

- Swidler, Nina, Kurt Dongoske, Roger Anyon, and Alan Downer (editors)
 1997 *Native Americans and Archaeologists: Stepping Stones to Common Ground*. AltaMira Press, Walnut Creek, CA.
- The Washington Post*
 1990 Skinheads Delay Baltimore March in Route Dispute. News Services and Staff Reports. *The Washington Post*, June 7, D4.
- Watkins, Joe
 2001 *Indigenous Archaeology: American Indian Values and Scientific Practice*. AltaMira Press, Walnut Creek, CA.
- Yellen, Samuel
 1936 *American Labor Struggles*. Harcourt Brace, New York.
- Zinn, Howard
 2003 *Passionate Declarations: Essays on War and Justice*. HarperCollins, New York.
- Zukin, Sharon
 1995 *The Cultures of Cities*. Blackwell, Malden, MA.

11

Entering the Agora

Archaeology, Conservation, and Indigenous Peoples in the Amazon

MICHAEL J. HECKENBERGER

David Clarke's seminal essay "Archaeology: The Loss of Innocence" (1973) heralded the important shift in archaeology from description to problem-orientation and scientific approaches. Recent shifts in archaeology emphasize questions of multi-vocality, dialogue, and social accountability and, as such, also represent a loss of innocence, referring to the maturation of views on the philosophical and ethical implications of multi-culturalism and, therefore, skepticism of claims that a singular, objective viewpoint can be achieved through rigorous application of the scientific method (Tilley 1998). Today, most practicing archaeologists accept that their craft, including basic data and facts as well as interpretation, is constructed and contested and not simply "discovered."

Context, perspective, and voice are critical new features of archaeological research, particularly in areas where descendant Indigenous groups are directly involved. Complex questions of intellectual and cultural property rights, who "owns" the past, and the so-called de-colonization of knowledge are central (Schmidt and Patterson 1996; see also chapter 8). These issues resonate or insinuate themselves across social and policy studies generally, but given the traditional focus on the socio-historical constitution of knowledge—on local

and historical context—anthropology, here including archaeology, is uniquely confronted by them (Strathern 1999). The contested nature of science deflects questions of knowledge production immediately into the area of ethics and how codes of conduct are forged or applied in actual practice.

This chapter focuses on the moist tropical forest areas of lowland South America, Amazonia, and how partnerships have been established with Indigenous peoples in the conduct of archaeological research. It emerges from experiences related to a specific project in the Upper Xingu region of southern Amazonia (Mato Grosso state, Brazil): the Projeto Etnoarqueológico de Amazônia Meridional (PEAM) in the Parque Indígena do Xingu (PIX). Here, anthropology lies at the confluence of broader issues of tropical conservation and development, usually measured in ecological, biological, and economic terms, and basic human and cultural rights of rural and particularly Indigenous peoples, largely in the realm of the socio-historical. This creates unique challenges and possibilities for knowledge production and training. In particular, the long-term heritage of tropical forest peoples, as revealed through recent anthropological archaeology, shows deep cultural histories, including sophisticated, large-scale, and culturally specific patterns of land-use and resource management.

The chapter promotes engaged and participatory strategies of knowledge production and politically frank engagement with policy making, conservation, and development, and with other outside interests in the region and in tropical forest regions more generally. It adopts the view that, while distinctive, Indigenous and non-Indigenous knowledge systems are highly diverse and contextual and often share important features in common, which creates common ground for dialogue and the co-production of knowledge. Translation between disciplines and cultural knowledge systems, as often as not, is the dominant concern for research teams as well as is measurement or verification according to preconceived and often discipline-specific units, questions, or research designs.

CONTEMPORARY KNOWLEDGE PRODUCTION: ENTERING THE AGORA

In *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*, Gibbons et al. (1994) distinguish between two approaches to knowledge production. First, scientific knowledge production, or “Mode 1,” is based on divisions of labor and specialization (disciplines)

and the search for answers to established (accepted) questions (problem-orientation) within the discipline. The goal is to establish widely accepted theory or basic “truths.” In recent decades, a “Mode 2” approach to knowledge production has appeared that focuses on the trans-disciplinary, heterogeneous, and dynamic nature (context driven) of research (Latour 1998). What is refreshing about the distinction, as phrased by Gibbons and his colleagues, is that Mode 2 does not simply supplant Mode 1 but complements and builds on it to answer complex questions.

In relation, specifically, to that what has come to be referred to as “sustainability science,” Martens (2006:38) distinguishes between core properties of Mode 1 and Mode 2 science as shown in table 11.1.¹ This distinction reflects the basic duality of constructive research on human issues, that between viewpoints from natural science and those from humanities and social studies, whereby the latter, at least, includes not only scientific methodologies and perspectives (naturalistic experimentation, human biology, ecology), but also history and viewpoint as critical elements. This duality, well understood since the late nineteenth century, is captured in the metaphor of the “the two cultures”—as British scientist and novelist C. B. Snow coined the division between the sciences and humanities and what he referred to as “literary intellectuals.” But, the distinction between and, to some degree, recent transition from Mode 1 and 2, entails more than this: As Nowotny, Scott, and Gibbons (2001) put it in their later work, *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*, “the world is no longer mainly defined in terms of its ‘natural’ reality, but includes the social realities that shape and are being shaped by science.” By adding the social and the cultural, questions of social responsibility and accountability of science and scientists to society, including addressing diverse publics—or ethics, in a word—take center stage.

Table 11.1. Core Properties of Mode-1 and Mode-2 Science

<i>Mode 1</i>	<i>Mode 2</i>
Academic	Academic and social
Mono-disciplinary	Trans-disciplinary
Technocratic	Participative
Certain	Uncertain
Predictive	Exploratory

Source: Martens 2006.

It is important to remember that by downplaying significant variation and change, such characterizations can potentially work against dialogue: the continuum between detached observation, participant observer, participatory technologies, and collaborative science is complex and dynamic (Rocheleau 2003; see also chapter 1). Dualisms, such as those between Indigenous and non-Indigenous, cyclical and linear time, group and individualizing, or even whole groups of societies, "hot" and "cold" societies, as often as not are actually describing (and distorting) continua or sliding scales rather than absolute (Cartesian-like) dichotomies. We might say, again following C. B. Snow, that there is a need to develop a "third culture," intermediate between science and other publics, including other social and cultural groups, in other societies and nations.

The "science wars" were particularly keenly felt by anthropologists due to the tri-partite division of intellectual knowledge production within the discipline: scientific, historical (including humanism and contextualism), and critical. Anthropology has come to embrace this tripartite structure of knowledge production within its vision of holism, aimed at addressing the full nature and implications of human cultural, historical, and biological variation. But this is obviously no small task, and no one should be surprised that appropriate units of analysis, research questions, methodologies, and instrumentation will never be decided upon definitively but are constantly redefined by the holistic enterprise itself, the cross-cutting nature of interdisciplinary investigations. Like ecology, the other inherently interdisciplinary arena for knowledge production (focusing on the natural sciences), anthropology is interested less in taxonomy and classification, as in relationship, the interconnectedness of things, and thus shares with ecology a meta-disciplinary quality: overarching diverse, potentially limitless domains.

