

The Parallax of Landscape: Situating Celaque National Park, Honduras

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Introduction

Landscape has a long and distinguished history within the discipline of geography, but by its own admission is but one mode of ordering the facts of the geographical world. The origins of landscape within geography are traditionally traced to the nineteenth century German ideal of *Landschaft*, with a dual meaning of (1) an area of land and (2) the viewpoint of this area of land tied to the perspective of an individual from a particular location (Olwig 1996). A dualism exists in the definition in that the landscape is both the material reality of a physical area of land *and* the ideal representation perceived from a particular viewpoint. However, it is acknowledged that landscapes can be viewed from multiple perspectives, each giving a differing interpretation (Meinig 1979).

Parallax, the apparent change in appearance of an object when viewed from different positions, is conventionally associated with the discipline of astronomy and, within geography, in the practice of photogrammetry. However, the definition fits nicely with the tradition of landscape geography where perspective is of the utmost importance. Hence, is it possible to create a complementary parallax of perspectives to address the human–nature dichotomy imbedded in the creation and global diffusion of that staple of tourism, the national park? Here this question is addressed by situating Celaque National Park, Honduras, within differing perspectives of the landscape tradition. It is argued that the ideological separation of humans and nature that occurs within the American national park tradition must be addressed if the negative cultural and natural repercussions of this exclusionary model of national parks are to be resolved.

National Parks as Landscape

As a national symbolic place, Yellowstone was perceived as a representation of national ideals and national self-image: a grand landscape painting that stood as a metaphor for America itself. [Germic 2001, 9]

A national park is formally defined as a bounded physical area of land protected from human habitation and exploitation for the conservation goals of biodiversity protection, continuation of ecological services, and other more spiritual, intrinsic,

and aesthetic values (McNeely 1990; Furze, De Lacy, and Birkhead 1996; Mitchell 2003). National parks are also significant destinations for tourists. However, a brief overview of the current literature regarding national parks from the landscape tradition challenges the official view that national parks are purely natural areas without human influence, and hence in need of protection from humans. In contrast, both directly and indirectly, they are cultural landscapes (Germic 2001).

The origins of the formal national park, with notable antecedents in forest and game reserves (Harrison 1992; Wright and Mattson 1996), arose in the United States out of the nineteenth century assertion of environmental consciousness by prominent writers such as Henry David Thoreau, George Perkins Marsh, and John Muir. Guided by these influences, and in opposition to the English cultural landscape of well-manicured parks, America placed cultural value in the scenic landscape beauty of untamed wilderness, "... it was obvious that what America lacked in cultural treasures it more than made up for in natural wonders. The American landscape became an effective substitute for a missing national tradition and a repository of national pride" (Patin 1999, 41).

In addition to the naturalist writers, who often wrote the description of nature through cultural imagery such as "Devil's Tower" and "Montezuma's Castle" (Patin 1999, 42), the American school of landscape painting contributed to the creation of national identity out of the valuation of nature. It was in this tradition that the majestic natural landscape was depicted through prose and paintings that created a symbolic landscape through which cultural meanings and values were encoded (Patin 1999). The existence of a general consensus among Americans of a certain vision of natural landscapes is in part due to indoctrination through painting, poetry, literature, and landscape design (Nuemann 1998). Frederick Law Olmstead, the father of American park landscape design, goes so far as to offer natural landscape appreciation as a measure of an individual's civility (Grusin 1998).

Toward the end of the nineteenth century the creation of the first national parks in the majestic wild lands of America began in earnest with the establishment of Yosemite and Yellowstone National Parks. However, these parks were both areas of "land protected from human exploitation and occupation" (Brechin et al. 1991, 7), as idealized by the National Park Service, and substantially influenced by the American urban park and landscape architecture tradition of Olmstead (Carr 1998). Thus, the Yosemite landscape attempts to both preserve and protect nature, and provide for the recreation and recuperation of those who labor (Grusin 1998). Through careful deployment of the principles of landscape architecture, Yosemite was made accessible to tourists, while maintaining the feeling of wildness. The end result is a reproduction of nature in Yosemite for human consumption through the practice of tourism.

