

# Indigenous People and Environmental Politics

Michael R. Dove

School of Forestry Studies and Environmental Studies and Department of Anthropology, Yale University, New Haven, Connecticut 06511-2189; email: michael.dove@yale.edu

Annu. Rev. Anthropol. 2006. 35:191–208

First published online as a Review in Advance on July 12, 2006

The *Annual Review of Anthropology* is online at [anthro.annualreviews.org](http://anthro.annualreviews.org)

This article's doi:  
10.1146/annurev.anthro.35.081705.123235

Copyright © 2006 by Annual Reviews.  
All rights reserved

0084-6570/06/1021-0191\$20.00

## Key Words

environmental knowledge, environmental conservation, social movements, ethnographic representation, NGOs

## Abstract

Modernity has helped to popularize, and at the same time threaten, indigeneity. Anthropologists question both the validity of the concept of indigeneity and the wisdom of employing it as a political tool, but they are reluctant to deny it to local communities, whose use of the concept has become subject to study. The concept of indigenous knowledge is similarly faulted in favor of the hybrid products of modernity, and the idea of indigenous environmental knowledge and conservation is heatedly contested. Possibilities for alternate environmentalisms, and the combining of conservation and development goals, are being debated and tested in integrated conservation and development projects and extractive reserves. Anthropological understanding of both state and community agency is being rethought, and new approaches to the study of collaboration, indigenous rights movements, and violence are being developed. These and other current topics of interest involving indigenous peoples challenge anthropological theory as well as ethics and suggest the importance of analyzing the contradictions inherent in the coevolution of science, society, and environment.

## DEFINITIONS OF INDIGENOUS

Whereas the connotations of popular use of the term indigenous focus on nativeness, formal international definitions focus more on historic continuity, distinctiveness, marginalization, self-identity, and self-governance.

Oxford English Dictionary (1999): 1. Born or produced naturally in a land or region; native or belonging naturally to (the soil, region, etc.). (Used primarily of aboriginal inhabitants or natural products.) 2. Of, pertaining to, or intended for the natives; “native,” vernacular.

International Labor Organization (1989): (a) Tribal peoples in independent countries whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; (b) peoples in independent countries who are regarded as indigenous on account of their descent from populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions. [ILO 1989: Article 1.1]

United Nations (1986): Indigenous communities, peoples, and nations are those which have a historical continuity with preinvasion and precolonial societies that developed on their territories, consider themselves distinct from other sectors of societies now prevailing in those territories, or parts of them. They form at present nondominant sectors of society and are determined to preserve, develop, and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions, and legal systems. [Cobo 1986, 5: para.379]

## INTRODUCTION: THE RISE OF INTERNATIONAL INDIGENISM

Over the past quarter-century, much of anthropology's interest in local, native, autochthonous peoples has been framed in terms of indigeneity, with its focus on history and place. Many local movements that once

would have been represented as revolving around race, ethnicity, or religion, have come to be seen—by the participants as well as by analysts—as indigenous rights movements. Subjects of study and debate that would formerly have been represented as peasants or tribesmen have come to be represented as indigenous peoples. Jung (2003) writes that indigenous subjects in Latin America have replaced peasants as the privileged interlocutors of the capitalist state; Tsing (2003) writes of a reimagining in South and Southeast Asia of economically and educationally disadvantaged peasants as culturally marked and naturally wise tribals. The rubber tappers of the Amazon exemplify this shift with their rise to global attention accompanied by their rearticulation as indigenous people of the forest (Keck 1995). Another equally successful rearticulation was that of the Zapatistas of Chiapas: Their little-known peasant land reform movement rose to global prominence after it became reframed as a movement about Indian indigeneity (Nugent 1995).<sup>1</sup> The increasing global importance of indigeneity was reflected in the development of its definition by the United Nations in 1986 and by the International Labor Organization in 1989 (the latter binding on signatories)—both of which defined indigeneity in terms of historic continuity, distinctiveness, marginalization, self-identity, and self-governance—and by the United Nations' declaration of 1995 to 2004 as the “indigenous peoples' decade.”

The confluence of forces leading to the conception of indigeneity with such global force has been surprisingly little studied (in contrast to the concept itself). Niezen (2003) attributes the origins of international indigenism to the intersecting development of identity politics and universal human rights laws and principles. Other analyses focus on the delocalizing impact of modernity (Appadurai 1996,

<sup>1</sup>See the collected papers on the Zapatistas' movement in *Identities* 3(1–2).

Giddens 1984). Hornborg (1996), for example, suggests that dissatisfaction with the fate of localized systems of resource use under totalizing systems of modernity stimulated interest in indigeneity and indigenous systems of resource knowledge and management. Hirtz (2003) suggests modernity makes indigeneity possible in the first place. He writes, "it takes modern means to become traditional, to be indigenous"; as a result, "through the very process of being recognized as 'indigenous', these groups enter the realms of modernity" (p. 889).

## THE CRITIQUE OF INDIGENEITY

### The Concept of Indigeneity

The rise of popular international interest in indigeneity is noteworthy, in part, because it was so opposed to theoretical trends within anthropology. During the 1970s and 1980s, anthropological thinking about indigenous peoples was radically altered by world system studies (Wolf 1982) even argued even isolated communities were caught up in global historical processes, which were even responsible for this isolation. Many scholars began to argue that indigenous identity itself was a product of historic political processes. Writing of contemporary Indonesia (and in particular Sulawesi), Li (2000) asserts that unlike the National Geographic vision of tribal peoples, there is a political nature to group formation. Where clear tribal identities are found today, she says, they can be traced to histories of confrontation and engagement, warfare and conflict. Also writing of Southeast Asia, Benjamin (2002, p. 9) similarly argues that, "[o]n this view, all historically and ethnographically reported tribal societies are *secondary* formations." The academic conception of indigeneity also was impacted by influential scholarship on the invention of tradition (Hobsbawm & Ranger 1983) and by the related argument that culture itself is but a construction (Linnekin 1992), so the search

for cultural authenticity is pointless.<sup>2</sup> Drawing on the work of the sociologist and cultural theoretician Stuart Hall, Clifford (2001) and Li (2000) have suggested that one way to elide this debate over authenticity is to focus on the articulation of indigeneity.

The debate over indigeneity came to a head with the publication of Kuper's (2003) critique "The Return of the Native" in which he questioned the empirical validity of claims to this status.<sup>3</sup> The debate that followed indicated that referring to indigeneity as invented was much more controversial than referring to tradition (or perhaps even culture) as invented, suggesting there may be more political capital invested in the former concept than the latter. The impact of Kuper's article came, in part, from making the tensions between science and politics within anthropology explicit and public. He challenged the discipline: "Should we ignore history for fear of undermining myths of autochthony? Even if we could weigh up the costs and benefits of saying this or that, our business should be to deliver accurate accounts of social processes" (Kuper 2003, p. 400). Many who disagreed with Kuper did so on the basis of the politics of science as opposed to the concept of indigeneity itself, which most agree is problematic.

Many anthropologists have commented on the negative political implications of the concept of indigeneity. Some have said it is too exclusive. Gupta (1998, p. 289) writes,

I fear that there is a heavy price to be paid for the emphasis placed by proponents of indigenous knowledge on cultural purity, continuity, and alterity. Such efforts at cultural conservation make no room for the vast majority of the world's poor, who live on the margins of subsistence and the most degraded ecological conditions but who cannot

<sup>2</sup>Compare with Clifford's (1988, p. 1) critique of "pure products."

<sup>3</sup>There was an extended debate regarding Kuper's argument and, more generally, the whole question of indigeneity in 2002–2004 in *Anthropology Today*.

claim to be 'indigenous people' in the limited definition accorded that term.

