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Legal Pluralism in the Wild: Rules of Encounter and their Effects on Imaginings and Practices of Wilderness

Recent works in environmental anthropology have explored how nature arises out of an epistemological paradox of being constructed yet real, thus being a combination of fact and fetish, or what Bruno Latour (1999) calls a “factish”, and have inquired into the processuality of its construction by focusing on “practices of nature”, i.e. human practices that depend upon or are involved in generating particular perceptions and categories of nature (Roepstorff and Bubandt 2003). One of these categories of nature is wilderness, a legally determined category of protected lands in the United States, which are mostly characterized by their relatively undeveloped and natural condition and lack of roads. The definition of wilderness stems from the US Wilderness Act of 1964, wherein wilderness is defined in contrast to areas “where man and his own works dominate the landscape” as “an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation” (Sec. 2.(c)). Each wilderness area must be managed and used so as to “preserve its natural conditions” and the “wilderness character of the area” (Wilderness Act of 1964: Sec. 4.(b)). Although the term ‘wilderness character’ is not defined in the Wilderness Act, it is generally considered to include the following four traits: 1) untrammeled – wilderness is ideally unhindered and free from intentional modern human control or manipulation; 2) natural – wilderness ecological systems are substantially free from the effects of modern civilization; 3) undeveloped – wilderness has minimal evidence of modern human occupation or modification; and 4) outstanding opportunities for solitude or a primitive and unconfined type of recreation (Leopold Institute 2004, as cited in Internet Source 1: 238-239). Wilderness areas can be found in national forests, national parks and monuments, national wildlife refuges and other public lands, and are managed by four federal agencies: the U.S. Forest Service (Department of Agriculture), the U.S. National Park Service, Bureau of Land Management and the U.S. Fish and Wildlife Service (all in the

Department of the Interior). There are currently 704 wilderness areas in the U.S. and today the National Wilderness Preservation System encompasses 107,514,983 acres (Internet Source 2) which represents almost a sixth of roughly 655 million acres of land owned by the federal government in the United States (which makes up almost a third of the entire US landbase).

Many of the scholars involved in nature conservation issues worldwide are critical of current conservation ideology, which sees the formal designation of protected areas such as national parks or wilderness areas as the most effective and efficient solution to the problem of dwindling natural resources and biodiversity. They have exposed the “Western” assumptions about the relationship between humans and nature that underlie the protected area model of conservation, whereby nature is constricted within the formal boundaries and is only to be viewed, enjoyed or studied. They have also pointed out the patterns of environmental and economic injustice common to the model, especially excluding local people from participating in creation and/or management and cutting off their access to resources (see, e.g., Anderson and Berglund, eds. 2003; Simonič, ed. 2006). Projects to protect spaces are often linked to myths of state identity or national progress (e.g. on nature and ideology in Germany and Scandinavia see Witoszek 2003). The roots of protecting natural areas in the United States stem from the romantic doctrine of the sublime (i.e. reverence for awe-inspiring dramatic natural landscape vistas in the presence of which a mortal might catch a glimpse of God or the divine), primitivism (according to which man’s happiness and well-being decrease in direct proportion to his degree of civilization), and the frontier mythology, according to which it was the vigor, independence, and creativity of pioneers that gave rise to American democracy and the American national character, which under ‘Manifest Destiny’ also justified the advance of Euroamericans and the subsequent elimination of indigenous populations (Nash 1982; Cronon 1996; on Native Americans and national parks see e.g. Nabokov and Loendorf 2004). Protected areas, and wilderness in particular, are thus closely linked to the creation myth of the United States, and love of wilderness has become to be seen as a patriotic act, as many cherish it as something uniquely American (Scott 2004: 20; see also Nash 1982; Cronon 1996).

Applying Geertz's (1983) view of law as a cultural system of meanings, whereby legal reasoning is one of the most significant ways in which people try to make explicit sense of their world and is itself partially constitutive of that world, notably through law's capacity to relate general concepts to particular cases, the legal designation of wilderness can be seen as a specific type of "imagination" of a specific area. As such, wilderness designation captures certain imaginings and practices of a specific place, but even more importantly, dictates future imaginings and practices through the power of law (see Geertz's distinction between a 'model of reality' and a 'model for reality' (1973:93); for the dialectical relationship between imaginings and practices see Anderson 1991). A legal designation of wilderness, and the law and policy behind it, can thus offer an insight into the spatial tactics and power relations pertaining to a particular physical place which is being strategically used for production and reproduction of power relations (Low and Lawrence-Zúñiga 2003; Gupta and Ferguson 1992), especially when contrasting the ways in which the state, and its regulations and actions, intertwine with non-governmental, 'semi-autonomous social fields' (Moore 1978) which generate their own obligatory norms which are usually socially enforced but can also induce or coerce compliance with or without state help, while state law might rely on collaboration from non-state fields for its implementation.