National parks as realized in the United States are analogous to art galleries and museums (Patin 1999). In a technique similar to that applied in landscape painting, nature becomes an object to be displayed through the design of scenic roadways, exhibits, and lookouts which all regulate visitor movements to maximize the visual presentation of natural landscapes. These design features reflect the classical landscape perspective through the removal of evidence of human labor and the separation of the observer from the land. As such, national park landscapes relate

to the German idea of *Landschaft* with a dual meaning of (1) an area of land, and (2) viewpoint of this area of land, tied to the perspective of an individual from a particular place (Olwig 1996).

As can be seen, the general assumption that national parks are for the conservation of nature becomes more complicated when viewed through the lens of landscape geography. For example, the creation of national parks arise out of a geography of exclusion (Mitchell 2001); "On the one hand, the reservation of 'nature' required and facilitated reservations for various Native nations" (Germic 2001, 9) and as a result, the history of the conquest of Native American societies was transformed into the conquest of nature. Both Yosemite and Yellowstone first had to be emptied of their native inhabitants before they could become "natural."

Today the geography of exclusion inherent in protected natural areas has diffused across the globe. In 1962, the first list of protected areas contained a mere 1,000 sites. By 2003 it had grown to over 100,000 protected areas covering approximately 11.5 per cent of the earth's land surface, roughly the size of the South American continent (Chape et al. 2003). However, the dichotomy present in exclusionary principles based on the American experience of national parks has also spread and, as a result, recent estimates place dislocated populations in the tens of millions globally (Brockington, Igoe, and Schmidt-Soltau 2006). As is clearly evident, the repercussions of the human-nature dichotomy are not inconsequential as this new class of environmental refugees would attest (Geisler and de Sousa 2001).

Protected areas such as national parks ignore the historical, and often contemporary, reality of these "natural" landscapes. For example, creating islands of biodiversity in parks where attempts to preserve a static nature from change is paradoxical in that nature is forever changing as a dynamic system (Pletsch 1993). The static exclusionary environmental strategy which believes nature can be "located, fixed, and preserved outside of culture ... read[s] generations of social actors out of the 'nature' they preserve, denying any social history of landscape" (Katz 1998, 55). Few, if any, natural landscapes are without a social history (Stevens 1997; Redford, Robinson, and Adams 2006). All natural areas protected as parks have been altered by humans to some degree and denial of this "illustrate[s] man's short memory where his own effects on landscape are concerned" (Nelson and Byrne 1966, 226).

It is argued here that the negative repercussions of national parks, from social impoverishment to unintended environmental degradation, are a direct result of the denial of the human-nature relationship. As this brief overview of landscape perspectives on national parks reveals, they are indeed cultural landscapes. But to get at the heart of the matter we must delve deeper into the topic, and Celaque National Park in the western highlands of Honduras will be used as a case point to do so. By situating this national park within several traditions from landscape geography, insights gained can help provide a new parallax vision of parks that attempts to address the human-nature dichotomy.

The Morphology of Celaque National Park

The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent, the natural area is the medium, the cultural landscape the result. [Sauer 1925, 343]

Carl Sauer's (1925) landmark work *The Morphology of Landscape* brought the German *Landschaft* ideal to American geography and serves as a basic template for modern traditions within landscape geography. Sauer's morphological method first describes the physical properties of an area and then how these are modified by the human agent of culture into a cultural landscape. The analysis of Celaque National Park that follows similarly begins with a brief description of the physical properties of the area of study.



Celaque National Park, Honduras

The Cultural Landscape of the Celaque Mountains

The Celaque Mountains, located in the western highlands of Honduras, have their geologic origins in an ancient volcanic plateau of the Central American volcanic axis (see Map 8.1). Due to their volcanic genesis, the soils are highly fertile. This contrasts with much of Honduras, where the infertile Old Antillia geologic base is dominant (Portillo 1997). The rugged topography of the Celaque Mountains includes the highest point in Honduras at *Cerro de las Minas*, lower-elevation pine/oak forests, and the

largest cloud forest in Honduras at higher elevations. High levels of precipitation source dozens of rivers which serves as the origin of the *Lencan* name for the mountains, Celaque, meaning “box of water” (AFE-COHDEFOR, GTZ and GFA TERRA 2002).

