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Ambivalent Landscapes: Environmental Justice in the US–Mexico Borderlands

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Abstract How can a single landscape, a shantytown on the US–Mexico border, symbolize environmental devastation for some and progress and 'the good life' for others? Our analysis of this landscape and the people who are a part of it highlights the complexities of the environmental justice movement in the current era of neo-liberal economic policies. Although the *colonia* that we studied, *Derechos Humanos*, is located on top of an abandoned landfill near an open sewage canal, living here represents a step forward for many residents. However, to many US environmentalists, this landscape represents a toxic wasteland and the people living here are simply victims of border industrialization. Contributing to critical environmental justice studies, our analysis of *Derechos Humanos* highlights the injustices of the global political economy, creative responses to these forces by individuals most adversely affected by them, and the potential limitations of conventional framings of environmental justice and mainstream Northern environmentalism.

Keywords US–Mexico border · Environmental justice · Toxic waste · Social movement

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Introduction

How can a single landscape, a shantytown on the US–Mexico border, symbolize environmental devastation for some and progress and 'the good life' for others? Close analysis of this landscape and the people who are a part of it highlights the complexities of the environmental justice movement in the current era of neo-liberal economic policies. *Derechos Humanos*, the *colonia popular*[1] or shantytown that we studied, is located on top of an abandoned landfill, closely flanked by an open sewage canal. Yet living here represents a step forward for many residents, who have come to the border from elsewhere in Mexico and Latin America where economic conditions made life even more difficult. However, to the eyes of many US environmentalists, this landscape represents a toxic wasteland and the people living here are simply victims of border industrialization. Truth exists in both of these visions, and in this ambivalence, potential limitations can be found in the conventional framing of environmental justice and mainstream Northern environmentalism. Addressing these limitations strengthens the capacity of both border residents and US environmentalists to struggle against the structural violence of what Escobar (2004) has called "imperial globality."

Inhabited by roughly 400 people, *Derechos Humanos*, both hopefully and ironically named Human Rights,[2] lies

[1] The term *colonia* simply means neighborhood, a *colonia popular* is a neighborhood of the people, or a poor people's neighborhood—typically the unannexed shantytowns that ring all of Mexico's cities. In the US, the term *colonia* by itself refers to shantytowns found on the US side of the border.

[2] This type of name is typical of *colonias populares*. *Colonias* are often named after dates marking uprisings of the people in Mexico, or other names representing the hopes for social justice of their residents.

3 miles south of the US border in Matamoros, Tamaulipas, Mexico, across the Rio Grande from Brownsville, TX, USA. Initially settled by squatters in the late 1990s, *Derechos Humanos* constitutes a picture-perfect case of environmental injustice and global inequality: located near a wealthy predominately white resort area (South Padre Island), it is a poor neighborhood of Latinos, living among the remnants of a former landfill near a canal designed to transport hazardous wastewater away from the city's bustling industrial parks and crowded neighborhoods. Some pollutants in the canal come from little treated and/or regulated industrial emissions from nearby factories, popularly known as *maquiladoras*,[3] that have become symbolic of the borderlands. Other pollutants result from the disposal of untreated human sewage, caused in part by the influx of migrants into Matamoros which has profoundly over-taxed the municipal wastewater system in recent years.

The conditions of *Derechos Humanos* well illustrate a point made by Duncan Earle in reference to *colonias* in El Paso: the borderlands are "signifiers of everything 'centers' deny or repress" (Earle 1999: 169). In this instance they illustrate in sharp relief the differentials of power and oppression that buoy, but yet are invisible at, the center. In a similar vein, the borderlands highlight the invisibility of systems of production and waste associated with capitalism, and call into question strategies of the environmental justice movement that primarily aim to equalize the distribution of environmental costs without consideration of the global policies and actions that generate communities like *Derechos Humanos* and the environmental devastation that its inhabitants face (for similar critiques, see Agyeman 2005; Agyeman *et al*. 2003; Mutz *et al*. 2002; Pellow and Brulle 2005a, b).

Theoretical Context

Our analysis engages three related issues in critical environmental justice studies (Pellow and Brulle 2005a, b):[4] whether environmental justice is primarily focused on reform and equity, or is instead a movement for radical social and economic change; how a global perspective challenges conventional readings of environmental justice; and finally, how at the heart of the movement for environmental justice lies a struggle for the definition of social reality.

How environmental justice is framed, or what it is popularly understood to be about, determines both the kinds of problems identified as environmental justice issues and the possible solutions to those problems (Bryner 2002). Critics contend that most conventional framings of environmental justice are focused primarily on equity, and on tinkering with the system to reform it, so that the distribution of environmental problems is equitable (Agyeman 2005; Benford 2005; Faber and McCarthy 2005; Limerick 2002; Pena 2005). Faber and McCarthy (2005: 60) call for the environmental justice movement to transition from focusing on the unequal distribution of environmental 'bads' (distributional environmental justice) to instead identifying ways in which environmental problems and their inequities are produced (productive environmental justice). Such a model fundamentally challenges the "capitalist growth economy" (Pellow and Brulle 2005a, b: 4) and works towards creating a broad-based movement for ecological democracy (Faber and McCarthy 2005: 61; see also Faber 1998). Other critics of the conventional model of environmental justice concur, arguing that "...the environmental justice movement's power lies in its capacity to disrupt the system rather to seek to reform it" (Benford 2005: 52).