The official or state law is not the repository of all forms of mandatory rules. Sally Moore (2005) states:

"The rules and institutions attached to governments are only one category of a vastly more extensive set of sites producing rules and obligations. In a particular locale, anthropologists ask such things as: how and by whom are particular obligations generated, what are the sources of their authority, how they are explained and enforced, and when and how and by whom they are obeyed or violated. Behavior and practices loom large, and so do the ideas that people have about what they are doing. What are the options and choices and restrictions that shape what people can do? How does their range of choice intersect with the obligatory requirements of the institutions of their society?" (Moore 2005: 246)

The answers to these questions are often complex, but offer an insight into an intricate, intentional or unintentional, interlocking between official government law and non-official organizations. A term used to describe such a situation where a multiplicity of enforceable rule systems, or a multiplicity of formal and informal obligatory rules, co-exist and operate concurrently (Moore 2005: 247) is legal pluralism (for definitional debate which has arisen in connection with the idea of legal pluralism see, e.g., Griffiths 1986, Merry 1988, Benda-Beckmann 1979), and in addition to the social context of the operations of rules, this article is primarily concerned with the multiple sources of binding rules, and the impacts of legal pluralism on imaginings and practices of wilderness areas.

Taking into account that much of the debate that surrounds legal pluralism today is often a debate about power, where it actually resides and its operations (Moore 2001), and seeing legal reality pertaining to wilderness areas as a collage of obligatory practices and norms emanating both from governmental and non-governmental sources (Griffiths 1986), this paper explores the co-existence of “rules of encounter”, i.e. rules dictating uses of wilderness areas, and some ways in which constellations of legal pluralism (Benda-Beckmanns 2006) pertaining to wilderness areas play out in social life, using the ethnographic example of the Cabeza Prieta Wilderness Area in Arizona, US.

Cabeza Prieta Wilderness Area, Arizona

One of the largest wilderness areas in the lower 48 states and the largest wilderness area in Arizona, the Cabeza Prieta Wilderness Area was designated in 1990 through the Arizona Desert Wilderness Act, which put a protective overlay on about 93% of the Cabeza Prieta National Wildlife Refuge (hereinafter “CPNWR” or “the refuge”). CPNWR lies in southwestern Arizona, just west of the small town of Ajo and State Highway 85 with a population of approximately 4000, 120 miles west of Tucson and 90 miles southwest of Phoenix, just 43 miles north of the US-Mexico border. The refuge is the third largest wildlife refuge within the National Wildlife Refuge System in the lower 48 states, and measures 60.5 miles across and 38 miles north to south at its widest point, comprising 860,010 acres (348,046 ha, i.e. 3,480 km²). CPNWR is a

broad, flat expanse interrupted by a series of mostly northwest-southeast trending mountain ranges, with flat areas lying between these ranges called ‘deserts’ and ‘valleys’. To the northeast, the refuge borders on BLM (Bureau of Land Management) land, to the southeast on Organ Pipe Cactus National Monument (and the Organ Pipe Cactus Wilderness Area), in the south it shares 56 miles of the US-Mexico border, and in the west and north it borders on the Barry M. Goldwater Bombing Range. The refuge is an integral part of the largest zone of contiguous protected desert anywhere in the Americas (Felger, Broyles et al. 2007: 3), altogether spanning across 210 miles (338 km) from San Felipe, Baja California, to just southwest of Phoenix, Arizona, and encompassing 7,515,221 acres (3,041,410 ha). The refuge’s large diversity of plant and animal species and varied geology make it an important component of the Sonoran Desert ecosystem. This land was feared as a *despoblado* (uninhabited land) by the Spanish conquistadors (e.g. Anerinno 1999: 9) and had little economic value for grazing, mining, homesteading, or settlement (Felger, Broyles et al. 2007: 8), but cross-border conservation efforts were begun there as early as the 1930s (Felger, Broyles et al. 2007; Chester 2006). As pointed out by conservationists, these areas are as delicate as they are harsh, and any human impact can leave traces visible for hundreds or even thousands of years (Felger, Broyles et al. 2007: 7). They are still in near-pristine ecological condition, and “no other desert region in the world can match [its] ecological wealth,” but once degraded, “these lands cannot recover even in our lifetime.” (Felger, Broyles et al. 2007: 26).

The Cabeza Prieta refuge was first established on January 25, 1939, as the Cabeza Prieta Game Range by Executive Order 8038, primarily to assist in the recovery of the desert bighorn sheep, and partially in response to public demand generated by the Boy Scouts of America, Arizona Game Protective Association, and the Audubon Society. In 1976 sole jurisdiction was transferred to the Fish and Wildlife Service of the U.S. Department of the Interior. In addition to the original refuge purposes and the additional wilderness purpose created by the Arizona Desert Wilderness Act of 1990, several federal policies, regulations, and laws affect refuge management activities. Preeminent among these is the Endangered Species Act of 1973, which mandates the protection and recovery of threatened and endangered species. The refuge plays a leading role in the recovery and protection of the federally endangered Sonoran

Pronghorn, a sub-species of the American pronghorn which is limited to two small remnant populations in the United States and Mexico. The refuge comprises nearly half the range of the U.S. population, and is central to its recovery. This has been a refuge management priority since 1988, and especially after a lawsuit filed in the late nineties by the non-governmental organization Defenders of Wildlife against governmental agencies managing areas which represent the last habitat of this species in the US (see *Defenders of Wildlife v. Babbitt*, Internet Source 3).