Due to the fertile soils and abundant precipitation, the highland cloud forest has a unique assemblage of flora including broadleaf trees reaching 25–30 m in height, epiphytic mosses, orchids, and bromeliads (Meija 1993). Further, high profile fauna species such as quetzals, toucans, spider monkeys, pumas, and at least 45 endemic species of reptiles and amphibians reside within the park (Wilson and McCranie 2004). Cloud forests are considered to be among the most threatened ecological systems in the world, making the importance of the Celaque Mountains a high priority for the conservation of abundant and unique biological diversity (WCMC 1998; GEF 1999; GTZ 2002).

As in Sauer’s definition, the cultural landscape of the Celaque Mountains is inherently related to the physical landscape. While the vast majority of Honduras has been geologically endowed with poor soils and low levels of pre-Colombian indigenous habitation, the relatively fertile soils of the western highlands has facilitated higher densities of the indigenous *Lenca* people. Even though the *Lenca* are the largest indigenous group in Honduras in terms of numbers, they are one of the least understood peoples in Central America. The loss of the *Lenca* language, which had completely disappeared except for a few words by 1900, precipitated a decline in traditional *Lenca* culture. Today only a relic of the pre-Hispanic *Lenca* culture survives in place names and syncretic mixes of Catholic and *Lenca* belief systems (AFE-COHDEFOR, GTZ, and GTA TERRA 2002).



Traditional Lenca Waddle-daub Dwelling with Fired Wood in the Highlands of Celaque National Park

The *Lenca* of the Celaque Mountains have traditionally resided in dispersed homesteads loosely organized into settlements, or *aldeas*. The dispersed homesteads consist of one-room homes made of wattle-daub walls and pitched roofs of thatch in lower elevations and fired wood shingles in higher elevations where large trees are available in the oak/pine forests and at the highest elevations in the cloud forest (West 1958). The homesteads are surrounded by agricultural fields, which in turn separate homesteads from each other (see Figure 8.1). The resulting *aldeas* are not centrally organized settlements but a dispersed association of homesteads whose patterns follow the contours of mountain valleys.

The highland *Lenca* rely primarily on subsistence agriculture for their livelihoods, using a traditional swidden fallow system (Jansen 1998; Brady 2003). They produce a particular assortment of crops and handicrafts in accordance with the physical environment. The traditional *milpa*, a Central American agricultural system of intercropping maize and beans, is practiced throughout the Celaque Mountains. However, in the higher elevations unique climatic and soil conditions allow for the cultivation of additional crops such as cabbage, potatoes, and carrots as well as the production of ceramic pottery for sale at market. The pattern of agricultural and handicraft production reflects the altitudinal life zones present in the high relief of Central America.

The assemblage of crop varieties and handicrafts are exchanged at traditional *Lenca* market centers optimally located at an intermediary location between the high and low elevation *Lenca aldeas*. Brady (2003) reports the preference of these markets over larger nearby *ladino* market centers, which are largely avoided by the *Lenca*. In the Celaque Mountains, this can be observed in the *Lenca* Sunday market in the municipality of *Belen Gualcho* on the western side of Celaque National Park, where residents of *aldeas* in the Celaque Mountains exchange produce and crafts with those from lower elevations and purchase basic household goods.

The natural landscape and *Lenca* cultural group have combined to form a unique cultural landscape that has managed to exist for several hundred years, with inevitable adjustments over time as no cultural landscape is immune to change. For example, encroachment by *ladino* farmers and export oriented coffee estates have created a geo-cultural pattern of verticality with the traditional subsistence *Lenca* cultural landscape in the upper reaches of the Celaque Mountains and *ladino* farms and coffee estates in the lower elevations and surrounding areas. Yet the basic symbiotic cultural landscape has been maintained in the face of ever-encroaching outside pressures for change which has spanned the historical spectrum from the Spanish conquest to the repressive Honduran state. However, this cultural landscape has recently been threatened by the contemporary ascendance of the national park landscape over the older symbiotic cultural landscape of the Celaque Mountains.