Globalization of the environmental justice movement has further challenged how issues of injustice are analyzed, and begs a broader frame that notes how, as Rees and Westra (2003: 101) point out, "overconsumption by the rich visits ecological violence on the poor". Rees and Westra contend that such a focus "raises moral, ethical, and legal questions that go considerably beyond existing concerns about inequity and charges of environmental racism" (2003: 101). Their argument is one critical component of a movement towards ecological democracy: putting the consumptive and well-healed lifestyles of the wealthy and powerful in the same frame of analysis as the impoverishment and marginality faced by those who suffer environmental injustice.[5] Similarly, a global perspective necessitates focusing on how different places affect one another, insuring a move beyond the "Not In My Back Yard" approach to solving environmental problems.

Arguably, all of these issues point to the heart of what these struggles are about: striving for a definition of social reality (Harvey 2000). How do we understand and who determines what 'progress' or 'prosperity' mean? Is modern global cosmopolitan subjectivity primarily defined by being a consumer and participating in increased consumption? What do we identify as the major problems in our lives?

[3] *Maquiladoras* are factories owned by foreign corporations which produce goods in Mexico for export to other countries, primarily the United States.

[4] Pellow and Brulle coined this term to mark a new development in the literature on environmental justice—a move beyond celebratory descriptions of the environmental justice movement to more critical evaluations of the strengths and limitations of both particular cases of environmental justice and the thinking that guides environmental justice activism more broadly (Pellow and Brulle 2005b: 4).

[5] This framing is related to the question of geographical scope, or what institution(s) should be the subject of analysis in environmental justice research (see Baden *et al.* 2007).

Does our belief in economic growth and scientific rationality make sense? Who benefits and who suffers as a result of these beliefs (Pena 2005; Pellow and Brulle 2005a, b; see also Sachs 1992)?

An additional issue raised by our research is that of representation: how are those on the margins, in this case those who face environmental injustice, envisioned in the literature and more broadly in popular culture? The issue of representation has not been a central focus of recent environmental justice literature, except perhaps the criticism that scholars are too often overly celebratory and not critical enough of grassroots social movement and community empowerment. In treatments of other environmental movements, particularly international movements to conserve biodiversity, scholars offer sophisticated analyses of the question of representation. These critics have noted that reified images of the ecologically noble savage have facilitated a neo-colonialist approach from the North to the South on questions of conservation (for example, see Brosius 1997; Doane 2007; Redford 1991). Ravi Rajan has made a similar claim about the residents of Bhopal who were affected by the world's worst industrial accident in 1984. He argues that non-profits focusing on chemical pollution and related environmental issues used the images of Bhopal victims to further the organizations' cause, but not necessarily the specific interests of the victims themselves. Rajan has called such practices "discursive violence" (Rajan 2001). We contend that some of these same representational issues, facilitating neo-colonialism and perpetrating discursive violence, are inherent in mainstream environmental coverage of the global south. People living in the midst of environmental problems are typically cast as victims, as sufferers, when they often see themselves very differently. In the case of the US–Mexico border, *colonia* residents are not only cast as victims of ecological destruction, but are also viewed as lesser than their Northern counterparts, dirty and unhygienic (Hill 2003). Furthermore, Northern environmentalists use the imagery of environmental injustice first and foremost to combat environmental degradation, while the people living in these places may have other primary concerns.

In *Derechos Humanos*, people moved to a toxic environment and claimed it as home because life elsewhere was not viable, in large part because of broader economic and political structures and policies. Our study of this small *colonia* reveals the normally hidden relationships among production, consumption, waste, and the structures of inequality inherently embedded in this relationship (Bandy 2000), and necessitates a frame of analysis that moves beyond distribution equity to a focus on productive justice. Such a frame demands attention to the relationship between consumption in the North and environmental degradation in the South while also taking into account the spatial breadth of how places and landscapes are interconnected. Within *Derechos Humanos*, resident activists view themselves not as victims of environmental injustice but as agents for positive change, leading directly to questions of what constitutes prosperity, how individuals define progress, and how people work to achieve affluence and the 'good life.'

Methods

We became involved with *Derechos Humanos* through a connection with Mimi Santoros,[6] the health care provider working in the *colonia*. Our work began with one of our students collecting water samples in 2000 and a follow-up in-depth chemical investigation in 2001. Discussions with Dr. Santoros, *colonia* leaders, and missionary workers in *Derechos Humanos* regarding the implications of our results led us to create an interdisciplinary research team integrating chemistry, anthropology, and religious studies. The full team, including both faculty and students, conducted further research in the *colonia* for 4 weeks in 2002 and 6 weeks in 2003. The students (six in 2002 and four in 2003) lived in the *colonia* for the duration of the summer research periods. The environmental chemists collected water samples from multiple sites along the banks of the canal and then analyzed them for a particular set of industrial chemicals, organic solvents, and heavy metal pollutants, while also conducting a study of basic water quality indicators.[7] Our anthropologists used participant observation, a survey of 20 households, interviews with adults from each household and a photography project to gather data about the history of migration to the *colonia*, the patterns of everyday life in *Derechos Humanos*, the main problems that *colonia* residents saw themselves facing, the mobilization strategies residents used to address issues in the *colonia*, and the perceptions of residents about their surrounding landscape. Our religious studies students conducted 12 in-depth interviews to investigate both the religious beliefs and practices of *colonia* residents, and the ideas and activities of the myriad religious groups from the US that came to 'assist' within the *colonia*. In this article, we use data collected from all of these sources but rely primarily on information gathered from analysis of water samples, personal interviews, and household surveys.