Similarly, Li (2000, p. 151) writes, "one of the risks that stems from the attention given to indigenous people is that some sites and situations in the countryside are privileged while others are overlooked, thus unnecessarily limiting the field within which coalitions could be formed and local agendas identified and supported." These risks are especially great for people who move about, which reflects the importance of place in conceptions of indigeneity (Li 2000). Whereas nomadism and transhumance fit into a recognized indigenous niche, there are far greater numbers of people involved in resettlement, migration, and flight. Thus the resource knowledge and management skills of urban squatters (Rademacher 2005) and frontier colonists (Brondizio 2004, Campos & Nepstad 2006) have tended to be less visible, less privileged, and less studied.

### Plasticity and Insecurity

Even for those people who are eligible for indigenous status, the concept can be a double-edged sword. Rangan (1992) has written of the negative local impact of the global embrace of the Chipko indigenous rights movement in northern India, and Conklin (1997) has written about the downside of Amazonian peoples' strategic adoption of global images of indigeneity. Aspirations for and articulations of indigenous identity that appear inauthentic and opportunistic may elicit official disdain and sanction, which Li (2000) sees as a real threat in Indonesia. Indigenous identity is in any case a narrow target, which is easily over- or undershot. Thus, Li (2000) writes that if people present themselves as too primitive, they risk resettlement, whereas if they present themselves as not primitive enough, they risk resettlement on other grounds. Once indigenous status has been attained, official expectations of appropriate behavior can be exacting. Li (2000, p. 170) writes, "[c]andidates for the

tribal slot who are found deficient according to the environmental standards expected of them must also beware."

In sharp contrast to the increasingly cautious academic approach to indigeneity, however, the concept has traveled, been transformed, and enthusiastically deployed the world over (Béteille 1998). The same potential that makes anthropologists anxious about the concept makes it attractive to many local peoples.<sup>4</sup> Niezen's (2003) term international indigenism is an ironic comment on this mobility. Most alarming to anthropologists is that local communities are not just adapting the concept to their own uses but are doing the reverse. Jackson (1995, 1999) has written about how local notions of history and culture in Vaupés, Columbia, are being changed to fit the received global wisdom of what constitutes Indianness; Pulido (1998) writes of the deployment of romanticized ecological discourses and culturalism in the southwestern United States as a means of resistance using the master's tools; and Li (2002) worries about the feedback loop through which an external sedentarist metaphysics is shaping the belief and practices of those called indigenous in Indonesia.

Obviously calculated instances of the deployment of indigenous status have, predictably, generated some political backlash. But, more interestingly, they have also generated adjustments by those doing the deploying. Conklin (2002) writes of a shifting emphasis in Brazil from indigenous rights to indigenous knowledge and shamanism to counter this backlash [compare with Hornborg's (2005) related observation that it is increasingly legitimate for Native Americans in Nova Scotia to invoke images of sacredness in defense of their resource rights]. Anthropologists have also adjusted to this

<sup>4</sup>Compare Hodgson's (2002) recommendation that instead of engaging in debates over the definition, construction, and authenticity of indigenous claims, anthropologists should instead ask how and why indigenous groups are deploying the concept (pp. 1040, 1044).

evolving situation by beginning to study the emic meaning of the articulation of indigenous status. Thus Oakdale (2004) has studied the meaning that externally oriented displays of culture and ethnicity by the Kayabi of Brazil hold for the Kayabi themselves. And Graham (2005), intriguingly, suggests the globally oriented articulation of indigenous status by the Xavante of Brazil is driven not by identity politics but by a quest for existential recognition. These feedback dynamics are not unexpected. Giddens (1984) has examined what he calls the interpretive interplay between social science and its subjects, and he concludes that theory cannot be kept separate from the activities composing its subject matter, a relationship that he aptly terms the double hermeneutic.

## INDIGENOUS KNOWLEDGE AND THE ENVIRONMENT

### Indigenous Knowledge

The twentieth century's high-modern, global discourse of development was dismissive of local knowledge (Scott 1998), including knowledge of the environment. Just as the development of the concept of indigeneity (Brokensha et al. 1980) was a reaction to modernity's de-localizing impacts, so was the rise in interest in indigenous knowledge in part a response to modernity's deskilling vision of and consequences for local communities. In an explicit effort to counter the dominant development discourse, indigenous knowledge scholars argued that indigenous peoples possess unique systems of knowledge that can serve as the basis for more successful development interventions (Nazarea 1999, Sillitoe et al. 2002). Interest in this concept became so powerful so quickly (it was invoked in principle 22 of the 1992 Rio Declaration) that in 1996 the World Bank declared its own commitment to indigenous knowledge by committing itself to becoming the knowledge bank. Proponents of the concept of indigenous knowledge initially had high hopes for it, as illustrated by Sillitoe's (1998) claim that it could serve as

the foundation for a new applied anthropology by promoting collaborative development with anthropology's subjects as well as improved north-south collaboration. Scholars in other disciplines pursued parallel lines of inquiry, with Scott (1998) developing a distinction between scientific knowledge on the one hand, and partisan, situated, practical knowledge, which he glossed as "mētis" on the other.

Similar to the concept of indigeneity, indigenous knowledge soon became the subject of a wide-ranging critique. In a pioneering and influential analysis, Agrawal (1995, p. 422) writes

Certainly, what is today known and classified as indigenous knowledge has been in intimate interaction with western knowledge since at least the fifteenth century. In the face of evidence that suggests contact, variation, transformation, exchange, communication, and learning over the last several centuries, it is difficult to adhere to a view of indigenous and western forms of knowledge being untouched by each other.

Ellen & Harris (2000) point out that the epistemic origins of much knowledge, whether folk or scientific, are hidden, and they argue this anonymity has contributed to the emergence of a perceived divide between scientific practice and indigenous knowledge. When the origins of knowledge can be revealed, the label of indigenous knowledge often becomes more questionable. In the case of smallholder rubber cultivation in Southeast Asia, closer study reveals that although this is indeed an impressive system of agro-ecological knowledge, it could hardly be less indigenous in nature (Dove 2000). Hornborg (2005) points out that so-called indigenous knowledge systems are reified by the structures of modernity that marginalize them. The concept of a chasm instead of a confluence between local and extralocal systems of knowledge is not sociologically

neutral.<sup>5</sup> By problematizing a purported division between local and extralocal, the concept of indigenous knowledge obscures existing linkages or even identities between the two and may privilege political, bureaucratic authorities with a vested interest in the distinction (whether its maintenance or collapse).

Many scholars argue for replacing this concept of a neat divide with something more complicated. On the basis of his work with migrants in southeastern Nicaragua, Nygren (1999) argues for replacing the perceived dichotomy between local and universal knowledge with an understanding of knowledge as heterogeneous, negotiated, and hybrid. Similarly, Gupta (1998, pp. 264–65), on the basis of his work in Uttar Pradesh in northern India, maintains that “postcolonial modernities” are characterized by a “mix of hybridity, mistranslation, and incommensurability.” Historical studies of how such incommensurabilities or contradictions arise are perhaps most promising of all, as in Ellen’s (1999) analysis of the internal contradictions in contemporary Nuaulu views of the environment, which reflect recent and ongoing changes in their environmental relations.

An important locus of debate over indigenous knowledge involves the issue of intellectual property rights. The traditional anthropological focus on plant knowledge, coupled with the development of interest in the conservation of biodiversity in general and plants with pharmaceutical value in particular, led to interest in assigning market-oriented intellectual property rights to indigenous peoples for biogenetic resources (Brush & Stabinsky 1996, Moran et al. 2001). This also

represented a reaction against a history of free appropriation of such resources, coupled with patenting in Western countries and then sale back to indigenous peoples in some of the most egregious cases. The concept of assigning intellectual property rights to indigenous peoples proved to not be as simple as it appeared, however. I previously suggested the concept’s premises were disingenuous with respect to the national politics and structural marginality of many indigenous communities (Dove 1996). Brown (1998) similarly concluded intellectual property rights were an inappropriate, romantic, and politically naive way of defending indigenous communities. Actual attempts to deploy intellectual property rights, and engage indigenous communities in global bio-prospecting partnerships, have been less than successful. Greene (2004) analyzes the problems of a controversial ethnopharmaceutical project of the International Cooperative Biodiversity Group in Peru’s high forest, and Berlin & Berlin (2004) regretfully describe the much-publicized collapse of a bioprospecting project in Chiapas, Mexico, which they subtitle “How a Bioprospecting Project That Should Have Succeeded Failed.”

