Community-Based Conservation: A Reflection on History

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THE AMBIVALENCE OF HISTORY

History is always written from the present and as such the past is always coming into being in relation to contemporary interests. In the case of Conservation, the interest in the history of local or indigenous conservation practices stems from a contemporary politics of conservation in which it has become difficult or counter-productive to ignore the interests of local or indigenous communities[1]. There are several reasons for this. One is the enhanced legitimacy acquired by the concept of indigeneity over the past thirty years. By this I mean that a respect for the political and cultural characteristics and autonomy of peoples recognized as indigenous or traditional) has entered general institutional and public discourse in ways that were non-existent even thirty years ago. This is not to say that discrimination is not practiced against such peoples and communities but that the terms indigenous or local carry a political force that was largely absent in the past. This is also reflected in mechanisms established in the administrations of some nation-states to deal with questions of self-representation and sovereignty for indigenous populations, and in international co-ordinating bodies for the interests of indigenous peoples such as the U.N. Working Group on Indigenous Populations and its Permanent Forum on Indigenous Issues. National and international Conservation organizations have not been immune to these changes in the political landscape. While historically they may have worked to exclude local or indigenous interests from conservation practice (often blaming them for the environmental degradation that led to a need for conservation), the politics of conservation has altered dramatically so that most new Conservation initiatives ignore indigenous or local interests at their peril. This focus arises from many sources. One is international institutional pressure which may demand that local participation or some variety of co-management be established as a condition of financing. More important, however, is a realization that to ignore or contradict local interests can provide the basis for effective on-going resistance to conservation projects that compromise their effectiveness. A contemporary focus on indigenous or local conservation also flows from scholarly work that has produced new categories of knowledge, variably termed indigenous, local, or traditional. This focus on different ways of 'knowing' has been most intensively applied to understandings of local environments and environmental processes. It has also been used to provide a basis for interpreting local practice as contextually rational and as contributing to social and ecological sustainability. While a desire to minimize resistance may be the motivating factor, it is this link between knowledge, practice and sustainability that is used to promote the inclusion of 'local' communities in the planning and implementation of conservation initiatives. For these same communities, participation in these activities is often not so much an issue of conservation as it is a way of retaining control over surroundings that they have historically considered themselves a part of. This focus on knowledge/practice/sustainability has been the subject of an increasing amount of attention and debate in both policy and academic circles and has been the subject of an increasing number of works (Posey *et al*. 1998). Yet, almost all of these works focus on contemporary cases and ignore the historical context of environmental and social change. If we are to understand the conditions under which particular environments have come

[1] In this article, I capitalize Conservation when referring to the policies, programs and projects of large international conservation agencies, and national governments. This is not to assign any priority to this work but to distinguish it from the many small-scale conservationist practices that fall outside of this institutional domain.

into being, we must understand the history of beliefs, meanings and practices applied to those environments by groups who have occupied those areas through time; beliefs and practices which in so many cases have fashioned the very environments that are the subject of contemporary conservation efforts.

The purpose of this article is to illustrate, by way of example, the practices, ideologies and governance structures that gave rise to conservation practices devoted to community interest, and to point to processes that have contributed to their dissolution. Such an understanding of historical context provides the possibility of building upon and strengthening these practices and structures and, in doing so, possibly overcoming much of the resistance that has accompanied contemporary conservation projects. Of course, history is always selective. It is written from the present and reflects the contemporary concerns and ideological structures of the context in which it is written. This 'history is no different. It is written from a present that is questioning the relevance of nationalist political and ideological boundaries and is looking to a past when environmental management was dominated by the concerns and practices of much more narrowly circumscribed communities and ideologies that were markedly different than the meanings of nature associated with the rise of 'modernity'. This is not to say that they were pre-modern, for we continue to find, if we bother to look, environmental practices that are based in the small-scale, localized concerns of 'communities'. The debate, however, is over whether these qualify as conservation. To address that question, we need not only to define what qualifies as conservation but to investigate the ideological underpinnings of such definitions and the practices that derive from them.

DEFINING CONSERVATION

To some extent, investigating a history of conservation relies on defining just what we mean b the term. Definitions abound. According to the IUCN/WWF/UNEP World Conservation Strategy Definition, conservation is "the maintenance of essential ecological processes and life-support systems, the preservation of genetic diversity, and the sustainable utilization of species and ecosystems" (Talbot , L. M.1980). This definition obviously highlights the dimension of practice relevant to an end goal. As with many definitions, however, it lacks specificity.[2] It also overlooks the reality of conservation practice which we know is about so much more than simply "maintenance".

Activities that qualify as Conservation have, over the past 150 years, been implemented by, and often in the favour of, political and national elites[3]. Over the past 50 years, however, as biodiversity loss has been constructed as an international problem, Conservation has also increasingly become the purview of international non-governmental organizations (NGOs), many of which have come to hold greater environmental authority than the governments of nation states. Often structured through class and racial bias, and ignorant of community-based practices for environmental management, contemporary conservation policy, practice and jurisdiction has emerged out of a past littered with struggles over sovereignty, competing ideologies of nature, conflicting use rights, and markedly inequitable power relations. To some extent, international conservation organizations, more so than state governments have recognized the reality of these conflicts and their ramifications for conservation efforts. But dealing with them effectively has been much more of a challenge. Part of the difficulty in this process lies in the unreflective nature of organizations, which inhibits them from a form of self-analysis that might come to

[2]For example, one might ask of this definition – "essential" to what?

terms with historic practice (Clark and Cragun 1991, Alvesson 1993, Rosen 2000). But just as important has been a general lack of historical knowledge of the social and environmental context of the areas in which they operate. When conservation organizations and national governments operate in local environments they, knowingly or unknowingly, establish a relation in which the long-term outcome of their efforts will be determined by the degree to which they can overcome potential local resistance either by force - no longer widely accepted, at least by NGOs, as a reasonable response to resistance – or in presenting the project as an undertaking that accords with situated needs and interests. It is unclear how often this presentation accords with reality. In many situations, the outcome[4] of projects departs markedly from the intent, particularly in the realm of community participation. Often, communities that initially viewed Conservation favourably become disillusioned with their role in the process as their interests and needs become defined or interpreted relative to a larger agenda or set of interests (*i.e.*, those of the implementing agencies, the state, or commercial interests). There are many reasons for this lack of congruence between initial expectation and actual outcome. But, much of the continued resistance to Conservation projects around the world stems from the ideological and physical distance that seems to separate the interests of states and international NGOs from the interests of the communities that they act upon (or to adopt the rhetoric of participatory management *"in partnership with*") (Cox and Elmqvist 1997). A significant element of this distancing lies in the failure of Conservation to appreciate the political reality of conservation and to incorporate that into a contemporary pragmatic, rather than purely scientific definition of conservation. In such a definition, Conservation would not simply be an end but also a means, a way of achieving ends that are determined within specific political and cultural contexts (*cf*., Saberwal 2000). To some extent, this is captured in Janis Alcorn's (1995; 15) definition in which "[c]onservation is a social and political process by which natural resources…are managed to maintain biodiversity." Alcorn's emphasis is on process rather than practice. Unlike the institutional definition, she recognizes the real contests and conflicts that are involved in conservation outcomes and incorporates them as a defining element of conservation.

But such a definition, to truly incorporate a political dimension, cannot avoid a consideration of the past. In considering the conservation of biodiversity in any locale, it is impossible to ignore the historical processes of human interaction that have shaped those same patterns of extant biodiversity. To ignore this dynamic history of beliefs, values, and the institutions and practices they sanction is to willingly delimit the idea of conservation, not to what has gone before, but to what must happen from here-on-in. Evidence of historic ecological practice tells a much different story. But it is a story that is often overlooked, largely because of a tendency to define conservation as a modernist practice. That is, to consider conservation as intentionally designed practice accordant with goals of protecting biodiversity that so-called modern societies have come to recognize as being vulnerable to their pursuit of material wealth. However, to define conservation in the present so as to exclude conservation in the past leads to a condition in which extant patterns of biodiversity are themselves considered static and abstracted from the history, and thus conditions, of their emergence. This is ironic given that landscapes seen as natural, or celebrated as pristine nature, are commonly dependent on a long-history of human disturbance. This dominant tendency to define conservation as a modernist practice has been added to by a body of knowledge arising from historical and disciplinary perspectives which limit their sphere of inquiry to available or easily accessible records.

THE CONSERVATION ARCHIVE AND DISCIPLINARY BIAS

[4] I distinguish **outcome** (the actual effects of policy or project implementation) from **output** (the intended or expected effects of implementation).

Conservation as a matter of historical inquiry has largely been shaped by disciplinary bias. Environmental History, the discipline most directly interested in the subject of Conservation history, following from a conventional reliance on textual sources, has for the most part treated conservation as a statist phenomenon. In other words, conservation in the historical record is produced by the decisions, policies and actions of national and colonial administrations. Consequently, a dominant 'record' of conservation is tied directly to the emergence of formalized governmental actions that leave paper traces. It is these paper traces, shaped by the political and ideological interests of their curators, which form the basis for the greater part of environmental history. Volumes abound that describe conservation history within the context of nation-states but few discuss conservation outside of these bounds. The explanation is fairly simple; there are few written records outside of this context. Unearthing history beyond these bounds is a much more laborious procedure involving long-term fieldwork, multiple language skills, and the ability to come to terms with ideologies of nature vastly different from one's own. It is an understatement to say that little such work has been done. Environmental History, as an area of inquiry, has not penetrated disciplines that address pre or trans-state societies to any significant extent. Questions of conservation practice or belief in such societies, for example, are largely absent from Folklore studies. A potentially useful collaboration between paleo-archaeology and Cultural Anthropology or Geography does not exist in any meaningful way, leaving the latter largely devoid of an ability to offer empirically supported interpretations of historical practice and Archaeology lacking cultural explanations for insights into material findings[5]. An additional problem in the field of Archaeology is a concern with establishing presence. Archaeologists are not so interested in documenting the absence of human action from certain areas as they are the presence of human action and landscape modification. Yet we know that signs of absence (e.g., the absence of settlement or of cultivation in human dominated regions), can be read as signs of action, (in for example, areas of land being protected from human use) that does not leave the same trace as settled areas.[6] Part of the problem in redirecting the focus of disciplines that could tell us much about past conservationist practice in small-scale societies lies in Conservation being dominantly defined as modernist practice. This has the tendency to restrict investigations of conservation behaviour to particular locales, particular societal forms, and to focus them on modernist practice, in the form of state policy, scientific knowledge, and bureaucratic action, all of which accord, *a priori*, with a modernist definition of Conservation.