Anthropology is also distinguished by a unique relationship between knowledge production and "human rights," since going there (to the field, away from home, to some other person's places) is still the singular professional imprimatur of anthropology (see Turner 2006). What often happens as anthropologists venture to foreign places around the globe, in the past and increasingly in the interstitial spaces of our own scientific and technological world, is that inobvious and often enough inconvenient aspects of these dualities and of other truths become apparent, which are often enough

found to be inobvious (neglected or hidden) precisely because they are inconvenient (to dominant discourses). Through practice and engagement, other meaningful partitions appear, second worlds wedged between the cosmopolitan elite and traditional society, third-genders situated along the margins of males and females, the local-global, all organized into cascading regions, genders, ontologies.

Central to Mode 2 knowledge production are questions of contingency, scale, agency, and voice—central features of what has been called "post-modern science" and what the majority of anthropologists practice today (Rappaport 1994). Interdisciplinary and multi-cultural collaborations have become the standard for projects in many disciplines to resolve complex, multi-scalar problems. The practice of such a "multi-sited" investigation blurs the traditional line between applied and theoretical approaches.

Furthermore, and most importantly, there is the reflexive nature of research: "context speaks back," and recursively transforms science. This second work follows up particularly on questions of knowledge and the public, expanding discussion on the defining characteristic of Mode 2: the idea of the "contexts of application" of research, or contextualization, and the "agora." The idea of the agora, which comes from the Greek word for forum or meeting place, is particularly relevant in the present case because of its meaning in Brazilian Portuguese, "here and now."

According to this view, contexts are made, not given. Contextualization is pervasive and must be internalized, meaning that unknowable implications—the emergent properties of the agora—and the planned or predictable applications of scientific research must be embraced (Nowotny et al. 2001:253–56). Finally: "If the agora has become the space in which science meets and interacts with many more agents, where institutions overlap and interact, and where interests, values, and actual decisions to be taken are discussed, negotiated, fought over, and somehow settled, then the self-organizing capacity of all participants needs to be enhanced" (Nowotny et al. 2001:260).

This is particularly relevant in Amazonia, where questions of the development and conservation of the natural environment loom large and where most of the people involved in these efforts are outsiders, including immigrant Brazilians, absentee owners and policy-makers, and foreigners. One of the most immediate questions that confronts outsiders moving into the area,

including archaeological practitioners, is how to meaningfully engage Indigenous “others” and what ethical and practical problems are involved? How do outsiders conduct themselves and to what ends?

Elsewhere, I discuss these questions in greater detail, including human rights and scientific and historical knowledge production, using the imagery or perspective of anthropology as “meeting place” (Heckenberger 2004). These insights require new outlooks into tropical civilization and Indigenous resource management strategies and how outsiders engage the descendants of these histories, the “First Nations” peoples, through participatory strategies and dialogue. In this dialogue, archaeology is critical as virtually the only means through which to contextualize deep (Indigenous) histories, critically important in discussions of cultural heritage and property rights. In order for meaningful dialogue to occur, archaeologists should have rules and standards in place—well articulated codes of ethics—to govern their conduct with affected peoples, particularly descendant populations, and to assure that archaeology is made relevant to their interests.

CODES OF ETHICS

Archaeologists typically work in areas where local people with roots in place and larger non-academic groups (pan-Indigenous organizations, developers, public servants, or other groups) have vested interests in their work. Research involves complex issues of local participation and social accountability at various levels. In particular, working with Indigenous peoples demands special considerations. In the United States, the Society for American Archaeology (SAA) has established practices for interaction with Native American communities in North America (under the general jurisdiction of the Committees on Native American Relations, and Ethics), but few guidelines are in place for the conduct of archaeological research in other areas. This is largely due to the scope of the SAA, focused on North America and especially the United States, but given the large membership, publication, and participation of people across the globe, particularly in Latin America, the question deserves attention.

The SAA describes eight principles of ethics, notably including accountability to diverse publics: “Responsible archaeological research, including all levels of professional activity, requires an acknowledgment of public accountability and a commitment to make every reasonable effort, in good faith, to consult actively with affected group(s), with the goal of establishing a work-

ing relationship that can be beneficial to all parties involved” (see Lynott and Wylie 2000).

The World Archaeological Congress (WAC) is far more explicit, and the “First Code of Ethics” addresses “obligations to Indigenous peoples” in a fairly comprehensive manner, no doubt in large part due to its international scope (World Archaeological Congress 1991). WAC’s comprehensive statement of ethical principles, developed after adoption of the “Vermillion Accord” by WAC in 1989 (in South Dakota) was constructed just before important U.S. legislation on Indigenous peoples and archaeology—most notably the Native American Graves Protection and Repatriation Act (NAGPRA)—and codifies the paramount responsibility of archaeology to Indigenous peoples.

Although the SAA remains vague on this issue, most practicing archaeologists in the United States subscribe (or received their advanced degrees) within the broader discipline of anthropology. The American Anthropological Association, the largest professional body of anthropologists, is clear in its “Statement of Ethics”: “in research, anthropologists’ paramount responsibility is to those that they study” (see Fluehr-Lobban 2003). In archaeology, this basic premise is increasingly accepted, since in the United States the discipline of archaeology is subsumed within anthropology, and all but a handful of U.S.-trained archaeologists receive their degrees in anthropology programs.

Archaeological research must be prepared to deal with questions of authenticity, or what exactly constitutes “Indigenous,” since attributions of cultural affiliation (to objects, sites, and whole regions/periods) is commonly considered as basic to research. The meaning of these terms is complex and refers to both a contemporary identity and a cultural heritage, which, although not unlinked, are not interchangeable. As an identity, many people may claim Indigenous status or privilege, even if they have no legitimate claim to the land or heritage through a specified Native American group (e.g., “New Agers” or centers for shamanistic studies). But, as a heritage, specific claims to first occupancy or cultural tradition are critical. Furthermore, careful consideration and negotiation are often required to address who, among equally legitimate and affected Indigenous parties, can represent others.

A discussion of “authenticity” is beyond the scope of this chapter, but a minimal definition for the conduct of engaged archaeological research with Indigenous peoples can perhaps be grounded in NAGPRA (Section 2(2)), which states: “A ‘cultural affiliation’ means that there is a relationship of

shared group identity which can be reasonably traced historically or prehistorically between a present day Indian tribe or Native Hawaiian organization and an identifiable earlier group." Further, legally mandated rights to "ownership" of sacred and special cultural patrimony ("repatriation") can occur "in the absence of a finding of cultural affiliation" if: (1) the claimant is a lineal descendant; (2) on Indian lands, many of which are under demarcation . . . ; and (3) on Federal land recognized as the aboriginal land of some Indian tribe (by land claims tribunals and laws in the United States).

The question of "who owns the past," complicated enough in philosophical and ethical terms, also involves many practical issues of knowledge production, including the conduct of research and the dissemination and storage of its products, materials and knowledge, intellectual and cultural property rights. As a provisional (minimal) starting point, let's take those cases where cultural affiliation is not in question, the following three conditions automatically apply: (1) Indigenous groups must be incorporated as full partners in discussion of any research that entails them or their lives, following explicit AAA and WAC statements cited above; (2) knowledge must be disseminated to a broader public, which must be able to scrutinize claims of accountability; and (3) among these publics are foreign institutions of governance (local, municipal, regional, federal, international), which (following from 1) includes Indigenous authorities.

