Cat Fights on the Rio & Diabolic Caminos in the Desert:

The nature of boundary enforcement

in the United States-Mexico borderlands

Juanita Sundberg
Assistant Professor
Department of Geography
University of British Columbia
Vancouver BC V6K 1M9 Canada
juanita.sundberg@ubc.ca

Dear Reader and Participant in the Berkeley Workshop on Environmental Politics,

Thank you for taking the time to read and discuss my paper. This paper has been submitted to the Annals of the AAG and revisions have been requested. I have begun the revision process and am looking forward to your comments and critiques, which will assist me in improving and completing the paper.

Yours sincerely,
Juanita
Abstract

This paper makes the case for addressing nonhumans as actors and subjects of geopolitical processes such as boundary making and enforcement. Accounting for nonhumans, I argue, compels different and more complex explanations for how the political boundary between the United States-Mexico is made and enforced. The challenge of this line of argumentation is to account for nonhumans as subjects without enacting dualistic ontologies that locate the natural and social in separate realms. I take up this challenge methodologically by employing relational ontologies. I develop my argument in relation to my research in protected areas along the Arizona and Texas southern border to trace how nonhumans are involved in the everyday encounters and negotiations that constitute boundary making. Specifically, I examine how deserts, rivers, Tamaulipan thornscrub, and cats inflect, disrupt, and obstruct the daily practices of boundary enforcement, leading state actors to call for more funding, infrastructure, boots on the ground, and surveillance technology. My analysis suggests that nonhuman actors are integral to understanding ongoing struggles over the configuration of boundary enforcement in the borderlands. I conclude that accounting for nonhumans as political subjects challenges epistemological frameworks and therefore ontologies in political geography.

Key words: boundary making, nonhumans, relational ontologies, materiality, embodiment, US-Mexico border
Cat Fights on the Rio, Diabolic Caminos in the Desert:
The nature of boundary enforcement
in the United States-Mexico borderlands

This paper makes the case for addressing nonhumans as actors and subjects of geopolitical processes such as boundary making and enforcement. Accounting for nonhumans, I argue, compels different and more complex explanations for how the political boundary between the United States-Mexico is made and enforced. To develop this argument, I draw on my research in protected areas along the Arizona and Texas southern border and trace how nonhumans are involved in the everyday encounters and negotiations that constitute boundary making. Specifically, I examine how deserts, rivers, Tamaulipan thornscrub, and cats inflect, disrupt, and obstruct the daily practices of boundary enforcement, leading state actors to call for more funding, infrastructure, boots on the ground, and surveillance technology. My research leads me to conclude that nonhuman actors are integral to understanding on-going struggles over the (re)configuration of boundary enforcement in the borderlands.

The challenge of this line of argumentation is to account for nonhumans as subjects “without resorting to the idea that [they] exist ‘in themselves’” (Castree 2003b: 208). Facing this challenge is especially problematic if the nonhumans in question are conventionally understood as belonging to the ontological realm of nature as opposed to society. I take up this challenge methodologically by employing relational ontologies. In other words, my epistemological approach refuses a priori ontological distinctions between the natural and
the social. And, rather than understanding deserts, cats, and U.S. Border Patrol agents as discreet beings, I treat them as entities that come into being through social relations (Castree and MacMillan 2001; Whatmore 2002). A relational conception of sociality de-centers the human as the privileged if not the only actor of consequence. To operationalize this approach, I use embodiment as an analytical practice to account for bodies – all bodies – in ways that acknowledge materiality/physicality while emphasizing that the properties and capacities of all actors are historically contingent and geographically situated outcomes of association, relations between things (Haraway 1997, 2003, 2008; Whatmore 2002; Bakker and Bridge 2006).

Telling a different and embodied story about the US boundary enforcement regime does not change the fact that the US Department of Homeland Security is currently building fences on the line. It does, however, render possible new explanations for "how (and therefore why) geopower is actually practiced" (Thrift 2000: 380; emphasis in original). Political boundaries may be human constructs, but producing and enforcing them is a “more-than-human” endeavor, to use Sarah Whatmore's expression. Indeed, boundary enforcement entails enrolling a variety of nonhumans (many more than those addressed here) to harden the line and make it durable. In the story elaborated here, pretensions of order and control on the part of boundary enforcement agents are continuously thwarted by the many living beings in the borderlands that knot together in (re)configurations that are for some ways of living together and not others (after Haraway 2008: 289). Seen from this perspective, the escalation of enforcement infrastructure on the border is a tale of failure rather than success.

I begin with an analysis of the place of nonhuman nature in political geography. This discussion provides an entrée into my methodological approach. I then briefly outline US
boundary enforcement strategies in the last decade to show how the natural environment figures in policy. Rather than a review of border policy since the early 1990s, which Joseph Nevins (2002, 2008) effectively covers, this section hones in on how US border policy enrolls nature in boundary enforcement. I then outline two scenarios demonstrating how diverse nonhuman entities constituting borderland environments inflect, disrupt, and obstruct every day practices of boundary enforcement. In my concluding discussion, I summarize how accounting for nonhumans as subjects and actors challenges epistemological frameworks and therefore ontologies in political geography.

I. Approaching Political Geography Through Relational Ontologies

Political geography has had an ambivalent relationship with the nonhuman realm, nature in particular. In the early twentieth century, for instance, the sub-discipline codified the place of nature in political governance by distinguishing between “natural” versus “artificial” boundaries (Newman 2003: 126). This mode of categorization effectively upheld attempts by state agents to ground rationales for the organization of political life in nature (Ó Tuathail 1996; Bassin 2003; Newman 2003; Fall 2005). The late twentieth century witnessed a concerted reaction against geo-deterministic arguments (Agnew, Mitchell and Ó Tuathail 2003; Bassin 2003). Social constructionist approaches were added to the political geography toolkit as a strategy for undermining truth claims based in nature (Dalby 2002). The following passage from Gearóid Ó Tuathail’s (1996) key text in critical geopolitics delineates a social constructionist approach to nature:
The geographical objects (for example, rivers, mountains, islands, continents, oceans), attributes (for example, size, natural resources, relative location, topography, climate), and patterns (for example, heartland-rimland, East-West, New World-Old World, continental-oceanic, land power-sea power) found in geopolitical scenes are not irreducibly transparent entities but socially constructed signs and systems of signification.

From this perspective, nature is not an independent realm that exists outside of or separate from social relations, but is thoroughly social, the effect of historically contingent political practices (see Castree and Braun 2001). This perspective is invaluable for analyzing how the natural environment becomes an object of political struggle (Dalby 2002; Castree 2003a). However, an emerging critique of social constructionism within the discipline of geography at large suggests that this approach risks erasing the materiality of the landscape (Castree and MacMillan 2003).

Although political geographers increasingly turn their attention to the environment, nonhuman nature continues to be treated as object rather than subject of political processes. For instance, in his analysis of articles on the environment in the journal Political Geography between 1992 and 2001, Paul Robbins (2003: 643) found that the natural environment appears either as a backdrop, the stage upon which human affairs are played out, or as “a generalized ‘problem’ of shared absolute scarcity within which political players stake out control.” Either way, Robbins (2003: 643) argues, nature figures as a “somewhat abstract system, far removed from the daily business of everyday life.”