Although *Derechos Humanos* had long been the target of numerous visits from non-governmental organizations (NGOs) and US religious/church groups, ours was the first

[6] We use pseudonyms throughout this paper.

[7] Detailed information regarding the sampling sites, analytes, instrumental techniques, and chemical results has been published elsewhere (Owens and Niemeyer 2006).

group of people from the US to actually live in the *colonia*, rather than visiting daily from Brownsville. In 2002, students lived in the *escuelita*, a small schoolhouse centrally located in the *colonia*. In 2003, *La Comité*, the *colonia*'s elected governing body, arranged for our students to live in the homes of *Derechos Humanos* residents, a fact that had a profound and very positive impact on our connections to the people living in the *colonia*.

The Making of the Border

The US–Mexico border has experienced rapid and unprecedented change—economic, social and environmental—over the past several decades. What was once considered a regional hinterland has quickly become a center of industrial production and a zone of economic strength for Mexico, with a corresponding population surge occurring along both sides of the international border (Ingram *et al*. 1995; Pena 1997; Ruiz 1998).

The initial seeds for this expansion were planted in the 1965 Border Industrialization Program in Mexico, aimed to boost the Mexican economy while benefiting the primarily US-based companies building factories along the 2,000 mile border.[8] These companies were allowed to import raw materials into Mexico and export their finished products duty-free, and they paid Mexican workers a fraction of the wages earned by similar laborers in the US (Ruiz 1998). Thus, foreign-owned assembly plants (*maquiladoras*) were built in urban industrial parks throughout the region. Matamoros, the largest city along the Rio Grande/Rio Bravo River just miles from its end at the Gulf of Mexico, became one of six urban centers in which the majority of the *maquilas* are now located.

During the final decades of the 20th century, further development of the border became part of a series of economic and political reforms created by US interests in Mexico and Latin America. These reforms were linked to the Mexican oil crisis, International Monetary Fund-directed structural adjustment programs, two sequential devaluations of the *peso*, and the 1994 signing of the North American Free Trade Agreement. The net effect of this series of economic shifts made it very difficult for small landholders, farmers, and ranchers to hold onto their property in much of interior Mexico (Gledhill 1995). At the same time, these reforms also ensured that wage labor opportunities in the Mexican interior, if they existed at all, would pay poorly (Gledhill 1995; Pena 1997).

The border therefore served as a beacon of possibility for residents from the Mexican interior who reluctantly left their homes and histories in search of an improved livelihood, and migration to the region skyrocketed. The population boom provided a growing pool of labor for the burgeoning *maquiladora* economy, and by 1998 these factories were estimated to employ over 970,000 people (Ramirez 2000). Yet, it has been nearly impossible for municipal development to keep pace in the borderlands. Thus in the late 1990s, roughly half of the population of Matamoros lived in *colonias populares*, without running water, sewage disposal, well-maintained roads, electricity, or telephone service (Dwyer 1995; US Environmental Protection Agency 1998).

In many cities along both sides of the international border, a situation now exists where virtually unregulated factories lie in close proximity to burgeoning unplanned communities with limited municipal services, causing fears that industrial contamination is severely compromising public health in the region (Carter *et al*. 1996; Tiefenbecher 1998; Varady and Mack 1995). Implementation of environmental standards within the region has remained elusive, with a gap existing between the ecological problems border residents must face daily and the large bureaucratic institutions established to address broader environmental issues.[9] Although there are laws in place, lack of financial resources, corruption, and shortage of personnel continue to make it difficult if not impossible to enforce environmental regulations (Staudt and Coronado 2002). For example, in the mid- to late-1990s, there was only one environmental inspector for the whole state of Tamaulipas (Ruiz 1998).

Environmental degradation and industrial contamination have remained looming concerns along the US-Mexico border for decades. Declining water supplies, hazardous waste releases from the *maquiladoras* and other local industries, water contamination by agricultural, industrial, and municipal sources, and air pollution from increased transportation have become pervasive problems within the region (Liverman *et al*. 1999). In 1991, the National Toxics Campaign Fund (NTCF) report, *Border Trouble*: *Rivers in Peril*, documented industrial pollution within the waterways of Northern Mexico (Lewis *et al*. 1991). The authors of the study found extensive evidence of environmental degradation along the entire border, including severe industrial pollution in a small Matamoros neighborhood with characteristics similar to *Derechos Humanos*.

[8] The Mexican government initiated the Border Industrialization Program after the *Bracero* Guest Worker Program ended in 1964. The *Bracero* Program, which began in 1942, had allowed Mexican laborers to work legally in the US.

[9] There have been a series of international accords and treaties, most notably the La Paz Agreement and NAFTA, established to address border environmental issues. While some of these agreements have led to tangible improvements, they can also collectively be seen as an "institutional shroud" (Staudt and Coronado 2002) that in its hopeful symbolism masks the international lack of accountability and responsibility for environmental degradation along the border.

Derechos Humanos: a Contaminated Landscape

Doctor Santoros, who we met during our initial visits to *Derechos Humanos* was very interested in having us analyze samples from the canal running through the *colonia* to determine what toxic chemicals were present. Over time, she had become increasingly convinced that some of the medical conditions she observed in *colonia* residents, including seizures, headaches, respiratory ailments, skin lesions on the neck and back (particularly noticeable on children playing in and near the canal), and an increased incidence of cleft palate in newborns, resulted directly from exposure to environmental contaminants within *Derechos Humanos*. Our analyses found many of the same industrial chemicals, organic solvents, and heavy metal pollutants found in other border communities during the NTCF study one decade earlier (Lewis *et al*. 1991).

