

# **Making Machu Picchu: Embedding History and Embodying Nature in the Peruvian Andes**

*Keely Maxwell*

*Agrarian Studies Program, Yale, and Earth & Environment, Franklin & Marshall College*

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## **INTRODUCTION**

Machu Picchu. The name evokes the archaeological wonder of the Incas surrounded by jewel-green peaks. It is a dream destination for many tourists, receiving 858,000 visitors to the archaeological site and 141,000 Inca Trail hikers in 2008. The Machu Picchu Historic Sanctuary (MPHS) is a Peruvian protected area (Figure 1), UNESCO World Heritage Site, and was recently voted one of the “New Seven Wonders of the World” in a global electronic contest. It also suffers from serious problems, including dysfunctional management institutions, impoverished residents, overabundant tourists, and imperiled ecosystems. These problems mirror those found in park across the globe. The most common explanation for conservation conflicts is what I call the “Ik model,” in which modern-day protected area problems are blamed on the inappropriate application of the “Yellowstone model” of park management. In the Yellowstone model, parks are designed to protect pristine wilderness from human intrusion. The Ik model attributes park-people problems to policies that attempted to re/create pristine wilderness in places with extensive human occupation, dispossessing local residents. The Ik model of conservation conflicts does not adequately explain Machu Picchu’s intriguing contradictions, where residents are treated as more foreign than tourists, donkeys are disparaged as more environmentally damaging than diesel trains, and international corporations exercise increasing control over this national monument. In this paper, I search for a deeper explanation of the MPHS’s problems by analyzing the cultural politics of how heritage conservation space is socially constructed. I seek to understand the social and spatial practices by which particular locales in the MPHS were designated sites of natural or cultural heritage, or neither, and how this process corresponds to a de- and re-historicization of Peruvian places and peoples.

My approach is to analyze the everyday politics of conservation, how competing concepts of natural and cultural heritage become constructed and inscribed on the landscape. I discuss three ways in which the causes of conservation conflicts in the MPHS differ from Ik model critiques of parks. First, the nature-culture dichotomy attributed to Yellowstone model visions of nature does not fit, spatially, with a Historic Sanctuary designed to celebrate both natural and cultural heritage. Nature and culture are not divided by Sanctuary borders. Second, the Ik model often fails to describe how parks were gazetted on space used for development, as well as on rural land use. The MPHS was imposed over rural villages. It was also created on top of existing tourism infrastructure, railroads, and a hydroelectric dam. These development projects helped naturalize how the Sanctuary became permeable to select visitors, and how modernity and heritage intertwine on the landscape. Third, the Ik model emphasizes how colonial governments, and later international conservation organizations, apply the Yellowstone model in a hegemonic fashion, creating global-local political conflicts. I demonstrate how MPHS discourse is configured and contested within and across state agencies, as well as between state agencies and local actors. Moreover, Ik model critiques often discuss how park establishment incurred the instrumental effect of extending state power, in particular colonial power, into the hinterlands. In Peru, state agencies did gain territory through park formation, and state power was expanded in the broader sense by creating subjects of rural peoples and places. But this power is diffuse and indeterminate, as park officials often complained of their lack of power and authority. Machu Picchu played a more important role in the constitution of modern state identity than it did in the expansion of colonial state power.

Before I begin discussing the particulars of Machu Picchu, I review the Yellowstone model of park management and Ik model of park-people conflicts. Then, I delve into the historic sedimentation of Sanctuary space. I begin by describing how, ever since the early 1900s, the archaeological site and nearby places were the focus of state and private development projects.

Heritage space was not dichotomously opposed to all modern land use, and indeed heritage conservation was part of state development projects. Next, I contextualize the creation of the MPHS as a protected area. I focus on Sanctuary boundaries as a point of inflection and reflection over apparent divisions between nature/culture and modernity/heritage. I analyze the creation of the Historic Sanctuary as it relates to another Peruvian policy, agrarian reform.

Machu Picchu was designated a National Archaeological Park in 1968, a Historic Sanctuary in 1981, and a UNESCO World Heritage site in 1983. Also going on between 1969 and 1976 (with many aftershock effects) was agrarian reform, in which *haciendas* (estates) were expropriated by the state and sold to peasant organizations. Sanctuary borders directly follow *hacienda* borders. Moreover, agrarian reform and protected areas both involve reterritorialization, reconfiguration of indigenous identity, and political economic reorientation of rural spaces and peoples. Modern struggles as well as Inca history thus have become part of the Sanctuary's landscape. Finally, I give one example of a conservation conflict over cattle, and how cattle policies vary among and within the state agencies responsible for managing the MPHS. While there are significant park-people conflicts over cattle, these are not brought about by top-down application of Yellowstone model visions of nature. Rural villagers in the MPHS, as with parks around the globe, have borne the brunt of conservation policies. The reasons why involve complex cultural politics and spatial practices. My analysis cross-cuts extant dichotomies still visible in Ik model analyses of conservation conflicts, deepening the discussion of how nature and culture, modernity and heritage, and conservation and development, are entwined sites of struggle in protected areas.

## **WHITHER YELLOWSTONE?**

Yellowstone National Park was fashioned upon the Romantic view of nature as pristine wilderness, a spiritual refuge that had to be protected from encroaching civilization (Cronon 1996;

Nash 2001). The first national parks in the U.S. were established in geographic locales that fit Romantic ideals of scenic beauty (El Capitán in Yosemite, geysers in Yellowstone, glaciers in Glacier). In colonial Africa, the first national parks reflected European visions of Africa as Eden. These visions of nature as dichotomous from culture were imposed from urban centers or abroad, and were incompatible with indigenous or rural visions-- and uses-- of nature (Buescher and Whande 2007; West, et al. 2006). Park creation also served political economic and cultural ideals. Game reserves in colonial Africa promoting hunting for elite, white hunters (MacKenzie 1988). Early U.S. national parks were established in places deemed useless for agriculture and other productive activities. Parks made these places economically useful through tourism, and politically useful by promoting national identity (Runte 1997; Sellars 1997). Yellowstone mo also has a darker side. By discursively creating “pristine wilderness” in a place that had been occupied, and modified, by humans, for centuries, the park legitimized U.S. policies that dispossessed Native Americans and turned rural whites into encroachers and poachers (Jacoby 2001; Spence 1999). It is not coincidence that the U.S. army managed Yellowstone for decades, as the federal government sought to establish control over lands it had wrested from Native Americans.