In what follows, I outline an approach that accounts for nonhuman nature as political subject and actor. In so doing, I build on recent calls to develop “a broader
conceptualization of how the ‘political’ is constituted” (Hobson 2007: 251). Feminist political geographers, for instance, have demonstrated the importance of embodying politics and considering everyday, material practices of power (Dowler and Sharp 2001; Hyndman 2004; Mountz 2004; Staeheli, Kofman and Peake 2004; Sundberg 2008). Along these lines, Nigel Thrift (2000: 380) calls for an increased focus on material practices involving bodies, objects, and the seemingly banal details of life, which, he argues, “are crucial to how the geopolitical is translated into being.” For her part, Kirsty Hobson (2007) builds on work in animal geographies to argue for the inclusion of animals as subjects (Wolch and Emel 1998; Philo and Wilbert 2000). In what follows, I contribute to these discussions by exploring methodological tools that promise to enable political geography to better study “the nature of power in the fullness of its materiality” (Barad 2003: 810).


Relational ontologies “refuse the choice between word and world by fleshing out a different conception of fabric-action” (Whatmore 2002: 5). Haraway’s (2003: 4) work on companion species, for instance, tells stories of “co-habitation, co-evolution, and embodied cross-species sociality.” In such tales, “the partners do not preexist their relating; all that is, is the fruit of becoming with” (Haraway 2008: 17). Sociality, then, is understood as constituted in and through encounter and association between what Haraway (2008:5) calls
“ordinary knotted beings” that “gather up those who respond to them into unpredictable kinds of ‘we’.”

As Bruno Latour (2000: 113) suggests, the “we” of society “has to be composed, made up, constructed, established, maintained, and assembled.” Analytical concepts like *network*, *assemblage*, and *collective* are tools for envisioning how contingent associations of actors such as humans, animals, plants, machines, devices like maps or diagrams, or other objects gather in ways that stabilize a particular social order. Inquiring into how such associations knot together is a method for including “the creative presence of nonhuman creatures in the fabric of social life and register[ing] their part in our accounts of the world” (Whatmore 2002: 35-36).

This post-humanist approach entails a radical reconceptualization of who or what counts as political subjects or actors and how agency is enacted. This is because no predetermined characteristics are enlisted to categorize actors; rather, Latour (2005: 71) argues, “*any thing* that does modify a state of affairs by making a difference is an actor” (emphasis in the original). In turn, agency is “cut loose from its traditional human orbit” (Barad 2003: 826). Rather than framing agency as the product of conscious intention, which restricts it to an imaginary figure of the all-knowing human, a relational approach treats agency as doing-in-relation, the outcome of association (Whatmore 2002; Latour 2005). How these emergent associations achieve durability in time and space is the subject of empirical analysis, wherein attention focuses on the *relations* and *practices* that bring them into being (Latour 1999; Whatmore 2002; Barnes 2002; Hinchliffe et al. 2005; Haraway 2008).

Hence, scholars eschew explanation that calls upon external forces to explain historically contingent socio-economic and political formations (Latour 2005). This is not to
say that political geographers, for instance, would disregard neoliberalism or nativism in analyzing the US-Mexico border. Rather, such logics or imperatives are not treated as having an existence prior to the social relations that bring them into being (Mitchell 2002; Latour 2005). For Bruce Braun (2005: 839), ANT and related methodological approaches provide an opportunity to rethink how something like capitalism works by examining the practices and networks that are “stretched across space and stabilized through time, which make possible forms of calculation directed toward the realization of value” (emphasis added).

Rethinking politics along these lines necessitates a performative understanding of how the world comes into being (Butler 1993; Campbell 1996). From this perspective, it is the repetition of everyday discourses and practices – performances – that produce the now (Thrift 2000: 577). Here, the everyday signals a methodological approach, a mode of inquiry that examines how the social comes into being “at the sites of doings and sayings, events and orders” (Jones III, Woodward, and Marston 2007: 267). The emphasis is on practices, doings, and actions; becoming rather than being (Barad 2006; Whatmore 2002).

Research using relational ontologies, especially ANT approaches tend to focus on science laboratories, bureaucracies, or disciplines like economic geography; consequently the nonhumans of interest are more often than not machines or other devices such as diagrams or documents (Hinchliffe 2001; Barnes 2002). To account more fully for the performative enactments of animals and plants, Whatmore (2002) draws on feminist theorizations of corporeality. By considering the flesh of things, Whatmore (2002: 119) calls attention to corporeal differentiation, the particular dispositions and characteristics of specific bodies. Such capacities are “complicated, but neither originated nor erased, by the various ways in which they may be enmeshed in the categorical and practical orderings of people” (Whatmore 2002: 37). The task is to account for the diverse properties, energies,
and potentialities, affects and affordances that flow between all kinds of embodied actors and “through which each takes and holds (and changes) shape” (Whatmore 2002: 119). In short, bodies are understood not only as effects of regulatory norms but also as active agents in the workings of power (Barad 2003: 809).

To summarize, a relational approach to studying political processes moves away from representationalism and anthropocentrism by building on and enacting a post-humanist performativity. Such an approach promises to embody and enliven political geography as well as expand conceptions of politics, political actor, and agency by attending to 1) the properties and capacities of the many embodied beings that bring the world into being; 2) everyday practices and doings-in-relation; and 3) specific sites of politics-in-action. In what follows, I bring this approach to bear on the politics of boundary enforcement on the US-Mexico border.

Doing so presents an additional set of challenges related to the politics of representation (Latour 2004, 2005; Hobson 2007). How to write about what nonhumans are doing on the border when they do not speak or act in the way that humans do? Latour (2004: 69) argues that privileging speech as the property of humans only assumes an a priori human/nonhuman ontology, making it impossible to include nonhumans as subjects. Moreover, Latour (2004: 67-71) points out, all expression is mediated through instruments or mechanisms. Hence, all actors may be said to leave traces, whether these take the form of texts, footprints, or faeces (Hinchliffe et al. 2005). Mountain and desert landscapes, for instance, tell stories through the configuration of vegetation, soil types, and a myriad of other traces which may be interpreted through a variety of methods. The term traces is used to move beyond humanist understandings of talk and text as the only mechanisms through which politics may be registered (Philo 2005).
The task at hand involves following subjects to study how associations in-the-making between humans and nonhumans stabilize and achieve durability – or not – in time and space. I use the term collective to refer to such associations, which form in support of some ways of being together and not others.\(^1\) Studying collectives involves research on the traces created in the process of group formation.

**Methodology to Methods**

My methodological approach and analysis stem from extensive research between 2003 and 2007 on the environmental dimensions of boundary making in the US-Mexico borderlands, with a focus on border-protected areas in the Texas and Arizona. Protected areas with federal designations – National Forests, National Parks, National Monuments, National Wildlife Refuge, and Tribal reserves – compose over forty percent of borderland environments. Of the total 1,900-mile boundary between the United States and Mexico, about 820 linear miles fall within federally owned or managed lands (GAO 2004: 4) (see Figure 1). Given the wide array of protected area designations, each with its own legal framework, I restricted my qualitative research to national wildlife refuges only.
Fieldwork took the form of multi-sited ethnography, wherein I engaged with a heterogeneous group of sites and actors at select times as researcher and participant observer. Here, I draw from semi-structured interviews and field visits with managers of federal lands on the border as well as Border Patrol officials who deal directly with federal lands and land managers. In addition, I conducted interviews with non-governmental organizations whose work centers on environmental protection, as in Defenders of Wildlife, as well as humanitarian groups offering aid to undocumented migrants including Humane Borders, No More Deaths, and Samaritans.