When in 1974 the majority of the refuge was proposed by the Fish and Wildlife Service (FWS) to be included as part of the National Wilderness Preservation System, in accordance with Sec. 3.(c) of the Wilderness Act, Congress ordered FWS to manage all proposed wilderness areas as de facto wilderness, pending study and final designation (Internet Source 1: 13-14). The Arizona Desert Wilderness Act of 1990 designated about 93 percent of the refuge, or 325,133 hectares (803,418 acres) as wilderness under Title III.¹ In accordance with Sec. 4.(a) of the Wilderness Act,² the wilderness designation of 1990 provided an additional refuge purpose on top of the original purposes and those which stem from the mission of the National Wildlife Refuge System, which is the only federally owned system of lands managed primarily for the conservation of fish, wildlife, and plant resources, and their habitats (National Wildlife Refuge System Improvement Act of 1997). With wilderness designation the refuge's wildlife management responsibilities therefore remain unchanged, but must be implemented within the context of legal requirements spelled out in the Wilderness Act of 1964. Also, in *Fulfilling the Promise*, a strategy document for the Refuge System and a guide for refuge management and planning from 1999, FWS acknowledged wilderness as a unique resource, whereby natural populations of native wildlife are identified as being important to the wilderness resource, in addition to solitude and self-sustaining ecological processes (CCP 2007: 30).

¹ Areas excluded from the wilderness designation in 1990 are the so-called Tule Well exclusion in the western part, approximately 14,975 hectares (37,000 acres) along the southern boundary, and a 61-meter (200 foot) travel corridor along El Camino del Diablo and the Christmas Pass Road. The designation also left out the most eastern part of the refuge south of the Charlie Bell Pass Road, roughly east of the Growler Mountains and north of the boundary with the Organ Pipe Cactus NM, where most of the remains of past human use are visible and where a pronghorn captive breeding pen is currently located.

² Sec. 4.(a) declares that the purposes of Wilderness Act are "within and supplemental to the purposes for which national forests and units of the national park and national wildlife refuge systems are established and administered."

Uses of the Cabeza Prieta Wilderness Area before the wilderness designation

Little is known about the lifeways of the region's first inhabitants (see, e.g., Ahlstrom, Chenault, Wroblewski 2001), yet prehistoric peoples of the Sierra Pinacate and far western Arizona appear to have traveled extensively through this area, leaving behind trails as well as trail shrines, sleeping circles and intaglios that remain clearly visible to this day. This area, which roughly corresponds to the center of what is called Western Papaguería, played a major role during the prehistoric period in the movement of two commodities, obsidian and especially marine shells (Ahlstrom, Chenault, Wroblewski 2001: 109), which can still be found scattered in the desert. In addition, ritual salt collecting journeys could have led across what is now known as the CPNWR (Broyles 2006: 119-123).

Historically, this area was mostly used by a small group of O'odham, the Hia-Ced O'odham or Sand Papago, i.e. 'Sand People' (Erickson 1994: 51; see also Fontana 1989: 47; Zepeda 1985; Thomas 1953; Bell, Anderson and Steward 1980). Their hunter-gatherer lifestyle was characterized by extreme mobility: agriculture was nearly impossible in their habitat (except on the very eastern portion of what is now the CPNWR), and life depended on knowledge of small desert water holes or 'tinajas' for drinking purposes, following the movement of game, and upon gathering certain desert plants for food, as one or two families traveled together in the dry, mostly barren land (Ahlstrom, Chenault, Wroblewski 2001: 119; Erickson 1994: 15). The designation of the Cabeza Prieta Gaming Range, together with the establishment of the national monument and Air Force Range in the 1930s, effectively removed most of the remaining land in the US that the Hia-Ced O'odham traditionally used, thus leaving them with virtually without land (Erickson 1994: 158).³ A small village, or more precisely a group of houses, remained inhabited on the eastern boundary up to the end of the 1980s when the last remaining inhabitant passed away.

³ From the 19th century on, they were officially presumed to have disappeared; only recently have they reorganized themselves under the Hia-Ced O'odham Program of the Tohono O'odham Nation, and are currently undergoing a process to become recognized as a district of the Tohono O'odham Nation.

Despite harsh environmental conditions, there were as many as six grazing allotments operating at one time on the Cabeza Prieta Gaming Range (CCP: 9-10). Grazing in this area began as early as 1919, and most of it occurred on the eastern portion of the Range where shallow wells for cattle could be dug. The ranchers would also build “homesteads” and corrals next to the wells, as well as temporary shelters across the range when moving with or after their cattle. The last existing grazing permit, set at 129 heads in 1975, expired in 1981 and was not renewed, and there has been no legal grazing on the refuge since. When established, the Game Range was left open to mining; military withdrawal of the Range lands in 1940s temporarily stopped all mining activity. In 1971, 17 unpatented claims and one patented claim were listed (CCP: 11).

Besides the uses listed, there has been no other known permanent or semi-permanent human habitation on the refuge. However, the local population of Ajo, which was established as a mining town, as well as occasional visitors from farther away, used the Range as their extended backyard, for outdoor activities such as hunting, camping, looting archeological remains, creating and using an extensive network of more or less primitive roads which criss-crossed the entire refuge.

Prohibited uses: Wilderness as a roadless area

Wilderness is best defined by the complete absence of motorized vehicles. The purpose of the Act is stated in Sec. 2.(a): “to assure that an increasing population, accompanied by expanding settlement and growing mechanization does not occupy and modify all areas within the US (...) leaving no lands designated for preservation and protection in their natural condition.” In addition to commercial enterprises, the Act explicitly prohibits permanent roads in wilderness. Further on, the Act stipulates that “there shall be no temporary road, no use of motor vehicles, motorized equipment, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area” (Sec. 4.(c)), except as necessary to meet the minimum requirements for the administration of the area (see below).