The Yellowstone model of park management—discursively creating pristine wilderness, dispossessing rural residents and land use, establishing state control to create “fortress parks,” promoting tourism and recreation— was reproduced around the globe. The late nineteenth and early twentieth century saw a spate of park establishment in the western United States and British colonies. After World War II, park creation became a global phenomenon. In 1948, the World Conservation Union (IUCN) was formed, an organization that served to promote parks as a means of preserving nature. It sponsors World Park Congresses once a decade and publishes guides to protected areas management (e.g. Lockwood, et al. 2006), among other activities. The IUCN diffused a common definition of what a protected area is, and advocated that each country set aside

at least 10 percent of its territory in protected areas. It determined six universal categories of protected areas, each with slightly different conservation goals and allowable human uses (IUCN 1994). It also standardized park management strategies, such as by zoning parks into different areas for tourism, science, no-entry, etc. Conservation NGOs took up the protected area banner, providing funding and management planning. Parks from Australia to Zimbabwe began to utilize similar management protocols-- and experience similar park-people conflicts.

Many of the existing histories of park formation focus on parks in the western U.S. and British colonies, with less attention to Latin American parks. Park formation in Latin America took place much later, with most created between the 1960s and the present. It also took place under different political circumstances. It was not part of colonial encounters and enterprises.<sup>1</sup> Rather, it took place within the context of modern state struggles over democracy, land reform, neoliberalism, and debt. Academic and grey literature narratives of why parks were created in Latin America follow a largely pro-conservation trajectory: natural history explorers and modern scientists realized the importance of species and ecosystems. State agencies took measures to protect biodiversity by establishing protected area systems and new bureaucratic institutions, based upon the Yellowstone model. But states were politically weak and fiscally challenged, so protected areas became “paper parks” that needed external funding and management interventions to function (Brandon, et al. 1998; Evans 1999; Simonian 1995; Young and Rodríguez 2006). Recent works have begun to question this pro-conservation trajectory narrative, highlighting the multiple motivations and complex negotiations over Latin American parks (e.g. Haenn 2005; Sundberg 2006).

Today, Peru has 63 protected areas covering 14.8 percent of the country. Peru’s modern protected area policies began when it became a signatory to 1940 Convention on the Protection of Nature and Conservation of Flora and Fauna in the Western Hemisphere. Also in that year, the

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<sup>1</sup> 1824 being the year of independence from Spain. I deliberately call parks not colonial to provoke discussion.

National Committee for Nature Protection a private conservation organization, was formed. Peru established its first national park, 2,500 ha Cutervo National Park, in 1961, but it was the lone example for several years. In 1973, a wave of protected areas designation began, lasting until the mid-1980s, during which time around half of Peru's parks were established. The other half were created quite recently, between 2000 and 2008. In 1975, a new law grouped Peru's eleven individual parks into a network of *unidades de conservación* (conservation units). There were four categories of *unidad de conservación*: national park, national sanctuary, historic sanctuary, and national reserve.

A 1990 law changed the term *unidades de conservación* to *áreas naturales protegidas* (natural protected areas), reflecting the proliferation of IUCN terminology. It also created a System of National Natural Protected Areas to facilitate national coordination of park management. The National Institute for Natural Resources (INRENA), a public, decentralized body affiliated with the Ministry of Agriculture, is the stage agency responsible for managing the protected area system. An additional four categories of protected areas (hunting enclosure, reserved zone, communal reserve, and protected forest) correspond with IUCN categories. The IUCN and conservation NGOs (both Peruvian and foreign) have played a significant role in park creation and management strategies. Several of Peru's parks have cookie cutter management plans, because multiple plans were written by the same conservation NGO, and all plans utilize IUCN-style zoning.

Why are protected areas, designed with the lofty goal of conserving biodiversity, so often plagued by conflict? In academic literature, the most common explanation of why such problems arise is what I term here the Ik model of park-people conflicts. The Ik model attributes park-people conflicts to the global spread of the Yellowstone model of park management. It lays the blame on the discursive underpinnings of the Yellowstone model, which dichotomized nature and culture and failed to recognize the long-standing nature of human occupation of, and extensive environmental modification of, parks. The ensuing policies that restricted rural residency and land

use damaged local livelihoods and provoked opposition to parks. It also finds fault with the hegemonic manner in which the Yellowstone model was imposed from above by colonial officers or international conservation organizations. In the late 1980s and early 1990s, park planners belatedly recognized these critiques, and resolved to add development back into parks by promoting ecotourism and integrated conservation and development projects (Wells, et al. 1992). These, too, have been plagued with socioeconomic inequities, and have largely failed to promote either conservation or development (Carrier and Macleod 2005; Wells and McShane 2004).

Those of you who have read conservation literature may be scratching your heads, saying “there’s no Ik model” of park critiques. Well, you’re right. But technically, there’s not a Yellowstone model, either. Although park planners have long circulated ideas, especially through IUCN World Park Congresses, no single “Yellowstone model” report made the rounds between Washington D.C., colonial India, and the Peruvian Amazon. Schelhas (2002) reminds us that this model doesn’t even accurately describe the complex history of Yellowstone National Park itself. In fact, the term Yellowstone model, as I’ve traced it thus far, originates with park critiquers (e.g. Colchester 1994), not park planners. Multiple models for conservation, from game reserves to sacred groves, have arisen at different places and points in history. Anthropologists and geographers love to hate the Yellowstone model of park management, but it is a bit of a straw man designed to take the brunt of blows of park critiques. As the Yellowstone model of park management was named after the most famous of parks, so too have I named the Ik model after an infamous case of park mistreatment of local populations. To create Kidepo National Park in Uganda, the hunting and gathering Ik were forcibly resettled and excluded from their traditional nomadic routes and hunting grounds, a policy that led to famine and social collapse (Calhoun 1991; Colchester 1994). No, there is no one Ik model; rather, I use the term to convey that there are common threads that run through a spectrum of literature, from analysis of the colonial history of parks (Carruthers 1995; Neumann

1998), to contemporary debates on neo-protectionism and pro-poverty conservation (Sanderson 2005; Terborgh 1999; Wilshusen, et al. 2002). The Ik model critique of the Yellowstone model has had remarkable staying power.

IK model critiques of conservation conflicts do raise valid points, and have been instrumental in illuminating the social effects of parks. Park-people conflicts have been reproduced around the globe, and conservation policies consistently harm those who can least afford it (West and Brechin 1991). Social analyses show how pristine nature was really occupied by humans, who often modified the landscape to create the nature parks were designed to protect (Neumann 2004; Spence 1999). Researchers have documented how “fortress” or “coercive” conservation policies forcibly removed people and legitimized state violence against rural people (Brockington 2002; Peluso 1993). Conservation policies have incurred the instrumental effect of expanding state power into the hinterlands (Brockington, et al. 2008; Li 2002; Neumann 2005). We are distressed by the power inequities that conservation NGOs, supposedly the good guys, continue to reproduce.