I also spent six weeks as a participant observer and volunteer at No More Deaths’ (NMDs) Arivaca Camp, which provides direct assistance to undocumented migrants in and around Buenos Aires National Wildlife Refuge and Coronado National Forest in southern Arizona. Hiking heavily used migrant trails to search for individuals in distress and leave water bottles at the height of summer, when temperatures regularly reach 110-115°F.
provided insight at the deepest and most corporeal level as to how the desert is involved in boundary enforcement. At the same time, however, this experience allowed me to sense that nature does not participate as intended in the boundary enforcement strategies implemented by federal agents. The sheer vastness of the landscape around Arivaca, with its rolling hills, deep arroyos, and knotted groupings of mesquite trees and prickly pear cacti make it virtually impossible to spot undocumented migrants, whether in distress or traveling in groups of thirty. If it is rare for NMDs volunteers to come across migrants while on active trails, what does this say about Border Patrol agents, who we rarely encountered outside their air-conditioned sports utility vehicles (SUVs)?

To understand why undocumented migrants (and NMDs volunteers) find themselves walking in the desert, I turn to a brief analysis of the place of nature in US boundary enforcement policies since the 1990s.

II. The Place of Nature in Boundary Making

In the mid- to late twentieth century, Joseph Nevins (2002: 147) argues, the divide between the US and Mexico “shifted from a border, a zone of gradual transition, to a boundary, a stark line of demarcation.” Moves to cement this boundary in the late 1980s culminated in the Southwest Border Enforcement Strategy, which the Immigration and Naturalization Service (INS)\(^3\) initiated in 1994 (INS 1996; GAO 2001). In what follows, I outline how this strategy enrolled nature in US border policy and describe the resulting geographical shifts in the routes used by undocumented migrants seeking to enter the U.S.
Detailed overviews of border policies from the 1990s to the present may be found elsewhere (Andreas 2001; Cornelius 2001; Nevins 2002, 2008; Payan 2006).

The Southwest Border Enforcement Strategy centered on “prevention through deterrence,” the aim of which was to “make it so difficult and so costly to enter [the US] illegally that fewer individuals even try” (INS 1996: 3; GAO 1999: 3). To accomplish this goal, the strategy called for new “force-multipliers,” including remote video systems, infrared night scopes, stadium lighting, and motion-detecting sensors as well as landscape-altering infrastructure such as fencing, roads, and land-infill (Bach 2005; GAO 2001). The new equipment required staffing, and the US Border Patrol increased from 4,200 in 1994 to about 12,000 in 2002 (US CBP 2006). All of this was accomplished with increased funding for the INS, which grew from $1.52 billion in 1993 to $5.5 billion in 2002 (US DOJ 2004). During this same period, funding for the Border Patrol increased to $1.2 billion (Inda 2006; US GAO 2001: 5).

The first step of the southwest strategy was to “regain control of major entry corridors along the border that for too long have been controlled by illegal immigrants and [drug] smugglers” (INS 1996: 3). To this end, the policy intended to “close off the routes most frequently used by smugglers and illegal aliens and to shift traffic to areas that are more remote and difficult to cross illegally” (INS 1996: 3; emphasis added). The southwest strategy laid out a plan stretching from California to Texas to shift unauthorized border traffic away from historically popular crossing points in urban centers to “remote” and “difficult” areas where, INS officials calculated, “natural barriers such as rivers, mountains, and the harsh terrain of the desert” would serve as “deterrents to illegal entry” (GAO 2001: 24). As former INS Commissioner Doris Meissner later recalled, INS officials assumed that
Meissner’s statement suggests two things about how the INS enlisted borderland environments in the southwest strategy. First, Meissner’s remarks presume that rivers, mountains, and deserts will serve as “natural barriers”, in part because they are remote and difficult to cross. For instance, Meissner stated that the “geography itself in these very tough places in the mountains and desert should be a deterrent in and of itself” (cited in Nevins 2002: 256 n. 129). Meissner added, “It was our sense that the number of [unauthorized] people crossing the border…would go down to a trickle once people realized what (it’s) like” (cited in Borden 2000). In other words, INS officials reasoned, undocumented immigrants would be deterred once they found out they had to cross through rough terrain. Secondly, INS officials calculated that the remote and difficult terrain would give Border Patrol agents a “tactical advantage” in apprehending those who did attempt to cross (INS 1996: 3). In sum, the southwest strategy treats rivers, mountains, and deserts as objects of geopolitical calculation and instruments of enforcement.
Figure Two: Border Patrol Operations in CA and AZ

The southwest strategy has been successful in its efforts to shift the geographies of border crossings (Cornelius 2001, 2005) (see Figure Two). Before the strategy, the San Diego Border Patrol accounted for over forty percent of the total number of apprehensions along the southwestern border (LAWG 2007). By 1999, traffic had shifted away from this urban center to the Sonora Desert as evidenced by dramatic increases in apprehensions in the Tucson Sector, which is mapped onto the desert. By 1998, the Tucson Sector accounted for thirty-one percent, up from only eight in 1993; by 2004, this sector oversaw forty percent of total apprehensions.

A wealth of research has documented the tragic social consequences of the southwest strategy and the resulting shift in border traffic: an increase in the number of border crossers who have died attempting to enter the US (Andreas 1998-1999, 2001; Cornelius
The number of deaths doubled between 1995 and 2005, reaching an all time high of 472 deaths in Fiscal Year (FY) 2005 (GAO 2006: 4). Mexico's National Human Rights Commission claims that over 3,500 Mexicans have died since the initiation of the strategy in 1994 (Frontera NorteSur 2005). The Coalición de Derechos Humanos (2009) estimates that 4,000 bodies have been recovered from borderland environments. Over 75 percent of the increase in migrant deaths between 1990 and 2003 occurred in the Tucson Sector (GAO 2006: 4) (see Figure Two). In 1998, the Tucson Sector reported 11 deaths; in 2005, the number had increased to 216 (GAO 2006: 4).

The deterrence function ascribed to nature has not been lost on scholars – including political geographers (Cornelius 2001, 2005; Hing 2004; Akers Chacón and Davis 2006; Nevins 2008). Indeed, a recent study by the Binational Migration Institute at the University of Arizona concludes that the increase in deaths in the Tucson Sector is the “inevitable result of the ‘funnel effect’ created by the U.S. government’s ‘prevention through deterrence’ immigration control policies” (Rubio-Goldsmith et al. 2006). While debate centers on who is to blame for the increase in deaths, the actual cause of death is unequivocally related to the risks of environmental exposure in such remote landscapes. Beyond noting the dangerous terrain and the increased mortal risks of crossing, analyses of boundary enforcement give little additional attention to the natural environment (although see Nevins 2008). As a consequence, deserts, mountains, and rivers are naturalized as instruments of enforcement and objects of human intentionality. How nonhuman nature might shape boundary enforcement in other ways is remains invisible.
In the following section, I enrich existing research on US border policies by treating nonhuman nature as *subject* rather than *object* of boundary enforcement practices. To this end, the next two sections demonstrate how diverse nonhuman entities constituting borderland environments inflect, disrupt, and obstruct every day practices of boundary enforcement.

**III. “Nature trumps border seal”**

I begin by engaging with borderland environments to emphasize how their distinct properties and potentialities have come into being through historically specific circumstances. Imperial Beach, CA is the westernmost point of the boundary between the US-Mexico; for about fourteen miles east, the landscape is composed of canyon lands covered in chaparral and coastal scrub. This landscape shifts into the Otay Mountains, which feature communities of oak woodland and pine forests and extremely steep canyons whose walls reach 4,000 feet. Sub-freezing temperatures may be encountered most of the year at higher elevations. This is true of the Tecate Mountains further east as well. East of the mountains, the terrain gradually shifts into the Imperial Desert; here, the border is paralleled by the All-American canal for forty-four miles. The twenty-one foot deep canal, which is the width of a football field, was unlit and unfenced until recently.

