deliberative democracy, Nussbaum defends a detailed, basic “capability set” necessary for the functioning of any human life, no matter what an individual might choose to do with the capabilities therein. Her full capability list includes: life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one’s environment.¹⁹ She argues that these capabilities, based in constitutional guarantees rather than community deliberation, would provide the social and political bases for the development of a fully functioning life. For Nussbaum, such guarantees would protect minority populations from being deliberated out of protection.

One reason the capabilities approach works to define environmental justice is that it includes such a wide range of concerns. Young, Fraser, and Honneth, for example, have developed theoretically a concern with individual and cultural recognition as an element of justice.²⁰ Such recognition is articulated throughout the EJ literature. These forms of recognition are identifiable as a central capability in Sen’s and Nussbaum’s frameworks. Likewise, political participation and procedural justice, demanded in both theoretical and movement discourses, are also encompassed by a thorough conception of the variety of ca-

15. Sen 1999b, 10.

16. In addition to Sen, see Crocker 2006.

17. Sen 2005, 158.

18. Nussbaum 2000, 70–71.

19. Nussbaum 2000, 78–80; and Nussbaum 2006, 76–78.

20. Young 1990; Fraser 1998, and 2000; and Honneth 1995.

pabilities necessary to construct a functioning life. The capability approach can simultaneously address a number of related and interconnected issues, such as inequality, cultural disrespect, and participatory and democratic rights.²¹ For all these reasons we believe that the capability approach is particularly well suited for understanding and analyzing indigenous environmental justice concerns.

The Importance of a Community Focus

A focus on the demands of groups in the environmental justice movement illustrates concerns with key capabilities and helps to operationalize the concept of functioning. However, in order to tighten the fit between the capabilities approach and environmental justice, particularly for indigenous cases, we must expand the frame to address the capabilities and functioning not just of individuals, but of communities as well. The capabilities approach to justice can offer an important vehicle for understanding the multifaceted discourses and demands of environmental justice activists and their communities. However, to do so, our conception of justice must cross this key conceptual barrier.

Unlike traditional liberal political thought, contemporary movements do not limit themselves to understanding injustice as faced only by *individuals*; justice for *communities* is often at the forefront of their interests and protests. For indigenous communities using environmental justice as an organizing frame, the collective experience of injustice—the impact on the abilities of communities to function and renew themselves—is absolutely crucial.

Sen and Nussbaum both focus primarily on individuals. However, there has been some movement in the capabilities literature to recognize group capabilities. Stewart notes the need to “analyze and categorize group capabilities as well as individual” and argues for a focus on group and collective capabilities as distinct from, and more than the sum of, individual capabilities.²² On the other hand, Nussbaum explicitly denies the application of capabilities to groups.²³ She is resistant to move beyond individual agents, and indeed the vast majority of capabilities writings remain tied to a liberal individualist framework.

The theoretical discussion, however, ignores and lags behind the ways that movements are articulating capabilities at the community level in practice. This applied discourse should be of greater interest to capabilities theorists. A focus on group capabilities illustrates the way that movement groups—in this case indigenous groups—articulate their concerns from a community standpoint. While this is a difficult and resisted move in the world of political theory, community-based capabilities are already part of an active discourse of justice in practice.

In practice, environmental injustice is not simply an individual experience; it is embedded in community. These are not cases in which communities

21. Olson 2001; Robeyns 2003; and Schlosberg 2007.

22. Stewart 2005, 185 and 200.

23. Nussbaum 2000, 74.

justify the preservation of tradition in order to limit or violate the rights of individuals (as in cases of footbinding or genital mutilation). Rather, these cases articulate injustices in terms of the negative impacts against both individuals and communities; communities are as much the victims of inequity as are individuals. Getches and Pellow argue that if “the wrongs to be addressed are essentially community wrongs, then communities, not individuals, can stake a claim to environmental justice.”²⁴ The overall emphasis of such groups is on individual and community functioning—including the basics of health and safety, the preservation of local economies, and the preservation of local and traditional cultures and practices—what Di Chiro calls social reproduction.²⁵ Numerous academic observers have also noted that the most important part of environmental justice activism is building community capacity and facilitating community empowerment.²⁶ For movement groups, environmental injustice takes away the ability of individuals and their communities to function fully, through poor health, destruction of economic and cultural livelihoods, general environmental threats, and political exclusion.

This focus on community capabilities and functioning is especially apparent in indigenous cases. Indigenous activists see threats to native lands as direct assaults not only against their peoples, but also against cultural practices and beliefs, and the ability of their communities to reproduce those traditions. Indigenous leaders thus articulate environmental injustice as a set of conditions that remove or restrict the ability of individuals and communities to function fully—conditions that undermine their health, destroy economic and cultural livelihoods, or present general environmental threats. The overall emphasis is on the health of the environment, the protection of local economies, and the preservation of local and traditional cultures and practices. Specific demands focus not only on religious, cultural, and traditional capabilities, but also on the political freedoms and the self-determination that enable community functioning. By fighting for autonomy, land, respect, or political voice, indigenous activists are fighting for the capabilities necessary for their communities to function fully.

In our view, indigenous environmental struggles have pushed the conception of capabilities to a community level in practice. The articulation of community-level necessities is clearly a challenge to the current iteration of capabilities theory. However, we assert that the capabilities approach is indeed compatible with such demands and with community-level units of analysis. That said, we do not intend for this article to stand as a full-scale case for a collectivist ontology of justice. Rather, we hope first to illustrate how the discourse of capabilities and justice used in practice applies to both individuals and communities, and second to raise a challenge to the capabilities approach at a normative level.

24. Getches and Pellow 2002, 24.

25. Di Chiro 2008.

26. Bretting and Prindeville 1998; Cole and Foster 2001; Faber and McCarthy 2003; Peña 2005; and Pulido 1996.

Capabilities and Indigenous Cases

In the dramatic global wave of indigenous mobilization of recent decades, most movements have included not only claims for land, autonomy, and political participation, but have also focused on the uses of land and natural resources and the impacts of development on native communities. Indigenous peoples and their allies are revaluing the ecological knowledge of their ancestors, and tying their struggles for rights and recognition directly to resource, land, and environmental claims.²⁷ Here, we turn to two cases from the United States and Chile to illustrate the centrality of community capability in native struggles for environmental justice. These cases help explain the sense of injustice that currently fuels numerous high-profile indigenous environmental conflicts around the globe.