### **Environmental Conservation by Indigenous Peoples**

Much of the interest in indigenous knowledge has focused on natural resources and the environment, which was reflected in the emergence of the concept of indigenous environmental knowledge. The emergence of this concept represented a reaction to the historical proliferation of discourses that largely and uncritically blamed local populations for environmental degradation. Most of these discourses were driven by a neo-Malthusian view of population growth outstripping available resources, a view now widely critiqued for being overly simplistic and, in particular, ignoring overarching political-economic drivers. The field of political ecology

---

<sup>5</sup>The constructed division between indigenous and non-indigenous knowledge is an example of what Foucault (1982) calls “dividing practices,” referring to the many ways by which societies objectify the other and privilege the self (e.g., by distinguishing between mad and sane, sick and healthy, criminals and law-abiding citizens) (p. 208).

established itself, in part, through the critique of these degradation discourses, notable examples of which include Blaikie's (1985) work on soils, Fairhead & Leach's (1996) work on forests, and Thompson et al.'s work (1986) on the Himalayan ecosystem.

Although there was both some historical justice and empirical validity to this correction, the concept of indigenous environmental knowledge was also flawed. As a proponent, Berkes (1999) wrote, it embodied three essentialized myths about indigenous peoples: that of the exotic other, the intruding wastrel, and the noble savage or fallen angel. As a result, this concept too became the subject of fierce debates. Iconic cases of indigenous environmentalism such as that of the Kayapó of Brazil have been subjected to exacting critiques. Posey's analysis (1985) of the anthropogenic forest islands (*apete*) of the Kayapó was one of the most powerful visions of environmental knowledge and management by indigenous peoples ever presented. The geographer Parker (1992), however, countered that these islands were really the natural products of the advance and retreat of the forest at the edges of the Brazilian savanna. An equally robust debate broke out in the wake of Krech's (1999) publication in which he claimed that, although there is evidence Native Americans had possessed both indigenous knowledge of and an ecological perspective on the environment, there is no evidence they had ever actually, intentionally conserved natural resources. Indeed, a debate was launched as to whether any indigenous people anywhere in the world had ever practiced anything that could properly be called conservation (Stearman 1994). One glaring lacuna in these debates is the lack of critical attention to the cross-cultural translation and interpretation of the concept of conservation itself, especially in non-Western societies and outside of the major world religions. Studies similar to that of Tuck-Po (2004), who explores the indigenous concept of environmental degradation among the Batek of peninsular Malaysia,

or West (2005), who compares emic and etic views of Gimi relations with their forests in Papua New Guinea, are relatively rare.<sup>6</sup>

For many scholars, intention is the key criterion for the presence versus the absence of conservation. Thus Stearman (1994) questions the accuracy of claims for resource management in the absence of conscious awareness, and Smith & Wishnie (2000) similarly argue conservation must be an intended outcome not an unintended by-product. However, much behavior that has the effect of conserving natural resources is not intentional (just as much religious behavior does not constitute religiosity). Fairhead & Leach (1996, pp. 285), in their pioneering reinterpretation of perceived deforestation in West Africa, attribute the actual afforestation taking place to "the sum of a much more diffuse set of relations, a constellation more than a structure." They write that, "While villagers do intentionally precipitate these vegetational changes, their agency in this is not always so overt. Short-term agricultural and everyday activities can sometimes in themselves lead unintentionally to these long-term and beneficial vegetational results; villagers know the results and appreciate them, but do not necessarily work for them" (p. 207). Although Posey, in his work with the Kayapó, was perhaps inclined for political reasons to exaggerate the consciousness of their resource-management practices, he too recognized that some practices with important consequences were of the everyday, unconscious variety. It is illuminating to look at how unconscious practices have been transformed in the modern era to conscious ones, as Ellen (1999) does for the Nuaulu of eastern Indonesia. He distinguishes an older, local, embedded system of Nuaulu environmental knowledge from a newer system of knowledge of higher-order environmental processes, and he does so partly on the

<sup>6</sup>West (2005, p. 632) calls for placing the "politics of translation" at the center of environmental anthropology.

basis of self-consciousness.<sup>7</sup> Taken together, these studies suggest any perceived divide between intention and nonintention in resource management is more likely a reflection of difference between modernity and premodernity than between conservationist and nonconservationist practices.

### Integrated Conservation and Development Projects and Extractive Reserves

The debate over indigenous conservation reached its most critical juncture with regard to integrated conservation and development projects (ICDPs). Widespread failure of the traditional fences and fines approach to protected area management led the International Union for the Conservation of Nature, the World Wildlife Fund, and the United Nations Environmental Program to call for a shift away from the strict separation of conservation and human development to a combination of the two in their 1980 World Conservation Strategy.<sup>8</sup> This led to the global proliferation of ICDPs, defined by Wells (1992), which typically were committed to raising the standards of living of communities located next to or within protected areas, with the premise that this was the primary determinant of the amount of pressure on natural resources. ICDPs proved to be complex to implement, however, and often failed to achieve their dual social and environmental objectives (see Naughton-Treves et al. 2005 for a recent assessment). In-depth studies of specific project histories have been rare (for exceptions, see Neumann 1997, Gezon 1997, West 2006). Whatever the case,

---

<sup>7</sup>Related studies have looked at how indigenous peoples, as part of this process of conscious environmentalism development, have strategically deployed claims to indigenous environmental wisdom (Conklin & Graham 1995, Li 2000, Zerner 1993).

<sup>8</sup>The history of the separation of society and environment in U.S. protected area management, which set the model for much of the rest of the world, is detailed in Spence (1999).

this new paradigm elicited a sharp counter-attack from conservationists who, disputing the basic principle of tying conservation success to human development, demanded a return to the fortress nature approach (Oates 1999, Redford & Sanderson 2000, Terborgh 1999), which helped propel a shift in the late 1990s from the community level to ecoregions. Defenders of the basic principle of ICDPs have responded equally vigorously (Wilshusen et al. 2002). Holt (2005) points out that there is a catch-22 in the resurgent protectionist paradigm, in that only groups lacking technology, population growth, and market ties are seen as conservation friendly, but only groups that have all of these characteristics are likely to have the incentive to practice conservation.<sup>9</sup> Shepard (2006), drawing on long-term research in Manu National Park in Peru, questions the claim that local communities do not conserve resources, and Schwartzman et al. (2000) present a convincing political argument that local people are actually the best defenders of tropical forests against the threats to them from both public and private sectors.<sup>10</sup>

One of the best-known examples of ICDPs is the so-called extractive reserves of the Amazon, which were designed to address both conservation and development goals through the noninvasive, sustainable extraction of forest products (Allegretti 1990, Schwartzman 1989). Heavily promoted but little studied

---

<sup>9</sup>In a related argument, Fisher (1994) observes that the Kayapó's articulation of an ecumystical attachment to the land was suited only to a specific political-economic juncture in time.

<sup>10</sup>The debate over ICDPs notwithstanding, there is considerable convergence today between environmental anthropologists and conservation scientists, beginning with their mutual commitment to a nonequilibrium paradigm and a related rethinking of simplistic concepts of community, nature, and culture (cf. Scoones 1999). Both fields share an interest in the prospects for community-based resource management and skepticism regarding the benefits of market involvement; both are re-examining the overlooked agency of local social as well as natural actors; and both are asserting the merits of an engaged versus disengaged science.