The Imperial Desert forms part of the Sonoran Desert, which spreads out over southern Arizona and northern Sonora, Mexico. The desert is a place of extremes: temperatures regularly reach between 105°F and 120°F in summer, and are extremely cold on winter nights. There is little to no surface water; either there are no rains or there are
torrential downpours with the summer monsoons, which fill desert washes and canyons with rushing water and cause the temperature to drop dramatically. Magnificent saguaro cacti are both emblematic of and endemic to the Sonoran Desert, and are accompanied by various and unique communities of animals and plants. Bighorn sheep, Sonoran pronghorn, and mountain lion roam these desert lands along with smaller creatures like the ubiquitous cottontail and antelope jackrabbits, coyotes, Gambel’s quail, and numerous venomous creatures, including the Gila Monster, Diamondback rattlesnakes, and the poisonous Giant Desert Centipede (Broyles 2003; Miller and Nelson 1996).

Moving east, the Chihuahuan Desert stretches over southern New Mexico, west Texas and Chihuahua, Coahuila and further south into Mexico. At a higher elevation than the Sonoran Desert, temperatures are milder in the summer, but colder in the winter as northerly winds sweep through. With less than 10 inches of rain per year, and few urban areas, the Chihuahuan Desert is a vast place made up of Mexican and common prairie dogs, American bison, pronghorn, javalinas, black-tailed jackrabbits, creosote bushes, agave plants, mesquite trees, prickly pear, native grasses and other creatures found nowhere else (WWF 2001a).

Both the Sonoran and Chihuahuan deserts are dotted with “sky islands,” forested mountains separated from each other by vast expanses of desert and grassland plains. The sky islands are composed of unique communities of plants, animals and other living beings. Several male jaguars have begun to include these areas in their migration routes decades after efforts to eradicate the grand feline (Blakeslee 2006; Nauman 2006). Black bears too have begun crossing the Rio Bravo from Mexico into west Texas to re-colonize areas from which they had been eradicated (McKinney 2006).
Following the Rio Grande River to the east and south, the landscape eases into rolling grasslands and Tamaulipan Thornscrub made up of mesquite and acacia trees, and prickly pear cactus along with patches of sabal palms. This region is home to many creatures, including javalinas as well as ocelot and jaguarundi, two small felines. In addition to the hundreds of bird species that make these brushlands their home, including the Grey Hawk, Altamira oriole, Green Jay, Great Kiskadee, and the endearing Plain Chachalaca, thousands of migratory birds funnel through the Rio Grande Valley (actually a delta), stopping here to rest on their journeys to and from Central and South America (WWF 2001b).

With some important exceptions, including San Diego, CA and the McAllen-Brownsville corridor in the Rio Grande Valley, borderland environments fit the INS’s (1996) characterization as “remote,” “difficult,” and “open.” However, as illustrated here, these places have been produced as such. Although space constraints preclude an extensive discussion of human-land relations in these areas, it is important to note that indigenous communities made their homes here since time immemorial (Webster et al. 2008). Beginning in the fifteenth century, Spanish explorers initiated processes of colonization, fundamentally transforming human-land relations by bringing diseases and attempting to force indigenous communities into nucleated settlements (Anderson 1999, 2005; Chipman 1992). The establishment of the boundary between Mexico and the United States and subsequent acts of dispossession led to a depopulation of much of the borderlands in the late nineteenth century (Menchaca 2001).

This process of depopulation was significantly furthered throughout the twentieth century, as land along the border with Mexico was brought under federal jurisdiction (Annerino 1999). Today, over forty percent of borderland environments are federally owned
or managed lands (GAO 2004: 4) (see Figure 1). This history has resulted in the creation of vast, uninhabited areas along the political boundary, marked historically by nothing more than a river or a rusty barbed wire fence stretching over desert sands, rocky riverbeds, and mountain slopes.

In Arizona, more than 85 percent of land along the border and 62 percent of land area within 100 miles is federally owned or held in trust for Native American nations (Defenders 2006: 12) (see Figure Two). For instance, the Barry M. Goldwater Gunnery Range, Cabeza Prieta National Wildlife Refuge (NWR) and Organ Pipe Cactus National Monument (NM) span over 123 miles of border. On the eastern boundary of Organ Pipe Cactus NM is the Tohono O’odum Nation and further east is Buenos Aires NWR. Texas alone encompasses over 50 percent of linear border miles, although federal lands represent a mere 230 linear miles (USGS 2001). Much of this is concentrated in the Rio Grande Valley, where the Lower Rio Grande Valley National Wildlife Refuge Complex encompasses 66,000 acres and includes over 100 tracts extending along 275 river miles of the Rio Grande River (US F&WS and DOI 1997).

While the mandates governing federal lands vary from protecting wildlife populations and their habitats, preserving historic sites, providing recreation areas, to holding native land in trust, most constrain the kinds of landscape alterations permitted. Some protected area designations such as national parks and national wildlife refuges prohibit human inhabitation therein and include strict regulations on roads and infrastructure, such as lighting and fencing. This is particularly the case in national wildlife refuges and areas legally designated as wilderness, where legislation restricts access to existing roads and prohibits travel off-road.
In their present (re)configuration, then, borderland environments present innumerable difficulties and dangers to humans traveling on foot. In the desert, human beings need at least two gallons of water per day to survive in the summer, making it physically impossible to carry enough water over long distances (Urrea 2004). Even privileged hikers like author and photographer John Annerino (1999), with legal rights to be in southwest Arizona’s protected areas and the finances to purchase high-tech hiking equipment must plan their trips carefully and in Annerino’s case travel during the monsoon season and hope that existing watering holes are full.7

In sum, historical processes of dispossession and protected area legislation have brought borderland environments into being as “remote,” “open,” and “difficult to cross.” Even so, the particular biophysical characteristics of these environments do not originate in nor are erased by the ways in which they have been constituted in relation to these specific socio-political conditions. In the most simplistic terms, this is also to say that the desert is extremely dry and hot with sparse vegetation offering little in the way of shade and the brush on the Rio Grande is dense and thorny. How, then, do borderland environments as presently (re)configured inflect the daily practices of boundary enforcement?

III.a. “It’s just amazing that we can catch anybody!”

Although the INS assumed that borderland environments would serve as a deterrent, unauthorized border traffic shifted to the open and remote areas of eastern California and Arizona in response to Operation Gatekeeper in California and Operation Safeguard in Arizona in the late-1990s (see Figure Two). Indeed, the characteristics of these landscapes drew border crossers whose passage was blocked in other areas. Although it is difficult to estimate how many individuals are using federal lands to enter the U.S., given that
apprehension data is calculated in relation to Border Patrol sector rather than land type, there are a few hints of trends on the ground. The Department of the Interior, which oversees much of the public lands along the border estimates that the number of people apprehended on its lands in Arizona increased from 512 in 1997 to 113,480 in 2000 (GAO 2004: 13). In Cabeza Prieta NWR, land managers estimate that 1,000 undocumented immigrants cross through its lands each week (GAO 2004: 14). An estimated 200,000 to 300,000 individuals pass through Buenos Aires NWR per year (US F&WS 2007). In the Rio Grande Valley, refuge law enforcement and Border Patrol officials calculate that 60 percent of those individuals apprehended in the Border Patrol’s Rio Grande Valley Sector (formerly the McAllen Sector) were located in refuge lands. According to this measure, if 108,000 individuals were apprehended in the sector in FY 2001, then about 65,000 were in refuge lands.