From the beginning of wilderness advocacy, roads have been identified as a key problem in efforts to protect wild lands. As Paul Sutter demonstrates in *Driven Wild: How the Fight Against the Automobiles Launched the Modern Wilderness Movement* (2002), the entire movement to protect wild lands reflected a growing belief among many conservationists that the modern forces of capitalism, industrialism, urbanism and mass consumer culture were gradually eroding not just the ecology of North America but crucial American values as well, including the core of what makes us human (Cronon 2002: viii; see also Cronon 1996). Sutter demonstrated how the founders of the Wilderness Society, one of the most important wilderness advocacy organizations, were not starry-eyed romantics, but went beyond the threats from ranchers, miners, loggers, oil-drillers and dam-builders, and saw the biggest threat to wild lands coming from middle-class tourists seeking to visit wild places in their automobiles. In addition, roads open routes for other exploitation projects (Sutter 2002). This is why the legal definition of wilderness, as written into the 1964 law, depends more than anything else on the touchstone quality of roadlessness, which embodied and managed to defend in law the less tangible qualities that wilderness advocates were trying to protect (Cronon 2002).

With the prohibition of roads and uses of mechanical means of transport, wilderness thus serves “public purposes of recreational, scenic, scientific, educational, conservation, and historic use” (Sec. 4.(b)), and above all provides opportunities for solitude and primitive and unconfined types of recreation (Sec. 2.(c)). With the designation of the Cabeza Prieta Wilderness Area in 1990, despite the above-mentioned existent network of primitive roads and trails on the refuge, no vehicle traffic is allowed on the refuge except on the three designated public use roads, i.e. Charlie Bell Pass Road in the north-east corner, Tacna Road in the northwestern part of the refuge, and the longer and perhaps more (in)famous El Camino Del Diablo,⁴ which runs along the southern edge of the mountain ranges in the Cabeza Prieta NWR close to the international boundary. This prohibition has, at the discretion of the refuge management, also been extended to areas that were exempt from the wilderness designation, including the above-mentioned eastern part of the refuge,

⁴ The Camino Del Diablo was the primary historical land route from Sonora, Mexico, to the Colorado River and California and is now listed on the National Register of Historic Places (see e.g. Ahlstrom, Chenault, Wroblewski 2001).

where the main pronghorn recovery project is located. The entire wilderness area is open to the public for hiking and backpacking (except during the seasonal closure of the refuge from April 15 to July 15 for pronghorn fawning), but because of extreme environmental conditions, lack of water and access, the numbers of visitors are very low.

The wilderness-related prohibition of driving effectively ended or at least severely altered uses by those who were using the area: ranchers, hunters, recreational drivers, campers. For example, members of a local group of Native Americans, who still claim the village in the eastern part of the refuge, have to apply for a special use permit if they want to drive out to the village or collect desert plants and herbs. Due to their average age and health issues, driving is the only way they can travel on the refuge, and even though the refuge management is very conscientious and generous about granting such permits to them, they often choose simply not to bother and do not go into that part of the desert. The wilderness designation, on the other hand, attracts people searching for solitude and a “primitive and unconfined type of recreation”, and even though hikers and backpackers have hailed this area for a long time, including the well-known writer Edward Abbey (who, according to local lore, even chose to be buried on the refuge), a more clearly defined group of public users can now be detected, called ‘recreational visitors’ by FWS. These are people who usually come to the area to experience “one of the most isolated, rugged, and pristine desert landscapes in the Southwest,” (Internet Source 2), with “brilliant night skies, unmatched desert scenery (...), the opportunity to see wildlife and desert fauna like no other place on earth, exemplary desert backpacking and hiking, and a deafening desert silence” (*ibid.*).

The Wilderness Act of 1964 and the Arizona Desert Wilderness Act of 1990 do not define further conditions for recreational use of wilderness areas, but FWS determined more specific rules with regard to the uses of the refuge and wilderness area: high clearance 4-wheel drive vehicles are required for entering the refuge, which can be parked only up to 50 feet from the centerline of the roads in areas previously used by other vehicles. All other off-road travel is prohibited. Also, visitors should refrain from travel during wet conditions due to possible damage to refuge roads. Driving in wet areas is prohibited. One has to carry two spare tires and other spare mechanical

parts in case of a breakdown. All visitors must bring their own water (taking water from tinajas and animal water sources is prohibited because of the disturbance of animals, as well as strongly advised against), at least 1 to 1½ gallons per person per day on cool days of 100 degrees Fahrenheit or lower (Internet Source 4). Furthermore, FWS prohibits certain activities such as dumping of litter, sewage, or liquid waste on the refuge; removal or disturbance of sand, rock, gravel, or minerals; rock hounding; excavating or removing objects of antiquity, cultural artifacts, or paleontological artifacts; trapping; collecting, disturbing, injuring, destroying, or removing any plant or animal. On top of these explicitly prohibited uses, FWS also advises visitors to practice a “leave no trace” ethic that applies to all wilderness areas.

Leave No Trace: Land Ethic

“Leave No Trace” is a modern wilderness recreation minimum-impact ethic, which served to negotiate the tension in the wilderness ideal enacted by Wilderness Act of 1964 whereby wilderness was most often viewed as either a pristine ecological reserve for posterity, or as a recreational resource for backpackers (Turner 2002: 463, Internet Source 5), by allowing an ever-growing number of backpackers to visit wilderness areas while leaving their ecological integrity intact. This effectively gave wilderness primacy as a popular recreational resource by shifting from the former approach of living off the land with a working knowledge of nature, to an aesthetic appreciation of nature where one ideally leaves no trace of their visit whatsoever by not utilizing any of the on-site resources, and by removing all traces of one’s visit. LNT can serve as an example of very distinctive normative order created in the semi-autonomous field, which has been extremely successful at reaching the target audience and affecting everyday practices within wilderness areas at the level of individual visitors.