Celaque National Park and the Disembodying of the Cultural Landscape

In 1987, the Celaque Mountains became another type of cultural landscape, a national park. The park was originally created to protect sources of water through the conservation of highland forests (Herlihy 1997; Portillo 1997). But in contrast to the American national park model, resident populations were allowed to remain

within the park's boundaries so long as no further forest clearance occurred (AFE-COHDEFOR, GTZ, and GFA TERRA 2002).

During the 1990s, Honduras was forced to adopt sweeping neo-liberal adjustment programs imposed by international financial organizations (Jansen 2000). One aspect of these programs was the ceding of protected area funding and management to non-governmental (NGO) interests (Beltrán and Esser 1999). As a result, control of Celaque National Park was transferred in 1997 to the NGO *Proyecto Celaque*, funded and created by the German development agency GTZ (GTZ 2002). *Proyecto Celaque*, in line with the American national park landscape perspective, created a park management plan calling for the relocation of *Lenca* peasants residing within the park, a reversal of the original Honduran policy.

In October of 1998, just as *Proyecto Celaque* took over management of Celaque National Park, Hurricane Mitch struck Honduras, leaving widespread devastation throughout the country. In the wake of destruction a *Proyecto Celaque* report described the situation as an "*oportunidad*" to implement the newly construed policy of relocation of the resident *Lenca* (Oviedo 1999). In response, and in keeping with the new policies, requests for assistance by the affected *Lenca* peasants residing within the park were denied unless they relocated to settlements outside the park's boundaries. Approximately half of the *Lenca* residents of Celaque National Park "voluntarily" relocated in order to receive assistance, albeit under extreme duress (Oviedo 1999). While the proximate cause of relocation was a natural disaster, the ultimate cause was the implementation of exclusionary Celaque National Park policies predicated on an American ideal of a natural landscape devoid of human habitation.

The end result of this brief morphological study is that the landscape of Celaque National Park contains a varied cultural history. It is not a purely natural landscape, but contains several cultural imprints that have modified the landscape in differing ways. Hence, the application of cultural landscape traditions to the study of the park is more appropriate than treating it as a solely natural landscape, as the national park perspective attempts to do. But to ask why this has not been acknowledged requires the application of additional landscape traditions to understand how the ideological representation of the landscape can be responsible for the practical treatment of it.

The Insider versus Outsider Landscape Perspectives

In the early 1970s, a reactionary movement to the quantification revolution arose within geography, termed "Humanistic Geography." The movement had a basis in the philosopher Søren Kierkegaard's subjective humanism where the only truth is in the individual. David Lowenthal (1972) and Yi-Fu Tuan (1974a&b) were at the heart of this tradition, and both discuss how our representation of a landscape is more about what is in our own heads than what is in the empirical landscape.

All humans share the physiological senses and a world view centered upon them. From that point on, however, experiences deviate to create a unique world view for the individual. Culture plays an important part as we are taught, or imprinted, by our cultural group to place importance on certain aspects and even which senses we rely

upon. Further down the hierarchy, kinship and family diverges our perspectives on reality in a similar manner. Finally, one ends with the individual, who has a unique view of the world based on personal experience, biological faculties, and accumulated values. As a consequence, each individual will have a matchless perspective and interpretation of landscape.

Tuan (1974a) discusses the creation of an insider versus outsider view of landscape. The insider is a person who is actually part of the landscape. Their world view, which influences their perspective on the landscape, is shaped through the intertwined relationship of livelihood. On the other hand is the perspective of the outsider, a person who is not from, or part of, the landscape. This worldview is based on cultural and personal experiences created elsewhere, and hence the ability to intimately read or know a landscape in other settings is encumbered. The outsider perspective can only be ephemerally based on the superficial. As an example, take the landscape of a national park. The outsider may view it as a natural landscape without human influence. However, the insider may be quite surprised to find out he or she resides in, and depends on, a landscape that is defined as having no human influence.