(Ehringhaus 2005),<sup>11</sup> it soon transpired that some of the indigenous communities involved found extractive reserves too constraining and began logging instead of conserving their forests [as happened with the Kayapó (Turner 1995)]. Zimmerman et al. (2001) report somewhat more optimistic results from a second-generation extractive reserve project, supported by Conservation International, which is attempting to present the Kayapó with improved economic alternatives to logging.

## INDIGENEITY, AGENCY, SOVEREIGNTY

### Community and State

A number of observers have commented on a fundamental shift in thinking within environmental anthropology over the past quarter of a century with respect to the study of power, politics, and sovereignty.<sup>12</sup> Thus, Brosius (1999a) argues that a major discontinuity between the ecological anthropology of the 1960s and 1970s and the environmental anthropology of today is that the latter draws on poststructural theory. This discontinuity is perhaps reflected in the distinction between Posey's (1985) analysis of forest islands in the Amazon, which began in the late 1970s, and Fairhead & Leach's (1996) analysis of forest islands in West Africa, carried out in the early 1990s (Dove & Carpenter 2006). Both studies correct the idea that forest islands are remnants of natural forest, but whereas Posey emphasizes the correction, Fairhead and Leach emphasize the mistake. Posey emphasizes the political importance to policy makers of valuable indigenous environmental

knowledge, whereas Fairhead and Leach emphasize the importance to scholars of studying the politics of the deflected knowledge of policy makers.

The new paradigm is reflected in the post-structurally driven rethinking of state hegemony, exemplified in the recent set of essays published in the *American Anthropologist* on the work of James C. Scott (Sivaramakrishnan 2005). A complementary development is heightened interest in the agency of local people and communities (Brosius 1999a,c), defined as "the socioculturally mediated capacity to act" (Ahearn 2001, p. 112). Scholars such as Li (2000) have looked at the way agency is exercised in the articulation of indigeneity, which she says opens up room to maneuver that might otherwise be unavailable, even if some of the elements employed in this articulation are essentialized. Li (2000, p. 163) writes, "the telling of this story [of indigeneity] in relation to Lindu or any other place in Indonesia has to be regarded as an accomplishment, a contingent outcome of the cultural and political work of articulation through which indigenous knowledge and identity were made explicit, alliances formed, and media attention appropriately focused."

One site of traditionally perceived agency, the local community, is increasingly problematized. Many anthropologists have contributed to a revisionist view of the community as much less homogeneous, harmonious, and integrated and much more historically contingent than formerly thought. Writing on south Indian irrigation systems, for example, Mosse (1997, p. 471) argues, counterintuitively, that older, supralocal social systems have actually been replaced by more localized ones in recent times because of the demands of the modern state:

The newly theorized 'community management' ideas stressing locally autonomous, internally sustained and self-reliant community institutions have emerged within a global discourse (policy and practice)

<sup>11</sup>A recent assessment by Godoy et al. (2005) concluded that the available evidence still does not allow any definitive conclusions to be drawn regarding the impact of extractive reserves on the well-being of indigenous communities or the success of their resource-conservation practices.

<sup>12</sup>Agrawal (2005b) maintains that the literature on indigeneity is still marked by the absence of any theory of power.

oriented towards finding community solutions to the perceived problems of state and market-based irrigation management; solutions that are capable of addressing the policy imperatives of cost-sharing, recovery, and reducing the financial liability of the state.

The hegemonic global discourse of community-based natural resource management (CBNRM), which helped to promote the development of this concept of community, is undermined by its shaky empirical basis. The problems and prospects of CBNRM are reviewed by Agrawal & Gibson (2001) and Brosius et al. (2005). Leach et al. (1999), on the basis of a comparative global study, critique the premise of a consensual community in CBNRM, and Berry (2004), reviewing cases in Africa, argues the CBNRM process of deciding who and what are local creates more problems than it solves.

One of the most debated cases of community identity and autonomy involves the San of the Kalahari, who were long taken to be an iconic case of isolated, timeless, indigenous people, a view now under revision and debate. The most influential revisionist Wilmsen (1989) argues the San were integrated into modern capitalist economies materially, as the British colonial administration strengthened the Tswana tribute system, which extracted surplus from the San, and they were also integrated discursively in a way that obfuscated their real history (cf. Sylvain 2002). In rejoinder, Solway & Lee (1990) argue that, although some San were dependent on non-San, others were, if not isolated and timeless, at least substantially autonomous and actively resisting incorporation into world capitalism.<sup>13</sup>

---

<sup>13</sup>An analogous debate, known as the wild yam debate, focused on whether these and other tubers constituted a sufficiently robust source of wild carbohydrates for tropical forests to support people without extraforest ties and dependencies (Headland & Bailey 1991, McKey 1996).

## Collaboration

Much scholarship has tried to move beyond the concept of local resistance, as seen in the work of Scott (1985, 1989) (which was itself an early and central contribution to the study of agency). Some felt Scott was overly optimistic in his assessment of local resistance possibilities, whereas others believed he was not optimistic enough and local communities did not simply resist powerful extracommunity actors but also collaborated with them in more complex ways than had been imagined. For example, in a departure from a long history of studies of opposition between forest departments and indigenous peoples, Mathews (2005) and Vasan (2002) analyze the everyday ways in which foresters and farmers actually get along to mutual advantage. Others, taking a Foucaultian view of decentered relations of power and the making of subjects, are more negative. For example, Agrawal (2005a) suggests the widely lauded granting of forest rights to villagers in India is really a way of making them into environmental subjects.

Collaboration and complicity are distinguished from participation in this literature. As interest in revealing informal patterns of collaboration has waxed, so too has a critique of formal developmental structures of participation. Over the past quarter-century, there has been a major discursive shift in global development circles toward ensuring the participation of indigenous communities in their own development, which was reflected in the emergence of purportedly more participatory techniques of research (e.g., participatory rural appraisal and local mapping), as well as CBNRM (discussed above).<sup>14</sup> But critics have questioned just how participatory these measures really are (Mosse 1994). Trantafillou & Nielsen (2001), for example, argue that participatory empowerment simply leads to greater enmeshment in relations of power.

---

<sup>14</sup>Compare Rademacher & Patel's (2002) analysis of the political genesis of the rise of the participatory paradigm.

Much of the scholarship on collaboration has focused on relations between indigenous communities and nongovernmental organizations (NGOs). Tsing (1999, p. 162) is hopeful about the prospect of such collaborations, writing that they “offer possibilities for building environmental and social justice in the countryside as exciting as any I have heard of.” Others, such as Conklin & Graham (1995), who have also studied the shifting middle ground between NGOs and indigenous peoples, place somewhat greater emphasis on its insecurity. The capacity of the oldest and most powerful international NGOs to benefit indigenous peoples has especially been questioned. Chapin (2004) and Bray & Anderson (2005) set off a firestorm of debate by claiming several of the world’s leading environmental NGOs were no longer (if indeed they ever had been) defenders of indigenous rights. In her case study of fishing in the Central Amazon of Brazil, Chernela (2005) builds on this critique by arguing the problem is a more subtle but equally problematic shift in the NGOs’ role from mediation to domination and from local partnering to local production.