As compelling as these accounts of park-people conflicts are, and as much as we’ve learned about the dark side of conservation, the Ik model does, in a sense, limit the terms of debate. It reifies the Yellowstone model, then reproduces discourses and power relations attributed to that model. MacDonald (2005) asserts that the “new ideology of conservation... brewed in the intellectual cauldrons of international conservation organizations” changes local human-nature relations (p. 260). Sundberg (2006) examines the “daily discourses and practices of conservation as articulated by powerful US-based international organizations” in Guatemala (p. 241). Both these papers are phenomenal, but the axis of discussion continues to center on dichotomies between nature v. culture, conservation v. development, and extralocal institution v. local communities. Continued focus on discursive nature-culture dualisms may even serve to mask the other political motives and social relations that influence park policies and outcomes.



Recent studies are advancing our understanding of park conflicts beyond Ik model dichotomies. Analyses of parks as colonial encounter are becoming more sophisticated. In British Malaysia, colonial visions of indigenous people were as important as visions of nature in shaping natural resource policies (Doolittle 2007). Key actors in the creation of Okavango Park in Botswana were local chiefs and hunter-conservationists, not just colonial officials (Bolaane 2005). The global-local dichotomy, too, is being questioned (Virtanen 2005). Latvian park policies do not reflect external imposition of the Yellowstone model, but rather a process in which Latvians themselves negotiate competing visions of nature (Schwartz 2006). Park managers in Peru do not all apply IUCN policies; in fact, they “struggled to recall the six-part nomenclature” of IUCN park categories (Naughton-Treves, et al. 2005 p. 231). Labor relations within conservation agencies are being recognized as important to how conservation is carried out on the ground (Sodikoff 2007).

Parks are also being recognized as places that have long been utilized for conservation and development. Chhatre and Saberwal (2005) document how political will for the Great Himalayan National Park in India reflects regional development orientation and electoral politics. Neumann (2004) positions park creation in colonial Tanganyika as part of, not opposed to, development. New research contextualizes parks as part of globalization and neoliberalization (Brockington, et al. 2008; Zimmerer 2006), broadening the scope of discussion beyond nature-culture discourse. There have been calls for increasing nuance in analyzing state-local relations (West, et al. 2006), but more researchers have dissected concepts such as “local community” and “indigeneity” (Agrawal and Gibson 2001; Brosius, et al. 2005; Li 2000), than they have concepts such as “state conservation agencies.” My analysis of Machu Picchu advances our understanding of conservation conflicts (following Braun 2002; Hughes 2005; Moore 1998; Walley 2004; West 2006). I do so by cross-cutting through traditional axes of analysis (nature-culture, global-local, conservation-development) to examine the complex cultural politics and spatial forms of these sites of struggle.

## LAYERING CONSERVATION SPACE OVER DEVELOPMENT SPACE

The Machu Picchu Historic Sanctuary is supposed to be *intangible* (translated as untouchable). This concept originates with protected area legislation, in which Historic Sanctuaries are “designed to protect, with an untouchable character, the settings in which memorable events of history were development. Untouchable character is understood to be the management, in a natural state, of all the associations of flora and wildlife, the beautiful landscapes” (1997 Art. 22). Being untouchable implies that those-who-do-the-touching are external to Sanctuary ecosystems, and Sanctuary cultural heritage. The notion of *intangible* is invoked constantly in Sanctuary management. When I asked why cutting trees was prohibited, villagers responded “here it is *intangible*, we can’t use the natural resources.” When I asked Sanctuary personnel why tree cutting were prohibited, they, too, replied that it was because the Sanctuary was “*intangible*.” Being untouchable is the be-all and end-all of why human activities are prohibited: the Sanctuary is untouchable, so any use of resources automatically is damaging. Yet not all human activities are prohibited. Rural villagers cannot chop down trees, but a diesel train makes eight round-trips a day to bring visitors to the archaeological site. The former violates the Sanctuary’s untouchability; the latter does not.

One reason for these apparent contradictions is how conservation space was layered over space used for state and private development projects, an aspect of park formation not often discussed in the Ik model. Machu Picchu has long been connected to the metropole. Elsewhere, I develop more fully the particulars of the historic sedimentation of the MPHS as development space (see manuscript draft). For the purposes of this paper, I summarize the trend here. The first state development project was construction of a railroad to connect regional capital Cusco, the endpoint of the railroad from the coast, with the province of La Convención on the eastern slopes of the Andes, where plantations produced cash crops such as coffee and coca. Cusqueñan politicians and landowners hoped that improved transportation would spur regional economic development.

Railroad construction was authorized in 1907, four years before Yale history lecturer Hiram Bingham's official scientific discovery of Machu Picchu. The proposed route happened to pass right under the nose of Machu Picchu. In 1928, train tracks reached Km. 110 (later Aguas Calientes), a short distance to the trail up to Machu Picchu at Km. 112. Train service fostered visitation to the site. The rail operator began to offer round trip packages, and even a special train car just for tourists, spurring Peruvian and foreign tourism to Machu Picchu. Local train service continued, as well, and the train tracks eventually reached La Convención in 1978, but were destroyed by a 1998 debris flow at Km. 122, and have not been rebuilt. Today, most trains are tourist trains, with the lone local train tolerated by private train operator PeruRail as a "social service" they provide.

Between the 1930s and the 1970s, Machu Picchu was the center of several state development projects that focused on tourism infrastructure, archaeological restoration, and hydroelectric power. National and regional government agencies were involved, as were private organizations and international aid agencies. The goal of many of these archaeological restoration projects was to attract tourists, making cultural heritage conservation part of development planning, not in opposition to it. The spatial configuration of cultural heritage was limited to Machu Picchu, Wiñay Wayna, and other individual archaeological sites. The presence of the Machu Picchu Hydroelectric Dam was not perceived to impinge upon heritage space. This perspective has changed in recent decades. Today, MPHS officials view the dam as an anomaly that contaminates Inca heritage space, and express surprise that the government would have allowed its construction so near Peru's premiere monument. (In fact, the same government agency sponsored both archaeological restoration and the dam.) Heritage space has transformed since the dam was built in 1964. It has grown in size to encompass places beyond the boundaries of discrete archaeological sites. It has also become more incompatible with modern development—at least infrastructure that cannot be transformed to support tourism, as happened with the train.