For Celaque National Park, the outsider perspective is embedded within a “western” cultural view of natural landscapes. Western conceptions of nature are centered on the separation of humans and nature (Stilgoe 1982), which predicates the perspective of national parks as (or as they should be) devoid of human influence. However, the insider perspective of Celaque National Park belongs to the residents within the “natural” landscape who are reliant on it for their very livelihood and location of their homes. The inherent duality, then, is that Celaque National Park is a natural landscape devoid of humans as an ideal *and* a cultural landscape where humans and nature are inherently intertwined as a reality.

“I love the mountains, but I hate the park.”

– *Lenca* peasant relocated from Celaque National Park

The Landscape of Social Formation

Cosgrove (1984; 1985) focuses not just on how we perceive landscapes, but how the purposes of social formation brought on by capitalism are reflected in landscape representation. He traces the idea of landscape back to the Italian Renaissance painters of the sixteenth and seventeenth centuries who took Euclid’s geometry and applied a linear single-point perspective to represent a three-dimensional landscape in two dimensional paintings with mathematical certainty. The painter, or observer, would represent the landscape according to the way they viewed the world, in effect appropriating and controlling the representation of it. Commonly this representation of the landscape would remove all evidence of the peasantry with a brushstroke and replace it with an idyllic scene for the appreciation of the elite.

More importantly, though, is the new perspective represented, both through landscape painting and the related surveyor’s “malicious craft” (Cosgrove 1985, 55), the legitimization of the existing social order by representing space as something

that could be controlled and dominated as an object transformed into the private property of an individual or state (Cosgrove 1984; Barnes and Gregory 1997). The political economy of social relations appears in how landscape is represented by a new way of viewing coincident with the infant stages of an emerging capitalism. During the Italian Renaissance, rich merchants from the mercantile era were able to appropriate country lands for leisure, and in later eras, profit.

Cosgrove (1985) addresses Tuan's (1974a) idea of the difference in perspective between insider and outsider. According to Cosgrove, the traditional insider is not separated from the landscape, but connected to it through the relationship of a natural economy. However, outsiders are separated from the landscape, and in the era of an emerging capitalism, such as occurred in Renaissance Italy or during the Enclosure Movement in England, an alienated relationship arises between owner and commodity. Such an idea can be traced to Marxist theory which claims that primitive accumulation violently separated humans and nature through the enclosure of lands and common property, turning them into private property, in effect making land a commodity (Sessions 1991).

Cosgrove's ideas are evident in the concept of national parks, defined as a natural landscape devoid of human habitation and exploitation (Davey 1998). Just as an artist would clear away any existence of human toil and labor in creating an idyllic scene, the human history of national parks must also be erased. The outsider's perspective stemming from the Western capitalist culture of Europe and the United States dominates as the landscape becomes not just an ideal representation of pure nature, but a real physical appropriation of the landscape from the insider through the formal creation of the park, marginalizing the insider perspective in the process.

Examples abound of national parks dispossessing the insider, from the violent history of park creation in the United States where Native Americans were forcefully removed (Germic 2001) to similar cases throughout Africa (Grove 1990; Neumann 1998; Cock and Fig 2000). The conservation of these areas has resulted in the transfer of ownership of resource rich but marginally located landscapes from local insiders to external outsiders (Smethurst 2000). Further, in relation to the perceived need to remove human labor and presence from natural landscapes, specifically in the form of relocation, national parks can be seen as creating aesthetic landscapes for philanthropic causes and tourist consumption (McNeely 1990; Shafer 1990; Castree and Braun 1998; Escobar 1998; Katz 1998; Zimmerer 2000). The rural poor are seen as a liability, and hence are removed from the scene as the landscape becomes appropriated by relatively powerful outsiders.