Although we concentrated our chemical analysis on industrial contamination within the canal, we and the residents of *Derechos Humanos* were well aware that our study represented a gross over-simplification of the environmental hazards and risks facing most people in the *colonia*. The *colonia* sits on a former landfill, adjacent to a working municipal landfill, and it is not uncommon to see tires and a variety of other potentially toxic municipal and industrial trash being burned in the vicinity. The location alone has undoubtedly exposed residents to a laundry-list of carcinogenic and hazardous chemicals such as dioxins, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, mercury, lead, and cadmium (Baird and Cann 2005). And although many residents now have access to the Matamoros city water supply, it is likely that they are still exposed to harmful microorganisms due to insufficient municipal water treatment (Varady and Mack 1995). For all of these reasons, residents wanted a comprehensive chemical analysis of the *colonia*—including air, dust, soil, and household water samples—to complement the information about environmental contamination in the canal. Unfortunately, we have not yet been able to provide residents with the full-scale environmental study they desire.

There is no doubt, however, that the wastewater canal is routinely exposing *Derechos Humanos* residents to industrial chemicals that have known negative human health impacts. On most days, especially in the summer when temperatures typically hover in the mid-90s, the pungent synthetic smell emanating from the canal—slightly sweet and reminiscent of paint thinner—warned most residents to stay away from the churning, foamy waters. Although adults in the *colonia* clearly recognized the hazardous nature of the canal, many young children played there on a regular basis. Juanita, a mother of eight, knew the canal was "totally contaminated" and told her own children never to play around it. Juanita recognized, however, the difficulty of keeping children out of the canal, particularly when most parents worked the entire day outside of the *colonia*. In fact, our research team regularly observed children wading out to the small islands in the canal, dangling their feet in effluent emptying out of the pipes, and splashing around in the water.

Our chemical analyses confirmed residents' ideas about the harmful nature of the canal. There were several industrial chemicals found in high concentration within the canal (Owens and Niemeyer 2006). Of greatest concern was benzene, which was detected at a sampling site adjacent to the *colonia* at a level almost 200 times higher than the US Environmental Protection Agency (EPA) National Recommended Criteria for groundwater (US Environmental Protection Agency 2002). Benzene, a component of gasoline, is a colorless liquid that is commonly used as an industrial cleaner and solvent. Benzene is a known poison with most human exposures occurring due to inhalation of the compound. The transition of benzene from its liquid to vapor form is particularly enhanced by high temperatures, such as those found during the summer in *Derechos Humanos*. High temperatures paired with intense sunlight create a condition that has undoubtedly led to continuous exposure to benzene vapors for many, if not most, *colonia* residents. Short term benzene exposure is associated with a long list of maladies such as dizziness, burning eyes, skin lesions, and anemia. The effects of long term exposure, however, are much more serious. Benzene is a confirmed human carcinogen which has been linked to cancers of the blood system such as leukemia (US Environmental Protection Agency 2002). Benzene is also an experimentally-confirmed teratogen, meaning that when a pregnant mother is exposed, the chemical can exert its toxicity on her embryo, leading to birth defects.

We also found exceedingly high levels of fecal coliform, a bacteria that is indicative of the release of untreated sewage directly into the canal. In addition, metals with known toxicological effects such as lead and nickel were detected at concentrations significantly above US EPA groundwater standards (US Environmental Protection Agency 2002). Given the location of the *colonia*, on top of an abandoned landfill alongside an open sewage canal carrying high levels of industrial pollutants, *Derechos Humanos* clearly constitutes a severely contaminated landscape within the ecologically-damaged US–Mexico border, yet it is also much more than that.

Derechos Humanos: a Land of Opportunity and Hope

For us, the toxic sewage canal both initially defined *Derechos Humanos* and drew us to the *colonia*. Although

our research team included people from a wide range of socioeconomic statuses and racial/ethnic identities, we were all nonetheless steeped in a middle-class US environmental sensibility, and initially saw the *colonia* as a locus of pollution and violence (Heyman and Campbell 2004) and a site of environmental disaster (Hill 2006). Our initial perspective was to view *colonia* residents as victims of this place. We quickly found, however, that people living in the *colonia*, particularly those who first staked a claim on this former refuse dump, viewed themselves quite differently. For most *colonia* residents we interviewed, *Derechos Humanos* is home and while the canal is a noxious nuisance, it is far from all defining.

Staking a Claim at the Border

Derechos Humanos is flanked by other *colonias populares*, the wastewater canal, and an expanse of dusty scrubland that leads to a municipal garbage dump. According to residents, the land that now houses *Derechos Humanos* had been planted long ago in sorghum for cattle feed but, after being abandoned, became a place where local garbage was hauled. In 1998, word went out that the land's owners, a prominent family in Matamoros, were interested in ceding the land to the city. In March of that year, a few individuals and families who heard the rumor and who had been living in worse conditions elsewhere staked a claim to a few small pieces of land and began to settle.

The residents we interviewed fit the typical patterns identified by migration scholars: pushed out of prior living arrangements by decreasing affordability of land and housing, these families and individuals moved into the *colonia* through networks of relatives and friends, initially drawn by the promise of potential land-ownership (Ward 1999; see also Fussell 2004). *Colonia* residents came originally from a variety of places, including San Luis Potosi, Veracruz, Chiapas, and, interestingly, the US (at least two residents were US citizens). The vast majority of *colonia* residents had no plans to move elsewhere, but instead were interested in making a home in *Derechos Humanos*. Matamoros offered them the possibility of relatively high-paying jobs and good educational opportunities for their children. Residents began settling the *colonia* by initially constructing the simplest and flimsiest of buildings, often using the trash that they found in this former dump to make their first shelter.