In North America, the indigenous environmental justice movement has focused on a variety of threats to sacred lands and sites by organizing, building political and technical capacity, and working to empower local native communities. Development and dumping projects have repeatedly taken precedence over the preservation of landmarks and areas central to tribal identities and community practices. As Winona LaDuke has argued, the survival of native nations is directly linked to their sustainable interaction with the land, and with the practices, ceremonies, and beliefs tied to that place.²⁸ The first case we discuss, in Northern Arizona, illustrates just such a battle for land, the preservation of natural processes, and the necessity of cultural practices for the very functioning and reproduction of native nations.

In Latin America, indigenous peoples' movements have flourished in recent decades. As dictatorships ceded power in the 1990s, civilian governments sought to burnish their democratic credentials by renouncing assimilationist policies and promising constitutional revisions to celebrate multi-ethnic societies. Environmental justice claims have surged to the forefront, in conflicts with international oil companies that contaminate indigenous lands in Ecuador, Colombia, and Peru, and in numerous mining, agricultural and development challenges in Nicaragua, Ecuador, and elsewhere.²⁹ In our second case, the historic struggles of Chile's Mapuche Indians have evolved into a defense of land, culture, and nature against the megaprojects of industrial development.

The Arizona Snowbowl, Indigenous Resistance, and Capabilities

The San Francisco Peaks, rising over 12,000 feet on the Colorado Plateau in Northern Arizona, are not part of any federally recognized reservation, but have long been held sacred by 13 Native American tribes in the region. For the Navajo, the Peaks are one of four sacred mountains marking the boundaries of their home. Medicine bundles containing plants and soil from the Peaks are

27. Apffel-Marglin 1998; Maybury-Lewis 1992; and Rodriguez and Carruthers 2008.

28. LaDuke 1999.

29. Roberts and Thanos 2003; Martinez-Alier 2003.

found in nearly every Navajo home; the Navajo believe that these bundles are a conduit for communicating healing prayers to the mountain. For the Hopi, the Peaks are the home, for half of the year, of the *Katsina* spirits. Appearing or living as clouds, these spirits are responsible for bringing rain to the nearby Hopi villages and crops—and must be treated with respect, or they will refuse to do so. For the Hualapai, the Peaks are the site of their creation story—their Eden. Hualapai believe water from the Peaks is sacred, and use it in sweat lodge purification ceremonies and healings.

The San Francisco Peaks are also a recreational area. Part of the Coconino National Forest, the Peaks are home to a small, privately owned ski area, the Arizona Snowbowl, on land leased from the Forest Service. In 2002, the Snowbowl requested permission from the Forest Service to make artificial snow with reclaimed sewage water, in order to provide a more predictable, and profitable, ski season. Since then a conflict has raged regarding the impact of such a practice on traditional religious and cultural customs, on the recognition of the value of these traditions, and on the environmental impacts of using reclaimed sewage for snowmaking. Much of the discourse has centered on religious freedom, environmental justice, and the value of a particular type of economic development over the traditional practices of the tribes.

The conflict moved through the legal system, from approval of the plan by the US Forest Service, to appeals at the US District Court, the US Ninth Circuit Court of Appeals (both a small panel of judges and then the Court as a whole), and the US Supreme Court. The US Forest Service and the local District Court ruled against the tribes. The initial Ninth Circuit panel decision was strongly in their favor, but it was later negated by the full panel (*en banc*). The tribes then appealed the full Ninth District Court's decision against them to the US Supreme Court, focusing their case on the Religious Freedom Restoration Act of 1993 (RFRA), but the Court denied the petition in June 2009, ending the legal process.

In this case, the central issues for the tribes relate to a conception of justice and to a critique of development, both of which illustrate the salience of a capabilities framework. In terms of justice, there is little, if any, reference in the tribal response to the Snowbowl proposal that directly addresses the question of equity in the distribution of goods and bads. Instead, the central issues are recognition and respect of traditional tribal and spiritual practices, autonomy and participation in the political decision-making process, and environmental health impacts (both to nature and human communities)—all “capabilities” in the parlance of Sen and Nussbaum. In addition, the tribes see the Snowbowl case as another example of a limited focus on “economic development” over other values and the community good—where the government is on the side of a particular form of economic growth at the expense of other possible common values and goods. Here, tribes articulate numerous concerns that mirror the capabilities approach.

Over the course of the Snowbowl battle, the local tribes articulated their

concerns in numerous ways. Most broadly, the tribes argued against the snowmaking proposal for a variety of reasons related to the ability of their cultures to function, survive, and thrive in the face of what they see as a direct attack on their traditional community practices. While the Forest Service was considering the proposal, Navajo President Joe Shirley stood clear on the reasons for resisting the plan:

The San Francisco Peaks is the essence of who we are. It is a Holy place of worship that was placed in the West for our sacred prayers and worship. It is . . . the Holy house of our sacred deities whom we pray to and give our offerings. . . . It is also a place where we gather and collect our sacred herbs for healing and our way of life ceremonies yearlong . . . The United States of America will commit genocide by allowing the desecration of the essence of our way of life.³⁰

Similarly, on the day the Forest Service approved the wastewater snowmaking plan, the main opposition coalition of tribes and environmental organizations, Save The Peaks, called the decision an affirmation of a “government policy of racial intolerance” that “perpetuates the slow murder of Native American cultures . . .”³¹ As apt as the phrase may be to describe US policy toward native nations over the decades, cultural genocide is not something used lightly by the tribes in this instance. Importantly, the concept of genocide is applied to cultural practices rather than to mass killings. From the tribal standpoint the impact is the same: the demise of a functioning and thriving people.

Later tribal arguments surrounding the Snowbowl proposal have generally been articulated as religious rights and human health issues. Importantly, those foci have developed within the legal avenues open to the tribes: The Religious Freedom Restoration Act of 1993 (RFRA), and the National Environmental Policy Act of 1969 (NEPA). Still, if we understand religious expression/rights, recognition and respect, and environmental health as basic capabilities necessary for the tribal communities to function, the language of the groups opposing snowmaking with treated wastewater fits within the capabilities approach to justice. The argument of the tribes has to do with the lack of recognition of tribal spiritual and cultural practices, but it also has to do with the relationship between that lack of recognition and the ability of the community to practice and renew those traditions for a new generation.