IDEOLOGIES OF CONSERVATION

What I have called modernist Conservation stems from a belief that an ideology of conservation (what some call an "ethic" of conservation) is a product of modernization emerging out of mid-1800s Europe and North America and practiced as variations on a theme until it takes the, admittedly contested, shape that it has today. Conservation, according to this narrative, *did not exist* prior to this emergence nor did the institutional practices that are accordant with Conservation. Of course there are narratives that challenge this history of conservation. Some of

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[5] See Meine (1999) on the absence of interaction between Environmental History and Conservation Biology

[6] Bradley (2000) also takes landscape archaeology to task for being divided between those who focus exclusively on material landscapes (the minutely physical evidence of where people lived and how they gained their livelihoods), and those who concentrate on mental landscapes (the superstructure of meanings and values through which landscapes were experienced). He sees this divide as damaging as it separates out a consideration of practice from belief.

them come from so-called indigenous or traditional peoples, and from activists operating in support of these groups. Others come from social scientists operating from a diversity of theoretical, empirical and political standpoints. These writings on indigenous or local conservation have often been accused of essentialism, and of supporting a stereotype of the 'ecologically noble savage' (Alvard 1993). Against this uncritical view that all local or small scale societies are, by nature, conservationist, is a set of rationalist arguments that claim little evidence for intentional conservation in indigenous or small-scale societies and assert that intentional Conservation is a modernist practice (Cartledge 1999, Alvard 1994, 1995, 2002). This perspective underpins either support for the depopulation of protected areas (no longer politically feasible in most cases) or the view that communities must be *provided with* the skills and capacity for Conservation before Conservation will occur, reducing the question to a developmental issue of capacity building. This debate emphasizes both the current lack of, and the need for, sophisticated and detailed contextual historical research of conservation practice (Headland 1997). To some extent, however, the debate emerges from failure to recognize the ideological nature of conservation. It also emerges from a contemporary politics of conservation in which "tradition" becomes an instrumental resource in a battle for sovereignty or control over resources that local groups have lost through processes of colonization or nationalization. In this struggle, the problem of biodiversity loss is equated with the loss of traditional control over lands. Biodiversity protection then becomes a question of regaining that control. The response to this is also to some extent political and stems from a fear of reduced state and organizational control and from a fear that the goal of biodiversity protection will not be met by devolving control to historical occupants. The goal here is to challenge the essentialist assertions of indigenous conservationism. In support of this, authors cite examples of anthropogenic faunal extinctions, habitat degradation and patterns of subsistence behaviour that conform to economic optimization rather than to resource or habitat conservation (though little thought given between how to actually measure motivation in a historical context). For some, the question of whether conservation is historically present comes down to a question of pre-requisites versus outcomes[7]. Alavard (2002), for example, without defining what constitutes conservation, suggests that there are two conditions or problems where conservation would be favoured: a) ownership – where control over access to the resources is derived from the willingness and ability to defend resources from others who wished to acquire them; and b) Resource scarcity relative to resource value . These two precepts basically state that resources must be defensible, scarce, and valued for conservation to occur. There are a number of problems with such assertions. For example, they ignores systems of land rights distribution and mutuality among multiple resource users, and assume that defence is a necessary and costly endeavour. This is a particularly Hobbesian view that assumes the *a priori* existence of natural competition. Research into common property management systems has done much to disabuse us of these assumptions, but again we are lacking a good empirically supported historical understanding of the emergence of common property systems (Berkes1989, McCay and Acheson 1987, Ostrom 1993, Ostrom 2002). Others have sought to restrict Conservation to a question of design. Smith and Wishnie (2000; 493, *cf.*, Hames 1987) state that "to qualify as conservation, any action or practice must not only mitigate resource overharvesting [*sic*] or environmental damage, it must also be designed to do so." The intent, and ideological effect, here is to distinguish Conservation, which is accordingly a rare practice - not least for the absence of historical information concerning design - from the sustainable use and management of resources. They do not accept that a failure to over-harvest or kill-off resident species, or to degrade habitat are diagnostic of conservation. To do so, they say, is to equate Conservation with sustainability. In this view, any conservationist outcome derived from low population densities, low resource demands or limited technologies is incidental or

[7] Mimicking the moral debate between deontology and consequentialism.

epiphenomenal (Lu 2001). What these views overlook, or fail to address, is the reductionist effect of their argument.
However defined, conservation always occurs within a system of, often competing, beliefs and values that mediate environmental relations. This is no less true today than it was 200 years ago[8]. What a rationalist argument demands is the application of contemporary beliefs and values formed within and through a particular cultural context to be applied to historical periods and cultural contexts where beliefs and values differed. To use conformity to these culturally, temporally, and spatially specific ideologies as a universal basis for evaluation is to ignore the potential existence of practices that lead to similar out comes but stem from different ideologies and consequent motivations.

Unlike many, Smith and Wishnie (2000; 502) adopt a broad concept of design whereby conservation practices maintained or extended because people "were less likely to suffer extinction or more likely to prosper and spread" as a function of those practices satisfy their design criteria, "even if the conscious reasons for carrying out the practice were not connected to conservation". Despite the circular tone of this statement, Smith and Wishnie move beyond the reductionism of much evolutionary ecology and recognize the capacity of small-scale societies to produce conservationist practice. Their basic demand, though difficult to satisfy, is not unreasonable; claims of conservationist practice should not be simply tied to vague statements of claimed effect or seen as inherently attached to animist belief, but that these be supported with examples of practice designed to achieve the ends of conservation. Design however, is difficult to identify historically and ideologically, for to some degree it assumes comparability in understandings of nature, which change not only over space but through time.

Indeed, one of the key factors that distinguish contemporary large-scale institutional Conservation from localized or indigenous practices is an ideology of nature that either positions conservationist practices as a part of everyday life or relegates them to distant institutional handlers. The modernist notion of Conservation, backed by the rationalism of ecological science, has arisen in accordance with an understanding of nature as artefact and, thus, subject and responsive to planning that prioritizes conservation in opposition to competing interests or uses of those same artefacts of nature. In many small-scale societies, at least historically, nature was not understood as artefact and conservation is not necessarily a matter of designed practiced in competition with contested interests. Rather, where conservationist outcomes are present in local practice, conservation can be seen as embedded in the knowledge, practices, and institutions that contribute to social reproduction and community sustainability - defined as the maintenance of political viability, social vitality, economic viability and ecological integrity (Butz *et al* 1991, MacDonald 2002). It is this embedded conservation (what rationalists would call epiphenomenal conservation – by which they imply conservation by contingent condition rather than design), manifest in the practices and institutions that have contributed to long-standing community sustainability, that has contributed to historical ecological integrity in many areas of the world. Though this interpretation can be derived from work in ethno-history, a great deal more research is needed that focuses explicitly on the relations between ecological practice and social, economic, political and ecological contexts in which those practices have emerged. If conservation agencies are to overcome costly local resistance to their initiatives and be successful in integrating communities into conservation planning, design and management, the onus is upon them to support this research. Nonetheless, between the two poles of rationalist thought and simplistic nativism, are a number of significant ethnographic studies that document historical practices with conservationist outcomes. Many of these studies, however, are appropriately

[8] Witness current debates over the privatization of protected areas in Canada, the United States, and Europe, often labeled 'a business approach to conservation'.

careful not to assign a specifically conservationist motivation to these practices, or to label them as evidence of a 'conservation ethic'. I call this appropriate simply because it implicitly recognizes the ideological element of conservation. It is to these examples I now turn

HISTORICAL CONSERVATION PRACTICE IN SMALL-SCALE SOCIETIES

Practices With Conservationist Outcomes

Sacred space

Areas that have spiritual relevance for communities are a common feature of many societies past and present and such spaces are likely the closest historical precedent for contemporary community-conserved areas. Anthropologists and Geographers have labelled such areas as sacred space; zones in which the concept of sacredness is invoked to mark a distinction between the divine and the profane. In many places these are recognized as marking a distinction between spaces imbued with spirituality and the spaces of everyday life. While areas described as sacred are often demarcated according to myth, the application of spirituality to landscape or to individual species is often used as a means of bounding space. More than that, it is often a material representation of the symbolic connection between humanity and the forces that drive 'nature'. In effect sacred spaces amount to community managed reserves, and are likely the closest historical precedent to contemporary conservation reserves. Sacred space for example, assumes numerous forms, from landscapes and the physical features they contain to individual trees seen to be the resting place of ancestral spirits. What seems clear is that the sanctioning power of religious authorities combined with the fear of divine retribution has and, in some cases, continues to enhance *in situ* conservation of biodiversity. The literature on sacred groves, for example, describes the processes through which both individual species and extensive areas of forest fell under regimes of prohibited or restricted use. The tradition of sacred groves is an ancient one that spans centuries and cultures. Tacitus, the Roman historian, in his study of Germanic peoples observed that "they make sacred woods and groves, and call by the names of gods that hidden presence which they see only in awe." Similar groves existed as cult centres in Anglo-Saxon Britain (Vest 1985, Roberts and Wrathnell 2000), and have been identified in most of South and South-east Asia (Ramakrishnan *et al*. 1998, Chandran and Gadgil, Pei 1993), Africa (Wilson 1996, Castro and Tibetts 2001, Chouin 2002, Sheridan 2001, Ranger 1998, Byers *et al*. 2001), and South America (Redford and Stearman 1993). Sacred space in ancient Greece formed a major category of land use. A sacred precinct was an enclosure "set aside and often walled to mark the boundary between holy and ordinary space" (Hughes 1994; 169) and usually contained groves of trees and springs but also could include mountain tops or other prominent features. Within them the environment was preserved in its natural state. Sacred enclosures were wilderness areas, protected by change from human beings. But they were also used for worship, supervised by local authorities. Groves varied in size, from a few square meters to the grove of Daphne which was ten miles in circumference. As there were hundreds of sacred groves the total area included in them was considerable so that protection was extended to a significant portion of the landscape. Rules protecting sacred land were strict and numerous and followed a consistent pattern though they varied over space and through time. Hughes (1994), however, includes a cautionary remark that groves had the effect of desacralizing nature in general. As gods were not seen to protect land beyond the bounds of the sanctuary people felt free to use it as they saw fit and sacred groves in Greece eventually became islands of forest in a generally denuded landscape. This recognition of the historic denudation leads to the conclusion that the establishment of sacred groves was probably the greatest single means of conservation in the ancient world, much as protected areas are popularly viewed today. Plants and animals survived

within them when they had disappeared from the surrounding area. But it would be difficult to make the claim that, at least in the Greek context, they were driven by a motivation of conservation. Rather, they were protected through an act of dedication that recognized an original sacred character of the place and the deity, not of nature broadly defined.

