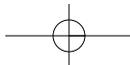
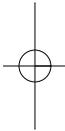
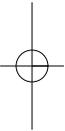


Part 2 • Unsettling Knowledge





Essay 9 • *Julie Skurski***Past Warfare: Ethics, Knowledge, and the Yanomami Controversy**

Contemporary reflections on the production of scholarly knowledge tend to take for granted the institutional groundings, professional alliances, and material resources involved in establishing and sustaining the academic disciplines. While in recent decades various “culture wars” have brought into question a wide range of disciplinary premises, the tendency in these debates has been to focus on methodological and epistemological issues independently of the concrete cultural framings and fields of power within which the disciplines are organized. Even as such challenges have helped give rise to new interdisciplinary programs, objects of study, and ethics regulations, the disciplining effect of academic practices has tended to solidify the lines between differing conceptions of knowledge and ethics within and between the sciences and humanities.

These concealed boundaries became visible at the University of Michigan in the course of an extraordinary set of events surrounding the publication of *Darkness in El Dorado: How Scientists and Journalists Devastated the Amazon* (2000), by Patrick Tierney. The controversy it provoked challenged established research assumptions and professional alignments, making visible differing conceptions of scientific knowledge and the hierarchies of power in which they were embedded. This controversy, and the efforts of the Anthrohistory Program to shift the terms within which it was framed, suggest how a transdisciplinary approach contributes to understanding the unseen relations on which disciplines are sustained and to posing questions that challenge dominant conceptions of the ends and ethics of knowledge.

Tierney’s book claimed that renowned scientists and anthropologists from elite institutions had endangered the lives and violated the dignity of Amazonian indigenous peoples by means of unethical and exploitative research practices. These claims shook the U.S. academy in the fall of 2000 and sparked an international controversy that spiraled through the press, professional associations, and universities, dividing and confounding scholars and disciplines. The acrimonious debate raised issues of the

ethics of research, the politics of knowledge, and the nature of science. Significantly, these issues were inseparably intertwined with debates over the personalities and careers of two major figures implicated by the book: geneticist and physician James Neel and anthropologist Napoleon Chagnon. These researchers had conceived and directed the projects lying at the center of the controversy, and they had done so while they were faculty members at the University of Michigan.

At the University of Michigan, the administration responded to the book's allegations by making a rapid and decisive intervention into a controversy that from the outset had national and international dimensions. Circumventing the channels of open discussion, provost Nancy Cantor issued statements that went far beyond refuting the book's erroneous allegations concerning the researchers' use of a measles vaccine. Rather, the documents defended the ethics and intellectual content of Neel's and Chagnon's body of work in their entirety and condemned Tierney's whole book as flawed and biased. The administration's statements also dismissed the arguments and integrity of Chagnon's U.S. critics and ignored the opinions of anthropologists and officials from Brazil and Venezuela.

Despite the fact that the administration bypassed established academic procedures by assuming for itself the authority to decide on a contested academic matter, preempting discussion, there were no public objections to these procedures. In fact, faculty from several departments worked behind the scenes to help research and write the provost's statements. These documents asserted they were based on research conducted by unnamed members of various departments and schools, including anthropology and medicine. This was essential for legitimating the statements as reflections of expert opinion rather than as primarily expressions of the legal concerns of the university.

The Anthrohistory Program communicated to the provost its concerns about the intellectual and ethical implications of the administration's statements and proposed a colloquium series on the controversy intended to open up discussion more broadly concerning the politics of knowledge and the ethics of research. The three-part series, "Science, Ethics, Power: The Production of Knowledge and Indigenous Peoples" (March–April 2001), focused on the Tierney controversy but also addressed the role of the university as an intellectual arena and as a node within a global network of unequal relations. It sought to place scholarly production within this broader set of relations and to submit to critical

analysis the disciplinary premises that help shape the production of knowledge.

As a result of the colloquium and Anthrohistory's proposal that the university change its position, the provost issued a strikingly different statement. It dropped its scathing critique of Tierney's book and blanket defense of Neel and Chagnon, and affirmed that the university should serve as a forum for the open discussion of ideas. While Anthrohistory's initiative did not resolve the complex issues at stake, it did help transcend the narrow limits of a polarized debate and develop a space that increased the opportunities for creating ethically responsible knowledge.