The difference between the two Ninth Circuit Court decisions is striking in terms of recognition and respect. The initial decision by a small panel of judges explicitly distinguishes the different tribes and their particular spiritual and cultural practices as they relate to the San Francisco Peaks, and explores closely how those practices would be impacted by the use of reclaimed sewage water for snowmaking.³² The decision quotes from traditional medicine men and healers,

30. Shirley 2004.

31. Save the Peaks 2005.

32. Navajo Nation v US Forest Service 2007.

noting their specific concerns with reclaimed water. For example, both Navajo and Hualapai cannot conceive of using water that has come from mortuaries or hospitals in medicinal ceremonies. Such water is contaminated by being “touched by death,” and there is no concept of “reclaimed” water after it is so tainted. The first decision cites tribal claims that the mountain, made impure, would no longer be a source of herbs or medicines; such a condition, for the Navajo, would be “a devastation for our people. Medicine bundles would be ruined.”³³ For Hopi, the purity of the spirits is central, and intruding on that “in a manner that is really disrespectful to the Peaks and to the spiritual home of the *Katsina*, it affects the Hopi people.”³⁴ The Court’s decision understands and places appropriate value on the fact that the desecration of the home of the *Katsina*, according to the tribe, “will undermine the Hopi faith and Hopi way.” The Forest Service understood that tribal religious practices require pure natural resources from the Peaks, and yet did not recognize the importance of such practices. The Court explicitly describes the potential impact on the functioning of native cultures:

Navajo Appellants presented evidence in the district court that, were the proposed action to go forward, contamination by the treated sewage effluent would prevent practitioners from making or rejuvenating medicine bundles, from making medicine, and from performing the Blessingway and healing ceremonies. Hopi Appellants presented evidence that, were the proposed action to go forward, contamination by the effluent would fundamentally undermine their entire system of belief and the associated practices of song, worship, and prayer, that depend on the purity of the Peaks, which is the source of rain and their livelihoods and the home of the *Katsinam* spirits.³⁵

The point here is not only the importance of recognition of the specific practices, but also how those practices are a basic capability necessary for a functioning culture and community.

In contrast, the later *en banc* majority decision of the Ninth Circuit Court³⁶ shows no recognition between these religious and cultural practices and the ultimate functioning and renewal of the tribes. The opinion is openly dismissive of native religions (on a decision regarding the Religious Freedom Restoration Act) and the idea of sacred areas. Unlike the previous decision, there is no description of particular religious practices or quotes from tribal members’ testimony; it mentions only “Indians’” conceptions of their lives as intertwined with particular mountains, rivers, trees, etc. In an important sense, the judges fail to recognize tribal beliefs; indeed, they openly malign and dismiss them.³⁷ Crucially, the majority claim that:

33. Navajo Nation v US Forest Service 2007, 25.

34. Navajo Nation v US Forest Service 2007, 27.

35. Navajo Nation v US Forest Service 2007, 30.

36. Navajo Nation v US Forest Service 2008.

37. Nancy Fraser (1998, 7) identifies three types of misrecognition: a practice of cultural domination, a pattern of non-recognition that is the equivalent of being rendered invisible, and routine

the only effect of the proposed upgrades is on the Plaintiffs' subjective, emotional religious experience. That is, the presence of recycled wastewater on the Peaks is offensive to the Plaintiff's religious sensibilities . . . (and) decrease[s] the spiritual fulfillment they get from practicing their religion on the mountain.³⁸

Here, the issue is simply an inconvenience to one's own individual spiritual feelings, rather than a practice that sustains a culture. There is no recognition of the testimony of tribal members, the role the practices related to the Peaks have on tribal culture, or of the relationship between the capability to practice religious tradition and the functioning of the communities as a whole. The connection between the capability of recognition and the functioning of a community—or in this case the absence of the first endangering the second—could not be more starkly expressed than in the contrast between these two opinions.

The latter decision also illustrates the contrast between understanding the issues and capabilities at hand as individual as opposed to collective. The *en banc* decision focuses on the subjective harm done to individuals, and makes no mention of the collective harm. Tribal testimony, on the other hand, repeatedly made the case that the practices and ceremonies were collective and related to the functioning of the various cultures that rely on the Peaks. The central capabilities in question—recognition and respect, autonomy and participation in political decisions, control over environment, bodily health and integrity, affiliation—were articulated at the community level by tribal representatives who testified on the issue. The “burden,” as the court was required to examine, is not just to individual spiritual sensibilities, but also more directly to a number of capabilities necessary for the local communities to function fully.

While not central to the court case focus on religious rights and environmental health, another issue in the Snowbowl battle has to do with economic development. Specifically, the question is how the community is to value such development against the interests and functioning of the local tribes. Snowbowl itself, along with the local Chamber of Commerce in Flagstaff, has long contended that snowmaking—even with reclaimed sewage—would augment winter income in the region, not only to the ski area, but also to local businesses, restaurants, and hotels. The proponents argue that the development would bring about a more stable winter ski economy, as opposed to one dependent on the vagaries of natural weather patterns in the high desert.

Yet the resistance to this argument by the local tribes and their allies illustrates much of the critique of neoliberal development embodied in Sen's capability approach. As Sen argues, “economic growth cannot sensibly be treated as an end in itself. Development has to be more concerned with enhancing the

disrespect or disparagement in stereotypic public representations. All of these forms of disrespect are apparent in the Ninth Circuit *en banc* decision.

38. Navajo Nation v US Forest Service 2008, 19.

lives we lead and the freedoms we enjoy."³⁹ In other words, the goal of development must be the promotion and expansion of valuable capabilities.⁴⁰ Opponents of the snowmaking proposal argue that the proposed form of development has no respect for tribal ways of life, and elevates the potential of slight economic growth over the health and functioning of indigenous communities. As a volunteer with Save the Peaks lays out: "The question is, what do we value more: a healthy community, ecological integrity and the cultural survival of more than 13 Indigenous Nations, or the interests of a single for profit ski business?"⁴¹

In a broad array of issues framing the indigenous resistance to the snowmaking proposal, we see elements of both the capabilities approach's broad interpretation of justice and its critique of standard values of development. Here, it is quite clear that the conception of environmental justice at play is much broader than one based solely on equity, or on individuals alone. Indigenous environmental justice is more closely aligned with a pluralistic and community-oriented capabilities approach to justice and development.