Tourism is perceived by MPHS officials as development that is compatible with heritage conservation. Tourism is not one of the primary policy objectives of Peruvian protected areas, but it is recognized as a sustainable land use that can take place within protected areas. Moreover, protected areas are recognized as important places for developing tourism and recreation activities (1990; 1997). In Machu Picchu, there have been numerous tourism infrastructure projects undertaken since the 1930s, including the road from the train up to the ruins, a hotel at the ruins, and restrooms and restoration along the Inca Trail. These projects, instead of seeming anomalous in a Historic Sanctuary, have been naturalized in management documents and rhetoric as compatible with heritage space. Not all tourism infrastructure is deemed so compatible. In 1994, Peruvian President Fujimori announced plans to construct a cable car that would replace bus transport from the Urubamba River to Machu Picchu. This proposal incurred the wrath of Peruvians and foreign citizens, government agencies, and UNESCO. The plan was officially scrapped in 2001. MPHS officials deplore some tourism infrastructure as problematic, but tourism is not perceived as categorically disrupting the *intangible* heritage space of the Sanctuary, as is rural land use. Rural villagers are perceived as problematic and incompatible with both conservation and development.

### **BOUNDARIES, AGRARIAN REFORM, AND PARK CREATION**

The social construction of *intangible* (untouchable) heritage space in Machu Picchu has been long and convoluted. Here, I focus on one aspect of space formation, Sanctuary boundaries. Park boundaries serve several functions, including physical barrier and socioeconomic filter, and so play an important role in shaping the social effects of parks. They may take different forms: permeable or impermeable, discrete line or extended buffer zone. Despite the importance of boundaries to parks as spatial and social force, conservation literature often fails to address why boundaries were placed where they are, and what spatial form they take. Recent works have begun to examine

boundaries more closely, including how their physical location, administrative control, and meaning have shifted over time (Fall 2005; Naughton-Treves, et al. 2005; Wolmer 2005). Yet even the most extensive analysis of park boundaries still asserts that a park boundary “formally reifies the modernist duality of nature and culture.” (Fall 2005 p. 35). The Machu Picchu Historic Sanctuary is designed to protect both natural and cultural heritage, so its boundaries do not fall along such dualist lines. By analyzing the political context of park formation in Machu Picchu, this paper illuminates how Sanctuary boundaries reflect twentieth century land tenure policies, not nature-culture ideals.

Machu Picchu has undergone several formal designations as conservation space, each with a different territorial configuration, state agency, and preservation goal. In 1929, Peru passed a law designating state authority over pre-Hispanic archaeological sites, and Machu Picchu became an Archaeological Monument. This law only applied to individual sites, and did not constitute a larger vision of protected space surrounding the ruins. Sometime after 1941, Machu Picchu became part of the Wenner Gren National Park, although this designation was more an honorific than a land management category. In 1968, the Machu Picchu Archaeological Park was created with the goal of preserving Inca archaeological sites in and around Machu Picchu. The state agency in charge was the Archaeological Institute, later the National Institute of Culture (INC). The geographic space of the Archaeological Park has transformed with time. On maps from the 1970s, park borders are shown as the Urubamba River to the north and the Inca Trail to the south, and the park is comprised of 10,724 ha. Today, the INC asserts that the Archaeological Park and the 32,596 ha Historic Sanctuary overlap precisely. The growth of the Archaeological Park reflects the continued expansion of state-designated places of history around Machu Picchu.

In the early 1970s, national and regional state agencies began to float the idea of creating a protected area (then called *unidad de conservación*) at Machu Picchu. The transformation of Machu Picchu from Archaeological Park focused on cultural heritage to Historic Sanctuary also designed to

protect natural heritage seems logical in retrospect. After all, the MPHS supports incredible biodiversity, including over 400 bird species, 2300 flowering plants, and ecosystems that range from lower montane subtropical forest to high altitude grasslands and snowfields. Its most famed occupants are the cock-of-the-rocks bird (*Rupiana peruviana*), the spectacled bear (*Tremarctus ornatus*), and the eighty-plus species of orchids. We must ask, though, why it made sense at the time to add nature conservation to a place dedicated to Inca heritage. One reason has to do with how the aesthetic beauty of Machu Picchu's landscape has always been lauded as complementing the architectural wonder of the archaeological sites. Hiram Bingham wrote of the scenery around Machu Picchu: "in the variety of its charms and the power of its spell, I know of no place in the world which can compare with it" (Bingham 2000 p. 159). Explorers and tourists who followed Bingham echoed these sentiments.

A second reason is that scientific expeditions to Machu Picchu have long focused on the area's flora and fauna. The Yale Peruvian Expeditions are remembered for their archaeological findings, but also collected botanical and zoological data. On Julio Tello's 1942 expedition to Wiñay Wayna, Cusqueñan botanist César Vargas Calderón conducted botanical surveys. The 1968 and 1970 University of Cusco expeditions led by Victor Angles Vargas also combined archaeological, ecological, and geological studies. The vision of nature reflected in later Sanctuary management strategies is based upon aesthetic appreciation for the landscape around Machu Picchu and scientific appreciation for individual elements of this landscape (birds, orchids). Perceived threats to nature (primarily in the form of fires purportedly set by rural villagers—see Dove, et al. 2008) was a motivation for creating protected space. This aesthetic and elemental vision of nature reflects how Historic Sanctuary legislation defines nature as a "setting" for history, not a dynamic ecosystem.

Two other, interrelated, motives for creating a *unidad de conservación* at Machu Picchu were to promote tourism and to secure UNESCO World Heritage Site status. Regional development plans

of the 1960s and 1970s advocated that Peru seek World Heritage recognition for sites in and around Cusco, to increase foreign tourism. The MPHS is one of the few World Heritage sites to be acknowledged for having both natural and cultural heritage “of outstanding universal value” (UNESCO 1972). Cultural heritage includes monuments, buildings, and archaeological sites; natural heritage includes physical or biological formations, habitat, and landscapes (UNESCO 1972). UNESCO evaluated Machu Picchu’s natural and cultural heritage separately, not as they interrelate. Peru had to demonstrate that it was able to protect both types of heritage from threats, so it had a strong motivation to supplement the Archaeological Park with a protected area for natural heritage.

Also in the 1970s, backpackers started flocking to the Inca Trail, so the geographic space associated with tourism to Machu Picchu was growing. Moreover, Inca Trail hikers had the goal of immersing themselves in nature as well as seeing archaeological sites. This extended tourism space around Machu Picchu was beginning to be perceived as a place of nature as well as of Inca archaeology. A final motive for creating an *unidad de conservación* on top of the Archaeological Park was so the Forestry Center (the institution that preceded INRENA in managing Peru’s protected areas) could gain authority over, and tourist revenue from, Machu Picchu. In 1978, the Forestry Center submitted plans for a new *unidad de conservación*. After a slow administrative process, Peru created the Machu Picchu Historic Sanctuary on January 8, 1981. UNESCO World Heritage recognition followed two years later.