This essay explores the unfolding of these events and what they reveal about constraints exerted by the often invisible bonds that link the production of scholarly knowledge, disciplinary formations, and institutional power. It discusses the issues that the Anthrohistory Program raised, the premises on which they were based, and the transdisciplinary perspective from which they emerged. It suggests that this perspective defines the reflexive and critically engaged practice that anthrohistory seeks to make its own.

Lineages of Controversy

Tierney's book manuscript alleged that scientists, in pursuit of their own careers and with indifference to the life and dignity of the subjects of their investigations, had subjected the Yanomami Indians of Venezuela and Brazil to unethical and possibly lethal research practices. As a result of these allegations, a debate concerning research among the Yanomami, long simmering within the American Anthropological Association, boiled over into the public arena and splattered onto the pages of major newspapers across the world. It landed as well in the e-mail boxes of anthropologists around the globe, for a confidential e-mail to officers of the AAA by Terence Turner (Cornell) and Les Sponsel (University of Hawai'i), anthropologists active in indigenous rights, was leaked to the public and took on a life of its own. Anthropology as a profession, their message warned, was in danger of serious damage to its reputation with the forthcoming publication of the book and of prepublication excerpts in *The New Yorker* magazine (October 9, 2000). As a result, even before the book was out, charges, refutations, and countercharges from differing camps

began to fly. The most inflammatory, and quickly disproved, claim accused geneticist James Neel of provoking a measles epidemic among the Yanomami in 1968 by using a flawed vaccine so as to further his study of genetic variation. (This was removed before the book's publication.)¹

While its allegations were less dramatic, the book's accusations had a direct impact at the University of Michigan, particularly in the Department of Anthropology and the Medical School. The book asserted that during the epidemic Neel's team had not adequately aided native villagers who were facing deadly disease and social destruction. It also argued that Neel's teams collected blood samples from Yanomami villagers without their informed consent during several expeditions. The blood continued to be stored in U.S. research institutions and was still used by researchers, thus violating Yanomami religious beliefs that all the bodily remains of the deceased should be properly disposed of by their family.

While the charges concerning Neel's research and the measles epidemic drew the greatest attention, in fact Tierney's book addressed at much greater length criticisms of Chagnon's extensive body of work, including his field methods, ethics, and theories. Chagnon's critics had long asserted that his acknowledged manipulative techniques to obtain secret genealogical information and trading of manufactured goods in exchange for blood samples, as well as his staging of conflicts for films, had in effect promoted rivalries and divisions in Yanomami villages. Thus the Yanomami violence that he described, they argued, was actually partly a consequence of Chagnon's actions. His representation of them as the iconic "fierce people," popularized and circulated in the media in Brazil and Venezuela, had a material effect on their lives, making them yet further objects of denigration, neglect, and violence.²

Why did Tierney's book strike a chord at this particular time? After all, much of the critical material in Tierney's massively documented but weakly argued book had long been available. Beyond the appeal of the exotic and the image of victimized indigenous people that the book tapped into, it resonated with the bitter history of nonconsensual medical experiments on minorities, the rise of indigenous rights movements, and critiques of first world exploitation of third world countries. In particular, it played into anxieties concerning metropolitan academic production that had been ignited by multicultural, postcolonial, and feminist critiques of Western thought, the results of which had shifted the terms of discussion concerning scientific authority and ethical responsibility. Thus we can see *Darkness in El Dorado* as a touchstone for debates that preceded its publi-

cation and that extended well beyond questions of academic expertise, including the sensitive issues of researchers' professional relationships with their subjects, their responsibility toward the communities they study, and the unexamined disparities of power that underlie much research.

The controversy brought to the surface debates over science and culture that had shaped the academic and political terrain in the United States for several decades. The earlier "culture wars" and "science wars" informed and formed the terms along which lines were drawn, institutional investments were evaluated, and ethical-political consequences defined. These past wars were evoked and drawn on in this battle over the "war-like" Yanomami and those who represent them.