In other regions, areas designated as sacred groves derive their sacredness from a variety of cultural sources: sites linked to specific events; sites surrounding temples; burial grounds or cemeteries housing the spirits of ancestors; the homes of protective spirits; the homes of deities from which priests derive their healing powers; homes to a powerful animal or plant species; forest areas that surround mythically or spiritually significant natural features such as rivers, rocks, caves and 'bottomless' water holes; and sites of initiation or ritual (see: Falconer, Pei, Bharucha, Zoundjihekpon and Dossou-Glehouenou, Pramod Parajuli, in Posey 1999; Vartak and Gadgil 1981). Motivations for protection however, vary. While myth and spiritual belief underlie justifications of protection, the attitudes that derive from these narratives are not uniform. In some cases, myth may be the cultural expression of ecosystem dynamics. Richards (1999) makes this case for the protection of Musanga (*Musanga cecropioides*) in Sierra Leone. Whereas the protection of this species is often explained in mythic terms, that explanation encodes a historical knowledge of biodynamics within particular ecosystems[9]. In other contexts, individual species and groves are seen to be the embodiment of dead ancestors, or gods with the capacity to act malevolently on human beings. In these cases, it is fear of retribution that provides the protective characteristic of the grove. Rival (1999), for example, questions the conservationist value of fear. Where fear is a motivator, individual trees and groves are being protected out of a desire to satiate the inhabiting deity or ancestor. In such cases these groves and trees may be seen as dangerous spaces rather than benign or protective locales. The relevance for conservation here is to recognize that in any cultural context, 'nature' whatever its form is imbued with cultural meaning, which will vary over space. While there is little doubt that sacred groves have contributed to the conservation of biodiversity, it is important to recognize the complex history and traditions that have created and maintain these areas in individual locales, rather than treating them as a universal and equitable category. It is also necessary to see them as part of a much larger complex of human-environment interactions.

Ranger's (1999) provocative history of Zimbabwe's Matopos Hills, for example, reveals the role that rain shrines played in regulating the overall resource management system in the area. The Matopos are the site of the Shona myth of the creation of water in which the founder, with a bow and arrow stitches together heaven and earth generating rain. The hills subsequently became the site of rain dances and of shrine caves for the High God Mwali. These sacred caves are seen as natural and undomesticated, but also as the source of all biological and social life. They are also a locale of authority. Past chiefs are buried in a pit in the caves, and a stone in the cave serves as the seat of the Voice of Mwali, the centre of all instructions, many of which concern people's relations with and obligations to the land. Priests and priestesses, invokers of the Voice, go through an initiation process akin to entering a state of nature, spending months living with wildlife in a cave and forbidden to cut their hair. But the result is to acquire command over nature and to be empowered to guarantee the prosperity of agriculture. "The 'natural' guardians at the 'natural' shrine control the environment." (Ranger 1999; 23). Priests and priestesses invoked the voice to protect wetlands (*inyutha*), used to determine whether rains would fall. The Voice of Mwali would also regulate land and water use, reserving some for wild species and any plans for land improvement or forest clearance had to be put before Mwali priests for approval. The shrines also controlled seasonality announcing when and where planting could start, where fire could be used for clearing land, and when harvesting could commence. While the role of the

[9] For an example of such myths see Smelcer (1996)

shrines in regulating human environment interactions has declined, cult injunctions are still followed in some areas and reveal a system of heavy fines for violating injunctions. The shrines also justify the protection of forest. Mwali has both a male and female persona and shrines represent one aspect or the other. As Mwali travels between caves, he rests in groves which are subsequently protected from cutting or fire as his/her resting place. Despite their role in regulating human-environment interactions, Ranger is cautious not to romanticize the shrines noting that in the 19th c. shrines interacted with political power and gave legitimacy to inequality as priests gained wealth and fought with each other to control shrines. But he demonstrates that in nineteenth century Matopos there existed an ideology of land use and environment that was unknown to European colonizers. In contrast with European views that held separate humanity and nature, Mwali ideology fused nature and society, and the sacred caves represented a quintessential source of culture "so that human society bears no meaning without the rocks and d pools and caves, and they in turn are given meaning only by the residence among them of human beings."

While sacred spaces are manifestations of a range of traditions and cultural values of 'nature'. they share many similar features with conservationist value, including the containment and protection of species with important ecosystem functions. The regular presence of keystone species such as *ficus* in sacred groves and as individually sanctified species, for example, is suggestive of some appreciation of the ecological importance of such species by the groups assigning such protection. Regardless, they are human artifacts and have as much historical, symbolic, and sociopolitical significance as they do ecological significance. Chouin (2002; 39), for example, argues that "sacred groves were devices created to maintain social order by managing conflict and protecting society from a range of threats." In this view, sacred space is a human artefact, something that emerges from human action in an effort to explain the world around. In many cases, the profane events that have given rise to the creation of sacred space are forgotten, but the ritual activities, common to them persist. It is these rituals that are rich sources of history, as they serve as conservatories of the past. They also provide some insight into the role of sacred space in the maintenance of social order, for "whichever groups control the groves and their rituals, also have control over the production of truth and, ultimately, over power" (Chouin 2002). Chouin's observation is important, for it points to the relations between sacred space, authority, environmental regulation, and community reproduction, confirmed by other research (e.g., Ranger 1998). It also highlights the importance of particular human ecological features such as forests in community survival and reveals how the dynamics of the sacred groves (i.e., their periodic decline and re-emergence) can be related to the changes taking place in the socio-cultural realms of a society. This understanding of groves as social artefacts rather than as remnant ecological formations or reserves may have benefits for modernist conservation. For if the process of grove formation starts in mundane events, contemporary understandings of the environment can well find themselves expressed through historic traditions and practices that underlie the establishment of groves. Indeed, there does seem to be some evidence for this. In some cases in which sacred groves and the authority underlying them were usurped by colonial and mission rule, groves have been re-established partially as expressions of postcolonial ideologies of nationalism and autonomy (Byers *et a.l* 2001)[10]. Darlington (1998) also describes a response by Buddhist monks to the loss of primary forest in Thailand. This has taken the form of

[10] This is not uncommon. Examples would include the rhetoric of religion used by early American Conservationists such as Teddy Roosevelt or John Muir in making the case for protecting 'Nature's Temples' with little knowledge of how those landscapes had been shaped by historic human-environment interactions. Nationalism in these cases provided the authoritative and cultural appeal for the protection of biodiversity.

creating and sanctifying community forests through the ordination of the largest remaining tree in the forest, and establishing regulations to limit use of the forest, prohibit cutting or the killing of wildlife within the forest. Darlington is careful to note that the concern of the monks is as much one of maintaining the relevance of Buddhism in a rapidly changing socio-economic context, but she paints a picture in which environmentalism has become instrumental to the reproduction of religion through the adaptation of past practice and tradition to contemporary community concerns.

Use and Access Prohibitions Prohibitions

Species and Area Specific Taboos

One of the principal means of securing the practical sanctity of sacred space is through the assignment of taboo to the species or areas concerned. Taboos, however, are not solely applied to sacred space but are used to effect regulation beyond the realm of the sacred. At the same time, species specific taboos – beliefs and accordant practices that totally avoid or prohibit any use of particular species and their populations - are not necessarily enacted because a species is endangered or threatened. Rather, species are avoided for a variety of reasons. As with the ideological debate over Conservation in general, there are debates over the utility of taboo in conservationist practice. Some argue that taboo is of little value in biodiversity conservation (Alvard 1993, 1994, Smith 2001). Others describe taboo as a social restraint that leads to biological conservation (McDonald 1977, Berkes *et al*., 1995). Much of the debate centres on the question of rationale. Rationalists require a direct expression of relation between taboo and ecological justification for a taboo to qualify as Conservation. Non-rationalists are satisfied with a conservationist outcome of the taboo, recognizing that rationale is often lost to history and dynamic in relation to altered ideology. Regardless, "[s]pecific-species taboos have had important ecological ramifications for the protection of threatened and ecologically important populations of species" (Colding and Folke 1997). In a broad-ranging survey Colding and Folke (1977) identified 70 currently existing examples of species taboo, most of them long-standing, and determined threat categories for each wildlife species. Their study shows a significant correlation between taboo species and species listed as threatened by the World Conservation Union (IUCN). About 30% of the taboos analyzed prohibit the use of species listed as threatened. In addition, many traditional groups offer temporal and spatial refuge to threatened and viable species which may hide, forage and reproduce in the vicinity of groups that abstain from using them. Avoidance of species can be local or regional depending upon the spatial extent of belief systems that underlie taboo. But the effectiveness of taboo is dependent on certain pre-requisites including that human groups practicing taboo have access and control over local resource areas, with rights to exclude outsiders (typical, until recently, of common property regimes and of territorial groups).

While taboos that exercise restraint on the use of species may have their roots in symbolic or mythological qualities, it is equally reasonable to suggest that ecological function, interpreted in the context of human requirements, may underlie and find expression in the mythic and symbolic status of species. In other words, conservation motivations as a source of taboo should not be ruled out. There are sufficient examples of taboo to suggest that it has, in the past, functioned much like use restrictions in protected areas function today, in some cases offering complete protection and in others offering periodic refuge while a species is particularly vulnerable to predation or recovering from some crisis event, natural or human-induced. One characteristic of taboo that potentially supports this point is that they are rarely divorced from the agent of legitimate authority in the communities where they are practiced. In South American

communities, Shamans often take the role of initiating taboo by prohibiting the killing of certain animals in restricted areas whenever he thinks that a species is suffering significant population decline (Reichel-Dolmatoff 1976)[11] Shamans also play a role in regulating extraction activities by directing harvesting activities in particular ways. Rival (2002), for example, in her discussion of the ecological practices of a Huaorani group in Amazonian Ecuador describes a situation in which the interaction of particular technologies (blowpipes), management practices based on the notion of natural property and the need to share resources with non-human species, contributed to a predictable and reliable environment.