Although the land had no municipal services, the initial squatters (and then the growing numbers who followed their example) were hopeful that if enough people settled here, the Matamoros government would take notice and reach an agreement with the previous owners to provide a way for settlers to purchase their land. The next step would be for the city to fully incorporate the *colonia*, thus providing paved roads, piped water, sewage disposal, and electricity, among other services. This is a typical pattern of urban growth on the border, and in Latin America more generally, and it has severely taxed the governments called upon to provide municipal services, leaving many *colonia populares* struggling without these services for many years (Fay 2005; Morse and Hardoy 1992; Ward 1999). In *Derechos Humanos*, the city did 'notice' the settlers and very quickly came to an agreement with the previous landowner, allowing the squatters to pay the city in modest monthly installments for the piece of land they occupied, but not supplying municipal services during the first years of the settlement.

Perceptions of Progress

Stories of moving from extreme poverty to relative prosperity, and the hard work such transitions required, marked the narratives of many *colonia* residents. Underscoring their sense of gratitude for and commitment to *Derechos Humanos*, residents exhibited pride in their ability to transform and improve their lives, most often from previous states of dire poverty.[10] Doña Celina, a small energetic elderly woman known as *la abuelita* (little/dear grandmother), was the first person to stake a claim on this land. She recalled how far she had to walk to get water at first; that when she moved to *Derechos Humanos*, "I only had a plate, a spoon, a sheet and pillow, and a machete." Doña Celina built her first house in the *colonia* from sticks, and then eventually a more solid home from cardboard. Likewise, Doña Maria, a community leader, remarked: "we are poor, but we were poorer," a sentiment echoed in many other residents' descriptions of their lives. And indeed in the years in which we conducted research in the *colonia*, improvements were evident: water spigots (*llaves*) one year, electricity the next; a preponderance of homes made from found items in 2001, to a larger number of cinder block homes in 2003.

Rather than highlighting the toxic canal or the problems they may face, many residents painted quite a different picture of the *colonia*, one that reflects their pride in transforming this empty land into home. Numerous residents described the *colonia* as a warm and happy place, some claiming it as a quiet escape from the hustle and bustle of the city's center, others remarking how much better it was to live in the peace and rurality of the *colonia* rather than the confusion of the city center. Doña Maria fondly remembered growing up in San Luis Potosi, and the

[10] There were, of course, exceptions. For example, one *colonia* resident had left his father's *ranchito*, where he had his own 20 acres and some cattle, to "make it on his own" at the border.

spring where she fetched water as a child, remarking how "the water was so clear." But she described Mexico City, where she lived before she migrated to Matamoros, as noisy, crowded and polluted. She smiled as she talked about life in the *colonia*, which she prefers, saying, "It is very peaceful."

Doña Rosita, a community leader especially active in national politics, told us that her relatives in Southern Mexico—the poorest part of the country—think she is living luxuriously in Matamoros.[11] Her comparison, between the prosperous Northern border and Southern Mexico which is imagined as poorer, has also been noted by Vila (2000), and was an important sub-text for many *colonia* residents' understanding of themselves and their position in the world. In fact, the residents' comparison between life at the border and elsewhere in Mexico echoes many global discourses on race, modernity, and development/progress: Southern Mexico is cast as darker, poorer, traditional and backward while by contrast, cities along the Northern border are whiter, wealthier, more modern and advanced (though not quite as much as the US and Europe). These discourses are powerful, enforcing hegemonic norms and justifying the structural violence of global inequality and the neo-liberal economic and social policies that generate it (Escobar 1995; Farmer 2004; Sachs 1992; Sbert 1992).

The comparison between the affluent border and the poor Mexican interior, however, is also well-rooted in the material experiences of *colonia* residents. Many of the residents we talked to compared the wages they earned in their former homes farther south to what they earned here in Matamoros—typically three or four times more. For example, middle-aged Alfonso traded working for 250 pesos/week in San Luis Potosi, for 1,800 pesos/week in a Matamoros *maquiladora*. Moving northward and establishing a home-site in Matamoros, even on an abandoned dump alongside a wastewater canal, can therefore be a powerful story of progress for *colonia* residents. In stark contrast, *colonias* such as *Derechos Humanos* represent hardship and ecological devastation to many Northern environmentalists when compared with life in US cities and suburbs.[12] The clear disparity that exists between the spatial frames of *colonia* residents and US environmentalists suggests that developing a more complete understanding of the complex factors which produce landscapes within the North and South and the differences between them is an important component of advancing the environmental justice movement.