This “land ethic” (to borrow Aldo Leopold’s expression from his *A Sand County Almanac* of 1949 (1966)) has been developed among wilderness advocates, organizations, and wilderness enthusiasts, and in cooperation with managing agencies. In the 1960s, managing agencies started seeing evidence of overuse of wilderness areas by the public, and started taking steps to limit the recreational use of wilderness

(Marion and Reid 2001, Internet Source 6). Since many wilderness advocates believed that maintaining popular support for wilderness means supporting liberal access for wilderness recreation, the evidence of overuse gave rise to a new genre of wilderness ethic best captured in and popularized through a new type of wilderness literature and manuals originating from the Sierra Club and the Wilderness Society, as well as outdoors stores and centers (Turner 2002: 474). In *Soft Paths* (Hampton and Cole 1988), one of the leading books on this minimum-impact ethic, the authors define its crucial elements, especially the transfer of the responsibility for wilderness areas to each individual user, and not being a governmental set of rules:

“Minimum-impact backcountry use is a hands-on practical approach to caring about both the land and others who share its richness. Its success hinges on the willingness of the individual user to learn, to think, and then to commit knowledge to action. The resulting techniques are flexible and tempered by judgment and experience. They depend more on attitude and awareness than on rules and regulations. Minimum-impact practices don’t replace one governmental set of rules with yet another.”
(Hampton and Cole 1988: 16)

As early as the 1930s, when the first wild areas were being protected,⁵ Aldo Leopold questioned the effectiveness of official regulation of usage of wilderness areas, and called for the exercise of conscience with regard to our obligations, and the extension of the social conscience from people to land (Hampton and Cole 1988: 10). Hampton and Cole stated that “Leopold knew it was not the place of government to lurk behind

⁵ The first natural areas were protected as wild areas by the federal government in 1924, when the Forest Service, then led by Aldo Leopold, established the Gila Wilderness Area of some half-million acres (Scott 2004: 29). Officially, such areas were first called “primitive areas” under the so-called L-20 regulation of 1929, which did not actually prohibit any form of development of use, including road building and logging, and decisions for wilderness were left largely to the discretion of Forest Service field personnel (Scott 2004: 29). In September 1939, new Forest Service regulations U-1 and U-2 replaced “primitive areas” with new labels: “wilderness areas” for those 100,000 acres and larger, and “wild areas” for those from 5,000 to 99,999 acres; in addition, management directions were tightened to better protect wilderness values, and logging and road building were excluded (Scott 2004: 35). It was only the Wilderness Act of 1964 that established a clear, unambiguous national policy to preserve wilderness, recognizing wilderness itself as a resource of value, and established a specific definition of wilderness which could readily be applied to real areas. The Act also established the National Wilderness Preservation System and set out a single, consistent wilderness management directive applying to wilderness areas in the jurisdiction of all federal land-management agencies (Scott 2004: 56).

every tree, ready to spring upon the rule-breaker. Appropriate behavior flows from an understanding of and respect for the land, an inherent set of values within the individual user – a land ethic” (ibid.).

In addition to the manuals, in the 1980s a pilot program was designed between the Boy Scouts of America (BSA) and the High Uintas Wilderness to reach a wider audience. Finally, a national education program was developed in 1990 by the United States Forest Service in conjunction with the National Outdoor Leadership School (NOLS). A 1985 national conference on wilderness management, drawing on extensive research, recommended that the four federal agencies overseeing wilderness cooperate in creating a standard, federally-sanctioned education program for wilderness users. The better educated the users, they hoped, the more traffic wilderness could withstand (Marion and Reid 2001, Internet Source 6). In the early 1990s, the public land agencies joined with the National Outdoor Leadership School to develop Leave No Trace, a non-profit organization promoting environmentally-sound travel throughout the National Wilderness Preservation System. In 1994, a Memorandum of Understanding was signed to formalize the LNT program partnership between NOLS and FS, BLM, NPS, FWS (*ibid.*).

LNT thus became a vehicle for promoting awareness of recreation impacts and encouraging visitors to become knowledgeable about how to reduce them. According to Marion and Reid (2001, Internet Source 6), educational programs and embracement of LNT rules is a critical management component, and seen as a light-handed approach that can reduce the need for more direct and regulatory forms of management. As Max Peterson, former Chief of the US Forest Service, said in 1985: “Wilderness management is 80-90 percent education and information, and 10 percent regulation” (*ibid.*).

LNT principles are very general in their scope, and are to be applied in all wilderness areas. Visitors and hikers are supposed to voluntarily comply with seven restrictions on their wilderness behavior in order to save wilderness from overuse. The rules are: 1. Plan Ahead and Prepare; 2. Travel and Camp on Durable Surfaces; 3. Dispose of Waste Properly; 4. Leave What You Find; 5. Minimize Campfire Impacts; 6. Respect Wildlife; 7. Be Considerate of Other Visitors (for more details see Leave No Trace,

Internet Source 7). Because of the above mentioned MOUs, these principles have been to a large degree incorporated (or “received” following Chiba 1986, as cited in Menski 2006: 119) into FWS rules for using the Cabeza Prieta Wilderness Area as well as the refuge as a whole,⁶ and therefore the FWS rules as described above correspond to a great degree with LNT principles. They are also incorporated into visitor education programs (all visitors are informed of them in the process of acquiring a permit from the refuge personnel and in an introductory video) and public outreach programs to local community (such as an Outdoor Adventure Program for children). The LNT principles are not officially being enforced by the refuge law enforcement officers, partially due to practical reasons (too vast of an area), partially because of their borderline shady status with regard to legal standing, public awareness of them and their enforceability. However, if a breach of any of the rules for the use of the refuge prescribed by the FWS is observed by a law enforcement officer, a warning or even a citation can be issued.