Why was the MPHS placed where it was? The boundaries of the Sanctuary are easy to follow in a topographic sense, being comprised of rivers to the east and west, a ridge to the north, and Salkantay mountain to the south (Figure 1). MPHS borders don’t necessarily correspond to ecological boundaries, however, as might be expected of an *unidad de conservación*. Nor do they correspond with the extent of Inca occupation and land use in the region. (In fact, the social construction of Machu Picchu as existing in a linear geographic space, with the Inca Trail to Cusco

being its sole connection with the outside world, has impeded understanding of connections among archaeological sites.) When I asked MPHS officials why the boundaries were put where they were, they speculated that it must have been because of the ease of topographic demarcation. But when I looked at management policies, what stood out is that the written description of Sanctuary boundaries is the same as that of the former *haciendas* occupying these lands, making boundaries artifacts of elite estates. I argue that there is more of a connection between park formation and *haciendas* than someone copying a paragraph from one land title to the next. The MPHS is not the only park that follows *hacienda* boundaries. Huascarán National Park, created in 1975 in the mountains north of Lima, does as well (Barker 1980). Barker (1980) hypothesizes that parks could be more easily established after agrarian because there was less political opposition from powerful landowners. While I think her point is important, I believe there are more profound connections in terms of how park formation and agrarian reform reterritorialized rural spaces.

The 1969 Agrarian Reform Law decreed that large *haciendas* on the coast and in the Andes be expropriated by the state. Productive lands were distributed to peasant organization, which were imposed by the state and took several forms, including peasant cooperatives and peasant communities.<sup>2</sup> Purchasing expropriated *haciendas* came with strings. Peasants owned the land collectively, not individually, and had to pay off their agrarian debt. *Hacienda* owners took measures to combat agrarian reform, by selling off land to peasants before expropriation, or subdividing their estate so it would be too small to expropriate. *Campesinos*, too, tried to manipulate the system. They initiated lawsuits and took direct action, in many cases violence, to “kick the estate owner out” (as rural villagers told me). Not all of the *campesinos* on an *hacienda* became beneficiaries, so reform was contentious within the peasantry as well as between peasants and *hacienda* owners.

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<sup>2</sup> Peasant communities, or *comunidades campesinas*, are a form of rural social and political organization. A *campesino* community has a demarcated territory, membership roster, is formally inscribed with the regional government, and is governed by community assembly and by an elected president and slate of officers.



The lands of the MPHS were part of four *haciendas*, the remnants of larger, colonial-era estates that gradually had been reduced in size through inheritance and sales (Glave Testino and Remy 1983; Rowe 1990). Each *hacienda* underwent agrarian reform in a different fashion, and had varying land tenure status when the MPHS was created in 1981. Mandorpampa was not expropriated. The owners rented or sold lands to *campesinos*, and later sold parts of the estate to tourism developers, sales contested by MPHS institutions. Torontoy did go through agrarian reform. In 1974, 342 ha of the 9,583 ha *hacienda* were expropriated and distributed to 55 *campesino* families, who achieved regional distinction in 1978 for being the first peasant organization to repay their loan from the agrarian bank in full. The peasant community of Torontoy continues to seek formal title to their lands.

Agrarian reform in the 6,926 ha Q'ente and 12,770 ha Santa Rita estates took a much different turn. The state expropriated 1,567 ha of Q'ente in 1974 and 1,124 ha of Santa Rita in 1975 and distributed these lands to 37 designated peasant beneficiaries in Q'ente and 14 in Santa Rita. The beneficiaries began to make payments on their agrarian debt. What happened next is unclear, as state and local actors give completely different narratives of how land tenure changed when the MPHS was created. INRENA asserts that the creation of the Historic Sanctuary in 1981 automatically gave it property rights over the Sanctuary. It blames a bureaucratic snafu, in which state expropriation of Q'ente and Santa Rita was not properly registered, for later problems with *hacienda* owners resurfacing to claim ownership rights. The INC maintains that a 1991 legal ruling nullified agrarian reform because there were nationally significant archaeological sites on the property. The INC uses this ruling to justify its property rights over the MPHS, as the institution responsible for archaeological sites. The Zavaleta family that owned Q'ente and Santa Rita argues that since agrarian reform was nullified, land ownership should revert back to them, not to go the INC. The family of an even former *hacienda* owner claims that when their ancestor sold it to the

Zavaletas, Machu Picchu was excluded from the sale, so they are the true owners of Machu Picchu. Ongoing court cases have yet to resolve these conflicts over land tenure.

Rural villagers tell a quite different tale. They contest that they were passive beneficiaries of agrarian reform, recounting their daily struggles with the *hacienda* owner and how they fought to get land tenure. They acknowledge that they did not secure an official land title, but attribute this to deception on the part of the Zavaleta family. Village leaders were invited to a big feast, where Zavaleta made them sign over the rights to their newly acquired land. The leaders, illiterate and dazzled by the celebration, were deceived into signing the document. Local political leaders also misplaced legal records, failed to sign a critical document, and lost money to pay off the agrarian debt. If these events had not happened, say *campesinos*, they would have secured title to their lands and been able to keep INRENA and the INC at bay.

These differing histories are not unique to places within the MPHS. Each *hacienda* in the region took a different route through agrarian reform, reflected in a mish-mash of property rights today, with few peasant communities actually holding land titles. The different routes by which the four *haciendas* passed through agrarian reform left legacies still central to current controversies over heritage space. The fact that Mandorpampa remained in private hands after land reform facilitated the development that took place in Aguas Calientes. Residents of Torontoy feel a measure of land tenure security that residents of Q'ente do not, contributing to differences in state-villager relations.

*Haciendas* and agrarian reform influenced the physical establishment of park boundaries. Agrarian reform and park formation also intersect in deeper ways. Both processes redistributed rural lands. They also tried to reorient rural land use towards state-sanctioned development—tourism, in the case of Machu Picchu. Under agrarian reform, *campesinos* only received an *hacienda's* productive lands, indicating that state motives went beyond redressing land inequalities. Indeed, one of the goals of agrarian reform was to increase peasant agricultural productivity, through new forms

of peasant organization and increased state supervision. Both parks and agrarian reform also sought to reconfigure indigenous identity. Agrarian reform legally recognized rural Andeans as *campesinos* (peasants), not *indigenas* (indigenous people). The MPHS reconfigured indigenous identity by historically dissecting modern-day residents of the Sanctuary from Peru's indigenous past.

These three strands of change wrought by agrarian reform and protected area-- land tenure, development orientation, and indigenous identity-- interdigitate in intriguing ways. Sanctuary officials categorize rural villagers as both too modern and not modern enough, characteristics used to justify rural dispossession in the MPHS. Rural Sanctuary residents are not modern enough because they weren't able to cancel their debt and secure state recognition as a peasant community with its own lands. "They're just a human settlement, not a peasant community," said one official in a derogatory manner, implying that this makes them less deserving of being part of park policy negotiations.