For Celaque National Park, the designation of the land as a national park under the control of the state between 1987 and 1998 appropriated the landscape from the *Lenca* residents, albeit tempered with the allowance of regulated continued settlement within the park boundaries. But the bequeathing of park control to international interests in 1998 resulted in the relocation of residents from their highland communal *aldeas* to the private land tenure settlements outside of the park, which is reminiscent of the capitalist transformation of natural economies tied to the representation of landscapes. Further, one of the major arguments for creation of the park resides in the tourist revenues it is expected to create, supporting the view that economic concerns play an important role in social representations of landscape.

Organic versus Universal Landscape

Olwig (1996; 2002) acknowledges Cosgrove's interpretation of the role of the Italian Renaissance painters' contributions to the formation of landscape, but delves deeper into history by examining the concept of landscape in the German speaking lands of northern Europe. Basing landscape on the German concept of *Landschaft*, Olwig discusses how the term originally did not just mean a bounded area of land and the view of it from a single point observer. *Landschaft*, based on other derivatives of the term in related languages such as Dutch, included customary organic laws that bound the community together through social norms and also bound them to the landscape in a nexus of localized land and culture. Such customary organic laws differed from location to location based on the local environment and local culture. However, forces of unification within larger regions encompassing multiple *landschaften* had to destroy localized customary organic laws binding communal communities to the territory in order to impose a more universal legal law that bound all people to the state.



Relocated Lenca Child Walking Along the Outside Boundary of Celaque National Park

Customary organic laws defining the relationship between the community and the landscape have to be severed in order for universal laws to apply in creating a National Park landscape. Through official state designation of the Celaque Mountains as Celaque National Park, and the subsequent ceding of park management to outsiders, universal laws and regulations relating to the western concept of national parks override local customary organic laws of *Lenca* communities within the park. When the original allowance of residence within the park was replaced by the policy of resident relocation, the local *Lenca* communities were physically severed from the land upon which their culture depended (see Figure 8.2).

Landscape as Social Compromise

Mitchell (1994) moves beyond the landscape tradition of Cosgrove and Olwig by proposing that landscape does not just *reflect* cultural landscapes, but also has an element of *intent*. Drawing on Marxist dialectics, he claims the creation of one landscape reflexively creates alternate landscapes. For example, the creation of Celaque National Park and the implantation of its exclusionary policies created an ideal “natural” landscape while necessitating new settlements outside of the park for the recently dispossessed. The separate landscapes differ, yet revolve around the same issue of appropriation of landscape. In the process the landscape is contested, and so landscape becomes a social compromise between opposing social groups.

Duncan (1993) discusses the need to address “the other,” those left out, in representing or creating landscapes as well as the importance of treating landscape at broader spatial scales. The majority of landscape geography is tied to specific localities, relatively small in area, which can be attributed to the single observer perspective of *Landschaft*. But in today’s globalizing world there are forces at grander spatial scales that influence the local.

Mitchell (2001) addresses such forces in relation to the contestation over the control of landscapes wherein insiders fight to wrest control from globalizing forces which, in turn, seek to homogenize the world through the exertion of power and influence at all scales from global to local. There is intent involved, and contestation, all of which take place within and about landscape. Mitchell and Duncan, by expanding the influences on local landscapes to global processes, adopt elements of political ecology where multiple scale analyses are needed to uncover all forces involved in the creation, alteration, and contestation of landscapes.

For Celaque National Park the questions of contestation are readily apparent, and are best exhibited by the resident *Lenca* populations originally being allowed to remain in existing settlements within the park, albeit with regulations. The later relocation of residents also exhibits social compromise in the creation of two settlements located in differing geographical locations. The modified park regulations and alternate relocation strategies represent contestation over landscape, intentionally creating alternate landscapes of social compromise.

One settlement, *Otolaca*, was created by NGOs, state agencies, and the Catholic Church on land far removed from their original highland *aldeas*, in effect severing the *Lencan*’s connections to their cultural landscape. However, in the other settlement of *Los Horcones* the relocated *Lenca* were able to negotiate the process whereby in exchange for promising not to return to reside within the park they were allowed to determine their own resettlement site. As a result, they chose a location in geographical proximity to their previous *aldeas*, but outside the park’s boundaries. This amount of self-determination allowed them to exploit a loophole in national forest policies and as a result any land continuously kept cleared of trees remains in their ownership (Jones 1990). Since the *Lenca* were geographically situated closer to their original landholdings within the park, they were able to work both the land outside the park and within it (see Figure 8.3). In effect, they resided outside of the park, keeping their side of the bargain, yet were able to expand their land holdings and exploit different ecological niches present at different altitudes.