This land use ethic does not necessarily correspond to how people used to use the Cabeza Prieta Wilderness Area before its designation as wilderness, or to their attitudes and views of this area, especially in terms of treating the desert as something special and valuable, as is often pointed out by local wilderness advocates; on the other hand, it cannot definitively be said that it does not, and previous users’ imaginings and practices of this area have yet to be officially recorded. It is very clear, though, that the installment of such ethic with the wilderness designation and FWS rules unified the recreational use to a great extent, since it applies to all users regardless of their background or intent for visiting, including Native Americans, hikers, photographers, campers, hunters, 4-wheelers crossing the Camino etc. However, a closer look at the operation of this set of rules reveals a surprisingly high level of compliance: in the refuge management’s estimate (Refuge Manager Curt McCasland, Aug. 2008, pers. comm.) and the author’s participant observation data, at least 80% of people voluntarily comply with these principles when in the wilderness area.⁷ This level of compliance indicates a fairly good resonance between official law

⁶ When communicating with visitors, the refuge management does not distinguish specifically between using the wilderness and non-wilderness areas within the refuge boundaries.

⁷ In the management’s estimate, 10% of visitors do illegal campfire activities such as cutting down live trees; and 10% violate the rule about the number of vehicles in a party (Curt McCasland, Aug. 2008, pers. comm.)

and peoples' values and ideas of the area at the present, as well as what is perceived as correct treatment of wild, undeveloped places and the Sonoran Desert.⁸

When discussing how to behave in the wilderness with experienced wilderness-goers, people mostly aren't aware of where or how they picked up "the rules"; they mostly say that it was "here and there", doing things outdoors, learning from other people and through reading. Simply, "this is just how one behaves", it is "normal" and "common sense". Most of the regular outdoors people are not even familiar with the formal phrasing of LNT, or have fragmented knowledge of what is allowed and what is not on the refuge or in the wilderness area, yet they exhibit an extraordinary high level of care for the land and are disinclined to damage it or leave traces of their visit. In fact, many would camp and hike in the same way if out on the refuge or right in the center of Ajo. While on the surface it seems that they are acting in accordance with LNT principles for wilderness areas, their implementation of such principles stems from their respect and love for the desert or the particular landscape of the Cabeza Prieta Wilderness Area, and it is above all "a desert code of ethics".

Exceptions to prohibited uses

General exemptions: Minimum Requirements Analysis

Each wilderness area must be managed so as to "preserve its natural conditions" and the "wilderness character of the area" (Wilderness Act of 1964: Sec. 4.(b)). For purposes of management of wilderness areas, the paradigm of wilderness does not include just the land but also the habitat and the animal and plant species (Hendee and Dawson 2002), thus, as mentioned above, wilderness designation does not lessen the priority of the original refuge purposes, but it adds securing an enduring resource of wilderness and preservation of wilderness character as supplemental, i.e. additional purposes (Sec. 4.(a)). For such purposes, the Wilderness Act allowed an exception to

⁸ Besides the request of hunting interest groups for allowing the use of wheeled game carriers and an initiative by various user groups to open the eastern, non-wilderness part of the refuge to public driving, there are currently no outstanding, publicly expressed requests with regard to the uses of the CPNWR and Wilderness Area.

the above-described prohibited uses: the management is allowed to use temporary roads, motor vehicles, motorized equipment, land an aircraft or other form of mechanical transport, as well as install a temporary structure or installation within a wilderness area, if such activity is “necessary to meet minimum requirements for the administration of the area for the purposes of this Act (including measures required in emergencies involving the health and safety of persons within the area)” (Sec. 4.(c)).

In general, wilderness designation requires managerial restraint. All management activities in wilderness that are an exception to the above-mentioned prohibited uses are subject to a what is called a “Minimum Requirements Analysis” (hereinafter “MRA”) to assure appropriateness, which can be seen as an internal mechanism of self-control for those controlling the uses of the area (the age-old question of *quis custodiet ipsos custodes?*). MRA is an administrative process generally conducted within the refuge; only occasionally are approvals required from the regional office, when decisions in sensitive matters are required that apply to FWS policy in general and that are beyond local scope. Further guidelines for this process were developed by the Arthur Carhart National Wilderness Training Center (2002, Internet Source 8) and within each management agency.