Battlegrounds at the University of Michigan

James Neel (1915–2000), doctor and geneticist, was a highly recognized figure in the biomedical field who had deep roots at the University of Michigan, where he began teaching in 1948. A pioneer in the study of human population genetics and founder of the Department of Human Genetics (1956), his career at the University of Michigan and his international research projects had established him as a leading figure in the scientific community.³ Notably, he was a pioneer in the study of genetic change and naturally occurring genetic variability. With funding from the Atomic Energy Commission, he studied genetic mutations among Japanese victims of the atomic bomb and subsequently directed multidisciplinary biomedical research projects on Brazilian and Venezuelan Amazonian indigenous peoples.

Neel's AEC-funded projects in the Amazon collected biological materials, genealogies, and demographic information so as to study genetic mutation and diversity in isolated tribal groups (Neel et al. 1970). The kinship practices and environmental adaptations of these groups were believed to provide clues to early human evolution and genetic selection. His evolutionary interests led him to sociobiological theories that were reflected in his argument that "dominant males" who were headmen had superior abilities ("index of innate abilities") and were thus able to acquire a greater number of wives and offspring spreading their genes more widely than other males (1980).

During the Amazon projects, Neel was a mentor to Chagnon, a recent University of Michigan Anthropology PhD and faculty member. As part

of Neel's team, Chagnon carried out research on demography, primitive warfare, and kinship, and shared Neel's concern for understanding the social mechanisms and genetic components involved in reproductive success. His long-term participation with Neel's projects, not widely known in the anthropological profession, was foundational for his subsequent research among the Yanomami. He continued his work with them during the rest of his career at the University of California at Santa Barbara (UCSB) as the director of research projects. However by 1995 he had met with antagonism from differing sectors in Venezuela and was prohibited from returning to Yanomami territory. He then sought to collect blood samples illicitly among Yanomami in Brazil and to circumvent Venezuelan restrictions by allying with an entrepreneur and the president's mistress to create a private biosphere that would grant them access to the Yanomami and to the gold in their territory (Albert 2005a, 115; Coronil 2001, 266).

Chagnon's earliest monograph, *Yanomamo: The Fierce People* (1968), was based on material gathered as part of Neel's expedition. This book branded the Yanomami as "fierce" and placed Chagnon on the anthropological map through its use in undergraduate courses throughout the country. Over the course of decades and several editions (the subtitle was later dropped), this personal and lively ethnography, in which Chagnon recounted everything from his revulsion toward certain Yanomami practices to the deceptive techniques he used to obtain secret genealogical information, became the most widely used ethnography in the United States (an estimated three million copies were sold).⁴

From his initial focus on the dynamics of village fusion and primitive warfare, Chagnon shifted to the sociobiological study of evolutionary mechanisms, documenting forms of male competition that were hypothesized to result in genetic advantage for dominant men, or a wider distribution of their genes. In an article in the journal *Science* that drew great attention, including in the Brazilian press, Chagnon argued that Yanomami male leaders exhibited qualities of "fierceness" (his disputed translation of *waiteri*), as measured by their having "killed" (his contested translation of *unokai*) another person. As a result of being "fierce," dominant men gained greater access to women (a larger number of wives) and thus had a higher number of offspring than other men (1988).⁵ He concluded that fierceness, as expressed through violence, led to greater success in fathering children, providing an evolutionary genetic advantage for fierce men.

For both researchers, the Yanomami, the least contacted and most numerous (estimated 15,000) of Amazonian native peoples, represented

“primitive man” as he had existed for hundreds of thousands of years. Regarded as untouched by modern disease and civilization and as constituting a genetic “virgin soil” population, the Yanomami seemingly provided scientists with a rare and vanishing opportunity to study mankind at an early stage of social evolution, which facilitated the study of genetic inheritance and the biological effects of norms concerning marriage and “mating.” Such tribal groups were regarded as examples of basic human nature as it existed prior to the establishment by civilized institutions of organized social constraints and hierarchies.