Blowpipe hunting is based on the idea that a balance must be found between human groups and the animals they hunt, for when human settlements become too large, or too sedentary, tree animals flee. People say they share fruit resources with the species they hunt by restricting the harvest of fruit trees in the ripening season (e.g., creating habitat) There is, however, a moral ambivalence to this: " fruits legitimately belong to humans but humans have to put up with animal's demands, not only because animals need food to subsist, fatten, and reproduce, but also because if people were to stop sharing fruit with animals, *the animals would steal the seeds,* hindering the reproduction of fruiting plant species" (Rival 2002; 78 emphasis original). Huaorani myths tell of the need to share fruit with animals in order to keep the animals nearby and to ensure the continuance of a mutual relationship between people, game animals, and fruit trees. Hunting is also seen as a form of gathering for the Huaorani, "whereby using and consuming natural resources does not impair – and possibly even encourages – their continued reproduction. Huaorani say that monkeys and birds reproduce unproblematically as long as humans leave them enough food to eat and as long as interspecies population dynamics are balanced, that is as long as human settlements remain relatively small, interspersed and transient." (Rival 2002; 79) Here is an example of the symbolic or mythic expression of empiricism which reveals taboo, not as unreflective practice but as belief and practice derived from empirical observation. To view myth and symbolism as absolute and static, leading to some form of paralytic fatalism in the face of change (e.g., Kay 1985), is to confuse the iterative nature of myth and spirituality in helping individuals account for real world events, through real world agents.

As with any ecological practice, taboo does not exist outside of a social structure and Rival also describes how Shamanic practices have contributed to the well-being of animals and their habitat through a human connection to Jaguars, a keystone predator. Jaguars, which are believed to control the distribution of animals and to attract monkeys and birds close to humans, become the adoptive sons of shamans. Jaguar bodies are believed to be the home of spirits that adopt certain men as their fathers, visit humans, make animal game stay close, and, through shamans whom they visit in trance, tell humans where to find game in the forest. The concern for the Shaman, as an authority, is to control the spatial distribution of wildlife in order to ensure the social and biological reproduction of the longhouse. This construction of shamanic power, then, "concords with other management practices that transform the forest into a giving environment" (Rival 2002; 78). Among other groups, other traditional institutions may play, or may have played, similar roles in the control and management of resources, and Conservation organizations need to pay a great deal more attention to the possible role of these institutions in furthering conservationist practice.

5.4 [11] I have witnessed a similar exercise of authority in Karakoram villages in relation to Chukar (Alectoris chukar).

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Spatial and Temporal Access Prohibitions

Though the moral forces behind taboo are multiple, core is recognition of the need to comprehend the difference between spheres of human activity that are potentially contradictory (e.g., prohibition of use in one context but not others). This recognition is recognized in taboo and other practices that impose constraints on access to particular areas or species during vulnerable periods. Such restrictions are evident in many common property regimes (McCay and Acheson 1987, Ostrom 1993, 2002), and a number of institutionalized examples have been documented, particularly in parts of Oceania (Johannes 1981, Lieber 1994 Pannell 1997, Zerner 1998, Thorburn 2000, Novaczek et al. 2001).

Zerner (1998), in a case study of the institution of Sasi, describes it as a historic family of institutions and practices that has been used to regulate access to particular resources and territories under a variety of property regimes. These typically take the form of periods of prohibitions on entry, harvest, or hunting in community-controlled areas. While there has been no systematic study of Sasi over a broad geographic area Zerner (1998) describes it as representative of similar management institutions extending from Maluku in eastern Indonesia east through New Guinea and the islands of the South Pacific, though others have been careful to point out that it is a mistake to treat Sasi as an uniform institution across this spatial range (Pannell 1996, Novaczek *et al.* 2001)[12]. Zerner also suggests that Sasi practices may have their origin in appeasing ancestral spirits who were believed to control the luck of the hunt, the fertility of crops, and individual fate. Accordingly historical sanctions for breaching Sasi regulations included a fear of sickness or death at hands of spirits as well as civil punishments and fines implemented by individuals (*kewang*) in the community vested with the authority to monitor resources, announce the temporary closure of areas subject to Sasi and to enforce community management rules regarding access, harvest and appropriate technology[13].

Studies suggest that while the conservationist benefits of terrestrial Sasi institutions declined through the intervention of colonial regimes, marine Sasi (Sasi laut) practices have endured over a period of at least 400 years (according to written records) as commercial markets for marine commodities did not emerge until the 1950s (Novaczek *et al*. 2001). Historically, coastal communities controlled well-defined marine territories, bounded by natural features in the landscape and extending out to the juncture of coral reefs and the drop-off. Sasi laut was also controlled by kewang who performed a ritual closing of marine areas. Typically, these areas were closed during the arrival of pelagic fish (e.g., tuna & *lomba* fish) and regulations were in effect as fish migrated to the bays or into river mouths. Sasi regulations also controlled harvest intensity by limiting the number of persons having access to community controlled areas, by defining the length of the harvest period, by restricting the size of individual fish or shellfish that could be landed and by regulating fishing technology (Harkes and Novaczek 2002). Thorburn (2002) notes that Sasi practices vary from village to village but "appear grounded in an indigenous sense of population ecology and consumer-resource interaction" with conservationist benefits. He cites cases where Sasi is imposed to allow plants and other organisms to regenerate, to protect spawning grounds, and to allow fry to reach optimal size before harvest.

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[12] Zerner (1998) Pannell (1996) and Novczek (2001) stress that Sasi as an institution is extremely flexible, varies from village to village, and has changed markedly through time in accordance with changes in the broader socio-economic context of which it is a part.

[13] The legitimacy of *kewang* is based on *adat*, the system of customary law and tradition that underpins Moluccan society.

In a different ecological and geographical context Lieber (1994) has described the historical change in fishing practice on Kapingamarangi a Polynesian atoll. In his discussion, he recognizes a historical pattern of conservationist practice but interprets this outcome as a function of constraints with multiple inputs. These include environmental constraints (the seasonality of wind and tide), technological constraints (who could own canoes and access fishing gear) social constraints, and religious constraints (the need to appease spirits who could influence environmental conditions and the harvest). In a situation where diverse technologies were used to catch diverse species, Lieber demonstrates that a pattern of social regulation governed resource use through the imposition of regulations that restricted the pressures placed on any one resource.

The need for precision in the use of ritual techniques for interacting with the gods organized fishermen into categories on the basis of their ability to deal with the gods (e.g., a ritual class based largely on age). Lieber emphasizes that empiricism was an important component of management that acted to reduce catch pressure on any one species. By regulating access to fishing grounds and distributing men over a variety of habitat with a variety of techniques, men's house headmen and the High Priest of the cult house collected information on environmental conditions, tides, and population dynamics that influenced their decisions. This was accomplished through evening meetings in the Men's house that brought together anglers and non-anglers (e.g., netters). Anglers provided knowledge on the status of stock, and netters provided knowledge on the status of tides. With that information, the men's house headman *tomono* made decisions about the following days activities. The men's house was *enabled* to coordinate fishing activity by using ritually determined differences between fishermen as sources of information about conditions of fish habitat and by its control over member's choice of activity and over equipment for group netting. It was *empowered* to coordinate the fishing activities of all its members through the ability of the headman to punish violators through a set of sanctions. The men's house, then, was an institution with control over information and over the processing of that information that made a difference in how men and equipment were allocated over specific habitats. But the men's house, whose role was to maximize fish catches, was regulated by the cult house, whose duty was to safeguard the island and its population. In the cult house, which also required information of men to monitor environmental conditions, the high priest regulated fishing activity by regulating canoe production, by prohibiting access to the lagoon and/or deep sea, and/or the outer reef, by limiting access to any of these areas to certain people; and by limiting personnel on canoes to, say, sacred class men, all by the use of taboo. In this way, the Priest controlled a set of fishing areas, and the means of access to those areas.

While "[t]he ecological outcomes of a hierarchical organization of fishing certainly give the appearance of a system designed with conservation in mind" and Lieber sees it as reasonable to infer that "Kapinga fishermen would regulate their own activities according to their observations of their effects on the fish, limiting their concentration on particular species accordingly" (Lieber 1994; 126) he emphasizes the importance of constraints in realizing conservation effects, and identifies three sorts of constraints limited overexploitation. Because tuna fishing precluded any other sort of fishing by canoes, other species breeding at the same time as tuna season, proceeded to their breeding ground untouched for at least two months of a four month breeding season; a constraint on netting spinefish was imposed by a labour and equipment bottleneck as other men were engaged in catching other species and other work; and rain acted as a constraint, as the sails used absorbed water and became excessively heavy during rain meaning that people rarely attempted to sail in the rain.

Basis Of Conservation Outcomes

Ideologies of Nature

Historical examples of practices with conservationist outcomes share some common features. To a large degree, they are based in cultural beliefs and values, many of these with spiritual antecedents. This is not surprising given contemporary understandings of 'nature' as a cultural product as much as an ecological reality, and of science as simply one element of culture that assigns meaning to reality (Simmons 1993, Latour 1999, Castree and Braun 2001). But culture is neither static nor unreflective. Historical analyses of culture at a variety of scales reveal culture as a social product negotiated through processes of resistance and accommodation. What is important in understanding culture as a process rather than an artefact of behaviour is a recognition that culture treated ahistorically and apolitically is not particularly helpful in understanding conservation motivations. Social groups that are described as cultures change, as do beliefs and practices. Worldviews, the ideological and semiotic filters that help us make sense of the world change. But if the foundation of culture - beliefs, values, norms, systems of meaning – change, they do so in relation to some broader context. Human beings then, are active subjects involved in altering nature, and "are always in the course of changing or adapting to the ecosystems they themselves construct" (Harvey 1996). This is an important point in thinking about the motivations for practice and the profane or mundane events that give rise to belief. For human are not separate from ecosystems and to speak of society's impact on an ecosystem is to act as if these are two separate systems in interaction with one another. It is to eject the relational dynamics that ecological theory has convinced us to accept. The point here is that all ecosystems tend to effect and reflect the social systems that created them, and that many historical examples of understandings of nature, reflected in studies of ethno-history, ethno-archaelogy and folklore studies tend to reveal this as common to worldviews in small-scale societies.