MRA is a two-step process. First, the proposed use, i.e. administrative action, must be demonstrated to be necessary for administration of the area as wilderness in accordance with Section 4.(c) of the Wilderness Act. For example, if installing weather stations in wilderness is proposed, one first has to ask whether installing weather stations furthers the purposes of managing the area as wilderness. If an action is found to be necessary for administering the area as wilderness, then in the second step the minimum activity required to meet the need for management intervention in wilderness is determined. This step is popularly referred to as determining the ‘minimum tool’, and could include any type of activity, method, or equipment. The Specific Minimum Requirements References in U.S. Fish and Wildlife Policy (March 2006, Internet Source 9) further define minimum tool as the minimum action or instrument necessary to successfully, safely, and economically accomplish wilderness management objectives. The second step thus investigates and compares the impacts to wilderness resources that would result from various alternative methods of implementing the proposed management action. The means of accomplishing the

proposed use must be analyzed and alternatives investigated to determine that the necessary use is being executed in a manner that minimizes impacts to wilderness character, both long- and short-term. In the particular case of weather stations, once they are found to be serving the wilderness character, one starts considering whether they could be installed outside the Wilderness Area, how they could be installed, taking into account the transport of all the materials and tools, as well as service and data collection. The current management policy is for staff members and/or volunteers to hike out to the weather stations in order to perform periodic check-ups and downloads, however, building and installing them is very demanding and requires a lot of carrying, so vehicles are used for these actions. Such assessment is also connected with assessing safety and health concerns; doing it in July, for example, is very unsafe, and it is not reasonable to hike in at that time, so hiking is scheduled as much as possible in late spring and early autumn, instead of driving in July. After all the alternatives are assessed, the best alternative is chosen, and the action is approved and conducted.

For the purposes of the refuge, the Comprehensive Conservation Plan (CPP) for CPNWR in Appendix 7 details an MRA analysis for 20 management actions on the refuge, which include: radio collaring of Sonoran pronghorn and bighorn sheep, Sonoran pronghorn and bighorn sheep population surveys and monitoring, as well as of other species of conservation or recreational interest, accessing wilderness to maintain and supply water to developed waters in Sonoran pronghorn and bighorn sheep habitats, developing or redeveloping developed waters in refuge wilderness for animal needs, developing forage enhancements within Sonoran pronghorn habitat, and meteorological, vegetation, and wilderness impact monitoring, abandoned vehicle removal and cultural resource site reconnaissance and stabilization (CPP 2007: pp. 395-463). The CPP also states that for actions “that will require refuge staff or volunteers to camp in wilderness while accomplishing a management action, the persons will be advised to observe leave-no-trace camping practices” (CPP 2007: 395).

In addition to the above described LNT principles and FWS regulations, Minimum Requirement Analysis can be seen as another example of the practical processes which create wilderness and wilderness areas, a process I have called “wildernization”

(Altshul 2008, from van Loon's (2002) processes of spatialization), since the managing agencies have to take pretty loosely defined definitions of wilderness, wilderness character and values, and fill them with meaning. Through MRAs, the definition of wilderness is actually redefined and recreated from the bottom up. This is especially true when the missions of the managing agency collide with the requirements of wilderness stewardship. Even though the refuge staff is specifically trained and follows the FWS policy and guidelines for MRAs, the entire decision-making process still remains quite open and subjective when choosing among numerous alternatives. In fact, about 80% decisions are made first and the analysis is then fitted around them; however, formal wilderness training is aimed at installing wilderness values deep within people's thinking and ethics. Further on, when proposing and evaluating an activity, one necessarily measures other people according to one's own capacities, for example, in terms of how much hiking one can do, thus influencing the decision, for example, about when vehicle use becomes justifiable as the minimum tool option. Final decisions however depend not only on official law and regulations but also on desert experiences, one's "mental filters" and last but not least, one's personal feel for the desert and personal desert ethic.

Specific exemptions for the Cabeza Prieta Wilderness Area

The Arizona Desert Wilderness Act of 1990 stipulates two exemptions to wilderness uses specifically for the Cabeza Prieta Wilderness Area: for military activities (low-level overflights by military aircraft and the maintenance of existing associated ground instrumentation) and law enforcement border operations by the Immigration and Naturalization Service, the Drug Enforcement Administration, or the United States Customs Service (now the Department of Homeland Security and its bureaus). The Act also allows the Secretaries of these agencies to enter into new agreements compatible with refuge purposes and in accordance with laws applicable to the Refuge System (CCP 2007: 13).

Especially the last exception has proved to be very useful. Because of its remoteness and isolation, the CPNWR has been heavily affected by the so-called 'funnel effect', which was brought about by the prevention-through-deterrence measures of the U.S.

immigration control policies installed in the mid- to late-1990s.⁹ The illegal traffic continued to grow until recently, and spread into more western, i.e. more desolate and isolated areas. As a result of both illegal traffic and border law enforcement, more than 200 miles of new illegal roads have been created within the Cabeza Prieta Wilderness Area (2004 estimate by Wilderness Watch (Internet Source 10)). In February 2007, a vehicle barrier was begun to be installed on the eastern part of the refuge (the construction of which was almost completely done within the so-called Roosevelt Reservation, which is exempt from the wilderness regime), which is designed to prevent vehicle entry while allowing foot traffic and animal movement. As of this writing (August 2008), the vehicle barrier is nearly completed all the way across, and according to the refuge management, the number of migrants crossing in order to work has substantially decreased; however, drug-related crossings are on the rise, as is the associated desperation and violence (Curt McCasland, Aug. 2008, pers. comm.).

Border law enforcement activities on the refuge include regular vehicle patrols along the non-wilderness access corridors, regular low altitude helicopter patrols, frequent vehicle travel on administrative trails and trackways created by undocumented aliens (UDAs) and smugglers, patrols on all-terrain vehicles over migrant trails and maintenance of two field camps along the Camino del Diablo. In addition, permanent field camps have been established along the Camino del Diablo. However, border law enforcement, while generating adverse impacts on wilderness, has the potential to mitigate the ongoing adverse effects of high-volume illegal cross-border traffic.