LOCAL PUBLICS AND PARTICIPATION

Framing the agora in tropical archaeology involves special questions of foreign interchanges, conservation and development of natural resources, and Indigenous and rural human rights, or cultural resources, balanced against the needs of diverse "publics."

Suggesting that knowledge production is (and should be) contextualized, that it involves complex issues of translation, perspective, and voice that cannot be canonized in research formulas does not imply that research should not adhere to accepted rules and standards. However, research methodologies must be easily adaptable, flexible to refinement if not invention in place in actual contexts of application, and, most of all, open to interrogation and strategic dialogue between participating groups (stakeholders) in the agora.

This suggests a continuum from participation to collaboration, characterized by complex and dynamic arenas of knowledge production, transmission,

translation, and application. Thus, it is important to recognize that research is generally composed of aspects that are non-participatory (of interest primarily to researchers, or local communities), others that are participatory (introduced or learned by researchers, or local community members, in the research context and potentially consumed and co-opted in competing ways by diverse participating groups), and yet others that are fully collaborative (co-produced knowledge). One common goal, however, can be expressed that applies equally to all aspects of research: it must be conducted in a way that is (or can be) open to interrogation and contestation from other points of view and within the context of explicit dialogue. While transparency is the goal, it should also be noted that due to the diversity of interests and voices, the job of dialogic construction, the agora, is never done.

In a recent article, Green, Green, and Neves (2003) eloquently argue for the need to recognize a "subaltern public" and local consumption of archaeology by Indigenous peoples, based on their collaborations with Amerindian communities in the northeastern Brazilian Amazon: an archaeology "by the [Indigenous] people, for the people, and of the people." In the early twentieth century, when studies into the archaeology of the Amazon began, researchers focused on areas where there were few surviving Indigenous groups—the major floodplains. By mid-century, studies were initiated in Indigenous areas, but seldom for more than a few days or weeks at the most.

By the late 1990s, several projects aimed to develop in-depth archaeological research with Indigenous groups, including interviews and place visits with local assistants and experts, and incipient participatory mapping and archaeological techniques (Heckenberger 1994; Neves 1998; Wüst 1990, 1994). "Story-trekking," as Green et al. (2003) call it, has also long been in use by Amazonian anthropologists to address historical and ecological knowledge (e.g., Balée 1994; Rival 2001; Santos-Granero 1998; Seeger 1976), and many recent ethnographies include detailed information on place making and native cartographies. Nonetheless, in-depth, long-term engagements, on-site map-making, and archaeological investigations at sites of memory are rare (but see Green et al. 2003; Heckenberger 2004, 2005; Neves 1998, 2001).

Below, I expand on the Projeto Etnoarqueológico de Amazônia Meridional, conducted under the auspices of the Associação Indígena Kuikuro do Alto Xingu (AIKAX), as one effort to create a project *with* rather than *on* Indigenous peoples, but it is important here to mention that, in this case at least, it

should be noted that “people” is a something of a moving target, and there are diverse publics. Archaeology, also, is not something that many folks may gravitate toward or be willing to adopt, except as a temporary (paying) specialty in these rapidly changing times. Many Indigenous persons have become noticeably forward-thinking, and the transmission of local knowledge and heritage sometimes suffers. Indeed, archaeology, even through the minimal conditions of participation (i.e., simple training as paid assistants), can have a very important effect of valorizing local history. Here, the agora, the contexts of collaboration and research applications, involve not only teaching basic methods, what archaeologists have come to accept as basic practices and premises, but also their relevance to local and global concerns.

Today, it is perhaps standard operating procedure to develop participatory strategies across the globe, at least as with respect to the conduct of anthropological (including archaeology), and ecological/biological research insofar as Indigenous areas are concerned. Archaeologists, like trained anthropologists, go out and dwell in other places with people typically quite culturally distinct from themselves. They are participant observers in local culture as well as students into the history of past peoples. In most parts of the world, this involves meaningful engagement with their hosts. Archaeologists, in particular, need help: they need trained labor, guidance in site survey, and logistical help to transport equipment and recovered materials, and in places like the Amazon, it is Indigenous and rural poor folk who provide this aid. In fact, little of what ethnographers—and surely ethnoarchaeologists—do in the field is not participatory. Participant observation remains the single most important technique of both. But the general audience to which they speak—like the few archaeologists working in this vast area—is not Indigenous, but academic.

The question remains: how do we impart Western knowledge deriving from these local collaborations to communities and research participants in meaningful ways. First, this implies knowing what is “meaningful,” and here, as Green et al. (2003) suggest, public archaeology is comprised of not a series of goals and activities additional to the task of archaeology but rather it constitutes a wholly different approach to the generation of research questions and the production of knowledge (see chapter 8). Indeed, they note, “Within days of arrival, in May 2000, we had learned the awkward truth that however important and relevant our research questions had seemed, the scholarly de-

bates from which they emerge are worlds apart from everyday life in the Reserva” (Green et al. 2003:377).

The research questions that Green et al. (2003) were interested in were common enough, the “usual suspects” by this time: what was the nature and composition of anthropogenic landscapes, did they suggest large later prehistoric populations, and how are sites remembered (or not) in Indigenous or other local histories and what does this say about the ravages of colonialism and globalization. These are good questions. They are also questions that have direct bearing on questions of land rights, conservation, and development. This raises a question of voice: what do Indigenous peoples have to say about their histories, heritage, or cultural property rights of any kind, as described by outsiders, and, importantly, who speaks or hears what they have to say, how are Indigenous peoples heard, and to what ends.

Consistently, the most meaningful thing that I have to offer descendant groups in such partnership is not the degree to which I (or “we”) have become fluent in “their” understandings but the degree that “they” have become fluent in “ours.” Archaeology, because of its traditional focus on place and technology (both the tools of the archaeologist and the objective materials that are generally most available for study) offers a particularly accessible means to develop this dialogue, coupled with a focus that is particularly meaningful to local communities, once again place and patrimony (cultural heritage). Archaeologists also tend to travel in groups, as teams, and are well versed in the idea of interdisciplinary research. Finally, due to the obvious element of unexpected discovery of things, archaeologists often embrace the idea that context will constantly generate novel questions.

In Amazonia, it is also important to know about Indigenous heritage for a more immediate reason, the basic human and property rights of Indigenous cultural groups. A viewpoint commonly voiced in diverse contexts outside of Indigenous areas is: why so much land for so few people, when they [Indigenous groups] do not know how to manage or develop it? Here, questions of anthropogenicity, societal scale, and the scale of disruption caused by colonialism, nation-building, and globalization are critical. The way native peoples dwell in the landscape and, specifically, how Western research can provide insights and techniques into knowing this provides a medium not only for knowledge production in local and Western contexts but a language for dialogue.

CONSERVATION AND PEOPLE: ETHNOARCHAEOLOGY AS APPLIED ANTHROPOLOGY

In a well-known essay entitled "Ethnoecology as Applied Anthropology," Darrell Posey (1984) argued for the ways Indigenous knowledge could be understood that would define problems and solutions of importance to local communities as well as provide important data and insights to construct general scientific models. It recognizes the importance of local ways of knowing for questions of global importance, such as how to save the remarkable cultural and ecological diversity of the Amazon. Ethnoarchaeology, taken here to mean archaeology *with* Indigenous peoples, can provide not only critical tools but also interfaces or language, due to the focus on mapping the movement or flow of material things and spaces.