### Indigenous Rights Movements

The expression of agency in indigenous rights movements has become of great interest to anthropologists. Jackson & Warren (2005) have reviewed the literature on such movements in Latin America, and Hodgson (2002) has reviewed the literature for Africa and the Americas. Well-studied cases include the Chipko movement (Rangan 1992), the Narmada dam (Baviskar 1995), the Zapatistas (Jung 2003, Nugent 1995), and the rubber tappers of Brazil (Allegretti 1990, Ehringhaus 2005, Keck 1995). There has also been great interest in the relationships of such movements to extralocal NGOs, led by Brosius’s (1999a,c) study of the Penan logging blockades in Sarawak. Brosius became interested in the implications for governmentality raised by such relations. He writes that as environmental NGOs displace grassroots environ-

mental movements, they “might be viewed as engaged in projects of domestication, attempting to seduce or to compel” grassroots groups “to participate in statist projects of environmental governmentality,” projects that envelop movements “within institutions for local, national, and global environmental surveillance and governance” (Brosius 1999b, pp. 37, 50).<sup>15</sup>

Complementing the interest in social movements has been new interest in the study of violence involving indigenous peoples. A prominent focus of scholarship on this topic has been what Richards (1996, pp. xiii) terms the new barbarism or Malthus-with-guns interpretation of tribal violence in terms of unchecked population/resource pressures (Homer-Dixon 1999, Kaplan 1994). This interpretation has drawn a sharp rebuttal from anthropologists who argue, first, that violence is more likely to result in degradation of local resources and impoverishment of local peoples than the reverse and, second, that extralocal political-economic forces—often involving industrialized Western countries—are frequently implicated in the causes of such violence (Fairhead 2001, Richards 1996). A number of contributors to this debate have argued for the need to articulate emic understandings of violence (Fairhead 2001, Harwell & Peluso 2001). I have analyzed the discontinuity in Kalimantan, Indonesia, between academic explanations of ethnic violence in terms of political economy and indigenous explanations in terms of culture (Dove 2006).

## INDIGENOUS PEOPLES AND ANTHROPOLOGY

### Problems

The study of indigenous movements and violence, indigenous resource rights and knowledge, and the deployment of indigenous status

---

<sup>15</sup> Compare Escobar & Paulson’s (2005) analysis of the discontinuity between dominant biodiversity discourses and the political ecology of social movements.

and identity all raise questions about the politics and ethics of research. That the topics of anthropological interest have become the tools by which indigenous peoples articulate their identities, stake claims to local resources, and fight for their rights in regional, national, and international arenas poses moral and ethical challenges to anthropologists—challenges that require new responses. As Brosius (1999c, p. 368) writes, “[w]ith but a few exceptions, anthropologists have yet to address seriously the political implications of the difference between mapping the life of a village . . . and mapping the contours of a social movement.” The debate regarding these implications reveals that a sea change has already taken place within the discipline with respect to the admixture of morality and science. The debate over Kuper’s (2003) article on indigeneity, for example, revealed that simple disavowal of politics and insistence on distance have become a minority stance, whereas an explicit, subjective, moral positioning is increasingly common. Kottak (1999) argues that anthropologists’ personal witnessing of threats to their subjects imposes a moral responsibility, and Hodgson (2002) points out that the uneven topography of power in the world makes neutral representation by anthropologists impossible.

One consequence of this moral positioning is ethnographic refusal, which is as little discussed as it is common. Ortner (1995) coined this term to refer to the refusal by ethnographers to write thickly about their subjects’ own views in cases of resistance. This refusal is especially marked with respect to behavior that violates the political norms of most anthropologists, including violence and biases on the basis of ethnicity, gender, caste, class, religion, and race. It is further complicated when what is at issue is not simply behavior seen as politically incorrect, but representations of behavior (as in some of the self-deployments of indigenous status) deemed politically nonastute. As Li (2002, p. 364) writes, “[w]hat does it mean for scholars, to generate knowledge intended to

counter understandings framed in ethnic or religious terms, when these understandings are generated not by misguided outsiders (the media, scholars or politicians highlighting primordial identities and exotic tribal rituals) but by everyday ‘indigenous’ experience?” Ortner (1995, p. 190) attributes ethnographic refusal, in part, to a “failure of nerve surrounding questions of the internal politics of dominated groups.” It not only results in “ethnographic thin-ness” (p. 190), but it also reflects a lack of respect for people’s own understanding of their motives (Baviskar 1996).

### Prospects

The implications of academic critique grow ever more complex. Thus, Latour (2004) supports a shift from critical scholarship discrediting matters of fact to an acceptance of the reality of matters of concern, using global warming as an example. He writes, “[i]n which case the danger would no longer be coming from an excessive confidence in ideological arguments posturing as matters of fact—as we have learned to combat so efficiently in the past—but from an excessive *distrust* of good matters of fact disguised as bad ideological biases!” (p. 227). Latour is troubled by the fact that environment-despoiling political actors are borrowing the tools of academic deconstruction to attack the thesis of global warming. Potentially troubling for the same reason is the coincidence of popular interest in indigeneity and its academic critique, raising questions as to how anthropology’s erasure of locality relates to the rise of indigenous rights (and, more generally, what role the decontextualizing trend in academia plays in modernity’s larger project of decontextualization).

Giddens’s (1984) double hermeneutic describes a similar sort of feedback process. For environmental anthropology, however, these theories are complicated by the addition of the environment as an active agent. Science, society, and environment clearly coevolve. This is illustrated by what we know of the Kayapó

over the past generation, for example. Their environment and their regimes for managing it, their identity and their modes of representing it, as well as scholarly understandings of all of this, all have changed in a mutually influencing and constantly evolving process, which presents a host of contradictions at any given time. We see these same sorts of contradictions among the Nuaulu, who became a people of nature precisely as they became more distanced from it (Ellen 1999). There

are many other examples of modernity making possible articulation of indigeneity and indigenous conservation at the very time as it renders actual achievement of these things impossible. Such contradictions should be the future focus of environmental anthropology, or, to put it another way, an understanding of the coevolution of science, society, and environment that shows why these are not really contradictions at all should be the future goal of the anthropology of the environment.

## ACKNOWLEDGMENTS

I am grateful to Carol Carpenter for a number of ideas that contributed to this essay, as well as the students of the advanced seminar that we co-teach at Yale, “The Social Science of Development and Conservation,” in which an earlier version of this review was presented. I am also grateful to my indomitable student research intern for the past two years, Caroline Simmonds, and my stalwart secretary, Ann Prokop. None of the aforementioned people or institutions is responsible for the content of this essay, however, whose shortcomings are mine alone.

## LITERATURE CITED

- Agrawal A. 1995. Dismantling the divide between indigenous and scientific knowledge. *Dev. Change* 26:413–39
- Agrawal A. 2005a. Environmentalism: community, intimate government, and the making of environmental subjects in Kumaon, India. *Curr. Anthropol.* 46(2):161–90
- Agrawal A. 2005b. *Indigenous knowledge/power*. Presented at Agrarian Stud. colloq., Dec. 2, Yale University
- Agrawal A, Gibson CC, eds. 2001. *Communities and the Environment: Ethnicity, Gender, and the State in Community-Based Conservation*. New Brunswick, NJ: Rutgers Univ. Press
- Ahearn LM. 2001. Language and agency. *Annu. Rev. Anthropol.* 30:109–38
- Allegretti MH. 1990. Extractive reserves: an alternative for reconciling development and environmental conservation in Amazonia. In *Alternatives to Deforestation: Steps Toward Sustainable Use of the Amazonia Rain Forest*, ed. AB Anderson, pp. 252–64. New York: Columbia Univ. Press
- Appadurai A. 1996. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: Univ. Minn. Press
- Baviskar A. 1995. *In the Belly of the River: Tribal Conflicts Over Development in the Narmada Valley*. Delhi: Oxford Univ. Press
- Baviskar A. 1996. Reverence is not enough: ecological Marxism and Indian adivasis. In *Creating the Countryside: The Politics of Rural and Environmental Discourse*, ed. EM DuPuis, P Vandergeest, pp. 204–24. Philadelphia: Temple Univ. Press
- Benjamin G. 2002. On being tribal in the Malay world. In *Tribal Communities in the Malay World: Historical, Cultural, and Social Perspectives*, ed. G Benjamin, C Chou, pp. 7–76. Leiden(Singapore: IIAS/ISAS
- Berkes F. 1999. *Sacred Ecology: Traditional Ecological Knowledge and Resource Management*. Philadelphia, PA: Taylor & Francis