Rival's (2001) discussion of a Huaorani group in Ecuador is an excellent example of this form of understanding. She claims that the Huaorani have a good empirical understanding of their environment and their role within it, displayed in a great knowledge of "the habits, habitats and feeding cycles of most arboreal species" (Rival 2001; 71) and use this knowledge and observation to predict animal behaviour and predict locations for productive hunting. They also manipulate the forest to keep resources in abundant and adequate supply. But distinctions between extraction and management are virtually impossible. People see plants as connected to human or animal activity. Humans have either historically planted useful plants that people come across, or when no human connection with the past can be established, they are said to "belong" to an animal. This, however, is not seen as a natural process. Rather, the natural environment for the Huaorani "is thought of as comprising elements that are the direct manifestations and concrete objectifications of *past* human work" (Rival 2001; 90) and is seen as a system in which the past of a dead person conditions resource increase. The dead are seen to have led lives that generated and contributed to the continuity of natural resources that have current and future use. Thus, the presence of abundance in the forest is envisaged as resulting from the subsistence activities of people long dead. People are also aware that their current activities are conditioning future possibilities. This is not a moral observation however. What exists in the forest is not a gift from the past, but a byproduct of previous life. The abundance of the forest is not regarded as the outcome of moral contract between past and present generations or between people and animals, but a function of people's domestic skills and practical knowledge. Neither is the forest seen as a unitary category. People live in particular locales and it is what they do in those locales that have "made the forest grow", "by which is meant that subsistence and ceremonial activities have encouraged the *natural* growth of *useful* forest plants." (Rival 2001; 92 emphasis added) The key word here is useful, for what Rival is describing is an ecosystem that has emerged in relation to a creative, rather than benign, indigenous mode of production. In short, the forest, which people

read as the historical record of past human activity, cannot be separated from the people who live in and with it.

The Huaorani's activities, then, as with the activities of any human group have shaped the pattern of biodiversity on and in land that they have historically considered their own. Their actions are reflective of a particular ideology of nature, and the patterns of biodiversity that result are a product of the interests of power vested in that ideology and the practices that result[14]. This does not mean that it is uniform, spatially extensive, or durable. Ideologies of nature change, and practices change with them. But it does suggest that human roles within the ecosystem are grounded in understandings of relationships between resource sustainability and individual livelihood or community sustainability. Whether and how people act on this understanding is a different question related to the effects of altered social structure and broader political and economic contexts.

These are not insignificant observations for how we think about Protected Areas. If the biodiversity that is the subject of protection efforts has arisen in contexts of human occupation, then human institutions and practice are responsible for the existence of that biodiversity. The most obvious and well-studied examples of this are fire regimes that have played a role in shaping the structure and composition of savannah, prairie and forest ecosystems. Given a long history of fire, we can expect an ecosystem to be comprised of fire-tolerant or fire-dependant species. We can also expect that the cessation or significant alteration of fire regimes will encourage the establishment of invasive species that are competitively superior within the altered fire regime (Hough 1993, Pyne 1993, Mbow e*t al.* 2000, Delcourt and Delcourt 1997, Davis 2000). Similarly, intensive grazing pressure can maintain high levels of biodiversity in areas historically subject to grazing pressure. Grazing may well reduce the dominance of a few tall growing species allowing for greater overall diversity. Altering grazing regimes or prohibiting grazing where it has a long history has the potential, then, to lead to a decline in overall biodiversity (Little 1996, Saberwal 1999). In the process of generating a sustainable livelihood from ecological resources, a significant number of studies summarized by Smith and Wishnie (2000) suggest that human small-scale agricultural societies have historically been primary agents of biodiversity enhancement. While these practices are generative rather than conservationist they do provide a baseline of sorts for gauging the effect of change.

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[14] This is simply an observation that practice leads to landscape form. Forests currently being protected have been created in the past through for a variety of reasons. Murali (1995), for example cites villages in Ahndra Pradesh, India with protected forest surrounding them (rather than cultivated forest) whose original role was as a natural protective barrier against external threat. This, while providing habitat for a variety of species, these forests were aimed at community security rather than the provision of resources. Yet today these anthropic forests are the target of Conservation (*cf*., Fairhead and Leach 1996). Similarly, practices of enclosure in medieval Britain, often described as conservationist shaped a landscape in human interest that provided habitat for select species, in effect replacing some species with others with a greater use or exchange value (e.g. the replacement of birch, holly, with oak which could be coppiced, or the protection of wetlands in France against reclamation in order to secure habitat for wildfowling – not unlike the activities of contemporary groups like Ducks Unlimited in the United States). Human management always implies, at some institutional level and in some practical form, the conservation of areas or species in the interest of people rather than species.

Historical Experience of Scarcity

Scarcity, at least according to rationalist and economic theorists is seen to be a pre-requisite of Conservation behaviour. One argument challenging the existence of historical conservationist practice is that population, or technology lacked the capacity to affect scarcity in the environment and provide the incentive to adopt explicitly conservationist behaviour. This is largely a generalist argument that fails to account for individual species dynamics and selective pressure on particular species. Beyond that, it does not square with accounts where particular groups have historically effected radical ecological change. If we recognize a capacity for empirical observation of ecological conditions, and recognize the capacity for change in worldview, we need to see history as a dynamic process in which human communities, in constant interaction with ecosystems can recognize the capacity for not only creating ecosystem dynamics but for responding to those dynamics in relation to the objectives of those communities. This is what both Lieber (1994) and Rival (2001), in the examples above, are describing. Of course, scale and time are important elements in this relation. The capacity to observe and interpret ecological conditions with some degree of accuracy depends on the capacity to survey a particular spatial area. Beyond that range, it is difficult to know what is happening and how distant actions might affect local conditions. There is also not a direct temporal relation between human action and consequence. Ecological responses to action happen on a time-scale different from that of action, and relating consequence to action is never precise. Nonetheless, it is not unreasonable to assume that over long periods of occupation of small spatial areas, human groups can observe biodynamics and discern their own role in change. In some cases, it may be too late to effectively adjust to that change with untested innovations. In others it may not and new innovations in ecological practice or political structure may well derive from an observed need to maintain particular ecological conditions. This is, in essence, a form of contextual rationality (MacDonald 1998) in which a process of trial and error, in a known but dynamic environment, can lead to institutional learning and the continued acceptance of practices that satisfy community objectives, secure the resource base, and to the abandonment or alteration of practices that seem to degrade it (Colding and Folke 1997, Gadgil 1998, Folke *et al* 2000)[15]. The motivation for such a process need not arise out of a continual confrontation with scarcity but out of an observed and historically developed, though imperfect, understanding of spatially and temporally contingent biodynamics.

Regulatory Mechanisms Of Conservationist Practice

A common element in studies that describe community-based conservationist practice is the existence of regulatory structures. Whether the underlying motivation of practice lies in religious belief systems (and the various forms of knowledge they encompass), or direct empiricism, it is clear that regulatory structures are needed to regularize practice and to operate as a mechanism of sanction when community norms are breached. This, of course, is not unusual. One of the defining features of community is the existence of institutions that manage the collective interests of community members. In small-scale communities, they tend to take the form of formal but small institutions quite often in the form of a single individual or a small group with responsibilities which include regulating community members access to resources, monitoring environmental conditions to ensure that community members are complying with the norms of

[15] Indeed, if we understand tradition as a process directing change rather than as the static condition conveyed by modernist development theories, this kind of evaluation-based change is a central element of 'tradition' (MacDonald 2002).

the community and sanctioning individuals who are found to be in violation. These responsibilities may be for life (e.g., in the case of a headman or woman), they may be for a limited time period (e.g., one year periods of office that rotate through households in the community), or they may be held during a particular stage of life (e.g., in the case of religious authority such as a monk or shaman). Key to the functioning of these institutions is their perceived legitimacy within their constituency. These institutions require legitimacy in order to maintain the support of those people they regulate and people tend to obey them when those who hold positions of authority adhere to community norms (which are subject to change through time) and protect the interests of their constituency. Where ecological maintenance is understood to be an integral part of the continuity of community, the failure of those institutions to safeguard ecological integrity would create a threat to legitimacy and a possible undermining of support for the position. There are a myriad of institutional systems around the world that assume responsibility for and exercise authority over ecological governance, as part of their broader responsibilities for the continuity of community. But the central characteristic that contributes to their effectiveness in regulating ecological activity appears to be the maintenance of their legitimacy[16]. Where these institutions are seen to be legitimate, they have the capacity to regulate access to particular areas, stipulate practice such as hunting restraint, manage rules governing resource use, monitor environmental conditions and compliance with management rules, and impose sanctions for violations. Of course, the integrity of the institution is a function of the integrity of the individual holding fulfilling the institutional role, but in many situations, there are broader mechanisms, often responsible for re-evaluating community norms, that have the ability to impose sanctions on those individuals seen to be abusing their institutional authority or acting contrary to the interests of their constituents[17].

THREATS TO SMALL-SCALE CONSERVATION

The degree to which communities have been able to maintain control over ecological resources, and engage in conservationist practice, in the past has been a function of their interaction with other political and economic systems. In the few studies that deal with the relationship between ecological practice, conservation and institutional authority,
histories of social change in indigenous and small-scale communities reveal a decline in conservationist practice in relation to a number of factors including altered ideologies of nature, loss of secure tenure over lands and resources, and centralized authority. These are not mutually exclusive effects and often work together to undermine community sustainability and human-environment relations. For example, where disparate cultural groups come into contact within inequitable power relations, it is not unusual to recognize altered ideologies of nature through

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[16] It is important to realize, however, that community interests, norms and the basis for legitimacy exist in an iterative relation. In other words, there is no guarantee that the maintenance of ecological integrity will continue to be a basis of legitimate authority if community interests are not seen to be tied to some expression of the importance of ecological integrity to community well-being. This is what underlies the suggestion that such institutions are mostly effective in small subsistence communities where competing interests are at a minimum and people have the ability to monitor ecological change and incorporate those observations directly into decision-making. A key to retaining internal legitimacy, not surprisingly, seems to be both the social and spatial distance from regional and national governments, who have a need to establish their own legitimacy, in communities removed from the reach of nationalist ideology.

[17] Leiber's discussion of the relations between the Men's house and the Cult house in Kapingamarangi is one example of this kind of check mechanism. MacDonald (1995) also describes such a system for some Karakoram villages in northern Pakistan.

time. Societies that may have once adhered to animist beliefs, may adopt shamanist practices, or convert to particular varieties of Buddhism, Christianity, or Islam. They also may become exposed to nationalist education programs with exposure to the teachings of rationalist science. Each of these carry with them different beliefs regarding what constitutes nature, different explanations for 'natural' processes, and different perspectives regarding appropriate forms of ecological practice. In many cases within any given community, individuals may adhere to multiple belief systems simultaneously, and are able to adapt historical practices to contemporary belief systems (MacDonald 2003). What is more difficult is when a belief system is confronted with alterations to political systems that either threaten security of tenure or weaken the political legitimacy of either religious or secular institutions of authority (Burke 2001). While this has doubtlessly happened in different ways in diverse locations around the world historically, studies tend to restrict themselves to the impact of European colonialism on small-scale societies and political institutions[18].