Conservation and development are contentious topics in tropical regions where competition is intense between groups for scarce financial and land resources and access to governance mechanisms. There is "big money" involved! More recently, conservation biologists have on occasion promoted the view that natural "hotspots" must be protected for global well-being, with as little human influence as possible, optimally only that of carefully managed research and eco-tourism locations. Since, it is argued, there were few or even no Indigenous peoples in these areas and since Indigenous peoples, in general, have little to offer in terms of finding solutions to complex large-scale problems of development, they are portrayed as an invasive threat to conservation unless they retain traditional low-impact techno-economic patterns (see Schwartzman et al. 2000). In relation to the contemporary Indigenous peoples of Madagascar, for instance, Kottak (1999) recounts one local collaborator who grimly observed that "pretty soon a lemur will have to pick you up at the airport, as all the Malagasy will be dead."

The idea of economically rational "community development," which has driven much of this discussion in the past, focuses on the question: are Indigenous peoples "good" at using or conserving the forest ecosystems? As often as not this involves learning about community as well as development or Western science and technology; ethnographic, archaeological, linguistic, and historical knowledge as well as local knowledge is critical to this aspect of interaction and dialogue. In this context, it is not local knowledge opposed to Western knowledge but complex investigative and personal relations: it is a relationship, which, like all social relationships varies and mutates over time.

Relationships can play themselves out over the long or short term, over periods of intensive and periods of rare contact, and have greater and lesser impacts on the goals of participants and the research team. What anthropologists, including archaeological archaeologists, typically "bring to the table" is this longer term, more intensive viewpoint of local conditions and relationships, including, and perhaps most importantly, that between the researcher and local participants.

The question that conservation biologists typically ask is what Indigenous knowledge can offer their mission in terms of "sustainable development." Based on their public websites, all the "Big-three" conservation non-governmental organizations (NGOs)—Conservation International (CI), The Nature Conservancy (TNC), and World Wildlife Fund (WWF)—seem to agree that work must be carried out with the interests of Indigenous groups in mind and through "participatory" strategies. However, the possibility (and actual number of cases) is great in which this apparent "call to arms" for Indigenous rights is something less than promised: they are participatory largely in name (Chapin 2004).

Participatory projects commonly involve Indigenous groups to a minimal degree and are created and conducted outside or at the margins of local administrative bodies. Participatory techniques including field training and "hands-on" experience and more formalized education in local arenas are primary means to make research designs and results explicit but also include more complex issues of fund-raising, education and training, and dissemination and reporting of results outside of the local community or region. Participation, if properly multi-vocal, makes science and technology intelligible to local communities and creates contexts for dialogue, which then expand outwards into larger political and economic arenas, broader agora, and futures, beyond the specific context of application, in the hands of any participating viewpoint.

Engaged approaches in Indigenous areas remain poorly developed, in many cases due to a perceived lack of continuity between past complex societies and current rural poor and Indigenous peoples. In some cases, it is intellectually and economically strategic to portray fewer people as better for tropical forest ecology and then promote the scientific viewpoint of low population numbers in the past, based largely on contemporary observations.

Conservation promotes an agenda that is, in a word, conservative, insofar as it attempts to hold things in place, to suspend change, which is seen as

deleterious to non-human biota and ecology. This is done under the assumption of no change in the past, but archaeology has shown this to be patently wrong. Furthermore, by creating an image of wilderness, little changed or even little occupied by Indigenous peoples (vacant), interlopers of all kinds can claim ownership and the right to governance of other people's lands. This is simply too convenient to be accepted without, at the least, substantial archaeological evidence to support it, given the history of colonialism and the reasons given by the powerful for manifest destiny and eminent domain.

The time has long passed when biologists, environmentalists, or others interested in natural science could feel confident in their view of the Amazon as little changed in terms of human culture, although many resources are devoted to promoting precisely this ideal. The general view of a "one size fits all" tropical forest tribe, with the only significant divide being that of floodplain (*várzea*) groups and those of the upland (*terra firme*) is no longer tenable. Recent studies show a significant human presence and alteration of many parts of the Amazon basin in pre-Columbian and pre-Industrial colonial times. This makes the question of preserving natural settings as they were and could always be (if left alone) completely ill conceived. The only way to sustain this view is to restrict our imaginations to the historical experience of the past 250 years or so and particularly twentieth-century ethnography, and ignore the historical realities of 500 years of colonialism in the Americas.

The problem with conservation is the same as participation, sustainability, or any number of other complex things: they all commonly get treated as straightforward and formulaic when, in fact, they are not at all; they multiply and reveal other basic dimensions and contradictions. They are certainly words that cannot be defined monologically, from the point of view of natural science, global conditions, or from the local point of view. They are dialogic concepts and draw our attention to certain things in an exploratory way rather than resolve them as predictors in explanatory models. Further, these words mean very different things to different people, and diverse viewpoints come into play.

The approach or culture of "conservation biology," for instance, founded strictly upon the language of natural science, cannot in and of itself provide the framework for public policy. In other words, while conservation optimistically seeks to retain natural diversity and ecological integrity—which is hard to argue is a bad thing, in the abstract—and, thus, keep the world as it is,

which also creates or perpetuates a reality of choices (with sometimes very high stakes) that vary immensely relative to both the advantages and disadvantages conferred on one species, ecosystem, or human social and political groups. And, frankly, much more can be done among the conservation biologists who promote the resolution of current problems through recourse to the methods of Western science, to employ "participatory" techniques (Alcorn and Zarzycki 2005). One area that could easily be expanded upon is the degree to which anthropological teams, including experts on long-term human and environmental history and Indigenous and language history, train in long-term contact with affected communities. This draws our attention once again to the context of applications, problems and solutions devised to address context-based (i.e., time-space specific) questions and interests: it is a question of entering the agora, the here and now of interaction among local, academic, and broader politico-economic worlds.

A CONTEXT OF APPLICATION: THE UPPER XINGU PROJECT, 1991–2006

Participatory strategies are only as good as the nature and strength of participations involved, and both knowledge claims and applications are best understood through reference to actual real-world cases. Participation, at least, is largely about how global structures of scientific knowledge production, conservation, and development articulate with local conditions. It is, by being local, based on a Mode 2 type of knowledge production—or, in other words, the questions, methods, and interpretations must be negotiated in the context of application, the agora. Viewpoints vary in the degree of source-sidedness, or subjectivity, whereby some are derived from local contexts and others are derived elsewhere. Among outsider viewpoints, anthropology is generally distinguished by its source-sided bias, the degree of time, empathy, rapport, and knowledge of history and context that is developed: it takes being there for some time—in-depth ethnography and shared experiences—to understand the complex ways that "Indigenous perspectives" vary through time within groups and from one group to another. Indigenous systems of appropriate interaction are very different, and, in fact, sometimes it takes a very long time to hear what Indigenous voices are trying to say, at least roughly, and help situate these voices into current dialogues.

For anthropologists, problems of knowledge production are as often as not related to practical questions of translation and not verification or

optimization. The focus on actual contexts, rather than established (disciplinary) maxims, means that what is discovered or seen as meaningful or worth "sustaining," varies from one place, time, or point of view to another. The anthropologist acts as a "go-between," promoting both the standards of academic or Western knowledge production and those of local knowledge. Rather than attempting to discover or represent the "native's point of view," the anthropologist is positioned between publics, points of view, between "cultures" (see Geertz 1973). From an anthropological perspective, even that of the detached observer or "armchair," there is really no other way to sidestep this engagement, since anthropological work always involves talking for or representing other people and their viewpoints.