- Berlin B, Berlin EA. 2004. Community autonomy and the Maya ICBG project in Chiapas, Mexico: how a bioprospecting project that should have succeeded failed. *Hum. Org.* 63(4):472–86
- Berry S. 2004. Reinventing the local? Privatization, decentralization and the politics of resource management: examples from Africa. *Afr. Study Monogr.* 25(2):79–101
- Béteille A. 1998. The idea of indigenous people. *Curr. Anthropol.* 39(2):187–91
- Blaikie P. 1985. *The Political Economy of Soil Erosion in Developing Countries*. New York: Longman
- Bray D, Anderson AB. 2005. *Global conservation, non-governmental organizations, and local communities*. Work. Pap. No.1, Conserv. Dev. Ser. Inst. Sustainable Sci. Lat. America Caribbean, Fla. Int. Univ.
- Brokensha D, Warren DM, Werner O, eds. 1980. *Indigenous Knowledge Systems and Development*. Washington, DC: Univ. Press of America
- Brondizio ES. 2004. Agriculture intensification, economic identity, and shared invisibility in Amazonian peasantry: caboclos and colonists in comparative perspective. *Cult. Agric.* 26(1–2):1–24
- Brosius JP. 1999a. Analyses and interventions: anthropological engagements with environmentalism. *Curr. Anthropol.* 40(3):277–309
- Brosius JP. 1999b. Green dots, pink hearts: displacing politics from the Malaysian rain forest. *Am. Anthropol.* 101(1):36–57
- Brosius JP. 1999c. Locations and representations: writing in the political present in Sarawak, east Malaysia. *Identities* 6(2–3):345–86
- Brosius JP, Tsing AL, Zerner C, eds. 2005. *Communities and Conservation: History and Politics of Community-Based Natural Resource Management*. Walnut Creek, CA: AltaMira Press
- Brown MF. 1998. Can culture be copyrighted? *Curr. Anthropol.* 39(2):193–222
- Brush SB, Stabinsky D, eds. 1996. *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*. Washington, DC: Island Press
- Campos MT, Nepstad DC. 2006. Smallholders: The Amazon's new conservationists. *Conserv. Biol.* 20:In press
- Chapin M. 2004. A challenge to conservationists. *World Watch* (Nov./Dec.): 17–31
- Chernela J. 2005. The politics of mediation: local-global interactions in the Central Amazon of Brazil. *Am. Anthropol.* 107(4):620–31
- Clifford J. 1988. *The Predicament of Culture*. Cambridge, MA: Harvard Univ. Press
- Clifford J. 2001. Indigenous articulations. *Contemp. Pac.* 13(2):468–90
- Conklin BA. 1997. Body paint, feathers, and VCRs: aesthetics and authenticity in Amazonian activism. *Am. Ethnol.* 24(4):711–37
- Conklin BA. 2002. Shamans versus pirates in the Amazonian treasure chest. *Am. Anthropol.* 104(4):1050–61
- Conklin BA, Graham LR. 1995. The shifting middle ground: Amazonian Indians and ecopolitics. *Am. Anthropol.* 97(4):215–29
- Dove MR. 1996. Center, periphery and bio-diversity: a paradox of governance and a developmental challenge. In *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*, ed. S Brush, D Stabinsky, pp. 41–67. Washington, DC: Island Press
- Dove MR. 2000. The life-cycle of indigenous knowledge, and the case of natural rubber production. In *Indigenous Environmental Knowledge and its Transformations*, ed. RF Ellen, A Bicker, P Parkes, pp. 213–51. Amsterdam: Harwood
- Dove MR. 2006. 'New barbarism' or 'old agency' among the Dayak? Reflections on post-Soeharto ethnic violence in Kalimantan. *Soc. Anal.* 50(1): In press
- Dove MR, Carpenter C, eds. 2006. *Environmental Anthropology: An Historical Reader*. Boston: Blackwell. In press

- Ehringhaus C. 2005. *Post-victory dilemmas: land use, development policies, and social movement in Amazonian extractive reserves*. PhD thesis. Yale Univ. 425 pp.
- Ellen RF. 1999. Forest knowledge, forest transformation: political contingency, historical ecology and the renegotiation of nature in Central Seram. In *Transforming the Indonesian Uplands*, ed. TM Li, pp. 131–57. Amsterdam: Harwood
- Ellen RF, Harris P. 2000. ed. Introduction. In *Indigenous Environmental Knowledge and its Transformations*, ed. RF Ellen, A Bicker, P Parkes, pp. 213–51. Amsterdam: Harwood
- Escobar A, Paulson S. 2005. The emergence of collective ethnic identities and alternative political ecologies in the Columbian rainforest. In *Political Ecology Across Spaces, Scales and Social Groups*, ed. S Paulson, L Gezon, pp. 257–77. New Brunswick, NJ: Rutgers Univ. Press
- Fairhead J. 2001. International dimensions of conflict over natural and environmental resources. In *Violent Environments*, ed. NL Peluso, M Watts, pp. 213–36. Ithaca: Cornell Univ. Press
- Fairhead J, Leach M. 1996. *Misreading the African Landscape: Society and Ecology in Forest–Savanna Mosaic*. Cambridge: Cambridge Univ. Press
- Fisher WH. 1994. Megadevelopment, environmentalism, and resistance: the institutional context of Kayapó indigenous politics in Brazil. *Hum. Org.* 53(3):220–32
- Foucault M. 1982. Afterword: the subject and power. In *Michel Foucault: Beyond Structuralism and Hermeneutics*, ed. H Dreyfus, P Rabinow, pp. 208–26. Chicago: Univ. Chicago Press
- Gezon L. 1997. Institutional structure and the effectiveness of integrated conservation and development projects: case study from Madagascar. *Hum. Org.* 56(4):462–70
- Giddens A. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: Univ. Calif. Press
- Godoy R, Reyes-García V, Byron E, Leonard WR, Vadez V. 2005. The effects of market economies on the well-being of indigenous peoples and their use of renewable natural resources. *Annu. Rev. Anthropol.* 34:121–38
- Graham LR. 2005. Image and instrumentality in a Xavante politics of existential recognition. *Am. Ethnol.* 32(4):622–41
- Greene S. 2004. Indigenous people incorporated? Culture as politics, culture as property in pharmaceutical bioprospecting. *Curr. Anthropol.* 45(2):211–37
- Gupta A. 1998. *Postcolonial Developments: Agriculture in the Making of Modern India*. Durham, NC: Duke Univ. Press
- Harwell E, Peluso N. 2001. The ethnic violence in west Kalimantan. In *Violent Environments*, ed. N Peluso, M Watts, pp. 83–116. Ithaca: Cornell Univ. Press
- Headland TN, Bailey RC. 1991. Introduction: Have hunter-gatherers ever lived in tropical rain forest independently of agriculture? *Hum. Ecol.* 19(2):115–22
- Hirtz F. 2003. It takes modern means to be traditional: on recognizing indigenous cultural communities in the Philippines. *Dev. Change* 34(5):887–914
- Hobsbawm E, Ranger T, eds. 1983. *The Invention of Tradition*. Cambridge: Cambridge Univ. Press
- Hodgson DL. 2002. Introduction: comparative perspectives on the indigenous rights movement in Africa and the Americas. *Am. Anthropol.* 104(4):1037–49
- Holt FL. 2005. The catch-22 of conservation: indigenous peoples, biologists, and cultural change. *Hum. Ecol.* 33(2):199–215
- Homer-Dixon TF. 1999. *Environment, Scarcity, and Violence*. Princeton: Princeton Univ. Press
- Hornborg A. 1996. Ecology as semiotics: outlines of a contextualist paradigm for human ecology. In *Nature and Society: Anthropological Perspectives*, ed. P Descola, G Pálsson, pp. 45–62. London: Routledge