Recall Liebers' (1994) discussion of constraint as the basis for conservationist practice in Polynesia. The historical constraints that Lieber outlines have disappeared. Tuna fishing is no longer sanctified, anyone can build canoes, the use of spear guns allows large catches, and outboard motors have replaced sails allowing wet weather fishing. Over-fishing is a contemporary reality in Polynesia. But Lieber (1994) claims it is not technological change that threatens the species. Rather, it is new forms of social organization. Some Kapinga recognize the problem "as people's failure to subordinate their personal interests to community interests and a failure of the community to exert authority to compel such subordination." (Lieber 1994; 135). Lieber argues that historical conservation resulted from a hierarchical ordering of constraints which were a function of the social order. When the institutions that maintained the constraints changed, this became evident in the re-organization of fishing activity at the lower social levels, and consequently, in the status of both habitat and species. Lieber (1994) traces this change in social order to the advent of Christianity and its threat to the authority of the cult house. The demise in the cult house, historically responsible for village security followed a general conversion to Christianity that was bolstered by colonial power. Following a Christian commitment to equality, access to wood for canoes became open and this resulted in the construction of more canoes, an increased frequency of angling, and a decrease in organized group fishing. This ultimately led to the individuation of fishing activity, and away from the group organized and sanctioned organization of fishing, which had helped to collect essential environmental information. Colonialism also resulted in the introduction of a western model of democracy and bureaucratic rationality. These changes generated a response in the community through which fishing entered into a new social order that altered the constraints that had resulted in conservationist practices.

Ranger (1999) offers similar evidence for changes in ecological practice in the Matopos Hills of Zimbabwe. Like Lieber, Ranger is cautious not to romanticize the cave shrines, to which he attributes conservationist effects, noting that in the 19th century the shrines were a focus of political power and gave legitimacy to inequality, priests accumulated wealth and fought bitterly with each other to control shrines. But he attributes the decline of their effectiveness to the contradictions between white and black notions of environment and how to exploit it, which led to open violence. When the Ndebele state was overthrown in 1893, the land was alienated to white farmers, and thousands of young men were press-ganged into mine work. A consistent inflow of Christian missionaries challenged the authority of the shrines and with the support of a colonial administration set about penetrating and defusing the shrines, building schools on shrine sites and using wood from sacred groves to construct their missions. Following the European

conquest of Matopos, agricultural intensification was the norm, land was cleared, large irrigation schemes planned, but by the 1920s, colonial sciences, relying on depictions of an amoral rapacious African agriculturalist (rather than the Europeans who were promoting intensive production), contributed to a conservationist ideology that was used to justify the eviction of the black population and eventually led to the creation of a National Park. Grounds of geological and botanical uniqueness, in the very places occupied by Africans for centuries, were used to construe a threat from that same population depicted as despoilers of those features. Eventually depopulation and destocking were carried out.[19] Here again is a situation where a new social order underpinned by evangelical Christianity and colonial power, undermined the basis for internally legitimate authority, effectively displaced people from land they had historically occupied, and restructured a historical relationship between nature and culture. Castro and Tibbetts (2001) describe a similar history on the slopes of Kirinyaga (Mt. Kenya). Here, the relationship between sacred groves and their importance as a spatial and ideological focal point for the shared concerns of community was disrupted by the arrival of Christian missionaries who interfered with the practice of worship and ritual, caused state intervention and centralized bureaucratic control over the authorization of scared space. This intervention in worship led to the erosion of communal bonds, altered internally valid modes of sanctioning legitimate authority, and led to a consequent decline in scared groves, and the protected habitat they provided.

These are all examples in which perceived relations between community well-being and ecological integrity have been altered historically through a number of processes including the displacement of communities from lands and resources that they have historically occupied and used, the loss of secure tenure over lands as states claim sovereignty, appropriate the right to extract and allocate resources and dictate appropriate mechanisms of environmental management, demographic changes including inflows of migrants backed by the state, and technological changes that encourage the direct alteration of ecological practice. These are not mutually exclusive effects and often operate in unison to achieve an altered ideology of nature within restructured community interests. Perhaps the most significant consequence of this process is the alteration of community social structure and the diminished legitimacy of traditional institutions of authority. As Smith and Wishnie (2000) point out, political systems that have operated to maintain ecological resilience and conserve biodiversity in the past are increasingly vulnerable to competition from larger and more powerful political and economic interests, which can destroy local incentives for conservationist practice and communal management. I would alter this to some degree to suggest that the incentives for communal management are redirected toward different communal ends, as community norms and values interact with superimposed systems, and are re-shaped through processes of resistance and accommodation to new demands[20].

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[19] A formally declared National Parks department came to manage the Matopos and in 1962 a partition was enforced that completely depopulated the area of the Park. The rest of the Matopos became reserves in which the Park authority could "re-introduce" big game and invent a pristine environment which it could then conserve. The park became a white playground devoid of the lives of those who had interacted with the environment to create what was there to be conserved.

[20] We can think of community reaction to Conservation programs in much the same way. As modernist Conservation attempts to put in place structures to conserve biodiversity, they are also attempting to put in place new ideologies of nature which are subject to, and locally redefined, through a dynamic of resistance and accommodation.

Zerner (1994a, 1994b, 1998) provides an excellent example of just such a process in his discussion of the dynamic and flexible aspects of Sasi in Maluku. Though the origins of Sasi are not at all clear, the accessible history of Sasi reveals a flexible institution which, in some cases, was used by Dutch colonial officials and traders to facilitate the commercial regulation of access to, and protecting, crops with value in an international economy dominated by imperial interests (e.g., coconuts, betel, cloves). In the case of marine resources, the emergence of a market for marine commodities like trochus shells, has altered Sasi and free community access has been discontinued. Village governments began to claim control of revenue from trochus harvest for development related investment, and gradually Sasi was restructured in the direction of centralization and government control of access to reef areas and commodities. The development of a market and centralized control, motivated by the government's dependence on trochus revenues for 'development', has resulted in changes to Sasi. As a function of these changes, Sasi, or restricted access, periods have declined. Whereas in the 1950s and 60s they were sufficient to allow for one reproduction to occur, now the interval between harvests has declined. The shortened intervals between harvests have resulted in decreased yields. Local officials also claim that villagers' need for income force them to extend the harvest period. Zerner's example points to the ways in which institutions and the practices they sanction change within altered social, political and economic contexts. In the case of Sasi, the effectiveness of the institution in contributing to ecological resilience has changed through time in accordance with changes in sources of authority, the political and economic interests that authority represented, and the ways in which community members have either resisted or accommodated that broader context. These changes in the structure of Sasi through time reflect a "changing hybrid institution that arose in a border zone of intercultural contact, crosscutting interests and competing claims on resources" (Zerner 1998; 543). This process continues, and others (e.g., Pannell 1997) suggest that recently Indonesian village level government officials and NGOs have begun to alter Sasi rules, practices, and ideologies in attempts to restructure Sasi in ways that further their own interests. While observers have documented the broad outlines of this process of historical change, the mechanisms are more obscure. For some, Sasi is viewed as a flexible institution able to change with altered environmental conditions. Rules can be implemented forbidding motor boats and extending harvest restrictions, but these are dependent on the maintenance of legitimate authority. The centralization of Sasi, however, and its incorporation as a mechanism of state governance removes internal legitimacy from that authority and displaces it from a communal context. This is not to say that the communal context will govern in the interests of conservation, simply that people may be more willing to obey an institution they see as legitimate (Harkes & Novaczek 2001).

CONCLUSIONS AND LESSONS LEARNED:

Given the conflicts that surround the establishment of conservation initiatives, there is a need to find ways to shift the power balance in conservation decision-making. Community-based conservation is one approach that holds promise. But this effort must confront and overcome a disturbing and dangerous tendency among governmental and non-governmental agencies to treat the idea of community as homogenous, and the idea of tradition as static. What become labelled as traditional communities are often treated as non-stratified entities. They are not. Like all communities, they are bounded locations composed of social relations of power. 'The community', for example, is commonly treated as a monolithic body of subjects with uniform interests, rather than as a network of micro-power relations (and their effects) contextualized and bounded by transformations introduced by regional, national and international relations of production, and differentiated along intersecting lines of gender, age, wealth, status, race, ethnicity, and kinship. Given an understanding of community as a collection of overlapping yet

divergent interests, the question of conservation highlights the importance of identifying and comprehending the mechanisms that provide political institutions with the legitimacy that sanctions their authority. It also underlines the importance of incorporating internally legitimated institutions of authority in making management decisions regarding conservation. I use the phrase "internally legitimated" here to distinguish such mechanisms and institutions from those legitimated by the state, as in many cases, externally legitimated institutions (*e.g*., those that rely on the authority (and police powers) of the state for their authority) tend to be less effective and less efficient in generating compliance among their constituency. In the context of conservation, then, what is needed for the protection of biodiversity is not something that can be determined from outside of the context of how people define their lives, how nature is defined and how people see themselves engaging in the process of conservation. There is no reason to expect that there will be coherent agreement on any of these questions within communities let alone between them, but that does not diminish the obligation to understand the basis for what constitutes nature and conservation lifestyle in any cultural political context.

WHY AND HOW DO SUCH ISSUES RELATE TO PROTECTED AREAS AND HUMAN WELL-BEING?

.*Understanding Conflict*

Modernist models of Conservation and Protected Areas as currently conceived and designed often produce community-based resistance that runs counter to the goals of conservation agencies and fail to recognize historical conservationist practice. Yet what stands out in most examples where communities have historically engaged in practices with conservationist outcomes is that they exist as embodied and historically situated experiences. This stands in contrast to modernist definitions of Conservation which treat entities, and scientific categories, such as species or biodiversity as abstract objects of knowledge, intentionality and action, that somehow exist independent of this cultural context. We need to recognize that many biodiversity conservation initiatives today target areas that have historically been occupied and utilized by resident populations, and that extant biodiversity is, to varying extents, a function of the interaction of the situated knowledge of those groups and biophysical conditions. In many of these areas, state and organizational authority actually has had limited reach historically and continues to encounter resistance when they try to exercise authority today. Biodiversity conservation, then, is reliant on the co-operation of these resident populations, and must take place where they live and work. What is also clear through an examination of history is that conservationist practice appears when it meets social objectives and disappears when it hinders them. Conservation then is as much a social phenomenon that reflects the dominant interests that define social objectives as it is an explicitly scientific practice grounded in theory and empiricism. This is explicit in a recognition of conservation politics and in a history of nationalist conservation in various settings around the world where conservation practice and regulation have waxed and waned in relation to dominant political interests. What is needed more than an understanding of explicit practice is an understanding of the processes constructing, regulating (*i.e*., approving or sanctioning), and managing those social objectives.