Indigenous Resistance and Community Capabilities in Mapuche Chile

Southern Chile is the ancestral home of the Mapuche, who resisted conquest by Incan, Spanish, and Chilean forces until the late nineteenth century. The national government imposed a system of reservations, challenging Mapuche cultural integrity and excluding them from the political decisions affecting their lives. Early twentieth century governments likewise pressed a culturally and economically devastating agenda of land colonization, subdividing and redistributing reservation lands to non-indigenous buyers, eventually pushing the Mapuche onto five percent of their original territory.⁴²

In the 1960s and 1970s, Mapuche communities mobilized and benefitted from national land reforms, but that meager progress was quickly reversed following General Pinochet's 1973 military coup. The dictator's radical neoliberal policies opened Mapuche lands to privatization, prohibited traditional communal land use, and limited indigenous families to six hectares of land.⁴³ To promote market-oriented development, the state extended land concessions, subsidies, and tax breaks to mining and timber companies and developers.⁴⁴ The military ruled with paternalism and repression, yet the indigenous movement sustained resistance across 17 years of dictatorship.

Another wave of Mapuche mobilization unfolded during the restoration of democracy. The *Concertación* (Coalition of Parties for Democracy) promised land devolution and political recognition during the 1989 campaign, and a year

39. Sen 1999b, 14.

40. Sen 1990.

41. Save the Peaks 2009.

42. Muñoz Ramírez 2005.

43. Aylwin 2004.

44. Repetto 1997; and Saavedra 2002.

later the new president, Patricio Aylwin, launched a “Special Commission for Indigenous Peoples” to write a new indigenous law, establish constitutional recognition, and promote ratification of International Labour Organization Convention No. 169 (on indigenous and tribal peoples).⁴⁵ The 1993 Indigenous Law represented this promise of inclusion, justice, self-determination, and indigenous rights. It created the CONADI (National Corporation for Indigenous Development), to institutionalize indigenous leaders as agents of their peoples’ futures, and established a Land Fund for restoring usurped territory.⁴⁶

At the same time, Chile’s nascent environmental movement sought democratic opportunities to address a legacy of environmental neglect.⁴⁷ The *Concertación* promised to prioritize sustainability and accountability in the creation of new environmental norms, procedures, and institutions, especially with the 1994 Environmental Framework Law and the creation of the National Environmental Commission (CONAMA).

Given the long history of exclusion, exploitation, and neglect, many Mapuche leaders were skeptical of this purportedly new era. Others, however, hoped for authentic citizenship and redress of longstanding historical injustices. Ultimately those hopes evolved into a third wave of Mapuche protest, marked by greater militancy, fragmentation, and repression.⁴⁸ When development projects have threatened the Mapuche, state agencies have favored industrial interests over the capabilities and functioning of indigenous communities.⁴⁹

The Ralco Dam Conflict

The *Concertación* pursued Pinochet’s program to develop a series of hydroelectric dams in the Upper Bío Bío River Basin, the heart of Mapuche territory. In 1990, the National Electricity Company (ENDESA) began building the first, the Pangué. It generated tremendous controversy, including a discourse of “ethnocide” and a denunciation by the President of the World Bank. The protections of the new indigenous and environmental laws were tested when ENDESA (by then owned by a Spanish industrial group) pursued a second dam, Ralco. The project threatened significant ecological and cultural disruption, including the forced relocation of hundreds of Pehuenche families from their ancestral homes (the Mapuche subgroup who inhabit the highlands).⁵⁰

As with the Arizona Snowbowl, the initial institutional response was encouraging. The democratic government opened space for public criticism and the appearance of respect for Pehuenche cultural functioning. A 1996

45. Mallon 2004.

46. For analysis of state-indigenous relations in the CONADI see Rodríguez and Carruthers 2008.

47. Claude 1997; and Quiroga Martínez 1994.

48. Zibeche 2008.

49. For a more expansive recounting of Mapuche environmental conflicts see Carruthers and Rodríguez 2009.

50. For complete accounts, see Morales et al. 1998; Namuncura 1999; Moraga 2001; and Baquedano 2004.

CONAMA review committee rejected ENDESA's Environmental Impact Study (EIS) on grounds that it understated the potential for environmental and cultural destruction. However, executive intervention soon dampened those hopes; President Eduardo Frei pressured officials to permit addendums, and the EIS was approved. Mapuche hopes shifted to CONADI, whose indigenous councilors were positioned to defeat the dam. However, in April 1997, the president unilaterally removed Ralco's opponents from their CONADI offices, including the national director, a Mapuche leader.

By 1998, the company initiated construction, threatening sites sacred to the Pehuenche, including burial grounds and the special field reserved for a religious rite known as *nguillatún*. Ralco workers also used dynamite near the *Machi Curi*, a sacred stone and national historic monument.⁵¹ The Pehuenche believe that an ancient mystic priest is buried under the stone and still performs miracles there. In the early stages of construction, workers avoided the hill where the stone rests due to protests and political pressure; the locals attributed this to the power of the *Machi Curi*.

Hoping to halt construction, two more CONADI councilors announced their opposition in July 1998, but the president demanded their resignations and replaced them with supporters.⁵² By August, the council was headed for a tiebreaker in the hands of the new director, another Mapuche, Domingo Namuncura. Knowing that Namuncura planned to vote against Ralco, the president demanded his resignation and installed the agency's first non-indigenous director, Rodrigo González, who approved the relocation plan. Several families refused to move and the controversy dragged on for several years, but by 2003 the holdouts had accepted ENDESA's terms, and the dam was complete, inundating the villages, sacred sites, and ancestral territories of hundreds of Pehuenche families.

The conflict revealed profoundly different interpretations of the new laws and institutions with regard to the functioning of indigenous communities. For Frei's government, "the objective of the CONADI is to act as a development agency, not as the representation of the indigenous world."⁵³ In contrast, indigenous leaders viewed CONADI as a vehicle to ensure the restoration, functioning, and wellbeing of indigenous communities. The Indigenous Law, the CONADI, and the Environmental Law were supposed to ensure that the destruction and humiliation of the Pangué dam would never be repeated in the Mapuche heartland. Instead, on behalf of Ralco, the administration "usurped" and "de-indianised" "our CONADI," provoking further protest and radicalization.⁵⁴

51. Moraga 2001.

52. Author interview with Christian Vives, Former Government Councilor, Corporación Nacional de Desarrollo Indígena, Santiago, 10 June 1999; and Namuncura 1999, 39.

53. President Frei's Secretary General, Claudio Huepe, in 1999; quoted in Haughney 2006, 138.

54. Author interview with Domingo Namuncura, Former National Director, Corporación Nacional de Desarrollo Indígena, Santiago, 2 June 1999.