These researchers held the view, widely shared at that time, that primitive people provided a window back in time, a way of studying “pre-civilized” or “savage” man living under conditions that allowed natural and social selective mechanisms to function. The Yanomami were not regarded, as Fabian has argued more broadly for anthropology, as coevals of modern society but as remnants of a past that helped explain the origins of the modern present (1983).⁶ The sociobiological agenda of these researchers cast the Yanomami primarily as a population that provided resources for the advancement of science, rather than as a people whose views and interests were to be taken into account by scientists (Coronil 2001; Geertz 2001; Sahlin 2000).⁷

From Primitive Warfare to Science Wars

Long an icon of primitive warfare, the Yanomami were now placed at the center of the revived “science wars” between interpretive and objectivist approaches to science. In this polarized conflict, defenders of the objectivist view, while acknowledging there were biomedical ethical issues at stake, presented this as a clash between science and antiscience (Hill 2000; Hurtado et al. 2001). They warned that politicized attacks on science would further endanger vulnerable indigenous people, as third world governments used the critiques to legitimate establishing barriers to scientific research by foreigners, to the detriment of indigenous health and the advancement of science. Critics of this instance of the objectivist approach, in turn, denied attacking science per se but rather a particular understanding of science as a neutral enterprise, outside the play of social meanings. They decried what they saw as a disjunction between objectivist research projects, often biomedical, and concern for the interests and health of the people studied (Albert 2005a, 112–18).

The view that objectivist science tended to operate with indifference to social and ethical implications, raised by the erroneous charge that Neel's measles vaccine was responsible for Yanomami deaths, built on a history of medical studies and projects that targeted U.S. minorities and third world peoples and were conducted without their informed consent or knowledge. These instances included the infamous Tuskegee Syphilis Study (Jones 1981), AEC radiation studies (Welsome 1999), and the forced sterilization of Puerto Rican women in the 1950 and 1960s (Briggs 2002, 143). The Tuskegee case was a landmark because of the institutional racism it revealed and the legal and ethical regulations it prompted, leading to the establishment of Institutional Review Boards (IRBs) in 1974 for the approval of research with human subjects.

Questions concerning the integrity of Chagnon's work had been raised for over a decade within the AAA. His representations of the Yanomami as warlike and his argument that men who killed had greater reproductive success circulated in the Brazilian press and were used by powerful landed and mining interests to argue that the warlike Yanomami should be confined to small reservations and access to their extensive terrain should be given to investors who would promote "development" (Martins 2005). The Brazilian Anthropology Association sent a statement to the AAA in 1988 objecting to Chagnon's representation of the vulnerable Yanomami as fierce and to his failure to refute publicly the misuse of his ideas (Carneiro da Cunha 1989).⁸ This was not an academic matter, they argued, for when gold miners massacred Yanomami and miners' incursions into their territory brought ecological destruction and virulent strains of malaria and other diseases, the Brazilian state, in complicity with mining interests, failed to protect them.⁹ Thus the concept that the Yanomami were violent and constituted a danger to modern society helped legitimate the structural and personal violence to which they were subjected.

The University of Michigan Arms a Response

Given this background, the controversy had potentially significant legal and ethical implications for the Medical School and the university.¹⁰ The Office of the Provost quickly convened a confidential fact-finding commission to investigate the book's allegations, and the commission speedily issued two draft statements. Prior to the provost office's final report (November 13, 2000), these drafts (September 27, October 31) circulated on

the Internet and were cited in the press, but there were no mechanisms for discussion or feedback. The statements vehemently refuted the charges concerning the measles epidemic, backed the integrity of Neel's and Chagnon's work, and rejected in scathing terms the conclusions of *Darkness in El Dorado* as a whole. This was a significant intervention, given the university's prestige and the measures under way in Brazil and Venezuela to investigate the issues.

The Office of the Provost's final report hinted at the administration's initial sense of urgency and mobilization of resources.

We immediately convened a team of senior administrators, research staff, and scholars to begin an internal inquiry. These individuals spent hundreds of hours over the course of several weeks conducting a careful and thorough review. . . . This effort involved people from across the university; supporting research was conducted by the offices of the Executive Vice President for Medical Affairs, Vice President for Research, and General Counsel, and by the Medical School and Department of Anthropology.