Escaping the political turmoil of modernist Conservation requires legitimacy to meet its ends. It is clear that such legitimacy (though often cynical) exists within international and nationalist institutions. The same cannot be said for the situated, quotidian, places and communities within which Conservation outcomes are decided. Here, legitimacy is yet to be acquired and likely will not be acquired unless Conservation finds effective ways to include self-defined expressions of culture, ownership rights, use rights, situated knowledge, economic development, and political

recognition as the legitimate basis for its criteria and goals. To do so is to recognize long-standing institutions such as those discussed in this paper as 'management' strategies that have potential value for conservationist outcomes. But it also requires recognizing that cultural values and social practices have been primary means of historically conserving some forms of biodiversity and ecological integrity. Even with that understanding and recognition, it is by no means certain that local communities will better protect and more equitably allocate resources than the state or NGOs. However, the continued alienation of communities from control over resources that they have historically considered their own virtually ensures that they will not mobilize in support of Conservation efforts. It is this situation that should guide inquiry into the historic practice and institutional governance of particular communities.

The Benefits of Historical Sensitivity

Just as critical history has benefits for contemporary conservation practice; it also has the potential to benefit communities subject to the activities of states, non-governmental organizations and commercial interests, attempting to acquire practical control over land considered their own. Rather than simply relying on the rhetorical and political instrumentalism of indigeneity or localism, such histories can reveal the processes and contexts through which disempowerment and disenfranchisement may have occurred. There are benefits in being sensitive to such history. Recognizing that historical values and beliefs and consequent practices in specific areas have produced conditions conducive to the maintenance of particular species, landscapes and mediated physical processes challenges the managerial rhetoric of capacity building, best practice, skills transfer, that overlook or ignore existing capacity in many communities. In interpreting a history of landscape use and formation through a multitude of information sources (oral tradition, documented records, contemporary traces on the landscape, archaeological evidence, ethnographic, ethno-historical and ethno-ecological data) we can uncover a history of sustainable resource use. That this is not predicated on a modernist understanding of Conservation or on scientific design practices is to some extent beside the point. What is clear from many examples is that conservationist practices and outcomes at the level of the community, and in relations between community and state, have contributed to community sustainability and consequently to ecological sustainability. If we consider community sustainability as a process that involves social vitality, political validity, economic viability and ecological integrity, we can begin to interpret conservation as an element of larger ideological systems that give meaning to what constitutes community. Indeed, this is the basis for most of the environmental conservation practices that occur in so-called modernist societies where Conservation practices stem from a realization of the value of ecological integrity to community well-being. Rare is the policy or project that receives administrative approval solely on the grounds of the inherent value of the species, landscape or process being targeted. Rather, anthropocentrism, and particularly the application of utility or opportunity value, continues to hold sway. The important point here is that a historical legacy of conservationist practice has not only contributed to community well-being but relied upon legitimate institutions, responsible for implementing those practices, responding to environmental change, sanctioning new practice, and regulating use and access of particular areas. Conservation initiatives can and should build upon these past histories. In doing so they can contribute to and in some cases strengthen the foundations of community sustainability. This would be in marked contrast to past practice which has often divested indigenous groups and small-scale societies of the ecological and social bases for community sustainability.

Institutional Legitimacy

In the implementation of many Conservation projects capacity or skills are simply assumed not to exist and institutions are replaced by external political interests and processes that have little internal legitimacy (e.g., there is little *good* reason, aside form the threat of force, to obey them). Yet, the identification of both institutions and practices that have produced conservationist outcomes in the past is evidence of 'capacity'. In cases where that capacity no longer seems apparent there is a need to investigate the causes of its disappearance or decline. Many of the cases covered in this paper describe processes whereby regulatory institutions have lost their legitimacy, both through the application of force (e.g., they were out-lawed), the imposition of new ideologies of nature, or through internal complicity (leaders allied with new ideologies of rule (e.g., state power)). The basis for conflict avoidance lays in understanding and recognizing the historical basis for the legitimate authority that sanctions conservationist practice in small-scale communities. Such recognition can not only empower communities, but it can help to minimize the social tension and cost of involved in dealing with conflict.

Valuing of Situated Knowledge

Valuing situated knowledge for what it is rather than extracting it to be used in the decision-making processes of conservation agencies can aid in the reproduction of local conservationist practice. Where such situated knowledge is being replaced it is often through the educational programs of national governments or conservation agencies. Recognizing that similar values may underlie different knowledge systems (e.g., a value of life expressed through different customary practices) can contribute to the integrity of the knowledge systems that have produced conservationist outcomes in the past, and is essential to understanding the social mechanisms through which contemporary ecological dynamics have come into being. Also, the understanding of contemporary environments is improved through an understanding of the knowledge and socially regulated practices that have played a part in their formation. Environments subject to contemporary conservation initiatives have come into being as a function of long standing interactions with humans. In many cases, they have been subject to human management such that an understanding of the historical conditions that have affected ideologies of nature and consequent values and practices directed at nature can improve an understanding of the ecological relations of the area subject to protected status. Understanding ecosystems as the product of human modes of production provides a better interpretive frame for understanding contemporary ecological dynamics, and for understanding the potential ecological changes brought about by intentionally altering those modes of production.

WHAT CAN WE DO ABOUT IT?

Kayan Mentarang National Park, East Kalimantan, Indonesia

Kayan Mentarang National Park covers an area of 1,600,000 ha and encompasses the largest remaining block of rainforest in Borneo. Historically inhabited by Kenyah people, land has been governed by a community institution known as Tana Ulen. Historically this terms has been used to refer to several proprietary and tenure arrangements where access is restricted or prohibited. This included not only agricultural lands but areas of primary forest. Currently, the term refers to a parcel of forest and associated resources that are managed by the community, according to specific agreements and regulations (Eghenter 2000). The meaning of tana ulen and its structure of administration, however, have changed through time, as an antecedent aristocracy waned in the face of the state's centralization of authority and as Christianity came to dominate spiritually. Currently, the meaning of tana ulen and its administration varies from community to community. As commercial pressures on forest resources have grown and as threats to community control of those resources have emerged, communities have intensified their strategies to assert exclusive rights over the exploitation of forest on their lands, including tana ulen. In 1991 WWF began collaborating with the Indonesian government to design a long-term conservation plan for Kayan Mentrang. The park had been established without consultation with affectted communities, but WWF staff made an effort to include what they thought of as traditional village leaders in the planning process. In doing so, they documented the existence of tana ulen and, with little regard to its complex social and historical circumstance, interpreted it as confirmation of a conservation ethic in local communities. Eghenter (2000) points out, however, tana ulen gained a heightened significance precisely because of the arrival of WWF at a time when community leaders were looking for a way to assert their historical tenurial rights. She documents the ways in which village elders quickly adopted the language that WWF staff had used in explaining conservation management plans and used it as the basis for representing tana ulen, in effect "using the international status and technical language of WWF to defend and promote a local system of values about resource management" (Eghenter (2000; 344). Similarly, WWF read tana ulen through the lens of their objectives describing it as "forest communally protected to provide clean water and a refuge for wildlife and plant species" (Eghenter 2000; 344). No doubt this interpretation was motivated by a desire to incorporate traditional practice and institutions into conservation planning but the adoption of a simplistic conception of such practices and institutions, particularly one that ignores the complex historical dynamics of such institutions creates the ground for potential conflict when projects designed on the basis of such simplistic interpretations confront situations where the local institution does not conform to their expectations. It is just such a lack of historical context and situated perspective that has contributed to the failure of many community-based conservation projects in the recent past (Brosius *et al*. 1998). Following such conflicts in Kayan Mentarang, WWF staff recognized that tana ulen was not solely designed to protect biodiversity. Importantly, however, they have not abandoned its incorporation but have begun working with communities "to analyze and revise current tana ulen management regulations, examione menegement traditions in other areas of the park, and elaborate new criteria in order to propose a viable alternative for forest resources management by local people inside the National Park" (Eghenter 2000; 351).

Understanding Temporal and Spatial Context

Just as Conservation projects are threatened by ignoring local context, conservation initiatives that have aligned themselves with the social justice concerns of indigenous groups or local communities are threatened by essentialist representations of indigenous practices are inherently conservationist. Ecological practices and knowledge emerge within specific political, social and economic contexts. They are not static and their outcome, which may well be conservationist, is a function of that context. It is important then, to explore how the interpretation of practices and institutions can be influenced by concerns with community rights, on the one hand and the conservation of biodiversity on the other. There may well be a tendency to interpret local practice and institutions in ways that suit the social/environmental agenda of conservation agencies rather than in the context of extensive historical research (Eghenter 2000). To speak, or think, in terms of universals or to assert generalizations from individual cases is counter-productive. One of the primary insights derived from an understanding of the historically localized and particularized context of environmental action is an understanding of the continuity of human-environment interaction structured by ideological changes that find their political expression in institutions of authority and their material expression in environmental conditions. To find explanations for contemporary environmental conditions and practice, we need to mine the history of political context, to understand the ways in which belief, knowledge, practice and authority have changed. Is the symbolic and material significance of hunting the same today as in the past? How do beliefs about water affect actions in relation to water? Are beliefs about plant life increasingly available from different sources? Do new beliefs structure practice differently? Scholars of so-called indigenous or local knowledge (with all the problems contained in those terms) have done a great deal of work establishing ecological typologies in societies around the world and documenting belief and practice. Unfortunately this work has not paid sufficient attention to historical context and tends to represent these typologies as static. But conservation practitioners have also paid insufficient attention to history and to how practices, knowledge and belief systems change, to the circumstances in which conservationist behaviour emerges and the relevant political, economic, and social contexts that support, or undermine it.

Options for Action and Advice

- Conservation practitioners must develop accounts of local practice that reveal the ways in which human-environment interactions are affected by their social, economic and ecological situation, and how these interactions can alter that situation. They must recognize that practice changes through time as do the ways in which people understanding, interpret, and act upon their surroundings. Local practice must be seen as temporally dynamic.
- Community-based conservation initiatives, if they are to be effective in the long-term, must be grounded in long-term ethnographic, ethno-historical and eco-historical research. A lack of historical context and local perspective in the interpretation of seemingly traditional institutions has contributed to the failure of many local experiments in community-based management. Greater attention to these can be useful in making effective policy decisions.
- Do not look for global solutions or replicability. Each context is distinct. Universal models annihilate context, yet it is clear that problems in human-environment relations are local before they exist at any other scale. The desire to transcend that local scale may satisfy demands for institutional efficiency and relevance but it does little to address the contextual reality of conservation issues.