To the Mapuche, Ralco represents an egregious distributive inequity—forced relocation and the inundation of ancestral homeland to produce benefits to be enjoyed by others (electricity to be carried out of the region). The case represents procedural injustice as well: “Why choose the territory of the Pehuenche, flooding what little land the state has left them with? Because they lack power.”⁵⁵ Ralco was a direct strike against community capacity, undermining the ability of Pehuenche communities to function through the destruction of nature, culture, tradition, and livelihoods. The relocation agreements fragmented and dispersed the families far from home. The reservoir eliminated their villages, burial grounds, and sacred sites. Perceived economic benefits for the nation were placed above the ecological integrity of the watershed and above the cultural survival of the peoples tied to that land. According to Domingo Namuncura, native groups across Chile viewed relocation of the Pehuenche as an “eradication” effort: “we see Ralco as the symbolic expression of the threat of ‘modernity’ and ‘progress’ to the indigenous people of Chile . . . ; we don’t want *your* progress to rub out *our* culture.”⁵⁶ Again, this conception of injustice centers on the threat to indigenous community capabilities and functioning.

Timberland Conflicts

Pinochet also prioritized industrial forestry, subsidizing company plantations on privatized former Mapuche lands. *Concertación* governments continued the strategy; timber accounts for 34 percent of Chilean exports, second to copper.⁵⁷ For many Mapuche, the restoration of their ancestral lands is the crucial precondition toward establishing and defending viable, functioning communities. Following democratization, indigenous leaders pressed for land reform and for new mechanisms to curtail timberland acquisition. When the government failed to respond, militant Mapuche groups revived strategies of protest and land-seizure. Aylwin’s government reacted harshly, employing the Anti-Terrorist and Internal Security Laws Pinochet had used to silence his political opponents; by 1992, the government had imprisoned 144 Mapuche protesters.⁵⁸

The Indigenous Law and Land Fund raised some hopes for justice. In 1997, the descendants of two 19th century Mapuche chieftains filed a claim for 3,000 hectares in Lumaco, now held by Forestal Arauco, one of the largest companies. When the company fought back in court, frustrated Mapuches intercepted three logging trucks and set them on fire. The government responded by imprisoning 12 more protesters under the anti-terrorism law. With land res-

55. Jose Aylwin in 1998, quoted in Hurtado no date.

56. Author interview with Domingo Namuncura, 2 June 1999.

57. Grass 1999; and Maggio 2007.

58. The 1984 Anti-terrorist Law, and the 1958 Law of Internal Security, which Pinochet stiffened in 1975; see Loveman and Lira (2000). “Gobierno estudia extender amnistía a indígenas condenados por tomas” (Government considers extending amnesty to indigenous people convicted for land seizures), *Diario Austral* (Temuco), 8 August 2000. See also Haughney 2006, 72.

toration stalled, conflicts erupted throughout the region. By September 1998, 15,000 hectares were in dispute between 473 indigenous families and the timber companies.⁵⁹ Protests, land seizures, roadblocks, and imprisonments continued. To the Mapuche, government actions confirmed the preference for one particular conception of economic development—one that favors landowners and large corporations over the wellbeing and cultural functioning of the native communities.

In 2000, President Ricardo Lagos came to power on a platform prioritizing indigenous rights. His government distributed 50,000 hectares to native communities, increased CONADI's budget, and expanded indigenous representation.⁶⁰ He also launched the Historical Truth and New Deal Commission to develop strategies for justice and reconciliation. However, the 2003 report's recommendations were blocked by conservative senators and southern landowners who argued that indigenous self-determination could lead to "dismemberment of the Chilean state."⁶¹ Seeing little progress, Mapuche protests and land invasions resumed. Lagos responded with force; by the end of his term, hundreds of Mapuche activists had been arrested and many remained in prison.⁶²

As with Ralco, the timber conflicts revealed differing perceptions of the state's obligation to provide the capacities necessary for the Mapuche people to function fully in the lives they choose. Though Frei's and Lagos' executive cabinets imparted an economic development mission to CONADI, its staffers tended to view their role as supportive of community capabilities. According to one CONADI official, "The Ministry of Finance pressed us to tell them about the economic return of such and such land devolution, when what we evaluated were the sociological and anthropological links between a community and a plot of land, the moral nature of the reparation."⁶³

The Mapuche struggle for justice, land, autonomy, and recognition continues today. The dark memory of Ralco hangs over the next Bío Bío dam proposal, Angostura. In the timber conflict zones of Arauco and Traiguén, Mapuche families have recovered about 20,000 and 12,000 hectares, respectively. Nevertheless, the two largest companies alone hold 1.2 million hectares, compared to about 700,000 total hectares of Mapuche land.⁶⁴ President Michelle Bachelet

59. According to an attorney for indigenous groups, the actual number of disputed hectares was closer to 400,000. "Tomas de predios y tomaduras de pelo" (*Seizing Land and Pulling Hair*), *La Tercera* (Santiago), 26 April 1998.

60. "Lagos se comprometió con los pueblos originarios" (Lagos announces his commitment to native peoples), *Diario Austral* (Temuco), 5 October 2000.

61. Rohter 2004.

62. Mapuche spokespersons assert that the Frei and Lagos governments jailed 500 Mapuche protestors; see "Mapuches marchan por la capital para exigir libertad de 'presos políticos' de su pueblo" (Mapuches march to the capital to demand freedom for 'political prisoners' among their people), *La Tercera* (Santiago), 20 May 2006. One 2004 report found 210 Mapuche protestors processed under the anti-terror and national security laws (Seguel and Bonniec 2004); by 2008 another found over 400 (Zibechi 2008).

63. Interview with Richard Mansilla, quoted in Rodríguez and Carruthers 2008, 11.

64. Muñoz Ramírez 2005.

campaigned on a pledge to end the use of terrorism and security laws against the Mapuche and to make good on the *Concertación's* promise of indigenous recognition.⁶⁵ However, the Organization of Friends and Families of the Mapuche Political Prisoners charged her government with “racism and state terrorism,” and her term was marred by Mapuche hunger strikes and by sustained pressure from national and international human rights groups.⁶⁶

On 22 January 2008, Mapuche prisoner Patricia Troncoso concluded 109 days on a hunger strike. From her hospital bed in Chillán, Patricia’s letter to President Bachelet articulates precisely the Mapuche sense of environmental injustice in the face of neoliberal development priorities:

From here, I want to encourage you to continue defending us from this predatory economic system that is seeking to pillage the little bit of nature we have left, and it is inhumane, because any economic project in our Mapuche territory is considered more valuable than we are, and immoral because the only human goals it leaves us are money and consumerism.⁶⁷

In a climate of sustained repression, Sen’s emphasis on political freedoms is particularly salient. However, the Mapuche struggle is not just a struggle for land or political rights; it is a struggle for the health of the environment, the protection of traditional village economies, respect for sacred sites, and the preservation of native religion, language, culture, and practices. These are, in Sen’s and Nussbaum’s terms, community capabilities, essential to the functioning and flourishing of a people, and to the defense of their cultural connection to their ancestral home.