- Hornborg A. 2005. Undermining modernity: protecting landscapes and meanings among the Mi'kmaq of Nova Scotia. In *Political Ecology Across Spaces, Scales and Social Groups*, ed. S Paulson, L Gezon, pp. 196–214. New Brunswick, NJ: Rutgers Univ. Press
- Jackson JE. 1995. Culture, genuine and spurious: the politics of Indianness in the Vaupés, Columbia. *Am. Ethnol.* 22(1):3–27
- Jackson JE. 1999. The politics of ethnographic practice in the Columbian Vaupés. *Identities* 6(2–3):281–317
- Jackson JE, Warren KB. 2005. Indigenous movements in Latin America, 1992–2004: controversies, ironies, new directions. *Annu. Rev. Anthropol.* 34:549–73
- Jung C. 2003. The politics of indigenous identity: neoliberalism, cultural rights, and the Mexican Zapatistas. *Soc. Res.* 70(2):433–62
- Kaplan RD. 1994. The coming anarchy: how scarcity, crime, overpopulation, and disease are rapidly destroying the social fabric of our planet. *Atlant. Mon.* (Feb.):44–76
- Keck ME. 1995. Social equity and environmental politics in Brazil: lessons from the rubber tappers of Acre. *Comp. Pol.* 27:409–24
- Kottak C. 1999. The new ecological anthropology. *Am. Anthropol.* 101(1):23–35
- Krech S III. 1999. *The Ecological Indian: Myth and History*. New York: Norton
- Kuper A. 2003. The return of the native. *Curr. Anthropol.* 44:389–402
- Latour B. 2004. Why has critique run out of steam? From matters of fact to matters of concern. *Crit. Inq.* 30:225–48
- Leach M, Mearns R, Scoones I. 1999. Environmental entitlements: dynamics and institutions in community-based natural resource management. *World Dev.* 27(2):225–47
- Li TM. 2000. Articulating indigenous identity in Indonesia: resource politics and the tribal slot. *Comp. Stud. Soc. Hist.* 42(1):149–79
- Li TM. 2002. Ethnic cleansing, recursive knowledge, and the dilemma of sedentarism. *Int. Soc. Sci. J.* 173:361–71
- Linnekin J. 1992. On the theory and politics of cultural construction in the Pacific. *Oceania* 62:249–63
- Mathews AS. 2005. Power/knowledge, power/ignorance: forest fires and the state in Mexico. *Hum. Ecol.* 33(6):795–820
- McKey DB. 1996. Wild yam question. In *Encyclopedia of Cultural Anthropology*, Vol. 4, ed. D Levinson, M Embers, pp. 1363–66. New York: Henry Holt
- Moran K, King SR, Carlson TJ. 2001. Biodiversity prospecting. *Annu. Rev. Anthropol.* 30:505–26
- Mosse D. 1994. Authority, gender and knowledge: theoretical reflections on the practice of participatory rural appraisal. *Dev. Change* 25:497–526
- Mosse D. 1997. The symbolic making of a common property resource: history, ecology, and locality in a tank-irrigated landscape in south India. *Dev. Change* 28:467–504
- Naughton-Treves L, Holland MB, Brandon K. 2005. The role of protected areas in conserving biodiversity and sustaining local livelihoods. *Annu. Rev. Environ. Res.* 30:219–52
- Nazarea V, ed. 1999. *Ethnoecology: Situated Knowledge/Local Lives*. Tucson: Univ. Ariz. Press
- Neumann RP. 1997. Primitive ideas: protected area buffer zones and the politics of land in Africa. *Dev. Change* 28:559–82
- Niezen R. 2003. *The Origins of Indigenism: Human Rights and the Politics of Identity*. Berkeley: Univ. Calif. Press
- Nugent D. 1995. Northern intellectuals and the EZLN. *Mon. Rev.* 47(3):124–38
- Nygren A. 1999. Local knowledge in the environment-development discourse: from dichotomies to situated knowledges. *Crit. Anthropol.* 19(3):267–88



- Oakdale S. 2004. The culture-conscious Brazilian Indian: representing and reworking Indian-ness in Kayabi political discourse. *Am. Ethnol.* 31(1):60–75
- Oates JF. 1999. *Myth and Reality in the Rain Forest: How Conservation Strategies Are Failing in West Africa*. Berkeley: Univ. Calif. Press
- Ortner S. 1995. Resistance and the problem of ethnographic refusal. *Comp. Stud. Soc. Hist.* 37(1):173–93
- Parker E. 1992. Forest islands and Kayapo resource management in Amazonia: a reappraisal of the Apete. *Am. Anthropol.* 94(2):406–28
- Posey DA. 1985. Indigenous management of tropical forest ecosystems: the case of the Kayapó Indians of the Brazilian Amazon. *Agrofor. Syst.* 3:139–58
- Pulido L. 1998. Ecological legitimacy and cultural essentialism. In *The Struggle for Ecological Democracy: Environmental Justice in the United States*, ed. D Faber, pp. 293–311. New York: Guilford
- Rademacher A. 2005. *Culturing urban ecology: development, statemaking, and river restoration in Kathmandu*. PhD thesis, Yale Univ. 341 pp.
- Rademacher A, Patel R. 2002. Retelling worlds of poverty: reflections on transforming participatory research for a global narrative. In *Knowing Poverty: Critical Reflections on Participatory Research and Policy*, ed. K Brock, R McGee, pp. 166–88. London: Earthscan
- Rangan H. 1992. Romancing the environment: popular environmental action in the Garhwal Himalayas. In *Defense of Livelihoods: Comparative Studies in Environmental Action*, ed. J Friedmann, H Rangan, pp. 155–81. West Hartford: Kumarian
- Redford K, Sanderson SE. 2000. Extracting humans from nature. *Conserv. Biol.* 14:1362–64
- Richards P. 1996. *Fighting for the Rain Forest: War, Youth and Resources in Sierra Leone*. Oxford: Int. Afr. Inst.
- Schwartzman S. 1989. Extractive reserves: the rubber tappers' strategy for sustainable use of the Amazon rain forest. In *Fragile Lands in Latin America: Strategies for Sustainable Development*, ed. JO Browder, pp. 150–65. Boulder, CO: Westview Press
- Schwartzman S, Moreira A, Nepstad D. 2000. Rethinking tropical forest conservation: perils in parks. *Conserv. Biol.* 14(5):1351–57
- Scoones I. 1999. New ecology and the social sciences: what prospects for a fruitful engagement? *Annu. Rev. Anthropol.* 28:479–507
- Scott JC. 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*. New Haven: Yale Univ. Press
- Scott JC. 1989. *Domination and the Arts of Resistance: Hidden Transcripts*. New Haven: Yale Univ. Press
- Scott JC. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale Univ. Press
- Shepard GHJ. 2006. Trouble in paradise: indigenous populations and biodiversity conservation in Manu National Park, Peru. *J. Sustain. For.* In press
- Sillitoe P. 1998. The development of indigenous knowledge: a new applied anthropology. *Curr. Anthropol.* 39(3):223–52
- Sillitoe P, Bicker A, Pottier J. 2002. *Participating in Development: Approaches to Indigenous Knowledge*. London: Routledge
- Sivaramakrishnan K. 2005. Introduction to “moral economies, state spaces, and categorical violence.” *Am. Anthropol.* 107(3):321–30
- Smith EA, Wishnie M. 2000. Conservation and subsistence in small-scale societies. *Annu. Rev. Anthropol.* 29:493–524
- Solway JS, Lee RB. 1990. Foragers, genuine or spurious? Situating the Kalahari San in history. *Curr. Anthropol.* 33(1):187–224