3 Lencan Settlement Within Celaque National Park

Conclusion

Parallax, the noticeable change in appearance when an object is viewed from different positions, is clearly discernible in the various yet complementary landscape perspectives surrounding national parks. This chapter began with the formal view of national parks as “natural” landscapes devoid of human influence. But this idealized single-point perspective masks the multiple realities that exist within the landscape, which were only uncovered when applied through the multiple lenses of traditions within landscape geography applied here.

For Celaque National Park, the application of these landscape concepts shows how singularly defined natural landscapes can in fact be cultural landscapes created out of differences in insider/outsider views, alterations to livelihoods and land relations, and social compromise arising from contestation. The landscape is in fact not one landscape, but a combination of several landscapes depending on perspective. The difficulties facing national parks, whether in the United States or other localities such as Honduras, revolve around this disconnect.

Whether addressing national parks or urban-based landscapes, there are an infinite number of valid landscape perspectives. While the idea of an infinite amount of perspectives conjures up fears of a downward spiral into post-modern chaos, there are avenues to build outward. The concept of parallax can be one such solution. When applied in stereoscopic photogrammetry, the simultaneous viewing of photographs taken from complementary positions creates three-dimensional perspectives with the ability to perceive depth. Can such an opportunity exist for landscape? If so, landscape must move beyond the geometry of a linear single-point perspective that

transforms the three-dimensional reality into a two-dimensional representation of it. Perhaps a complementary parallax of landscape perspectives can form a basis for just such a movement.

The American national park perspective of natural landscapes devoid of human impact or occupation is premised upon the separation of humans and nature, ideologically and practically. However, most natural areas protected as parks have been changed appreciably by humans. The very idea of protecting nature from human impact through the creation of preserved landscapes is inherently paradoxical and reflects the philosophical dilemma created by the perception of humans as separate from nature. This is especially the case when the preserved landscapes are created at least partly for touring, as in the American national park tradition. The path to resolve this dilemma is through a re-conceptualization of the human/nature dichotomy.

The inherent unity of humans and nature must be accepted if there are to be steps taken toward the conservation of sustainable human-nature systems. In the Celaque Mountains this relationship was not acknowledged and the presence of *Lenca* peasants within park boundaries was assumed to cause environmental degradation. However, this assumption is challenged by research showing that, in fact, forests within Celaque National Park actually increased between the year of the park's creation, 1987, and the year of relocation, 1998 (Aguilar 2003). During the same time period additional research has found evidence that the expansion of coffee production is encroaching into the park itself, forming a significant threat to the ecological goals of the park (Southworth, Nagendra, and Tucker 2002; Southworth, Tucker and Munroe 2002; Bass 2006). To compound the issue, all of the relocated *Lenca* households have been relegated to working as increasingly cheap laborers on the same coffee estates in order to make ends meet, in effect facilitating the expansion of coffee cultivation into the park. Thus, the implementation of an exclusionary landscape based on the ideological perspective of nature as separate from humans has created pressure on the landscape the park was designed to alleviate, while impoverishing the local population at the same time.

In light of these revelations, can it be possible that the cultural landscape of the *Lenca* could serve as a buffer against the expansion of capitalist export agricultural production, the true threat to the conservation goals of the park? Viewing the landscape from the perspective of a complementary parallax of culture and nature addresses the human/nature dichotomy, a dilemma which has plagued national parks.

For those of us who are convinced that landscapes mirror and landscapes matter, that they tell us much about the values we hold and at the same time affect the quality of the lives we lead, there is ever the need for wiser conversations about ideas and impressions and concerns relating to the landscapes we share. [Meinig 1979, 47]