Conclusion

The indigenous response to the Snowbowl proposal demonstrates the central concerns of the capabilities approach, both in terms of its broad and integrative interpretation of justice, and in terms of Sen’s concerns about the economic reductionism of development for development’s sake, at the cost of other values. In southern Chile, it is also clear that indigenous conceptions of environmental justice expand beyond a traditional emphasis on distributive inequities, and even beyond political exclusion and residual authoritarianism. In northern Arizona and southern Chile alike, indigenous environmental justice struggles demonstrate a broad, pluralistic, community-centered capabilities approach to justice and development.

In the southwestern US, indigenous activism has responded to the impacts of development projects on the autonomy of local nations and their com-

65. “Bachelet insistirá en reconocimiento constitucional a pueblos originarios” (Bachelet promises constitutional recognition to native peoples), *La Tercera* (Santiago), 10 November 2006.

66. “Presos políticos mapuche en huelga de hambre” (*Mapuche political prisoners go on hunger strike*), *Ojarasca* (Mexico City) no. 109, May 2006.

67. “Open letter to Bachelet,” ANAMURI (Asociación Nacional de Mujeres Rurales e Indígenas), 23 January 2008. Cited in Zibechi 2008.

munities' ability to survive. In movements against coal mining, oil and natural gas drilling, industrial use of scarce aquifer water, and numerous other threats to local resources, much of the indigenous response is related to the capacity for communities and cultures to thrive. Further, the relationship between these battles against energy projects, and the coming impacts of climate change and on the functioning of both natural and cultural communities, has motivated indigenous activists. The plan put together by southwest indigenous participants in the "Just Transitions" movement, for example, directly addresses a move away from energy practices destructive to tribes and the planet to those based in alternative and local energy strategies that could sustain the flourishing and functioning of both.

Indigenous environmental justice has also begun to reshape local struggles in southern Chile. Native groups are increasingly mobilized over threats like toxic waste, landfills, road and airport construction, cellulose plants, and industrial salmon farming operations.⁶⁸ Water treatment facilities in more than 40 Mapuche communities have contaminated local rivers and lakes.⁶⁹ Community leaders are responding to the environmental health threats from 28 solid waste dumps.⁷⁰ In 2005, 1,300 people protested a landfill in Vilcún,⁷¹ and CONAMA registered 349 complaints by local residents against a landfill in Pumanal.⁷² As painful as the setbacks have been, Mapuche communities now recognize the many ways that the development priorities of outsiders can impinge negatively upon the functioning of their communities, and they are mobilizing in response.

We believe the cases presented here provide empirical, discursive evidence for a community-based, capabilities-centered conception of environmental justice, building from Amartya Sen's and Martha Nussbaum's work on capabilities and human functioning. This approach embraces the great diversity of the world's indigenous peoples, and recognizes the multiplicity of local environmental struggles. It provides a broad and integrative way of understanding how varied indigenous demands for equity, participation, dignity, autonomy, rights, and recognition can undergird a quest for the basic functioning of communities, the integrity of cultures, and the defense of local, inherited links between culture and nature. In North America, South America, and around the world, indigenous demands for environmental justice may begin with claims for distributive and procedural justice, but the discourses of these movements quickly move into broader issues of capability and functioning. To more fully comprehend current claims and discourses, a conception of justice must address the

68. Several informational websites chronicle Mapuche environmental struggles, e.g. www.mapuexpress.net; www.redchem.entodaspartes.org; www.azkintuwe.org

69. Seguel 2006.

70. OLCA 2004.

71. "Multitudinaria marcha en rechazo a relleno sanitario" (Multitudes march in protest of landfill), *Diario Austral* (Temuco), 24 August 2005.

72. "349 reclamos llegaron a la Conama por proyecto Pumalal" (CONAMA registers 349 complaints on Pumalal Project), *Diario Austral* (Temuco), 11 August 2005.

fundamental capacity of indigenous communities to sustain the lives and livelihoods they value.

References

- Apffel-Marglin, Frederique. 1998. *The Spirit Of Regeneration: Andean Culture Confronting Western Notions Of Development*. London: Zed Books.
- Aylwin, José. 2004. Los mapuche o esa parte de la realidad que no queremos ver (The Mapuche or That Part of Reality We Don't Like to See). In *El despertar del pueblo mapuche: nuevos conflictos, viejas demandas (The Awakening of the Mapuche People: New Conflicts, Old Demands)*, edited by Richard Vera, José Aylwin, Andrea Coñuecar and Elicura Chihuailaf, 26–33. Temuco, Chile: Instituto de Estudios Indígenas/Universidad de la Frontera.
- Baquedano, Manuel. 2004. *La batalla de Ralco: de la electricidad sucia a la electricidad verde (The Battle For Ralco: From Dirty Electricity to Green Electricity)*. Santiago: Ediciones LOM.
- Barry, Brian. 2000. *Culture and Equality*. Cambridge, UK: Polity Press.
- Bretting, John, and Diane-Michele Prindeville. 1998. Environmental Justice and the Role of Indigenous Women Organizing Their Communities. In *Environmental Injustices, Political Struggles: Race, Class, and the Environment*, edited by David Camacho, 141–164. Durham, NC: Duke University Press.
- Bryant, Bunyan. 1995. *Environmental Justice: Issues, Policies, and Solutions*. Covelo, CA: Island Press.
- Bryant, Bunyan, and Paul Mohai, eds. 1992. *Race and the Incidence of Environmental Hazards: A Time for Discourse*. Boulder: Westview Press.
- Bullard, Robert, ed. 1994. *Unequal Protection: Environmental Justice and Communities of Color*. San Francisco, CA: Sierra Club Books.
- Carruthers, David. 2008a. The Globalization of Environmental Justice: Lessons from the US-Mexico Border. *Society and Natural Resources* 21 (7): 556–568.
- . 2008b. Introduction: Popular Environmentalism and Social Justice in Latin America. In *Environmental Justice in Latin America: Problems, Promise, and Practice*, edited by David Carruthers, 1–22. Cambridge, MA: MIT Press.
- Carruthers, David, and Patricia Rodriguez. 2009. Mapuche Protest, Environmental Conflict, and Social Movement Linkage in Chile. *Third World Quarterly* 30 (4): 743–760.
- Casal, Paula. 2003. Is Multiculturalism Bad for Animals? *The Journal of Political Philosophy* 11 (1):1–22.
- Chavis, Rev. Benjamin F. Jr. 1993. Forward. In *Confronting Environmental Racism: Voices from the Grassroots*, edited by Robert D. Bullard. Boston, CA: South End Press.
- Claude, Marcel. 1997. *Una vez más la miseria: ¿Es Chile un país sustentable? (Misfortune Once Again: Is Chile a Sustainable Country?)* Santiago: Ediciones LOM.
- Cole, Luke W., and Sheila R. Foster. 2001. *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. New York: New York University Press.
- Crocker, David A. 2006. Sen and Deliberative Democracy. In *Capabilities Equality: Basic Issues and Problems*, edited by Alexander Kaufman, 155–197. New York: Routledge.