Archaeologists, like anthropologists more generally, act as liaisons, translating Indigenous cultures and voices, including those of the past, to outside audiences. They deal with a part of human experience, the past, to which all humans are outsiders, and all are potentially insiders as well (in terms of the importance of discoveries to large social groupings or humanity in general). But in addition to the disciplinary objectives of archaeology, public archaeology is also a means to aid local groups in culturally meaningful ways dictated by local social and political relations and interests (Green et al. 2003; Heckenberger 2004).

Dealing with Indigenous relations in Amazonia, collaboration is best phrased in kin terms: getting and being involved in the lives of the peoples with whom we participate in the field, which for archaeology, specifically, means native descendants. As historical and urban archaeology expand their interests into the region, other publics will also come to be critical, but for now, archaeology is about Indigenous histories: it is therefore an archaeology of colonialism. Contemporary interests of conservation, development, science, and market penetration are forms of colonization, and questions of "shared governance" also involve questions of neo-colonialism, deciding elsewhere, such as Washington, DC, London, or New York, what should be done locally, or else, as generally defined in languages foreign to Indigenous and rural peoples. (Parenthetically, C. B. Snow's admonition that even urban "literary intellectuals" often know little about science or its basic premises is somewhat ironic here.)

In the remainder of this chapter, I describe one such case where local and global forces, Indigenous cultural rights, conservation, and development are

all at play, and where archaeology (and the author) has been centrally involved for the past 15 years: the Xinguano nation, a closely related society of over a dozen Indigenous communities that inhabit the upper Xingu River headwaters, a major southern tributary of the Amazon, and, specifically, the Kuikuro community. They live within the Parque Indígena do Xingu (PIX), the first Indigenous reserve in Brazil (established in 1961), which covers an area of about 20,000 km² in the southern Amazon forests in Mato Grosso state, Brazil.

Going Xinguano

Xinguanos are settled agricultural and fisher peoples. They are also regionally organized, and their basic rituals of social and symbolic reproduction, chiefly initiation rights, are by definition supra-local. Archaeology demonstrates that in the period just prior to European contact local communities were much larger, structurally elaborated and partitioned, and fortified. After about A.D. 1550–1650, major depopulation from pandemic disease is suggested by settlement desertions. The ancient villages were, however, simply larger versions of the same basic patterns seen in contemporary villages: a large circular central plaza, surrounded by large thatch houses, connected to other settlements with wide, straight roads, and with large agricultural countrysides surrounding villages. Direct contact with *cagaiha*—as Kuikuro call "Whites"—was initiated with violent slaving raids in the mid-1700s, although they did not enter written history until the 1880s (Franchetto 1992). Since the mid-1950s, they have become one of the most studied peoples in all of Amazonia.

I first met the several members of the Kuikuro community, including the village chief Afukaka, in 1991, when they were participating along with several other Xinguano chiefs. At the time, the Kuikuro were a traditional community of about 330 living in one settlement. Today the Kuikuro number more than 500 in three villages in the territory. They were in Rio de Janeiro to inaugurate the Indigenous KUARUP Organization, organized by the most powerful chief in the region, Aritana Yawalapiti, with the aid of their Anglo-Brazilian friend, Sandra Wellington. KUARUP was the first Indigenous NGO in the PIX. I had the privilege to be invited to participate in some of the activities leading up to this event, including the production of maps for flyers, distribution of the flyers, and aid in the sale of Indigenous crafts at the inauguration.

I was in Rio to get my dissertation research approved, but what I did not know was how critical these early activities were to the success of that project.

The research was designed to apply a direct historical approach to addressing one question: what happened to a Native Amazonian people over the 500 years of European conquest. It was aimed to understand the “disease” theory, or Native American “holocaust,” which seemed to be critically important based on preliminary studies in the archaeology and ethnohistory of the Amazon and Orinoco River regions. What was so critical to their acceptance of my project, however, at a time when the regional leadership was discussing a “moratorium” on *cagaiha* (white people), was not so much the value of my project, in the abstract sense, although they saw map-making and heritage studies as significant, but was instead who was conducting it: its success depended on getting to know the Kuikuro, and particularly Chief Afukaka, first.

The Kuikuro chief was willing to allow me to come and work in his village in part because of this initial interaction, not my research interests or design per se, but based on trust we had begun to establish. In even larger part, this trust was an extension of social connections, my social relations to other people who had worked with the Kuikuro before, beginning with Robert Carneiro (in the 1950s), Sandra Wellington, and Bruna Franchetto, an anthropological linguist who officially sponsored my research (over the past 15 years). Afukaka and I shared a hotel room when I went to Brasilia the first time (1991) and he escorted and introduced me to the folks at FUNAI, a gesture that essentially guaranteed the approval of this federal agency. Since that time we became and remain fast friends, and in 2004 he formally adopted me in a midnight public (plaza) ceremony into his family and the Kuikuro community.

Ethno-archaeology as Ethnographic Experience (1993–2006)

Doing archaeology in the Upper Xingu was, at first, a one-person job, with the assistance of numerous Kuikuro research assistants. Living for a year (1993) in the Indigenous community, sleeping in a hammock alongside Afukaka and his extended family, created a variety of new questions as well as the rapport and mutual assistance that was critical to archaeological work here in this distant outpost of the world system. During these initial phases of the project, research on archaeological sites was interspersed with opportunistic participant observation and attention to general activities in the home and village. This was strongly influenced by an “epidemic of witchcraft” that took seven people in 1993, during the time that I was living in permanent residence with the Kuikuro, three of whom were from my adoptive household

(Heckenberger 2005). Needless to say, such shared life experiences indelibly affect any and all research efforts in myriad ways.

The ethno-archaeology project has three major foci, all ongoing since 1992: (1) landscape, (2) spatial organization and built environment, and (3) material culture. Much of the knowledge produced to date was acquired through mutual dwelling in landscape, by organizing and mapping things in place, by handling material culture in contemporary and archaeological contexts, and by watching others handle or manipulate the material world. The non-linguistic orientation, which provides unique perspective on the gestural and physical world, a “dwelling perspective,” as Ingold (2000) calls it, is complemented by analytical methods focusing on the spoken word. While shared human and cultural experience, with, for instance, a painted landscape or a written text, may evoke certain feelings that guide interpretation, it is hard to visualize such a “temporality of landscape” in most non-Western settings (or at least visualize the subtle, culturally specific details that separate them from the generally human, or modern) without some degree of actual dwelling with people and in places under discussion.

Ethno-archaeology is taken here to mean investigations of the entire archaeological record in the context of a living cultural tradition and requires working *with* Indigenous peoples. The initial methodology was simple: involve as many people as possible and manageable, apply standard archaeological methods or instruments for measuring the distribution and variability of archaeological remains including materials up to the present in broad cultural landscapes, and be open to incorporate any new view or technology possible (e.g., ethnography, linguistics, computerized and satellite-based technologies, palynology, among other things), including local viewpoints. What the Kuikuro seemed to want most from the research—in addition to respect, a community research (or location) fee, and remuneration for actual labor (a decent wage, which is renegotiated every year)—was our knowledge, our science and technology, and not reaffirmation of their own knowledge through application of it to archaeological or other problems.