It should be noted that in the Department of Anthropology meetings at that time there was no discussion of the department's participation, which included the employment of anthropology graduate students to conduct research for the commission. This silence reflected the screen placed around the proceedings and the identity of the commission's participants.

The Office of the Provost's statement asserted, "The University of Michigan takes allegations of impropriety in research very seriously" and claimed that its commission had conducted a "fair and proper peer review" in contrast to the "sensationalized public discussion in the headlines and over the Internet." The commission evaluated the claims made in the Turner-Sponsel e-mail and in the book concerning the measles vaccine, but it went much further. It addressed the overall procedures of the 1968 expedition and the integrity of Neel and Chagnon, Chagnon's research ethics and representations of Yanomami culture in his later work, and the motives of his critics. The report concluded:

The evidence uncovered by our review supports the conclusion that the claims are false. We are satisfied that Dr. Neel and Dr. Chagnon, both among the most distinguished scientists in their respective fields, acted with integrity in conducting their research, and that their medical care of the Yanomami and their attempts to halt the spread of a pre-existing measles epidemic through vaccination were humane, compassionate, and

medically appropriate. . . . We believe that Mr. Tierney did not consult important original source material that was readily available for review. Analysis of that material and other material from persons familiar with the expeditions, the measles outbreak, and the measles vaccine refutes the allegations. The serious factual errors we have found call into question the accuracy of the entire book as well as the interpretations of its author. (Cantor, 2000c)

This document's conclusions were based on certain acts of omission and silencing. They did not acknowledge anthropological sources that historicize the disruptive impact of colonialism, trade goods, epidemics, and settler violence on the Yanomami (Ferguson 1995), or those that critique Chagnon's narrow translation of key terms such as *waiteri* and contextualize Yanomami understandings of illness, death, spirits, and the body (Albert 1985, 1989; Ramos 1987; Albert and Ramos 1989). On the contrary, the statement argued for the continuity between contemporary Yanomami conflicts and pre-Columbian forms of indigenous warfare in South America, and it uncritically cited sources, ranging from Spanish conquerors to nineteenth-century naturalists, to substantiate the characterization of the Yanomami as essentially violent.

Warfare among Indian groups in South America goes back a minimum of 3,500 years. Abundant archaeological data show raiding, including the saving of trophy heads, throughout the pre-Hispanic periods called Chavin, Moche, Chimu, Wari, and Inka. Warfare also was reported by the Spanish conquerors of the sixteenth century A.D. . . . Our first report about these people is from the mid-1800s, by Moritz Schomburgk (1847–1848) . . . These and many other accounts, too numerous to mention here, make the claim that Yanomami violence began with Chagnon's arrival obviously false" (Cantor, 2000b).

As further proof, it asserted that the Yanomami refer to themselves as *waiteri*, or fierce; "What Chagnon did was translate the term into English" (Cantor 2000b). Yet the translation of Yanomami terms had been debated earlier in anthropological publications, as noted above. Albert and Ramos had analyzed the complexities of translating *waiteri*, whose meanings include brave, humorous, and assertive, and *unokai*, which does not mean that an individual is a literal "killer" of another but is in a state of shared ritual pollution relating to a death that may have spiritual or physical origins (Albert 1989; Ramos 1987; Albert and Ramos 1989).

As with any official document, factors including discursive conventions, legal considerations, and differences of power among participants establish limits on the possibility of gaining insight into the largely opaque process of producing the provost's report. Moreover, there were informal limits on efforts to inquire into the procedures, composition, and agenda of the provost's commission even after the report's completion. Nevertheless, two documents written by Kent V. Flannery, professor of archaeology and member of the Academy of Sciences, provide a degree of insight into the agenda of the commission. They suggest that personal and theoretical loyalties were deeply intertwined, and that neo-Darwinian logic prevailed.