- Di Chiro, Giovanna. 2008. Living Environmentalism: Coalition Politics, Social Reproduction, and Environmental Justice. *Environmental Politics* 17 (2): 276–298.
- Faber, Daniel, and Debra McCarthy. 2003. Neo-Liberalism, Globalization, and the Struggle for Ecological Democracy: Linking Sustainability and Environmental Justice. In *Just Sustainabilities: Development in an Unequal World*, edited by Julian Agyeman, Robert D. Bullard, and Bob Evans, 38–63. Cambridge, MA: MIT Press.
- Figuroa, Robert M. 2004. A Cross-Cultural Analysis of Distribution, Recognition, and Environmental Heritage. Paper given at a conference on Environmental Justice Abroad, Rutgers University, October 2004.
- Fraser, Nancy. 1998. Social Justice in the Age of Identity Politics: Redistribution, Recognition, and Participation. In *The Tanner Lectures on Human Values, Vol. 19*, edited by Grethe B. Peterson, 1–68. Salt Lake City, UT: University of Utah Press.
- . 2000. Rethinking Recognition. *New Left Review* 3, May/June: 107–120.
- Getches, David H., and David N. Pellow. 2002. Beyond ‘Traditional’ Environmental Justice. In *Justice and Natural Resources: Concepts Strategies, and Applications*, edited by Kathryn M. Mutz, Gary C. Bryner, and Douglas S. Kenney, 3–30. Washington, DC: Island Press.
- Grass, Antonio. 1999. Las Empresas forestales y el pueblo mapuche (Forestry Companies and the Mapuche People). *La Tercera* 31 (Santiago), 31 March.
- Haughney, Diane. 2006. *Neoliberal Economics, Democratic Transition, and Mapuche Demands for Rights in Chile*. Gainesville, FL: University Press of Florida.
- Honneth, Axel. 1995. *The Struggle for Recognition: The Moral Grammar of Social Conflicts*. Cambridge, MA: MIT Press.
- Hunold, Christian, and Iris Marion Young. 1998. Justice, Democracy, and Hazardous Siting. *Political Studies* 46 (1): 82–95.
- Hurtado, Cristina. No date. *Justicia ambiental: en torno a un debate y dos casos de injusticia: urbano y rural (Environmental Justice: The Debate Surrounding Two Cases of Injustice—Urban and Rural)*. Santiago, Chile: Instituto de Ecología Política. Available at: <http://www.mapuche.info/mapuint/hurtado020000.pdf>, accessed 8 July 2010.
- LaDuke, Winona. 1999. *All Our Relations*. Boston, MA: South End Press.
- . 2002. *The Winona LaDuke Reader*. Penticton, BC: Theytus Books.
- Lake, Robert W. 1996. Volunteers, NIMBYs, and Environmental Justice: Dilemmas of Democratic Practice. *Antipode* 28 (2): 160–174.
- Loveman, Brian, and Elizabeth Lira. 2000. *Arquitectura política y seguridad interior del Estado, 1811–1990* (Political Architecture and the Internal Security of the State, 1811–1990). Santiago: DIBAM.
- Maggio, Marcelo. 2007. El conflicto con las empresas forestales en territorio mapuche (The Conflict with Forestry Companies in Mapuche Territory), 16 January. Available at: http://www.biodiversidadla.org/Principal/Agencia_de_Noticias_Biodiversidadla/El_conflicto_con_las_empresas_forestales_en_territorio_mapuche, accessed 8 July 2010.
- Martinez-Alier, Joan. 2003. Mining Conflicts, Environmental Justice, and Valuation. In *Just Sustainabilities: Development in an Unequal World*, edited by Julian Agyeman, Robert D. Bullard and Bob Evans, 201–228. Cambridge, MA: MIT Press.
- Mallon, Florencia. 2004. *La sangre del copihue: La comunidad Mapuche de Nicolás Ailío y el Estado chileno 1906–2001 (Courage Tastes of Blood: The Mapuche Community of Nicolás Ailío and the Chilean State, 1906–2001)*. Santiago: LOM Ediciones.