Archaeological work was structured around Kuikuro schedules and protocols. Nothing was done before the chief introduced things in the plaza, and the author described results and current plans. (This became more informal over time but still involved a mandatory village gift, distributed in the plaza.) The work groups were fed each day, the typical payment for

doing social labor projects in the community. Cooking for the Kuikuro field crew, like all parts of the organization of this work project, requires hiring members of the community to fish, collect manioc, produce flour, and cook. Over time, as research teams grew, providing food each day after work became almost impossible to do dependably, in terms of provisioning (specifically, getting fish), and was abandoned. The project provides one of the few equal opportunities for wages without having to leave the village (which the Kuikuro do, often several times a year, and sometimes for over a month, to make wages, but which also makes it hard on occasion to maintain local economic, social, and ritual activities).

Making Maps

Of particular importance, archaeology provides a means to link the Kuikuro histories of settlements and great personages, including stories of spirit ancestors, ancient communities, as well as the stories of living Kuikuro as they have traveled, fished, hunted, and dwelled in these places. To paraphrase a comment Chief Afukaka once made to me: "This research is important to us. It is the first time an anthropologist has taught me something I didn't know. I know how we grow manioc, speak in our language, and conduct our rituals. I did not know about these places, not only the places of our [ancient spirit] ancestors, but as old villages where people lived."

Sometimes the archaeological survey would take us for days out of the village. This was quite a remarkable dwelling experience, sleeping in camps, out under the stars, in hammocks under which we would need to make fires to keep warm, and, I was told, visited on more than one occasion by jaguars, nearby, checking us out in the middle of the night. In my case, getting on a bike almost every day, going often to the forest and taking occasional camping trips fit well with their idea of male activities. Our camping trips were always cut off when *beiju* (manioc flat bread) or fish runs out: time to go home. There was even some low-level consternation on the part of women that, if true to public discourse, I intended to provide "equal opportunity" employment, this should include women in fieldwork, which it did by the mid-point of 2005 fieldwork.

Field crews are trained in many basic field operations, such as surface survey and excavation, and specialists gain extra training in mapping, using transit, compass, and more recently GPS technology (figure 11.1 and figure 11.2).



FIGURE 11.1

Laquai Kuikuro using Trimble XRS, with OMNISTAR satellite subscription "real-time" backpack GPS, to map the intersection of a prehistoric road curb with a modern pecuary fence (around manioc gardens). Photograph courtesy of the Projeto Etnoarqueológico de Amazônia Meridional/Associação Indígena Kuikuro do Alto Xingu.

Certain members of the community have excelled at one or another of these tasks, excavations, GPS mapping, "tracking" ancient earthworks, and gain extra training and take on the role of crew chiefs. Getting people to use technology, such as videos, in Amazonia is an important step toward self-determination (Conklin and Graham 1995). Archaeology is uniquely adapted as a research activity to expand this technological empowerment to include mapping and working with their unwritten histories in conjunction with oral history. Such technologies are seen as relevant by both researchers and local groups, and GPS-based mapping, traditional survey and excavation, and GIS all provide means of communication—research languages—as well as tools for knowledge production.

How then can archaeology be appropriated by local communities and used as a means of articulation and dialogue? In large part, this is for Indigenous



FIGURE 11.2

Excavation crew—including three graduate students, two Kuikuro crew chiefs, and excavation technicians—exposing house 1 at the Pre-Columbian site of Nokugu. Photograph courtesy of the Projeto Etnoarqueológico de Amazônia Meridional/Associação Indígena Kuikuro do Alto Xingu.

social groups to decide for themselves, but clearly participation, engagement, is critical. But, as noted above, participation can mean many things. Archaeology, which is defined through the participatory act of doing it, is an excellent model of how to develop dialogue between researchers and Indigenous peoples for mutually relevant issues, such as the dynamic relations between humans and environment, the composition and history of the land, and cultural heritage, but one that is first and foremost administrated within local contexts. In other words, Indigenous people must be allowed to co-produce and co-own research results. Like technologies, social and political relations change between guest researchers and Indigenous leaders and the community, and negotiation is ongoing.

Cultivating Multiplicity and Dialogue

The project aimed at documenting the cultural, artistic, and historical patrimony of the Kuikuro, championed by Chief Afukaka, was galvanized by the establishment of the Associação Indígena Kuikuro do Alto Xingu (AIKAX). By the late 1990s, linguistic, ethnographic, and ethno-archaeological research has been conducted in collaboration with AIKAX, Bruna Franchetto (linguistics and education), Carlos Fausto (ethnography) of the Museu Nacional, Universidade Federal do Rio de Janeiro, and the author. The combined results have been critical in juridical cases involving land tenure (Fausto 2006; Franchetto 1987, 1999).

The social relations that are established are as critical to the research. Many people simply watched as we went about our work and daily business. The impact on the community is great. Every person who works on the project is paid, and every household is gifted. After 2001, the interdisciplinary research team began to introduce graduate students into the project, which now includes four PhD dissertations, each of which addresses a different problem related to the Indigenous history of the area. The project has paid to build a project house in 2002, which was replaced in 2004 with a traditional (*une*) house, which was embellished with chiefly insignia (a mock chief's house, *tajife*) into which the chief moved in 2005 when his house burned along with 11 (of 24) others (making it a true chief's house).

Few Kuikuro have shown any keen interest in the ancient material culture that archaeologists dig up, at least not the potsherds that make up about 98% of it. In part, this may reflect the fact that historically they themselves are not potters but instead trade with Arawakan-speaking Xinguanos, the Wauja, for their pottery. There is great interest, however, among many Kuikuro in general terms in the material culture, built environment, designs, and landscapes revealed in the archaeological work. The generalized knowledge of place and Western technology that is gained is also of primary relevance to the local community.

Paid research assistance allows many individuals a means to gain income and, for especially interested and committed individuals, some prestige as skills are rewarded in the conduct of research, and this provides another means for certain individuals to succeed. What this creates is a generalized distribution of information regarding the conduct of archaeology and an immediate sense for many people of the methods and results of fieldwork.

General overviews of the project and seminars on archaeological and ethnographic history, geography, ecology, and other areas (e.g., English language) are given once or twice yearly and are currently being formalized in a Portuguese language reader on physical geography, history, and pre-history of the area to be used in the on-site school classes, open to all Kuikuro children. Professors (3) in the Kuikuro also learn about anthropology, linguistics, and archaeology in the "Indigenous University" established close to the state capital of Mato Grosso in Cuiabá, part of a broader educational project developed in collaboration locally between the Museu Nacional and AIKAX and including the Projeto Etnoarqueológico de Amazônia Meridional under its purview.

In the Upper Xingu, the scientific research team, in addition to Fausto and Franchetto's expertise in linguistics and sociocultural anthropology, includes archaeology PhD students (five from the United States, three from Brazil) who have worked directly with the Kuikuro over periods of months, including predictive archaeological site modeling using satellite information and the spectral signatures of these images, regional ethnohistory, anthropogenic soils, and material culture. Additional graduate projects are planned between Brazilian and U.S. graduate students. With training and support of Indigenous monitors of landscape features, they will use Western research protocols as tools, with a background in the deep historical development of that landscape, to elucidate wetland ecology, forest ecology, and built environment.