Another way in which residents of *Derechos Humanos* achieved 'progress,' was by converting the former landfill on which they settled into an aesthetically-pleasing landscape, effectively refuting discourses that cast residents of border *colonias* (or poor people more generally) as unhygienic and dirty (see Hill 2003). For example, the *abuelita,* Doña Celina*,* transformed her yard, initially a dusty piece of landfill with a stick house on it, into a green oasis with a colorfully painted plywood house and carefully tended yard and flower garden. Doña Maria spent a great deal of time sweeping her home and yard in an often futile attempt to free her surroundings of trash. Explaining the frustration she feels about this never-ending task, she exclaimed, "And it's not [even] my trash!" In addition to remains from the former garbage dump, unoccupied areas of the *colonia* including the side of the canal still served as *de facto* dumping grounds. Doña Maria noted that residents sometimes found people dumping old containers of paint and other toxic materials in areas throughout the *colonia*, which she and other residents deplored. Yet an interesting twist to the role of trash in *colonia* life is that as much as householders try to remove trash and dust from their yards to create well-tended garden landscapes, found objects have been critical to the 'progress' that residents have been able to achieve. Trash of various sorts has always served as a critical building block for houses in the *colonia*. The 'trash' of *Derechos Humanos* was both useful and a problem: the *colonia* was plagued by trash, but trash had been essential to its founding and to the accumulation of wealth.[13] The issue of trash, and cleanliness more broadly, was particularly charged. While many residents of *Derechos Humanos* despise unwanted garbage and dirt and are proud of the clean gardens and yards that they have created (thus challenging representations of *colonos* as unhygienic shantytown dwellers), the very trash of the landscape has also allowed residents to increase their material wealth, claiming their status as global citizens in this way.

While material well-being is a widely shared goal among various social movements, *colonia* residents' stories of progress also raise questions of how the 'good life' or equal membership in the global community is defined. Although many of the women we interviewed discussed working together to bring electricity and running water to the *colonia* as evidence of their prosperity, one man, Alejandro, was eager to show us his brand new video collection, fancy glassware, and tiling project, as evidence of his new found affluence. Although material prosperity is undoubtedly the

[11] This may also be because migrants tend to paint their lives as more prosperous than they really are for the people living where they migrated from, as pointed out to us by Bridget Hayden.

[12] Numerous Northern environmental magazines have publicized the pollution and ecological devastation occurring within the *colonias* at the US–Mexico Border, including an article focusing specifically on *Derechos Humanos* (Snell 2001).

[13] Sarah Hill has a richly detailed discussion of the varied trajectories and meanings of trash in the border region (Hill 2008).

measure by which *colonos* (and most of the worlds' people) claim their improved status and progress, that same drive for material goods and the greater capacity to consume is what degrades the landscapes in which they, and all of us, live. The difficulties associated with defining prosperity and progress through increasing material wealth and consumerism suggest that moving towards environmental justice will require a radical rethinking and revision of our current system.

Progress for *colonia* residents is thus indexed in myriad ways. Some visions of progress rest on residents' capacities to transform their lives and the landscape in which they live, both by moving to a place with higher status, and by converting a former landfill into gardens and yards. Others, however, in their quest for progress through increasing their material wealth, may ultimately feed the same international economic system that has made their lives so challenging. Clearly, the frame through which *Derechos Humanos* residents view their lives is more expansive than the monolithic picture most Northern environmentalists have of people living in border *colonias*. An analysis of progress that incorporates the myriad factors that have produced border shantytowns and drawn individuals to inhabit them can provide residents and activists with the possibility of more fundamentally challenging global inequality and environmental injustice.

Concerns in the *Colonia*

While the toxic canal and garbage may strike middle-class US environmentalists as the most pressing issues that needed addressing in *Derechos Humanos*, the majority of residents rarely named them first.[14] Instead, our household surveys revealed that residents identified access to safe drinking water, eliminating the fine gritty dust that blows into people's eyes and throats on dry windy days, access to jobs, adolescent addiction to spray paint and other drugs, and general concerns about health (only a few of which people viewed as linked to the canal) as main concerns. Evidenced by the gossip about who received new houses from missionary groups and the lines to receive food from the *dispensas*,[15] everyday concerns focused on having enough food for all household members and adequate shelter from the elements (torrential downpours and floods during the rainy season often brought the canal's waters directly into residents' homes).

Access to safe drinking water was the concern most widely reported. Residents had a detailed knowledge of all of the places that sell water, and the degree to which the water sold at any given location could be trusted. When we first encountered the *colonia* in 2001, there were only one or two communal spigots from the Matamoros municipal water system, but by 2003 many households had their own spigots. However, the city's water was not necessarily free of bacterial contaminants, and diarrhea was a common problem, especially during the hot summer months when residents needed to drink more water. Because of reduced supply and increased heat, summer led to higher concentrations of disease-causing bacteria in the municipal water supply, compounding the likelihood of intestinal disorders for most residents. Although city water was the cheapest (and therefore most likely to be consumed by the poorest residents who often did not have enough money to pay for the fuel needed to boil and purify it), there were two other primary sources of drinking water in the *colonia*: *la pipa* and bottled water. *La pipa* refers to the trucks that regularly sell water from their tanks throughout *Derechos Humanos*. While most residents believed *la pipa* to be a better source of water than the municipal supply, it was well known that the trucks filled their tanks from the Rio Grande. Although *la pipa* collected water upstream from Matamoros, the location was still down-river from numerous other cities and municipalities (such as Juarez/El Paso) where effluent from industrial and household sources flowed into the Rio Grande, often without adequate treatment. Water from *la pipa* was therefore not only likely to contain disease-causing bacteria but also a variety of industrial toxins, despite the beautiful images of serene mountain lakes and streams on the trucks' sides. The most expensive source of water in the *colonia* was 5-gal plastic bottles of supposedly purified water. The challenge with this source was knowing whether the bottles actually contained purified water and determining where the water came from prior to purification. As with residents' creation of clean and beautiful yards and gardens, residents' knowledge of water sources—and the ability they had to procure the cleanest water possible—were charged issues and important markers of status.