A law enforcement officer for a Texas national wildlife refuge points out why the refuges are attractive entry points:

If you want to engage in subversive activities, which is [sic] narcotics, smuggling, you want to avoid being seen. … And, a lot of these areas are attractive because they’re remote, they’re hard to watch, and hard to access by law enforcement, by traditional law enforcement means; um, your potential for witnessing by the community is minimalized [sic], and you can relatively, you know, [in] most areas, conduct your activities without ever being seen or caught. What makes the refuge and the national parks attractive to go to [for recreation] also makes it attractive to conduct smuggling.
In a similar fashion, a flyer entitled “Safety Precautions” offered to visitors at Buenos Aires NWR suggests that the same attributes that make the refuge attractive to nature lovers – “grasslands, open spaces, wildlife and water” – make it “an ideal point for illegal entry into the United States” (US F&WS n.d.).

Not surprisingly, the biophysical features that attract undocumented migrants actually make it difficult for the Border Patrol to police the boundary. Indeed, the sheer vastness of borderland environments in some areas, along with rugged or mountainous terrain in others confounds policing efforts. “Just the vastness of the desert out there,” remarked a Border Patrol officer in Arizona, “it’s just amazing that we can catch anybody!” In contrast, the brush covering the banks of the Rio Grande in south Texas is so thick, it provides cover for undocumented migrants wishing to enter the US without detection and in some areas it extends so far north that they are able to reach a road without risking exposure.

Moreover, the historical and political processes described above make lands along the border relatively inaccessible due to the lack of roads. Although Title 8 US Code Section 1357(1)(3) entitles the Border Patrol authority to access all land “within a reasonable distance of the border” (MOU 2001), there are few roads along the border or to it. This is especially the case in Arizona’s southwest corner, where Barry M. Goldwater Gunnery Range, Cabeza Prieta NWR and Organ Pipe Cactus NM encompass approximately 4,100 square miles of desolate desert lands (Annerino 1999; see Figure 2). Here, the borderlands are characterized by basin and range formations, sand dunes, and ancient lava flows. The vegetation changes with elevation and other factors; in the desert flats, creosote bushes and the occasional sahuaro are all that may dot the landscape for miles. Water may be available
in springs, rock tanks called *tinajas*, or aluminum tanks the Fish and Wildlife Service provides for the Sonoran pronghorn, on the endangered species list in the US.

In Cabeza Prieta NWR, “there’s only three roads essentially that allow travel…through the wilderness areas,” land managers explained; “so, logistically speaking, it is a hard place to patrol.” Agents patrolling Cabeza Prieta NWR are not “able to get down to the border,” said a Border Patrol officer. The only road to the border is the Camino del Diablo – the Devil’s Highway – named as such to acknowledge the extreme hardships suffered by European explorers and migrants traveling across the Sonoran Desert on this ancient route from the 1540s to the California gold rush (Annerino 1999). Today, the 130-mile Camino is one of the few roads in southwest Arizona.

However, in many areas, the Camino does not actually reach the line diving the US from Mexico. A Border Patrol officer explains why:

The Camino del Diablo runs east and west and it parallels the border in a sense. However, in some places it is 3 miles [from the line]: some places it is right on the border, some places it’s 6 miles, sometimes it’s 12 miles, just depending. So what it does, if you don’t have an access road on the border, let’s say they have 12 miles – cross-border illicit activity has 12 miles – to cross before you ever intersect it. You’re not cutting it at the primary place where you should be.

Moreover, traveling along the Camino del Diablo is a feat in and of itself. Agents from the Border Patrol’s Wellton and Ajo Stations in the Yuma and Tucson Sector respectively might spend two to four hours of their shift just bumping along the camino to reach the political boundary.
A report to Congress underscores how borderland environments inflect the daily practices of boundary enforcement in crucial ways. “The remoteness of many Federal lands,” the report suggests, mean that federal land managers and law enforcement officers “face situations where they are at personal risk and must deal with overwhelming odds” (U.S. DOI et al. 2002: 3). Due to the long distances and rugged terrain, the report added, “timely assistance” or “back-up” is not always possible. In western Arizona, the sheer vastness of the desert lands means that agents who travel alone or in pairs face many potential risks. This vulnerability was made abundantly clear when a Mexican drug smuggler chased by Mexican police killed Chris Eggle, a park ranger at Organ Pipe Cactus NM (Fialka 2003). Though nothing prevented them from crossing the line, the Mexican smugglers’ truck got stuck in “moon dust” – the vernacular term for desert soils that have been reduced to a fine powdery substance by repeated compaction. Trapped by moon dust, the smugglers engaged Mexican police in a gunfight. As Eggle approached one of the smugglers to arrest him, he was shot with an AK-47.

Although Congress is concerned about the risks to federal agents, the Sonoran Desert presents even more dangers to undocumented migrants who travel without weaponry or SUVs full of water bottles. At the western boundary of the Border Patrol’s Yuma Sector, it is about nineteen miles from the border to Interstate Highway 8; on the eastern boundary, it is seventy-nine miles – if you walk in a straight line that is. “But nobody walks in a straight line,” said a Border Patrol officer; “well, you could, but you can’t in this area ‘cause of the mountains; you have to go around, go east and west.” In the summer, he said, it takes border crossers “anywhere from 4 to 5 days to reach the interstate; you can’t carry enough water. … But we still have people making it; they’re not in very good shape
when they get to the highway.” In the winter, the trip is shorter, but the journey is equally dangerous due to extremely low nighttime temperatures.

In addition, the landscape in Arizona’s southwestern corner includes few if any markers that might direct the journey. In 2001, the inexperienced guide for a group of twenty-seven undocumented migrants got lost in Cabeza Prieta NWR. The men wandered about the desert, climbing mountains in an attempt to orient themselves; over the course of 5 days, fourteen of the men succumbed to hyperthermia, a horribly gruesome death (Urrea 2004). Another five stumbled upon the Camino and were found by a Border Patrol agent, who then initiated a search for the others.

In sum, the desolate desert and its diabolic caminos are significant players in the politics of boundary enforcement, even as the desert’s specific properties are framed here as “always and already an ongoing historicity” (Barad 2003: 821). Instead of helping to enforce the border, the desert hinders and even endangers, not only law enforcement personnel but also undocumented migrants drawn by the lack of infrastructure. The INS may have enlisted mountains, rivers and deserts to aid them in their enforcement efforts, but, as my research shows, these so-called natural barriers continually disrupt attempts to enforce the boundary. As I briefly detail below, this state of affairs resulted in attempts to override existing environmental legislation to give the Border Patrol increased access to public lands.

III.b. The ABCs of Boundary Enforcement

After nearly a decade of increasing apprehensions in the Tucson Sector, the Arizona Border Control Initiative (ABCI) was announced in March 2004, promising to gain operation control over the “weakest spot in our border” by fostering multi-agency coordination, enlisting additional “boots on the ground,” and adding new technology (Carroll 2005; U.S. DHS 2004; U.S. ICE 2004). The $10 million initiative included adding
200 Border Patrol agents to the Tucson Sector, to bring the total up to 2,000. Funds were provided for remote video cameras, electronic ground sensors, and unmanned aerial vehicles – “like those used by Israel to monitor the Gaza Strip,” one journalist dryly noted (Marek 2004).