Specific graduate projects articulate with the research on long-term human-ecological change conducted in the PEAM. Graduate students provide the liaisons between individual projects and the research monitors and teams and education system in the Kuikuro, including soils, water, forestry, and agriculture. Each individual project will ultimately result in a basic manual of methodologies employed in the field and field results, which are tied to broad areas of local education such as culture history, geography, and ecology (along with basic reading, writing, and math skills).

Simultaneously, the AIKAX-supported education and documentation projects are collecting critical materials on Kuikuro language and Indigenous knowledge. Almost all interaction with the archaeology team has been conducted in Portuguese to date. In part, for the author, the reason for this is historical and personal. I was still working on Portuguese when I went to the Kuikuro, and my whole relationship with the Kuikuro chief was based on talk and learning of Portuguese. We developed great personal empathy in this shared second language. Our gifting is continuous, although within limits

built on histories of specific transactions, and seldom a month goes by that I do not receive news of the village and my "brothers."

Beyond this brief history, the narrative of these engagements, cooperative and conflictive, is outside the scope of this essay. But, suffice it to say again that anthropological and, specifically, archaeological engagements are often important for the quality and depth of their participation, not only in research but also in other people's lives. In my case, in short, our lives and projects are intertwined, and our collaborative engagements are defined as much or more by personal involvements, co-habitation, as by formal research design: I went to live with the Kuikuro from January to December 1993, after the chief and I and his son had lived together for several months before that in Rio, Brasília, and Canarana (the last small center of Western society before one enters the PIX). He again stayed with me in Goiania with his daughter and her family; I again stayed with them for a brief time in 1994, with some of my brothers, and again for a month in 1995 and a month in 1996. They came and stayed with me in Rio in 1998; then I returned again to them in 1999, 2000, and 2001, and from 2002 to 2006 invaded the lives of community members, this time with several students along. In 2005, Afukaka mentioned that he would like to come to an SAA meeting when he visits my home in Florida.

EPILOGUE

In 2003, not long after a paper in *Science* reported the results of the first ten years of collaborative and participatory research in the Upper Xingu, the chief Afukaka and his brother Urissapa were asked to comment on the work before millions of viewers on the Journal Nacional, the largest television news program in Latin America. The article showed evidence of complex anthropogenic landscapes tied to unique forms of pre-Columbian social complexity, which linked in multiple, obvious ways with descendant Xinguano populations. I was told that it was among the first, if not the first, article in *Science* authored by Indigenous persons. The co-authors spoke easily of the results of the archaeology in terms that, while their own, were understandable to most viewers. Although I was not present, I was told of their impressive knowledge, including the specialized technologies, goals, and relevance of archaeology. I had not heard them describe these things before since, as I was the expert, they and others had generally deferred to me so as not to be rude.

The fact about most Indigenous persons, however, is that as locals, they often do not or do not wish to engage or concentrate on larger "global" interests

or issues. This is precisely where outsiders and non-local knowledge can be of great help, so long as they are willing to learn how to hear their Indigenous colleagues, their friends, and kin. What's more, to know Indigenous views, even in a rudimentary way, to hear them and thus to help give them voice in contemporary debates often takes quite a long time. But in describing the present case, I am reminded (in the context of other generally English-speaking, North American contributors) that although working and commenting on First Nations peoples in Brazil, I am typically the least Indigenous voice, not being from the Kuikuro, the Xingu, the Amazon, Brazil, or even Latin America, the most-distant of various publics. Brazilian government and NGO officials balance the economic and political aspirations of their diverse constituencies with the realities of social plurality and local expressions of globalized flows of capital and power in Indigenous areas, and I am an outsider to these as well.

For archaeologists, mindful always of the deep past, one feature of research does often come immediately to the forefront and distinguishes it in many respects: a history of colonialism and Indigenous rights or, as the UN puts it, first occupancy. Most recently, areas just beyond the official PIX but within the traditional territories of Xinguanos since before 1492, the destruction of critical and sacred cultural resources, origin places in Xinguano mythology and important archaeological sites of Xinguano human ancestors (forebears), have become threatened and even been destroyed by dam construction and expansion of the soy-frontier into this region. This all-to-familiar expansion of global technology and resources over local interests and at the cost of cultural heritage makes it all the more urgent to bring the archaeology of these peoples to bear on the critical importance of this cultural patrimony, this bio-historical diversity.

ACKNOWLEDGMENTS

In addition to project co-directors Carlos Fausto and Bruna Franchetto, Sandra Wellington, currently director, Memorial dos Povos Indígenas, in Brasília, was critical in my introduction to Xinguano leaders; her vote of confidence with them and many kindnesses over the years were crucial in developing the rapport with Indigenous leaders. Fellow archaeologists Jim Petersen and Eduardo G. Neves visited the area for four days in 1994, and Jim returned five times for periods of 1–3 weeks. Dr. Irmhild Wüst, then of the Museu Antropológico, Universidade Federal de Goiás, was my archaeological sponsor during doctoral research (1992–1994). Dr. Edithe Pereira is currently the archaeological research counterpart for the project. Other collaborators who

have visited the area include Dr. Jason Curtis (geology, University of Florida) and Dr. Paulo de Oliveira (UESP). Dr. Dirse Kern of the Museu Goeldi has aided in soils processing and analysis. Nine graduate students, who on average have spent 2–3 months in the PIX, have developed two completed MA and one PhD, and three PhD projects in progress.

Kuikuro participants included five crew chiefs, including one household manager (chief's younger wife), over 25 people who worked more than 50 days, and another 35 who worked less than 25 days. Among the chiefs, Afukaka and Tabata Kuikuro have been both sponsors and liaisons for the project as well as active participants in diverse aspects in the field. Other chiefs in Ipatse and across the region were also critical at various times in my more than 24 months in the PIX.

This research was permitted by IPHAN and FUNAI, from 1992 to 1994 and again from 2002 to 2005. It was supported by grants from SSRC (1992–1994), NSF (1992–1994), William T. Hillman Foundation (1995–2004), the University of Florida (1999–2001), and NSF (2002–2006), of which roughly one quarter has been channeled through the local Kuikuro economy over this 15-year period. Since 2001, major linguistic research funding through the Volkswagen Foundation (awarded to Bruna Franchetto) and ethnographic research, particularly AIKAX proposals for video documentation. All are thanked, and I take full responsibility for the views and information suggested here and for any omissions or errors.

NOTE

1. This dualistic representation is usefully considered against those presented above for participation vs. collaboration, and Indigenous and non-Indigenous (Western) systems of knowledge production. See chapter 1 on the former, and chapters 4 and 8 on the latter.

REFERENCES CITED

- Alcorn, J., and A. Zarzycki
 2005 Response to Chapin: A Challenge to Conservationists: Phase II. *World Watch* 18(1):11–13.
- Balée, William
 1994 *Footprints of the Forest: Kaapor Ethnobotany*. Columbia University Press, New York.
- Chapin, Mac
 2004 A Challenge for Conservationists. *World Watch* 17(6):17–31.