While their access to public lands seems to be almost unlimited, the Department of Homeland Security and its bureaus are not required to perform Minimum Requirements Analysis for any uses of the Wilderness Area prohibited by the Wilderness Act, including the use of motorized means of transport, on or off the

⁹ These policies redirected hundreds of thousands of unauthorized migrants away from previously busy crossing points in California and Texas into Arizona's perilous and deadly landscape of the Sonoran Desert (Rubio-Goldsmith, McCormick, Martinez and Duarte 2006). Both the refuge and the wilderness were put in the spotlight of public attention (as well as that of anthropologists) in 2001, when a group of illegal immigrants from Veracruz, Mexico got lost on the refuge and 14 died due to dehydration and heat exposure (as described vividly in Luis Urrea's book *The Devil's Highway* (2004); for accounts of crossings see also Annerino 1999).

established roads. Regarding the installation of tactical infrastructure, the MOU among DHS, Dept. of Interior and Dept. of Agriculture Regarding Cooperative National Security and Counterterrorism Efforts on Federal Lands along the United States' Borders of 2006 stipulates that the local federal land manager, i.e. CPNWR management, "promptly" conducts MRA for installation of such infrastructure (Sec. B:6). Also, while conducting border-related activities, Border Patrol agents are not officially bound to follow FWS rules or LNT principles or any other desert-related code of ethics.¹⁰ However, extensive inter-agency cooperation efforts are being expanded on both sides with regard to environmental education and protection, including education of new recruits through videos, field trips and vertical mulching (a technique aimed at disguising newly made roads in wilderness with native materials in order to prevent further driving in the area and to reinstall the wilderness character of the area at least to some degree).

Currently, the refuge is dealing with a major new challenge in the form of surveillance towers. The towers are a part of the Secure Border Initiative which has so far proved to be largely problematic and inefficient in its test project, called Project 28, in the Buenos Aires National Wildlife Refuge south of Tucson. The principal concern for wilderness advocates and refuge management is placing 80 to 200-foot-high towers within fenced-in areas about 80 by 80 feet, which is a footprint big enough to cause concern for wildlife habitat and the wilderness character of the area. The towers also require an access road to be built and maintained, a generator and a gas tank, plus 7-8 miles of radius of interception where Border Patrol agents will respond to anything the tower detects, and then continuing further north. As mentioned above, the DHS was authorized to perform activities in wilderness by Arizona Desert Wilderness Act of 1990, but is not authorized to build permanent structures which will influence all the traits of the wilderness character of the area as well as present a potential danger to the pronghorn recovery. The surveillance towers are not covered by a waiver created in the 2005 Real ID Act which allows the Homeland Security Secretary to waive border projects' compliance with federal regulations, meaning that DHS must go through an environmental impact assessment

¹⁰ In fact, comments can be heard that the attitudes of Border Patrol agents towards the desert landscape, flora and fauna often seem to be negligent if not actually disrespectful (author's personal archives).

procedure as prescribed by the National Environmental Policy Act. At the moment, intense negotiations with regard to the position and impact of the towers are under way between FWS and DHS.

Conclusion

Interpretations of official and alternative modes of normative thought with regard to the uses of a specific wilderness area within a local situation and context allow an insight into the appropriations of legal and normative ideas and institutions in a practical local setting, especially by showing ways in which “legal thought is constitutive of social realities and not merely just reflective of them” (Geertz 1983: 232). Moore (1978) not only established that the official law is never the only legal force in any given social field, but also argued that there is a certain fallacy in assuming that law alone controls society, and stipulated the possibility that “it is society that controls law and not the reverse” (Moore, 1978: 55). Focusing on the ‘semi-autonomous social field’, and especially “the intentional interdigitation between official government law, and non-official organizations” (Moore 2005: 247), is therefore an appropriate methodological tool to understand the operation of law in society. Considering this polycentric nature of law (or normative orders), the article discusses the allowed and prohibited uses of a specific wilderness area, through investigation of “rules of encounter”, which stem both from the state (legislative and executive branch) and the semi-autonomous field, and their interpretation, implementation and enforcement. A spatial model of multiple legalities arises in which each system of normative ordering has a certain geographical reach, and places of overlap and absence are created. By close examination of prohibited uses of wilderness and exemptions thereof in practice in a specific local setting, this article argues that local variations and deviations in uses incrementally but continuously reshape the general concept of wilderness and wilderness uses, constituting processes that create wilderness areas, i.e. processes of wildernization, within and beyond the legal designation. However, in the case of the Cabeza Prieta Wilderness Area, most of the significance these “rules of encounter” have for the stewardship of the wilderness area unfortunately pales in comparison with the impact of the activities of another governmental agency, in addition to those of illegal traffic. This begs for a serious

examination of the power relations as well as hierarchy of values between federal environmental legislation, executive regulations and principles from the semi-autonomous field which regulate uses of wilderness areas on one side, and the authority of the Department of Homeland Security and the value of national security on the other side. In this particular case, questions are being voiced whether this area should have been designated wilderness in the first place and whether it is still wilderness with all the hundreds of miles of new roads and other traces of human use. Such questions touch on deeper issues of what wilderness actually is, when does an area become or stop being one, and whether the Cabeza Prieta Wilderness Area should actually be de-designated, which could set an important precedent for the future of the protection of public lands in the United States.

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