- Spence MD. 1999. *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*. New York: Oxford Univ. Press
- Stearman AM. 1994. "Only slaves climb trees": revisiting the myth of the ecologically noble savage in Amazonia. *Hum. Nat.* 5(4):339–57
- Sylvain R. 2002. Land, water, and truth: San identity and global indigenism. *Am. Anthropol.* 104(4):1074–85
- Terborgh J. 1999. *Requiem for Nature*. Washington, DC: Island Press
- Thompson M, Warburton M, Hatley T. 1986. *Uncertainty on a Himalayan Scale: An Institutional Theory of Environmental Perception and a Strategic Framework for the Sustainable Development of the Himalaya*. London: Ethnographica
- Trantafillou P, Nielsen MR. 2001. Policing empowerment: the making of capable subjects. *Hist. Hum. Sci.* 14(2):63–86
- Tsing AL. 1999. Becoming a tribal elder and other green development fantasies. In *Transforming the Indonesian Uplands: Marginality, Power and Production*, ed. TM Li, pp. 159–202. London: Berg
- Tsing AL. 2003. Agrarian allegory and global futures. In *Nature in the Global South: Environmental Projects in South and Southeast Asia*, ed. P Greenough, AL Tsing, pp. 124–69. Durham, NC: Duke Univ.
- Tuck-Po L. 2004. *Changing Pathways: Forest Degradation and the Batek of Pahang, Malaysia*. Lanham, MD: Lexington Books
- Turner TS. 1995. An indigenous people's struggle for socially equitable and ecologically sustainable production: the Kayapó revolt against extractivism. *J. Latin Am. Anthropol.* 1:98–121
- Vasan S. 2002. Ethnography of the forest guard: contrasting discourses, conflicting roles and policy implementation. *Econ. Polit. Wkly* 37(40):4125–33
- Wells BK 1992. *People and Parks: Linking Protected Area Management with Local Communities*. Washington, DC: World Bank
- West P. 2005. Translation, value, and space: theorizing an ethnographic and engaged environmental anthropology. *Am. Anthropol.* 107(4):632–42
- West P. 2006. *Conservation Is Our Government Now: The Politics of Ecology in Papua New Guinea*. Durham, NC: Duke Univ. Press
- Wilmsen EN. 1989. *Land Filled with Flies: A Political Economy of the Kalahari*. Chicago: Univ. Chicago Press
- Wilshusen PR, Brechin SR, Fortwangler CL, West PC. 2002. Reinventing a square wheel: critique of a resurgent "protecting paradigm" in international biodiversity conservation. *Soc. Nat. Res.* 15:17–40
- Wolf ER. 1982. *Europe and the People Without History*. Berkeley: Univ. Calif. Press
- Zerner C. 1993. Through a green lens: the construction of customary environmental law and community in Indonesia's Maluku Islands. *Law Soc. Rev.* 28(5):1079–1122
- Zimmerman B, Peres CA, Malcolm JR, Turner T. 2001. Conservation and development alliances with the Kayapó of south-eastern Amazonia, a tropical forest indigenous people. *Environ. Conserv.* 28(1):10–22



# Contents

## Prefatory Chapter

- On the Resilience of Anthropological Archaeology  
*Kent V. Flannery* ..... 1

## Archaeology

- Archaeology of Overshoot and Collapse  
*Joseph A. Tainter* ..... 59
- Archaeology and Texts: Subservience or Enlightenment  
*John Moreland* ..... 135
- Alcohol: Anthropological/Archaeological Perspectives  
*Michael Dietler* ..... 229
- Early Mainland Southeast Asian Landscapes in the First  
Millennium A.D.  
*Miriam T. Stark* ..... 407
- The Maya Codices  
*Gabrielle Vail* ..... 497

## Biological Anthropology

- What Cultural Primatology Can Tell Anthropologists about the  
Evolution of Culture  
*Susan E. Perry* ..... 171
- Diet in Early *Homo*: A Review of the Evidence and a New Model of  
Adaptive Versatility  
*Peter S. Ungar, Frederick E. Grine, and Mark F. Teaford* ..... 209
- Obesity in Biocultural Perspective  
*Stanley J. Uljaszek and Hayley Lofink* ..... 337

Evolution of the Size and Functional Areas of the Human Brain <i>P. Thomas Schoenemann</i> .....	379
<b>Linguistics and Communicative Practices</b>	
Mayan Historical Linguistics and Epigraphy: A New Synthesis <i>Søren Wichmann</i> .....	279
Environmental Discourses <i>Peter Mühlhäusler and Adrian Peace</i> .....	457
Old Wine, New Ethnographic Lexicography <i>Michael Silverstein</i> .....	481
<b>International Anthropology and Regional Studies</b>	
The Ethnography of Finland <i>Jukka Siikala</i> .....	153
<b>Sociocultural Anthropology</b>	
The Anthropology of Money <i>Bill Maurer</i> .....	15
Food and Globalization <i>Lynne Phillips</i> .....	37
The Research Program of Historical Ecology <i>William Balée</i> .....	75
Anthropology and International Law <i>Sally Engle Merry</i> .....	99
Institutional Failure in Resource Management <i>James M. Acheson</i> .....	117
Indigenous People and Environmental Politics <i>Michael R. Dove</i> .....	191
Parks and Peoples: The Social Impact of Protected Areas <i>Paige West, James Igoe, and Dan Brockington</i> .....	251
Sovereignty Revisited <i>Thomas Blom Hansen and Finn Stepputat</i> .....	295
Local Knowledge and Memory in Biodiversity Conservation <i>Virginia D. Nazarea</i> .....	317

Food and Memory <i>Jon D. Holtzman</i> .....	361
Creolization and Its Discontents <i>Stephan Palmié</i> .....	433
Persistent Hunger: Perspectives on Vulnerability, Famine, and Food Security in Sub-Saharan Africa <i>Mamadou Baro and Tara F. Deubel</i> .....	521

### **Theme 1: Environmental Conservation**

Archaeology of Overshoot and Collapse <i>Joseph A. Tainter</i> .....	59
The Research Program of Historical Ecology <i>William Balée</i> .....	75
Institutional Failure in Resource Management <i>James M. Acheson</i> .....	117
Indigenous People and Environmental Politics <i>Michael R. Dove</i> .....	191
Parks and Peoples: The Social Impact of Protected Areas <i>Paige West, James Igoe, and Dan Brockington</i> .....	251
Local Knowledge and Memory in Biodiversity Conservation <i>Virginia D. Nazarea</i> .....	317
Environmental Discourses <i>Peter Mühlhäusler and Adrian Peace</i> .....	457

### **Theme 2: Food**

Food and Globalization <i>Lynne Phillips</i> .....	37
Diet in Early <i>Homo</i> : A Review of the Evidence and a New Model of Adaptive Versatility <i>Peter S. Ungar, Frederick E. Grine, and Mark F. Teaford</i> .....	209
Alcohol: Anthropological/Archaeological Perspectives <i>Michael Dietler</i> .....	229
Obesity in Biocultural Perspective <i>Stanley J. Ulijaszek and Hayley Lofink</i> .....	337
Food and Memory <i>Jon D. Holtzman</i> .....	361

Old Wine, New Ethnographic Lexicography <i>Michael Silverstein</i> .....	481
Persistent Hunger: Perspectives on Vulnerability, Famine, and Food Security in Sub-Saharan Africa <i>Mamadou Baro and Tara F. Deubel</i> .....	521

## Indexes

Subject Index .....	539
Cumulative Index of Contributing Authors, Volumes 27–35 .....	553
Cumulative Index of Chapter Titles, Volumes 27–35 .....	556

## Errata

An online log of corrections to *Annual Review of Anthropology* chapters (if any, 1997 to the present) may be found at <http://anthro.annualreviews.org/errata.shtml>