Villager experiences with *haciendas* and agrarian reform also made them too modern. Some Sanctuary managers refuse to see villagers as indigenous (which would accord them certain rights under protected area law). Agrarian reform recognized rural inhabitants as *campesinos*, making them vulnerable later on to being called not indigenous by Sanctuary officials. Their indigeneity is also called into question because their land use is too modern, i.e. not Inca. Finally, even if villagers are, in the eyes of one official, "perhaps ethnically indigenous, [they are] not native to the Sanctuary." Why? Several individuals and families were brought to their current village to work by the former *hacienda* owner from one of his other estates. By being subject to the whims of *hacienda* owners, villagers lost their locality in the eyes of the state. Villagers dispute state assertions that they are recent arrivals and not indigenous. Indeed, they play up how "we are indigenous" and how their families have lived in their community "since the time of our ancestors."

## **CATTLE MICRO-POLITICS**

Ever since 1981, institutional authority of the Historic Sanctuary has been cleaved along the nature-culture divide. There have been numerous conflicts between INRENA, responsible for natural heritage, and the INC, responsible for cultural heritage: whether the Inca Trail is natural or cultural heritage, whether Machu Picchu should be referred to as the Archaeological Park or the Historic Sanctuary, and the never-ending question of how to divide revenue from tourist entrance fees. In 2000, a new state agency, the Machu Picchu Management Authority, was created to have the ultimate word on management decisions, but a lack of budget and personnel impeded its success at mediating between the INC and INRENA. A third important actor is the Machu Picchu Program, funded by a debt-for-nature-swap from Finland. The Machu Picchu Program provided \$6 million for ecological conservation. Operational from 1996 to 2002, one of its principal contributions was to increase INRENA's presence in the Sanctuary by hiring and training park rangers and constructing ranger stations. It also had a seat at the table in many policy discussions.

UNESCO is not directly involved with Sanctuary management. It does send the occasional fact-finding mission, and has issued several threats that it will place Machu Picchu on the list of World Heritage Sites in Danger if its management does not improve (the cable car was one incendiary issue). This threat has little teeth, as UNESCO cannot take away state authority over Machu Picchu, although it could give Peru bad publicity and impede its efforts to secure World Heritage recognition for other sites.

One of the most controversial conflicts between rural villagers and Sanctuary institutions is over cattle. Villagers own one to eight cattle per household. People use livestock as savings banks, selling mature animals when they need cash. Oxen are used to plow maize fields. Households earn income by renting out oxen teams or stud bulls. For most of the year, cattle roam freely in communal, high altitude grasslands several kilometers away from villagers' primary residences. The

right to graze livestock depends on one's status as a member of the peasant community. Villagers travel every so often to check on their cattle, which are at risk for being stolen or falling on steep hillsides. After maize harvest, livestock are brought down to graze on the stubble in harvested fields. Cows with calves are kept closer to home, so their owners can milk the cows and protect the calves from theft and predation.

On the surface, institutional discourse about cattle appears similar to that of the Yellowstone model. When we unpack this discourse, we see how individuals draw upon differing visions of nature, history, and rural villagers as they construct and apply cattle policies. Park rangers assert that in protected areas, "cattle aren't allowed... the law says they can't have cattle" because cattle are exotic species. However, neither the 1981 legislation creating the MPHS nor the 1997 protected area law specifically prohibits livestock in protected areas. Nor do national policies explicitly define what an exotic species is, or highlight exotic species as a particular threat to park ecosystems.

The principal management document for the MPHS is the 1998 Master Plan. The Master Plan was negotiated between the INC and INRENA in Cusco, with input from the Machu Picchu Program, regional government, tour operator associations, and University of Cusco. The master plan states that conserving "native flora and fauna" and "gradually eliminating exotic flora" are two goals for the Sanctuary (INRENA 1998 p. 8, 281). It does not assert that all exotic species are bad for Sanctuary ecosystems. In fact, it calls for reforestation by "native or exotic tree species." The plan gives a limited definition of exotic species as species "outside of their natural environment" (INRENA 1998 p. 33), and provides few examples other than eucalyptus. The master plan does address the issue of cattle. It states that cattle are problematic because they cause erosion and eat plants, but does not refer to them as an exotic species (INRENA 1998).

For management staff working in Cusco and Lima, exotic has come to mean that a species was not present in the Andes when the Spanish arrived in 1532. As an exotic species, cattle violate

untouchable heritage space. They contaminate the Sanctuary by their mere presence, and damage Sanctuary environments by being biologically incompatible with Andean ecosystems (i.e. a cow eating a plant causes more damage than a llama eating a plant, because the cow is exotic). By depending on cattle, rural villagers demonstrate their incompatibility with spaces of history. Villagers are told by rangers that exotic species are prohibited in the MPHS, but the majority of villagers said that they did not know what an exotic species even was: “no one uses that term here,” I was told, “we just started hearing that recently.” One person did say that “the park rangers just come, they tell us it’s an order from INRENA, but INRENA has never come here, they haven’t told us why they’re prohibited.”

In December, 2000, the heads of INRENA-Machu Picchu and the Management Authority held an assembly with one peasant community. These officials have professional degrees, and have climbed their way up the ranks in government agencies. They arrived around mid-day, tired from trekking uphill from the train station. After eating lunch and resting at the ranger station, we all walked down to the schoolyard. Benches and a table were brought out from the school, and the Sanctuary officials, rangers, and ecological police took their seats. Around sixty villagers sat on the hillside above the schoolyard, men on one side, women on the other. I sat in the middle. The community had called the assembly to get their newly formed porters association recognized by Sanctuary agencies and be given priority in working for Inca Trail tour operators. Villagers were particularly worried about who would be allowed to register with the association, since a few undesirable ‘son-in-laws’ were setting up households, and they couldn’t stop these intruders given their uncertain land tenure. All of a sudden, the Management Authority head changed the topic:

“You know that this is a natural protected area. We can allow up to two head of cattle now. We are in the process of putting everything in order. Not five, not ten. We will expel the rest, without any loss of quality [of lifestyle]. It’s been a long time since you have been notified. This number will be sufficient for a family. Ten, fifteen, five is too much. You have to take the extras outside. I am communicating this to you.”