Not included in the public announcements, but later revealed by Arizona journalists, the ABCI was an explicit attempt to give the Border Patrol increased access to – and therefore control over – federal protected areas by permitting new roads, off-road travel, unlimited access for motorcycles and all-terrain vehicles, horse patrols, and backcountry camps in Cabeza Prieta NWR and Organ Pipe Cactus NM (Dykinga, Annerino and Broyles 2004; Slattery 2004; Tobin and Marizco 2004). Although legislation prohibits these activities and all federal agencies are subject to these regulations, the Border Patrol insists that off-road travel is necessary to pursue smugglers and undocumented immigrants. Likewise, backcountry camps are needed, an officer suggested, to place agents “right smack in the middle” of the activity, without having to spend time and resources traveling to and from their patrol stations.

The ABCI was put into motion by circumventing procedures required under the Endangered Species Act and the Wilderness Act. A Fish and Wildlife Service official explained that the Border Patrol accomplished their goals by enlisting a legal mechanism in the Endangered Species Act called an Emergency Consultation, which allows actions to move forward in the case of exigent circumstances, an ill-defined term built into existing legal frameworks to ensure health and human safety. Boundary enforcement officials claimed the ABCI was necessary to save the lives of undocumented migrants. Due to the exigent circumstances clause, the Border Patrol avoided going lengthy and costly regulatory processes to obtain federal approval for their actions. Hence, as Defenders of Wildlife
reported (2006: 26), “the Border Patrol has been implementing [ABCI] for nearly two years without completing the environmental analysis and notification and involvement of the public required under the Endangered Species Act and National Environmental Policy Act.” The implications of bypassing federal legislation extend far beyond this small section of the Sonora Desert, as discussed in the next section.

Although the safety of migrants is important to the Border Patrol, I would argue that the ABCI was driven primarily by failed attempts to master the remote terrain in Arizona’s desert borderlands. Indeed, the ABCI stands as a concrete example of how border enforcement strategies are compelled by and co-shaped through their lively encounters and negotiations with nonhumans whose particular properties matter to politics. Through the ABCI, the Border Patrol was able to expand its scope by obtaining new technologies but also mechanisms to bypass federal environmental legislation intended to protect the habitat of nonhuman communities.

In sum, boundary making operations are (re)configured in relation to a landscape that is constituted in and through many living beings whose particular properties matter to politics. But even if nonhumans matter, the skeptic may be asking, does this mean they have agency? In the next section, I focus more specifically on this question to demonstrate why a post-humanist conception of agency matters to understanding how geopower is practiced. I do so by entering into the fray, this time in the Rio Grande Valley of south Texas.

IV. Cat Fights on the Río

In the mid-1990s, apprehensions in the Border Patrol’s McAllen Sector (now the Rio Grande Valley Sector) began to rise, reaching eighteen percent of the national total by 1997,
or 243,793 of 1,368,707 (LAWG 2005). At that time, the McAllen Sector began developing plans for Operation Rio Grande, a component of the Southwest Border Enforcement Strategy (INS 1996) (see Figure Three). The project proposed installing about fifty miles of stadium-style lights along the riverbank, eight miles of fencing in urban centers and eight boat ramps; mowing brush at the river’s edge; improving roads; and installing Remote Video Surveillance systems (EA 1999 1-2; Meyer et al. 1999: 3). The project’s prime target: the brush on the riverbanks, which provides ideal cover for undocumented migrants. An assistant sector chief was cited as saying: “There’s just so much vegetation. If you can’t eliminate it, at least you can illuminate it” (Katz 1997). To this day, Border Patrol officials are fond of explaining that the lights take “the darkness away from the criminal element.”

Figure Three: Border Patrol Operations in the Lower Rio Grande Valley, Texas
What the lights might do to nocturnal animals and insects was not their concern, however. And yet, the Border Patrol soon came to discover that Tamaulipan Thornscrub is not just brush on the riverbanks, but exists in relation to other actors who gather to ensure its survival. In what follows, I analyze how the brush, its feline inhabitants, and their human allies challenged the Border Patrol’s authority and altered the practices of boundary enforcement in the Rio Grande Valley. My goal is to show how nonhumans shape (geo)political processes by reframing agency in terms of doing-in-relation.

IV.a. Illuminating the Brush

Although the Border Patrol proposed some mowing on the river’s banks, federal legislation restricts them from eliminating much of the brush because it grows within the boundaries of the Lower Rio Grande Valley National Wildlife Refuge Complex. Given that approximately ninety-five percent of the region’s brush vegetation has been cleared, the US Fish and Wildlife Service (F&WS) and supporting NGOs have been working for the last two decades to create a 132,500-acre contiguous wildlife corridor on the banks of the Rio Grande River to protect and restore this habitat, which is home to approximately 18 species listed by the federal government as threatened and endangered (F&WS, DOI 1997: 8). Two small felines, the ocelot and jaguarundi are included in the list of endangered species. Though small, the cats have come to represent as the valley’s charismatic megafauna. In short, the brush and its many inhabitants exist in relation to a community of human allies, who in turn are empowered by a wide array of federal legislation that they may call upon to ensure the protection of plants, animals, insects, etc.

Since the Border Patrol was prohibited from eliminating the vegetation, they aimed to illuminate it. On 20 June 1997, the Chief Patrol Agent of the sector contacted an individual at the F&WS regarding the agency’s proposal to install “stadium style lights
directed at the floodway of the Rio Grande” (F&WS ES, 1997). The letter was forwarded to the appropriate individual, who replied on June 25, 1997 that the F&WS was concerned about the “potential effects [of the proposed lights] on the endangered ocelot and jaguarundi.” The letter explains that the two cats are nocturnal and the F&WS works to maintain a densely vegetated travel corridor so they may travel and hunt at night. If the Border Patrol’s proposal were not altered to avert adversely affecting the cats, the letter indicates, the agency would be required to enter into formal consultation with the F&WS as required by Section Seven of the Endangered Species Act.

This letter exchange between the Border Patrol and the F&WS is significant in (at least) two ways. First, it suggests that the Border Patrol did not appear to understand the institutional network in which they are embedded, which includes procedures they are required to follow as a federal agency proposing an action on a federally designated NWR with endangered species. Another letter from the F&WS to the McAllen Sector’s Chief Patrol Agent dated September 8, 1997 supports this hypothesis. Here, the Chief is informed: “activities which involve Refuge lands must be coordinated with the Refuge Manager prior to such activity” (US F&WS 1997: 1). In short, the agency was blind to the network of institutions and legal mandates acting in association with the brush to ensure the livelihood and well being of the many nonhuman creatures making it their home.

Secondly, the letters bring to light the privileged position of the ocelot and jaguarundi in south Texas, the northern most extent of their hemispheric range. Only about 100-120 ocelots inhabit the area, while a live jaguarundi has not been sighted in decades, though one was found dead along a roadway in 1986 (EA 1999; Gee 1997; IUCN 1996; Schiller 1997a). Nonetheless, their status as endangered under the Endangered Species Act compels a wide range of actors into action, including numerous legislative acts and treaties,
land managers, plants and animals, environmentalists, scientists, nature enthusiasts, cameras
to document the nocturnal activities of ocelot and jaguarundi, and a land acquisition
program funded by the federal government and private NGOs. Studies of the cats’ behavior
and disposition compel the F&WS to frame them as nocturnal and preferring “extremely
dense, impenetrable brush thickets for traveling and breeding” (F&WS and DOI 1997: 26).
In the US, this type of brush exists only in south Texas and, as mentioned, has been
significantly reduced due to clearing for agriculture and urbanization; thus, efforts center on
protecting and creating habitat for the felines as well as numerous other species. In short,
the cats are constituted in relation to a group of human and nonhuman actors that gather in
ways that protect habitat; indeed, they cannot be understood outside of it. I call this
assemblage of heterogeneous actors the south Texas Thornscrub collective.