A stark contrast therefore exists between what *colonos* see as their most pressing issues versus what we as Northern environmentalists envisioned as residents' greatest concerns, which further emphasizes the importance of developing a frame of analysis that focuses on the production of environmental injustice. The economic and political processes that generate toxic landscapes also produce inadequate municipal services (from water, to garbage disposal, housing, and healthcare) and insecure access to jobs. The situation in *Derechos Humanos* calls for actions that highlight these productive processes and the

[14] Community leaders had advocated in the past, however, for enclosure of the wastewater canal.

[15] Two *dispensas* were operated by missionary organizations and served as sources of inexpensive and/or free food for the community.

ways in which they link the consumption and material wealth of people in the North to the life of residents in the global South.

Mobilization in *Derechos Humanos*

Many residents of *Derechos Humanos* have a strong commitment to helping each other and coming together to generate improvements in the *colonia*. Indeed, this is yet another way in which residents view their lives with pride and a sense of accomplishment, and through which they aim to craft their ideal world. Literature on *colonias populares* and other settlements characterized by 'self-help' housing suggests that leadership and social organization can have profound effects on community development trajectories (Ward 1999). Women in the *colonia* frequently talked about how they had helped others who were experiencing rough times: Doña Celina provided funds for several residents to put water spigots in their yards because "we are brothers and sisters." Doña Maria cooked for women neighbors when they were sick. Likewise, these women recalled receiving assistance from others when they were experiencing difficult times. Women commonly shared resources for cooking with other *colonia* residents since not everyone had access to a gas stove or could afford to purchase gas for cooking, and fuel wood was often difficult to find. When we asked why *Derechos Humanos* was so well organized, both residents and outsiders working in the *colonia* pointed to the particular set of residents who had come together to improve *Derechos Humanos* by creating and supporting community-developed programs: the locally elected *La Comité*.[16]

The efforts of *La Comité* have attracted a variety of NGOs to the *colonia*, most of which focus on addressing residents' immediate needs such as housing, food, water, and access to medical treatment. Most of these organizations have been religiously affiliated, such as the Catholic-based organization that initially paid for the services of Dr. Santoros, who has been a powerful force in the *colonia* since its initial founding, not only providing medical care but also helping *Derechos Humanos* organize as a community and develop in myriad ways (Snell 2001). Religiously-affiliated groups were also involved in the building and running of a medical clinic, pre-school, two *dispensas*, and in building houses for *colonia* residents deemed needy by *La Comité* (Sharp 2006). Visiting groups provided food and other items for the dispensary and money for the running of the clinic.[17] The presence of these amenities in *Derechos Humanos*—the clinic, *dispensas*, pre-school, and more than the typical number of church buildings—was a point of pride for many *colonia* residents. People came from near and far, from the *colonias* next door and from ones on the opposite edge of the city, to seek medical assistance, attend school or church, and receive food aid. Within the context of the *colonias* of Matamoros, *Derechos Humanos* emerges as a site of development and progress, and many *colonia* residents gain a sense of themselves as agents of change through their activism.

La Comité and other residents have built upon this sense of optimism to petition the city government for improved services and amenities. *Derechos Humanos* was one of the first *colonias* in the area to receive municipal water spigots and electricity. In 2002, a *lecheria* was inaugurated by the Matamoros mayor and other city officials to provide powdered milk for babies, pregnant women, and the elderly.

Nonetheless, evidence of the limits to what organized residents and *La Comité* could achieve was also clearly present within *Derechos Humanos*. One remarkable sight that struck us on our first visit to the *colonia* (and every visit that followed) was the presence of six large pieces of cement culvert piping on the edge of the wastewater canal at the entrance to *Derechos Humanos*. During a past political campaign just prior to the election, *colonia* residents had been advocating for enclosure of the canal. Doña Rosita explained that government representatives had the pipe pieces delivered to the *colonia* with great fanfare. The local candidate gave a rousing political speech promising that the drainage canal would be enclosed in piping if he were elected. However, the pipe pieces then sat at the edge of the drainage canal for years after the election. Many *colonia* residents pointed to stories like this one to indicate why they organized themselves and sought help from sources other than the municipal government.

The Broader Frame

While *Derechos Humanos* residents have enacted a local politics of place, advocating for and significantly improving

[16] Women were very involved in community organization, arguably more so than men (see also Snell 2001). This fits a pattern that has been increasingly noticed in urban Latin America (see, for example: Stephen 1997; Alvarez *et al*. 1998) and, as well, in movements for environmental justice (see Rocheleau 1996).

[17] While some mission groups from the US put most of their efforts into building houses and try to enter into, as much as possible, a more equal relationship with *colonia* residents, others are more clearly focused on proselytizing and adopt a more superior attitude to *colonia* residents. *Colonos* typically recognized that outside visitors can at the minimum be a source of candy for the kids or more substantial gifts for the adults. While some residents did not appreciate the proselytizing, few rejected the gifts. Nonetheless, the racialized discourses of 'helping,' North vs. South, and modern vs. backward shape each of these encounters, reminding both *colonia* residents and visitors of their places (see Gronemeyer 1992).