Then followed a discussion in which villagers attempted to persuade the official that they needed more than two head of cattle, not to mention cargo animals. The INRENA head spoke:

“we have to regulate the quantity of livestock. Other people will say, well, if they have an extra, why can’t I, I’m as much of the place as they are. You have to regulate this. Visitors will want all the comforts. They will get scared if a horse enters their campsite. There are no muleteers allowed here. The cattle can go on the other side of the river. Two cows attacked tourists. We are not prohibiting cattle because we don’t recognize that you live here. It’s that this is a tourist place, and then no one says they’re responsible. If someone gets hurt, it costs \$3500, hurt on the trail because animals were there that weren’t supposed to be there. It’s not that we want to be against families. This is a tourist place. The animals will ruin this. You need to change, manage your farms. Cattle go outside [Sanctuary boundaries], they can just cross the river. If we want to keep on living here, there are going to be restrictions. They say “why do they prohibit us from going this. Twenty years ago, there were no tourists, I’m not accustomed to this.” We can change the trail route and then you can raise the livestock you want. From the moment we accept visitors, we have to accept restrictions... I can’t invite you to my house and then my dog bites you.”

The Management Authority head sought to carve out authority for this new institution, thus her emphasis on “order” and “notification,” and her proclamation of an increased restriction in the number of allowable livestock. She positioned herself in a distinct sphere from villagers, implying that she knew better than they how many head of cattle they needed. The INRENA head took a different approach. He contextualized cattle limitations as a necessary part of increased engagement with Inca Trail tourism, not as part of ordering and rules. He even put the burden back on villagers for having “invited” tourists in the first place. He shifted between I, you, we, alternatively identifying with people (“why do they prohibit us”) and state institutions (“you need to change”). Their solution, to simply move cattle outside the Sanctuary, demonstrates that for these officials, Sanctuary boundaries dominate the landscape. Taking cattle across the river would move them out of the Sanctuary, but it would also mean taking them to another community, and an individual’s grazing rights do not cross community boundaries.

After these pronouncements, a discussion followed about when INRENA would make an official inspection of cattle pastures. A new theme emerged, namely that since villagers don’t

adequately care for their animals, they may as well give them up entirely. The INRENA head asserted “this isn’t livestock raising, because you don’t watch the animals enough.” Park rangers pointed out that “the cattle are in a bad state.” Villagers, in turn, accused INRENA of not doing technical extension (“they’re the ones who manage natural resources”) to help them better raise their livestock. The discourse as articulated on the ground was not about the appropriate divide between nature and culture; it was about the appropriate roles of peasants in livestock raising and tourism, and the appropriate role of state officials in supporting resource management and local livelihoods.

The immediate reaction to the assembly was anticlimactic. Sanctuary officials kept postponing their planned inspection of livestock pastures. Rural villagers didn’t remove their cattle. Park rangers did not agree with the new policy, saying “you can’t just tell people to take their cows out.” Another countered, “but they’ve been notified for years already,” yet later admitted that “I myself am not entirely sure what the [legal] situation is.” Rangers think cattle should be regulated on conservation grounds: “cattle cause the loss of orchids, they eat the plants, it’s sad.” Park rangers articulate conservation discourse that most strongly resembles Yellowstone model rhetoric, passionately believing that their duty is to “conserve and protect the natural resources of the Sanctuary.” They also see their role as being an intermediary between park rules and local realities: “the law says that there can’t be cows, but there is a population, they are poor, they need alternatives.” Rangers state that while protected area law prohibits cattle from parks, they, the rangers, have made an exception to the law: “we let them have five cows” since “the law doesn’t offer alternatives, but it’s necessary to do so.” Rangers see themselves as having knowledge of rural realities that their superiors do not. Most rangers have at least completed high school; the younger, more recent hires also tend to have professional degrees. Yet they do not feel comfortable demonstrating their knowledge to the Sanctuary management team in Cusco. Rangers feel differences in social class with office workers in Cusco: “our boss doesn’t drink beer with us, with



foreign volunteers, yes, with us, the park rangers, no.” Relations with their superiors in Cusco are not filled with trust. Rangers are afraid of sticking their heads out, for fear that doing so will cause them to be fired. Given that their contracts must be renewed every six months, it is not surprising that they choose not to rock the boat, preferring to change policies informally on the ground.

In February, two months after the assembly, rumors began to float around the village that officials were coming to take people’s cattle away. At the end of February, during pre-Lent Carnival celebrations, the Machu Picchu Management Authority head, ecological police, and regional district attorney led a “surprise operation” to the village. One by one, household heads had to sign an official statement declaring how many livestock they owned in the Sanctuary. The ecological police then gave an official Act of Notification to household heads to remove any livestock in excess of the allowed two per household (two of each type of animal). The Management Authority head justified this operation since “you abandon them there, it’s not a livestock zone because you don’t take care of them... its not just because of tourism that we’re declaring this, it’s because it’s a Historic Sanctuary, there are other species here.” The Management Authority head and district attorney walked a fine line between being powerful authorities (“we already decided on two livestock”) and being beholden to uphold a more powerful law (“I don’t want this...but the law is blind, we’re responsible for the legal aspect of protection”).

To the Management Authority head, an Act of Notification was a logical next step, given that “we’ve already notified you several times already.” To villagers, there was nothing logical about this visit. Even though the official number of allowable livestock was set at two, the District Attorney and Management Authority head made exceptions. One woman pleaded that she needed seven horses to bring goods for her store, and was given an exemption. Another said he needed six head of cattle “to keep our children in school” but was told “no” by the district attorney, since “the little animals do damage to the plants that are protected, they damage the natural, native plants.”

The selection of households notified was also random. If you were unlucky enough to be in the village center drinking *chicha* (corn beer) that afternoon, you were at risk of being notified. In one case, the authorities eschewed notifying one family rumored to possess numerous cows in order to notify another family with very few cows, because visiting the first house would have required an extra half hour's walk. When villagers pointed out the first house on top of a far-away hillside, the district attorney and Management Authority head visibly sighed and said they had to get back to catch the afternoon train.

To villagers, it was an unprecedented, and unwelcome, tactic interpreted as a first move to kicking villagers themselves out of the Sanctuary. They showed their resentment in a unique fashion. After the district attorney and Management Authority head had left to catch the train, the ecological police stayed on to drink a large bottle of beer in honor of Carnival. Carnival is a time when social norms are inverted, and many games and tricks are played. Three women came up and started throwing mud at the uniformed policemen. "Ladies, please! Stop! I have to work" the police bleated, loathe to physically defend themselves against three short, rotund Andean women, and finally ran off downhill to the train. The women gleefully saw them off with a few last potshots, then helped themselves to the leftover beer. State performance of power and authority, making the women sign official documents by thumbprint, had been trumped (at least momentarily) by a Carnival performance that inverted power and authority, leaving the policemen quite literally with mud on their faces.