IV.b. Lights, Action, Cat Power

The cats became even more important in shaping the politics of boundary
enforcement in south Texas after the INS held a closed-door meeting with officials three
weeks into Operation Rio Grande in mid-September 1997. Immediately afterwards, Texas
Republican Senators Kay Bailey Hutchison and Phil Gramm wrote a letter to then
Secretary of the Interior Bruce Babbitt complaining about what they called an “outrageous”
situation. Specifically, the senators were upset about the F&WS’s suggestion “that the use of
bright lights as part of the Border Patrol’s new Operation Rio Grande may be disturbing
endangered nocturnal ocelot and jaguarundi cats” (Hutchison and Gramm 1997). “As
concerned as we are about endangered species of animals, we are even more concerned
about an endangered generation of children in America,” one in four of who, according to
the senators, had been offered illegal drugs from Mexico in the past year (Hutchison and
Gramm 1997). In voicing their objections to the cats’ privileged position in the south Texas
Thornscrub collective, the senators enrolled children and drugs into a contingent gathering of actors working to enforce the boundary, which I call the boundary enforcement collective. However, children and drugs never took hold to make a difference in border politics the way the cats did.

For months, the local papers carried articles about what one journalist called “a cat fight between two federal bureaucracies” (Katz 1997). Meanwhile, the F&WS continued its informal discussions with the Border Patrol, which involved field visits to negotiate the actual position of the stadium lights to prevent them from shining directly on refuge tracts in the wildlife corridor (Gee 1997). Informed of the federal regulations it was required to follow, the INS issued a draft Biological Assessment (BA) in September 1998 and a Draft Environmental Assessment in October. The assessment concluded: “because of the close cooperation between the USBP and FWS in determining the project actions in general and the location and direction of the lighting in particular and because FWS has final review over these actions, the project is not likely to significantly adversely affect any listed species addressed in this BA” (EA 1999 E-27).

However, the INS’s conclusions were not satisfactory to south Texas environmental NGOs, whose members had worked with the F&WS for two decades to raise political and financial support to extend the existing refuges and create a wildlife corridor on the banks of the Rio Grande. The south Texas Thornscrub collective moved to enlarge its network by enlisting the support of immigrant rights organizations, concerned that undocumented migrants were simply being pushed into “more dangerous terrain to the east and west of the operation” (Schiller 1997b). This unusual assemblage came together to address then INS Commissioner Meissner; their letter states that the draft Environmental Assessment “is grossly inadequate” (EA 1999). When the groups received no response, the Sierra Club,
Frontera Audubon, and Defenders of Wildlife sent a sixty-day notice of intent to sue the INS and the Corps of Engineers in March 1999 over violations of National Environmental Protection Act (NEPA) and the Endangered Species Act (ESA) (Meyer et al. 1999). Months later, the environmental groups filed their lawsuit in federal court.

In suing the INS, these groups followed a US trend in using litigation to force federal agencies to comply with their own mandates. By enlisting the minutia of federal regulations, expensive lawyers in Washington D.C., and the vagaries of the courts, the south Texas Thornscrub collective enlarged its network, thereby strengthening its power in relation to the boundary enforcement collective. In a settlement reached with the Department of Justice, the Border Patrol agreed to enter into formal consultation with the F&WS and complete an Environmental Impact Statement, as required by the ESA.8

The agreement represented a victory for the south Texas Thornscrub collective. As Defenders of Wildlife’s vice president for law stated: the federal government “has finally admitted that it is fully bound by environmental laws” (U.S. Visa News 2000). Senator Hutchison, in contrast, reacted negatively: "I cannot imagine a group that would value the habitats of a nocturnal ocelot over keeping drugs out of our country that are preying on our children" (U.S. Visa News 2000). In the Rio Grande Valley, then, the ocelot was a key actor in the south Texas Thornscrub collective.

In sum, the ocelots and their existent/professed need for dense brush and the cover of darkness to hunt came to matter tremendously to the politics of boundary enforcement and indeed compelled the Border Patrol to change its plans to account for these actors. Attending to the ways in which the south Texas Thornscrub collective co-shaped political outcomes along the Rio Grande entails an openness to the brush and the ocelots as
embodied actors whose particular properties and dispositions have the potential to affect every day practices. In turn, agency must be treated as doing-in-relation, rather than an attribute or intention; the outcome of associations between embodied beings, a collective enactment of being as becoming.

But how does this framing of agency account for power asymmetries between differing communities? This is a crucial question, for after the tragic events of September 11, 2001, the strength of the south Texas Thornscrub collective was challenged, its durability tested. In what follows, I explore this question in order to critically examine the political import and efficacy of relational ontologies to understanding how geopower is practiced and political boundaries enforced.

**IV.c. Cat Power in Question**

In the post-9/11 context, terrorism, immigration and border security were conflated, leading to the creation of the Department of Homeland Security (DHS) in 2002 (Payan 2006; Coleman 2007). In this politically charged context, the threat of terrorist attacks increasingly has been called upon to justify new enforcement measures along the border. And, gaining “operational control” of the border requires the boundary enforcement collective to enlist new allies. One such ally is the Real ID Act, which the US Congress passed in March 2005. According to Republican Congressman James Sensenbrenner, the Real ID Act “is aimed at preventing another 9/11-type attack by disrupting terrorist travel and bolstering our border security” (US HRCJ 2005). Attached to this act is a provision giving the DHS secretary “the ability to waive laws necessary to complete border fences and roads to improve national security” (US HRCJ 2005). The provision exempts the DHS from all federal, state, tribal and municipal laws (Nuñez-Neto and Garcia 2007b). No other
law in US history has given a federal agency the ability to so completely and unilaterally sidestep federal legislation (Mumme 2006).  

The provision was included at the instigation of California politician Duncan Hunter and others frustrated by the unique collective of human and nonhuman actors working together to thwart construction of the last three miles of the triple border fence in San Diego. In 2004, for instance, the California Coastal Commission had refused to grant Customs and Border Protection the permits required to complete the last three miles of fencing on the grounds that it was detrimental to the Tijuana River National Estuarine Research and Reserve (Nuñez-Neto and Garcia 2007b; Mumme 2006). Soon after its passage, DHS Secretary Michael Chertoff invoked the Real ID Act to complete the fencing project by waiving the requirements of National Environmental Protection Act, Endangered Species Act, Coastal Zone Management Act, Federal Water Pollution Control Act, National Historic Preservation Act, Migratory Bird Treat Act, Clean Air Act, and the Administrative Procedures Act (Nuñez-Neto and Garcia 2007b).