- Clarke, David
1973 Archaeology: The Loss of Innocence. *Antiquity* 47:6–18
- Conklin, Beth, and Laura Graham
1995 The Shifting Middle Ground. *American Anthropologist* 97(4):695–710.
- Fausto, Carlos
2006 Laudo Antropológico. Unpublished manuscript in possession of the author.
- Fluehr-Lobban, Carolyn
2003 Appendix D: Principles of Archaeology Ethics. In *Ethics and the Profession of Anthropology: Dialogue for Ethically Conscious Practice*, edited by Carolyn Fluehr-Lobban, pp. 263–266. AltaMira Press, Walnut Creek, CA.
- Franchetto, Bruna
1987 Laudo Antropológico. Unpublished manuscript in possession of the author.
1992 O Aparecimento do Caraíba: Para uma História Kuikuro e Alto Xinguana. In *História dos índios no Brasil*, edited by M. Carneiro da Cunha, pp. 339–356. Companhia das Letras, São Paulo.
1999 Laudo Antropológico. Unpublished manuscript in possession of the author.
- Gibbons, Michael, Camille Limoges, Helga Nowotny, Simon Schwartzman, Peter Scott, and Martin Trow
1994 *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. Sage, London.
- Geertz, Clifford
1973 *The Interpretation of Cultures*. Basic, New York.
- Gow, Peter
1994 Land, People, and Paper in Western Amazonia. In *The Anthropology of Landscape: Perspectives on Place and Space*, edited by Eric Hirsch and Michael O. Hanlan, pp. 143–162. Clarendon Press, Oxford.
- Green, Leslie Fordham, David Green, and Eduardo Goés Neves
2003 Indigenous Knowledge and Archaeological Science. *Journal of Social Archaeology* 3(3):366–398.
- Heckenberger, Michael J.
1994 War and Peace in the Shadow of Empire: Sociopolitical Change in the Upper Xingu of Southeastern Amazonia, AD 1400–2000. Unpublished PhD dissertation, University of Pittsburgh.
2004 Archaeology as Indigenous Advocacy. *Practicing Anthropology* 26(3):34–38.
2005 *The Ecology of Power: Culture, Place, and Personhood in the Southern Amazon, A.D. 1000–2000*. Routledge, New York.

- 2007 **Anthropology as Meeting Place: Indigenous History, Conservation, and Human Rights in Amazonia**. Paper presented at the Universidade de São Paulo. Unpublished manuscript in possession of the author.
- Heckenberger, Michael J., Afukaka Kuikuro, Urissapa T. Kuikuro, J. Christian Russell, M. J. Schmidt, C. Fausto, and B. Franchetto.
2003 Amazonia 1492: Pristine Forest or Cultural Parkland? *Science* 301(5640): 1710–1714.
- Ingold, Tim
2000 *Perception on the Environment: Essays in Livelihood, Dwelling, and Skill*. Routledge, London.
- Kottak, Conrad
1999 The New Ecological Anthropology. *American Anthropologist* 101(1):23–35.
- Latour, Bruno
1998 From the World of Science to the World of Research? *Science* 280:208–209.
- Lynott, Mark J., and Alison Wylie (editors)
2000 *Ethics in American Archaeology: Challenges for the 1990's*. 2nd ed. Society for American Archaeology, Washington, DC.
- Martens, Pim
2006 Sustainability: Science or Fiction? *Sustainability: Science, Practice, and Policy* 2(1) Spring 2006.
- Neves, Eduardo G.
1998 **Paths through Dark Waters: Archaeology as Indigenous History in the Rio Negro, Brazil**. Unpublished PhD Dissertation, Indiana University.
2001 Indigenous Historical Trajectories in the Upper Rio Negro Basin. In *The Unknown Amazon*, edited by Colin McEwan, Cristiana Barreto, and Eduardo G. Neves, pp. 266–286. British Museum Press, London.
- Nowotny, Helga, Peter Scott, and Michael Gibbons
2001 *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*. Polity Press, Cambridge.
- Posey, Darrell A.
1984 Ethnoecology as Applied Anthropology. *Human Organization* 43(2):95–107.
- Rappaport, Roy
1994 Humanities Evolution and Anthropology's Future. In *Assessing Cultural Anthropology*, edited by Robert Borofsky, pp. 153–166. McGraw-Hill, New York.
- Rival, Laura
2001 *Trekking through History*. Columbia University Press, New York.

Rocheleau, Dianne E.

- 2003 Participation in Context: What's Past, What's Present, and What's Next. In *Managing Natural Resources for Sustainable Livelihoods: Uniting Science and Participation*, edited by Barry Pound, Sieglind Snapp, Cynthia McDougall, and Ann Braun, chap. 8. Earthscan, London.

Santos-Granero, Fernando

- 1998 Writing History into the Landscape: Space, Myth, and Ritual in Contemporary Amazonia. *American Ethnologist* 25(2):128–148.

Schmidt, Peter R., and Thomas C. Patterson

- 1996 *Making Alternative Histories: The Practice of Archaeology in Non-Western Settings*. SAR Press, Santa Fe, NM.

Schwartzman, Stephen, Adriana Moreira, and Daniel Nepstad

- 2000 Rethinking Tropical Forest Conservation: Perils in Parks. *Conservation Biology* 14(5):1351–1357.

Seeger, Anthony

- 1976 Fixed Points on Arcs in Circles: The Temporal Processual Aspect of Suyá Space and Society. *Proceedings of the International Congress of Americanists* 2: 341–359.

Strathern, Marilyn

- 1999 *Property, Substance, and Effect: Anthropological Essays on Persons and Things*. Athlone Press, London.

Tilley, Christopher

- 1998 Archaeology: The Loss of Isolation. *Antiquity* 72:691–393.

Turner, Terry

- 2006 The Special Relationship between Anthropology and Human Rights. *Anthropology Newsletter* 47:3–4.

World Archaeological Congress

- 1991 World Archaeological Congress First Code of Ethics (Member's Obligations to Indigenous Peoples). *World Archaeological Bulletin* 5:22–23.

Wüst, Irmhild

- 1990 Continuidade e Mudança: Para uma Interpretação dos Grupos Ceramistas da Bacia do Rio Vermelho, Mato Grosso. Unpublished PhD Dissertation, Universidade de São Paulo.
- 1994 The Eastern Bororo from an Archaeological Perspective. In *Amazonian Indians from Prehistory to the Present: Anthropological Perspectives*, edited by Anna Roosevelt, pp. 315–342. University of Arizona Press, Tucson.

12

Collaborative Encounters

GEORGE P. NICHOLAS, JOHN R. WELCH,
AND ELDON C. YELLOWHORN

Over the past several decades, there has been growing recognition (resignation by some) that collaborations between archaeologists and Indigenous peoples are not only inevitable but also often mutually beneficial. Despite the many challenges leading up to the Native American Graves Protection and Repatriation Act (NAGPRA) and the subsequent reactions to it, the discipline continues to become ever more relevant to, and representative of, a broader and more varied group of stakeholders, especially so for descendant communities. Furthermore, the archaeological world has changed significantly; the current generation of archaeology students is growing up in an intellectual world where “Indigenous archaeology” is an established theme.¹ Increasingly, reburial and repatriation are viewed not as “unfunded mandates” or even “the end of archaeology” but an essential and potentially rewarding part of interacting with Aboriginal peoples (see chapter 5). Indigenous communities are also turning to archaeology to help them address their various needs and interests, including, in some case, detailed studies of ancient human remains.

Collaboration means more than just working together, however. It also entails mutual respect, meaningful dialogue, a long-term commitment of time, and expanding “research” to embrace processes and objectives that may not be