Park rangers were not happy that they had been drawn into this incident: "in my opinion, it wasn't good, the goal was to surprise people, and why didn't they notify everyone? This will cause conflict, people will say, why me, why not him... I'll talk to them, tell them they should meet amongst themselves." Rangers feared a backslide in villager-state relations, worrying that they would be on the front lines of any violence. The livestock controversy intensified in April, when the

district attorney brought criminal charges for “degrading the environment” of the MPHS against 33 villagers who had received an Act of Notification to get rid of their cattle. Tensions between villagers and park rangers heightened as villagers tried to determine who had tattled to the district attorney’s office that they hadn’t removed their cattle. The municipality of Machu Picchu hired a lawyer for the 33 defendants. Meanwhile, villagers made a few changes in grazing practices, not letting animals roam without supervision on the Inca Trail where they could scare tourists. Relations with park rangers slowly moved back to the arena of informal discussions rather than formal notifications and criminal charges. As one ranger said, “we don’t agree, but then we go drink *chicha* (corn beer) together.”

## **CONCLUSION**

This paper dissects how a myriad of factors shape heritage conservation space and Sanctuary policies, going beyond traditional dichotomies often employed in anthropological and geographic analyses of parks. The material and discursive construction of heritage conservation space in the Machu Picchu Historic Sanctuary has involved de- and re-historicizing Andean people and places. Park conflicts in the MPHS do involve dispossessing rural residents, but this dispossession did not come about because Sanctuary managers imposed the Yellowstone model vision that the MPHS is pristine nature. Conservation space in the MPHS is not divorced from development space, it has been layered on top of it. Protected area boundaries helped create heritage space where aesthetic nature becomes a setting for history, allowing “natural ecosystems” and sites of past human occupation to coexist. Even modernity and heritage can be in harmony in the MPHS, as long as modernity consists of approved development and heritage is historic or natural enough to serve development. Villagers are problematic for Sanctuary officials by being too modern and not modern enough, incompatible with conservation and development, and outside the ideal time of heritage

space. These characteristics are brought about in part because of their recognized history with the land, albeit a version of history that begins and ends with *haciendas* and agrarian reform.

Park creation is related to modern state formation. Looking at linkages between park formation and agrarian reform provides insight into the Peruvian context that made protected area establishment logical at the time. Both policies reflect larger political economic reorientation of agrarian space and societies. Cattle micropolitics demonstrate how protected area policies are not only about applying Yellowstone model rhetoric and expanding state power in the hinterlands. They are also related to issues of state agency identity and social relations, whether it is the Management Authority head trying to carve out authority between the butting heads of INRENA and the INC, or park rangers trying to make sure their jobs, and lives, are safe, and figuring out how to have a beer with both INRENA officials who employ them and rural villagers with whom they must live. By analyzing historic sedimentation of the Machu Picchu Historic Sanctuary as an agrarian issue as well as a conservation issue, this paper illuminates new ways in which conservation and development, nature and culture, and global and local forces are inscribed on the landscape.

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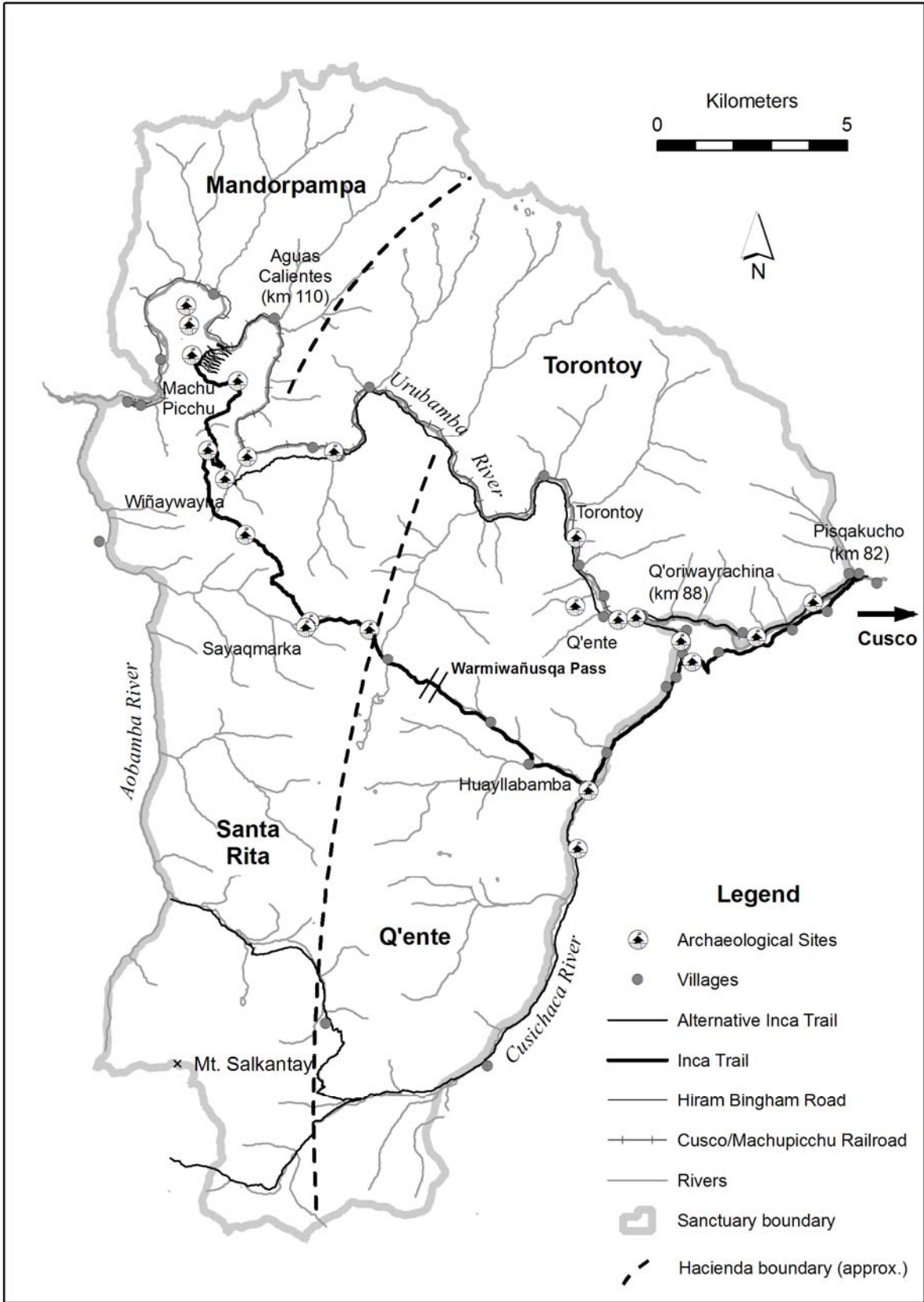


Figure 1. Machu Picchu Historic Sanctuary, Peru

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