This waiver significantly weakens the power of nature-inclusive collectives in the borderlands. Without federal environmental legislation to contest the actions of the boundary enforcement collective, their strength and durability is severely limited. Meanwhile, the boundary enforcement collective has been extended and fortified. So empowered, Chertoff again invoked the act in January 2007 to build 37 miles of fencing along the Goldwater Range’s southern border, against the wishes of the Marine Corps range manager, who supported the vehicle barrier that was already in process (Nijhuis 2007). Chertoff then invoked the waiver authorizing construction of 70 miles of fencing/walls along
the Rio Grande, some of which borders the northern end of several tracts in the wildlife refuge corridor (U.S. DHS 2008; Meserve 2008; Sullivan 2008).

Even as the waiver built into the Real ID Act allows boundary enforcement officials to act with impunity, adding the waiver to its arson does not produce a clean slate onto which they may project and operationalize exclusionary territorial strategies. This is also to say that reconfiguring the material/legal/discursive context does not empty the borderlands of the many human and nonhumans that constitute this place. Indeed, the boundary enforcement collective continues to come up against gatherings of humans and nonhumans who obstruct and challenge their presumed authority to dictate life, livelihood, and wellbeing in the borderlands.

V. Concluding Discussion: methodologies for a post-humanist politics

In this account of the US-Mexico border, I take deserts, rivers, brush and ocelots seriously to demonstrate how their biophysical properties and capacities, as well as the ways in which they are gathered in collective arrangements make a difference to everyday practices of boundary enforcement. Treating their embodied particularities and affordances as always and already the outcome of (re)configured associations does not in any way erase or diminish their relevance to emergent practices and relations. As shown here, the vast Sonora Desert of diabolic terrain and the Rio Grande Valley of thorny scrub and elusive ocelots present on-going challenges to boundary enforcement. Moreover, these so-called natural entities are constituted in relation to and enrolled in highly populated and regulated communities made up of federal land managers, federal regulations like the Endangered
Species Act, environmental NGOs, environmental lawyers, and environmental activists. The daily practices of these collectives quilt relations in time and place to support some ways of being together rather than others.

This account of boundary enforcement on the US-Mexico border is very different from that which has been made familiar. Instead of treating boundary enforcement as the outcome of geopolitical forces or as the discursive affair of human actors, my research demonstrates that it is an embodied, material process requiring strategic arrangements of humans and nonhumans. Such arrangements must be continuously brought into being and performed through daily discursive and material practices. Seen from this perspective, political boundaries are achievements rather than foundations of geopolitical life.

Why is it important to tell a different story about boundary enforcement on the US-Mexico border, one that addresses nonhuman subjects? What is at stake politically for critical geopolitics and political geography more generally? For one, more-than-human geographies of boundary enforcement de-center the human as the principal, if not the only actor on the stage. The political significance of this move is to disrupt the “purificationary conceit” of wannabe moderns (Philo 2005: 825), showing us to be the intimately connected, intra-dependent, indeed co-evolved beings that we are (Latour 1995; Barad 2003; Haraway 2008).

In addition, more than human geographies draw attention to the discourse of species (Wolfe 2003) that constitutes political geography in ways that exclude all but humans. In allowing a species bias to configure geographical analyses of the world, our geo-graphing practices become mere reflections of what we already (want to) know and see. In contrast, attending to nonhumans promises to transform geo-graphing practices by developing more objective studies in the sense recently outlined by Latour. Latour (2000: 116) argues that
objectivity comes from creating the conditions in which subjects/things are “able to object to what is said about them…and to be as capable to raise their own questions in their own terms.”

This framing of objectivity also acknowledges the role of nonhumans in producing knowledge. As Karen Barad (2003: 829) suggests, “practices of knowing cannot be fully claimed as human practices.” This is not simply because “we use nonhuman elements in our practices,” she adds, but also because we are “part of the world-body space” (Barad 2003: 829). “We do not obtain knowledge by standing outside of the world; we know because ‘we’ are of the world,” argues Barad (2003: 829, emphasis in original). My efforts to embody and enliven geographies of the US-Mexico border are rooted in corporeal engagements and represent my attempts to “learn to be affected” in new ways by seeing, smelling, and feeling the many embodied beings in the borderlands (Hinchliffe et al. 2005: 248). Developing new and creative modes of engagement work to cultivate “the ability to address nonhumans as colleagues in the process of producing knowledge that makes new knowledge possible” (Hinchliffe et al. 2005: 253). Such efforts form part of the humbling process of acknowledging that geographers are part of, rather than standing above the world performing the “god trick” that passes for objective knowledge production (Haraway 1991).

Being of the world also means that geographers are implicated in the very practices of boundary making outlined here. Rather than sanctioning political boundaries as an inevitability in our daily lives, geographers might tell stories to reveal the collective performances that go into (re)producing them. To do so is also to be accountable to, and participants in communities and performances that are for some ways of living together and not others.
References


---

1 While I borrow the term collective from Latour (2004), I use it in a slightly different way. For Latour (2004: 59, 238), the collective alludes to the “progressive composition of the common world” that includes humans and nonhumans. Latour distinguishes the collective from the term society, which is assumed to consist of humans only. My use of the term collective more closely resembles the way others use network or assemblage. After Haraway (2008: 289), I suggest that collectives stabilize in ways that are for “some ways of getting on together and not others (emphasis in original).

2 I interviewed land managers in six national wildlife refuges (NWR) in Texas and Arizona, including the Lower Rio Grande Valley NWR, Santa Ana NWR and Laguna Atascosa NWR in Texas and in Arizona, Buenos Aires NWR, Cabeza Prieta NWR, and San Bernadino NWR. To ensure anonymity and confidentiality, I refer to all NWR personnel as “land managers” regardless of their actual position and I provide only the name of the state in which they are located.
3 In 2002, the INS was dissolved, its functions incorporated into the Department of Homeland Security (DHS) and divided into two branches: the Bureau of Citizenship and Immigration Services in charge of processing immigration applications and the Immigration and Customs Enforcement (ICE) bureau in charge of enforcement. The Border Patrol is included in ICE. I will use “INS” when referring to its operations prior to its dissolution.

4 Crossing the US-Mexico boundary without authorization has always been hazardous (GAO 2006). However, the US Border Patrol did not systematically compile statistics on migrant deaths until 1998 (Cornelius 2001).

5 From the title of Innes (2006).

6 The USGS map is dated 2001 and therefore may be out of date. For instance, the 2001 USGS map of the entire U.S.-Mexico border indicates that federal and tribal lands represent 648 linear miles; a 2004 GAO study indicates that 820 miles are in federal and tribal lands. Recent years have seen increased federal interest in border-protected areas and therefore new calculations of lands along the border. However, Texas has not been in the spotlight, thus, new data is not available. National wildlife refuge staff provided data for the Rio Grande Valley.

7 Unexpected deaths of campers or hikers in the desert are not unusual and tend to occur in relatively short periods of time (two days to a few hours) because the individuals did not have the requisite amount of water to survive even one day, which is two gallons (Urrea 2004: 118-120).

8 The case against the INS was limited in that no data existed at the time to demonstrate the effects of lights on the “hunting, foraging and dispersal success of Ocelots” (Grigione and Mrykalo 2004).

9 In 1996, the Illegal Immigration and Immigrant Responsibility Act had authorized the Attorney General to waive the Endangered Species Act of 1973 and the National Environmental Policy Act of 1996 to build a 14-mile triple fence and roads to enforce the border in the San Diego area (CRS 2007). The waiver authority was not used in this case.

10 A primary fence was completed in 1993 and was built with 10-foot-high sections of welded steel. The triple fence, authorized in 1996, extending 9 miles east of San Ysidro was completed in 2001. The last 3 miles of the triple fence are what caused the conflict with the California Coastal Commission.