Recognizing Legitimate Authority

Conservationist practice is directed by institutions of authority (often long-standing) that are seen to have internal legitimacy. It is a mistake to see these institutions as inherently dedicated to the protection of biodiversity. In part their internal legitimacy is derived from their ability (and the ability of the office holders) to satisfy the internally defined needs and life goals of their constituents. Where a population is dependant directly on biodiversity for their immediate and long-term survival, we might expect a bias in favour of environmental protection or action that responds effectively to perceived environmental impairment. But institution and life goals change through time. One of the features of modernism and development is a change in the perception of life opportunities, hopes, and desires. Institutions may change accordingly and still retain internal legitimacy. But this also is not a universal. Appropriate knowledge is not necessarily distributed equally within societies, nor is it seen to be distributed equally. That is why some individuals, and the positions they occupy, are accorded status in relation to particular spheres of activity (such as the environment) and why they hold to the responsibilities that knowledge implies, often in the face of considerable opposition from within the communities whose activities they are delegated to regulate. Recognition of the authority bestowed by their access to knowledge may well allow their decisions and decrees to affect community action. Yet there are also cases in which the holders of these offices and the individuals responsible for knowledge use their position for individual gain. This possibility is created through the emergence of political opportunity structures. Where their actions are regulated by the need to adhere to community norms and evaluations of appropriateness, it is difficult to take advantage of office. When external agents attempt to attain legitimacy (e.g., political elites, states, NGOs) or to introduce directed change, they may create a political opportunity to acquire individual gain as a function of occupying 'traditional' office. Numerous examples describe the ways in which colonial agents (e.g., missionaries and colonial administrative officers) usurped and/or weakened the legitimacy of traditional institutions of authority. Conservation programs have the capacity to recognize and utilize legitimate institutions of authority and at the same time overcome resistance to their initiatives by operating through these same institutions. The challenge, however, lies in knowing whether local institutions of authority retain legitimacy and understanding the historical and social context that has produced effective conservation. This can only happen through long-term dialogue with the communities concerned.

Options for Action and Advice

- Understand the bases for legitimate authority at a community-scale, the conditions that produce legitimation and the practices that constitute a threat to legitimation and hold the potential to create resistance to conservation interventions.
- Research that identifies the environmental and social function of traditional institutions of authority, how those functions have changed through time, and the mechanisms of legitimation for those institutions
- Historical research designed to reveal how external challenges to institutions of authority have altered the range of activities governed by those institutions and their legitimacy.
- The establishment of conservation planning processes that incorporate, build on and contribute to the integrity of legitimate institutions of authority.

Khunjerab National Park and proposed Central Karakoram National Park, Pakistan

Khunjerab National Park encompasses a region of 2300 sq km. in the central Karakoram range of northern Pakistan. First proposed by George Schaller in 1974 after a brief survey of the area, the area was created in 1975 as an IUCN Category II park defined as ecosystems not materially altered by human use. Despite this declaration, it existed as little more than vague lines on a map until 1989 when the first serious attempts at establishing a management plan were initiated. During the process, villagers with customary use rights in the area feared that these would be curtailed even further than they had been and petitioned for compensation. After a hostile period of negotiation, the government agreed to a nominal amount of compensation for villages. All affected villages signed the agreement with the exception of one. Despite the threat of force, the community of Shimshal whose lands are almost all enclosed by park boundaries refused to sign citing fears that their use rights would be subject to constant curtailment, their extensive pastoral economy undermined, but more importantly as a reaction to suggestions that Shimshalis were incapable environmental stewards (Butz 2002). In response to their proposed subjection to the park management plan, Shimshalis developed the Shimshal Nature Trust, a five pronged institutional and practical strategy designed to meet what they saw as both the needs of conservation and the needs of the community. The document outlining the Nature Trust includes the following statements:

While we appreciate recent efforts by external agencies to develop community-based nature conservation projects, our evaluations of such projects … suggest that it is not enough that external initiatives be managed locally; rather, a culturally and contextually-sensitive nature stewardship programme should be developed and initiated, as well as managed, from within the community. (Shimshal Nature Trust 1999; 2)

…as we are already practising sound nature stewardship, many of our indigenous customs need only be formalised, perhaps somewhat more regulated, and articulated in a way that resonates with the larger Pakistani and international ecological movement. Our largest challenge is not to develop a system of utilising the natural surroundings sustainably, but rather to express our indigenous stewardship practices in language that will garner the financial, technical and political support of the international community, and that will persuade Pakistani authorities that we are indeed capable of protecting our own natural surroundings (Shimshal Nature Trust 1999; 4)

This sophisticated initiative, which Shimshali's would like to see legally formalized by the Government of Pakistan has not been welcomed by the authorities in Pakistan nor by international conservation NGOs working in the area. While villagers see themselves as working to accommodate the interests of these groups, and claim to be achieving the same ends, support for this initiative from outside of the community with the exception of a small group of academics has been minimal (Knudsen 1999).

Need for Flexibility in Conservation Planning

Distrust between different actors in a conservation initiative can interfere with the capacity to implement co-management schemes. Conservation organizations need to recognize the history of relations between actors in attempts to implement these agreements and recognize that they may have to alter initial goals and definitions (e.g., standardized definitions of protected areas) to be able to reach agreement. In cases where local communities propose alternative means to achieve the same ends, these should be seen as sincere attempts to express not only community interests but to meet the goals of the agency as well. In the case of Khunjerab National Park, a mechanism of achieving conservation objectives was proposed as an alternative to the potential livelihood threats posed by a National Park (Knudsen 1998, Butz 2002). The strategy has been implemented and needs to be observed. Community members are quite open to consultation, but firm in their commitment that they will be the primary decision-makers in matters that affect their land-base. The alternative, labeled a nature trust, is a sophisticated document and seeks to achieve many of the same goals as the Protected Area, which had been mislabeled as a Category II Park. This indicates a serious lack of knowledge of the region by those who proposed and created the park, and by those involved in establishing a management plan. The process of devising a management plan has been ongoing for the last 15 years, and in the meantime, village members have devised what seems to be a reasonable alternative. Yet, Conservation organizations and government agencies have ignored the potential value of this alternative in satisfying the objectives of conservation. As so-called traditional or indigenous communities increasingly have access to employment and educational opportunities outside of their communities and bring a sophisticated knowledge of institutional bureaucracy back into those communities, this form of response is likely to become more common in the future. Both governments and Conservation organizations would be unwise to overlook the potential of these community initiatives. To do so will produce greater resistance to imposed institutional arrangements. However, being able to accommodate alternatives to standard conservation mechanisms requires a degree of intellectual and organizational flexibility that is not readily apparent in the institutional arrangements of most large NGOs as they exist today.

Options for Action and Advice

- Build a capacity for flexibility into co-management agreements rather than adhere to rigidly defined pre-conceived standards of how agreements should be defined and implemented
- Recognize the multiple interests of the state in promoting conservation (extension of sovereignty, extension of surveillance, extension of access, etc.), and that while Conservation agencies tend to share organizational interests with the state, the goals of the agency may be more closely allied with the community than with the state.
- Develop a reflexive capacity to overcome institutional adherence to normative definitions of conservation and normative mechanisms for achieving it. This means that the input to conservation planning needs to be broadened to include non-standard and innovative ways to satisfy the interests of the multiple interests involved in conservation activities. This has occurred in Europe, North America and Australia/NewZealand where communities have been empowered to participate in the planning process, but less so in other parts of the world where small-scale societies exercise less power.

Need for Reflexivity in Conservation Agencies

Formalized conservation programs are undertakings that have potentially serious consequences for the real lives of people, their sense of self, and their sense of place. It is important that

conservation agencies recognize that they are undertaking a moral project as much as an ecological project in implementing conservation initiatives. They are asserting an idea of what is right, and their actions reflect, consciously or not, ethical choices. Rarely, however, are these ethical choices aired in the open. Conservation agencies often continue to operate on assumptions about people and place that are grounded in the biased ideological representations of colonial regimes. Without undertaking their own contemporary research, it is difficult to see these for the stereotypes that they are. These assumptions (e.g., the rapacious native, the inefficiency of the commons, the incapable steward, etc.) quite often lie at the root of conflicts between local groups and NGOs and state agencies that implement Conservation projects. These conflicts reflect a situation of inequitable power relations, or a relation of domination and resistance. Rarely, however, is this resistance reflected upon by those in positions of greater power. Often it is explained away with other stereotypes (tradition, resistance to change, self-interest, etc.). Yet, what is possible in terms of conservation ***outcomes*** is structured by this relation of domination and resistance (*i.e*., the difference between what an agency attempts to put in place and what a receiving group is willing accept). Given its prevalence in the field of conservation, this relation must become the subject of reflection within conservation agencies. The legitimate causes for resistance must be sought and understood contextually. This is difficult to accomplish without having established a long-term relationship with those individuals and groups involved. A knowledge of history can help in this exercise as it allows for a deeper understanding of people and place, but conservation agencies and actors must come to terms with their power, reflect on the source of their own ideological biases, the ramifications of their consequent actions, and adjust practice accordingly. This is not a simple process but involves a great deal of work in establishing relationships, gathering information, evaluating that information, and being willing to act on the basis of that deliberation. Ultimately, this means generating an institutional culture in which dissent and free debate are the norm, and where introspection and a tolerance for difference are respected and valued over conformity.

Options for Action and Advice

- Establish mechanisms (e.g., Insititution-wide, rather than project specific, monitoring and evaluation) and an institutional culture that allows for sincere self-study rather than self-study that amounts to self-promotion.

- Create mechanisms for open dialogue with and between communities. This includes facilitating dialogue between communities outside of the presence of power (*i.e.,* representatives of conservation agencies or national governments), in situations where people feel free to speak openly. In many parts of the world where conservation agencies operate, communities are not readily able to interact and share the benefit of comparing their different experiences with conservation interventions. Conservation agencies, on the other hand, have the benefit of widespread information accumulation and a capacity to communicate with whomever they choose. The ability of communities to acquire a wider base of information and communication can only enhance their ability to evaluate the choices they are confronted with by conservation initiatives.

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