- Maybury-Lewis, David. 1992. *Millennium: Tribal Wisdom and the Modern World*. New York: Viking Press.
- Moraga, Jorge R. 2001. *Aguas Turbias: La Central Ralco en el Alto Bío Bío (Muddied Waters: The Ralco Dam on the Upper Bio Bio)*. Santiago de Chile: Observatorio Latinoamericano de Conflictos Ambientales.
- Morales, Roberto José Aylwin and Ximena Navarro. 1998. *Ralco: modernidad o etnocidio en territorio mapuche (Ralco: Modernity or Ethnocide in Mapuche Territory)*. Temuco: Instituto de Estudios Indígenas, Universidad de la Frontera.
- Muñoz Ramírez, Gloria. 2005. El movimiento mapuche autónomo: su lucha en vivo (The Autonomous Mapuche Movement: A Living Struggle). *Ojarasca* 100 (August).
- Namuncura, Domingo. 1999. *Ralco: ¿represa o pobreza? (Ralco: Reservoir or Poverty?)*, Santiago, Ediciones LOM.
- Navajo Nation v US Forest Service 479 F.3d 1024. 9th Cir., 2007.
- Navajo Nation v US Forest Service 535 F.3d 1058. 9th Cir., 2008.
- Nussbaum, Martha C. 2000. *Women and Human Development: The Capabilities Approach* Oxford: Oxford University Press.
- . 2006. *Frontiers of Justice: Disability, Nationality, Species Membership*. Cambridge, MA: Harvard University Press.
- Nussbaum, Martha C., and Amartya Sen. 1992. *The Quality of Life*. Oxford: Oxford University Press.
- OLCA. 2004. *Basurales en comunidades mapuche: Un conflicto latente en la region de la Araucanía (Garbage Dumps in Mapuche Communities: A Growing Conflict in the Araucanía Region)*. Santiago: Observatorio Latinoamericano de Conflictos Ambientales.
- Olson, Kevin. 2001. Distributive Justice and the Politics of Difference. *Critical Horizons* 2 (1): 5–32.
- Pellow, David N., and Robert J. Brulle eds. 2005. *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*. Cambridge, MA: MIT Press.
- Peña, Devon. 2005. Autonomy, Equity, and Environmental Justice. In *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*, edited by David N. Pellow and Robert J. Brulle, 131–152. Cambridge, MA: MIT Press.
- Pulido, Laura. 1996. *Environmentalism and Social Justice: Two Chicano Struggles in the Southwest*. Tucson, AZ: University of Arizona Press.
- Quiroga Martínez, Rayén, ed. 1994. *El tigre sin selva: consecuencias ambientales de la transformación económica de Chile, 1974–1993 (Tiger Without a Jungle: Environmental Consequences of the Economic Transformation of Chile, 1974–1993)*. Santiago: IEP.
- Repetto, Maxim. 1997. Políticas indigenistas en el cono sur: Argentina y Chile frente a los mapuche (Indigenous Politics in the Southern Cone: Argentina and Chile Confront the Mapuche), siglos XIX y XX. Dept. of Social Anthropology, University of Brasilia: Master's thesis.
- Roberts, J. Timmons, and Nikki Demetria Thanos. 2003. *Trouble in Paradise: Globalization and Environmental Crisis in Latin America*. New York: Routledge.
- Robeyns, Ingrid. 2003. Is Nancy Fraser's Critique of Theories of Justice Justified? *Constellations* 10 (4): 538–553.
- Rodriguez, Patricia, and David Carruthers. 2008. Testing Democracy's Promise: Indigenous Mobilization and the Chilean State, *European Review of Latin American and Caribbean Studies* 85: 3–21.

- Rohter, Larry. 2004. Mapuche Indians in Chile Struggle to Take Back Forests. *New York Times*, 11 August, p. 3.
- Saavedra, Alejandro. 2002. *Los Mapuche en la sociedad chilena actual (The Mapuche People in Chilean Society Today)*. Santiago: Ediciones LOM/Universidad Austral.
- Save the Peaks. 2005. Regional Forester Snowbowl Decision: Destruction Of Native Cultures & Environment. 9 June. Available at http://savethepeaks.org/index.php?option=com_content&view=article&id=36:regional-forester-snowbowl-decision-destruction-of-native-cultures-a-environment&catid=4:release&Itemid=14, accessed 1 June 2010.
- . 2009. Tribes & Environmental Groups Petition Supreme Court in Appeal to Protect Religious Freedom & Environmental Integrity of Sacred Mountain. 6 January. Available at http://savethepeaks.org/index.php?option=com_content&view=article&id=50:tribes-a-environmental-groups-petition-supreme-court-in-appeal-to-protect-religious-freedom-a-environmental-integrity-of-sacred-mountain&catid=4:release&Itemid=14, accessed 1 June 2010.
- Schlosberg, David. 1999. *Environmental Justice and the New Pluralism: The Challenge of Difference for Environmentalism*. Oxford: Oxford University Press.
- . 2003. The Justice of Environmental Justice: Reconciling Equity, Recognition, and Participation in a Political Movement. In *Moral and Political Reasoning in Environmental Practice*, edited by Andrew Light and Avner de-Shalit, 77–106. Cambridge, MA: MIT Press.
- . 2007. *Defining Environmental Justice*. Oxford: Oxford University Press.
- Seguel, Alfredo. 2005. Modelo forestal chileno y movimiento autónomo mapuche: las posiciones irreconciliables de un conflicto territorial (The Chilean Forestry Model and the Mapuche Autonomy Movement: The Irreconcilable Positions of a Territorial Conflict), 16 December. Available at: http://www.biodiversidadla.org/Principal/Contenido/Documentos/Defensa_de_los_Derechos_de_los_Pueblos/Modelo_forestal_chileno_y_Movimiento_autonomo_Mapuche_las_posiciones_irreconciliables_de_un_conflicto_territorial, accessed 8 July 2010.
- Seguel, Eduardo, and Fabien Le Bonniec. 2004. Movimiento mapuche y justicia Chilena en la actualidad: reflexiones acerca de la judicialización de las reivindicaciones mapuche en Chile (The Mapuche Movement and Chilean Justice Today: Reflections on The Juridical Treatment of Mapuche Demands in Chile). In *Derechos Humanos y Pueblos Indígenas: Tendencias Internacionales y Contexto Chileno (Human Rights and Indigenous Peoples: International Tendencies and the Chilean Context)*, edited by Jose Aylwin, 354–364. Temuco: Instituto de Estudios Indígenas/UFRO.
- Sen, Amartya. 1990. Development as Capability Expansion. In *Human Development and the International Development Strategy for the 1990s*, edited by Keith Griffin and John Knight. London: MacMillan.
- . 1999a. *Commodities and Capabilities*. Oxford: Oxford University Press.
- . 1999b. *Development as Freedom*. New York: Anchor.
- . 2005. Human Rights and Capabilities. *Journal of Human Development* 6 (2): 151–166.
- Shirley, Joe. 2004. President Shirley Comments on Draft Environmental Impact Statement for Arizona Snowbowl Improvement Project. Navajo Nation Public Information Office, 13 April.
- Shrader-Frechette, Kristin. 2002. *Environmental Justice: Creating Equality, Reclaiming Democracy*. Oxford: Oxford University Press.

- Stewart, Frances. 2005. Groups and Capabilities. *Journal of Human Development* 6 (2):185–204.
- Taylor, Dorceta. 2000. The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses. *American Behavioral Scientist* 43 (4): 508–580.
- Young, Iris. 1990. *Justice and the Politics of Difference*. Princeton, NJ: Princeton University Press.
- Zibeche, Raul. 2008. Historical Mapuche Hunger Strike Ends in Success, Americas Policy Program Special Report. Washington DC: Center for International Policy, 26 February.