colonia life, none of the *colonia*'s problems can be understood in isolation from the region, nation and globe to which they belong. Additionally, most of the external assistance to *Derechos Humanos* has focused on residents' immediate concerns and needs, adequate housing and access to food and water, rather than pushing for deeper political and economic change. Most of the kinds of efforts taking place in *Derechos Humanos* are readily encompassed by a distributive justice framework. Yet the problems facing the *colonia* beg for a perspective that pushes deeper, asking what processes create these kinds of landscapes. Northern visitors who come to 'help' in *Derechos Humanos* seldom made any broader connections between the relative poverty and environmental degradation they observed in the *colonia*, the nearby facilities manufacturing products for export to the US, and their own patterns of consumption. For example, when Jane, a woman who has done missionary work on the Mexican side of the border since 1990, and Josie, a pre-medical student at a US university, were asked about the relationship between US consumption and environmental pollution in the *colonia*, they brushed our questions aside and re-focused the conversation back to their goals of building "houses, benches, and relationships" in *Derechos Humanos*. Likewise, as the members of our research team began to discuss these themes, we became uncomfortable by the realization that the cell phones, digital cameras, and other newly inexpensive items that made our research possible were directly implicated in the larger relations of inequality, of production and consumption, that have created *Derechos Humanos*. Within these tensions and contradictions, our findings in *Derechos Humanos* reinforce some of the key issues raised by critical environmental justice studies, in particular the close ties between consumption, environmental degradation, and economic inequality that the current configuration of global capitalism encourages (Rees and Westra 2003).

Conclusions

The picture we have painted shows residents in a small *colonia* on the US–Mexico border who see their lives as indicators of prosperity and progress. However, these border residents are viewed by those in the North as victims of environmental injustice. These contrasting views reveal paradoxes within the global political economic system, global discourses about place and progress, and within social and environmental movements that aim to address these problems.

The degree to which some of the residents of *Derechos Humanos* have mobilized resources to improve *colonia* conditions is one testament to local community organizing based upon a connection to place, and the way those who are part of the global coloniality can assert their agency. Many residents of *Derechos Humanos* are rightly proud of how they have been able to improve their own situations, and arguably have put into place processes of participatory democracy, in direct opposition to broader political and economic forces. However, by focusing primarily on the place in which they live, they sometimes advocate for actions that may help local residents, but will not change the underlying system that has generated conditions in the *colonia*. For example, in their efforts to cover the drainage canal running through *Derechos Humanos*, local leaders ignore what happens to the effluent once it leaves the *colonia*. In fact, the drainage canal winds out to the northern reaches of the Laguna Madre, the long inland lagoon that stretches southward down the Tamaulipas coast, where the toxic effluent with its large load of heavy metals affects small villages and the fisheries that serve the lower Rio Grande Valley.[18] Thus, to the extent that residents of *Derechos Humanos* push for change in their own community, they may perhaps only be shifting their problems downstream.

Likewise, those residents who aim first and foremost to increase their material prosperity run the risk of accepting some of the premises of the neo-liberal economic order. The primacy of increased consumption as a measure of success and status occludes a deeper critique of the cultural and economic structures that have generated *colonia* residents' marginalization.

What is needed is a scale of analysis that is both broader and deeper, and that brings into view at the same time the purchasing habits of the US missionaries and their house-building work in the *colonia*, the few remaining small farmers in a village in Chiapas and US food subsidy policy, and racialized discourses of progress and environment and the wishes of *colonia* residents. Our analysis also suggests that while traditional place-based environmental justice movements are critical, and can be a powerful way to organize and enfranchise people in marginalized communities (Cole and Foster 2001), that to affect greater change, these movements must embrace a framework of productive environmental justice (Faber and McCarthy 2005). Such a framework focuses specific attention on the links between rampant consumption in the North and environmental degradation and economic devastation in the South, ensures a regional spatial perspective, and would allow residents in *Derechos Humanos* to closely align with a wide range of other movements committed to global justice (see also Bandy 2000).

[18] A further irony here is that some residents help NGOs in their work in these fishing communities, which were devastated by the 2005 hurricanes.

Additionally, Northern visions of environmentally devastated landscapes can easily be seen as part of patterns of discursive violence. In the case of the US–Mexico border, many Northern environmentalists see (and depict) the border as an environmental wasteland, and the people living there as victims of environmental devastation. While ecological destruction of the border is indeed part of the story (and can be a useful narrative for fund-raising and pushing for policy change), it also leaves conventional power relations intact, and does not fairly represent the people living in these areas or their agency. Yet as our research shows, many border residents' self-definitions are based upon having agency and their descriptions of themselves and their lives foreground the ways in which they have been able to transform their situations. Their stories also suggest that what US environmentalists see as unacceptable (living in an industrial and ecological wasteland) might be 'better' than living in a bucolic but deeply impoverished setting elsewhere in Mexico. The net result is that environmentalists might focus primarily on cleaning up the border, rather than pushing for policy changes that could make life in rural Mexico more viable. Tactics of representation thus can undermine attempts to craft a framework of productive environmental justice, and so can limit the effectiveness of the movement for justice and environmental sustainability.

An effective response by Northern environmentalists to the problems of toxic landscapes in the global South must see the people living in these landscapes not as hapless victims but as agents who have had, and continue to have, the power to transform their lives. This kind of engagement will allow US environmentalists to see the broader contours of the problems they are interested in solving, and will allow them to work with, rather than work for, Southern peoples.

There is a critical need for local place-based movements that empower communities to find common ground and connection not only with other place-based activists, but also with a wider range of movements that can challenge global imperiality at many different nodes and levels. A framework of productive environmental justice that attends to how spatial inequalities are created and that highlights the links between economic activities in different places provides a way for that common ground to be found. Within such a frame, the limitations that certain unwitting tactics of representation pose can be overcome, and the struggles for social reality that lie at the heart of these inequalities can be made more legible.

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