Flannery (n.d.) privately sent a "Memo to the Neel family" that included the subcommittees' drafts prior to revision by legal counsel. His aim, he wrote, was to reassure the family that "James Neel will be cleared of all impropriety, and will be revealed as the victim of a personal vendetta."¹¹ He later published a letter, "Hypocrisy in El Dorado," in *Anthropology News* (May 2002) in which he reasserted the theory of the vendetta as the explanation for the actions of Chagnon's and Neel's critics. He lauded scientists on the University of Michigan commission who had dismissed as hypocritical Turner and Sponsel's claimed concern for Yanomami welfare, along with their denial that the El Dorado controversy was in fact "tainted by personal animosity, hatred of biological models, or jealousy born of laboring for years in Chagnon's shadow" (2002).

The evidence uncovered by our review supports the conclusion that the claims are false. We are satisfied that Dr. Neel and Dr. Chagnon, both among the most distinguished scientists in their respective fields, acted with integrity in conducting their research, and that their medical care of the Yanomami and their attempts to halt the spread of a pre-existing measles epidemic through vaccination were humane, compassionate, and medically appropriate.

OFFICE OF THE PROVOST
STATEMENT ON DARKNESS IN EL
DORADO, NOVEMBER 13, 2000

The Epistemology of the Battlefield

By casting the controversy as a feud among individuals competing for prestige and power, the unpublished draft of the provost's statement, included in Flannery's memo to the Neel family (n.d.), in effect reproduced

a neo-Darwinian framework. But it did not reduce the conflict to raw competition among self-interested individuals, for the opposing figures were presented as belonging to different moral orders; they were in a battle between objective truth and moralizing invention that constituted a threat to the very foundations of scientific knowledge. This Manichaeian framing is reflected in the structure of the provost's public statements, built on the opposition between false allegations and true facts between irresponsible critics and ethical scientists (e.g., Cantor 2000b).

Linking the personal to the theoretical and political, the unedited draft asserts that the feud reflected a schism within anthropology between those "who believe in a scientific paradigm and those who do not." It cast "science" and "anti-science" as opposed endeavors, citing Robert Benter's definition: "Science," it stated, is "objective, quantitative, extrapersonalized, and based on proof and consensus; 'anti-science' is subjective, qualitative, personalized, moralistic, and based on individual authority with no accommodation of contrary views" (Flannery n.d.).

In making this argument, the draft drew on the binary contrast between scientific and moral models that Roy D'Andrade (Department of Anthropology, University of California at San Diego) had proposed in a scathing critique of postmodernist and postcolonial trends in anthropology (1995). Based on his framework, the report classified Sponsel and Turner as belonging to the moral model camp and offered the following evidence of their antiscience position: Sponsel's "agenda seems to be the promotion of a 'more nonviolent and peaceful world,' a world he believes is 'latent in human nature'"; Turner "is known for especially ferocious dedication to the rights of threatened indigenous people" and "claims a moral high ground because he was named to two AAA committees concerned with the Yanomami and human rights." Like other such "extreme moralists," it asserted, they denounce and demonize their opponents rather than engaging in scientific debate. It concluded that the actual targets of *Darkness in El Dorado* are "science, genetics, and neo-Darwinian theory, as exemplified by Neel and Chagnon" (Flannery n.d.).

Science, Ethics, Power

As noted above, the Anthrohistory Program questioned the administration's decision to evaluate Tierney's book and faculty members' work and the manner in which it carried out this evaluation. As David W. Cohen,

professor of history and anthropology, later observed at the colloquium, "This seems, for a university, a highly specious intervention in on-going scholarly and public discussions."¹² In the opinion of a wide range of scholars, the University of Michigan statements not only conflated individuals with theoretical positions and parts of the book with the whole, it excluded the opinions of dissenting scholars and preempted debate at the University of Michigan even as investigations continued in the United States and abroad.¹³

In response to this restriction of debate, the program's directors proposed a colloquium series that would open up discussion. Recognizing that the issues raised in this controversy were being taken seriously outside and within the university, Provost Cantor, in a notable shift, gave the colloquium generous support. Nevertheless, there was resistance from within the Department of Anthropology to supporting the colloquium. In a departmental meeting some faculty objected that the invited speakers did not represent both sides of the controversy and that vocal critics of Chagnon had been included.¹⁴ The department withheld its name from the broad list of the colloquium's supporters, and few anthropology faculty members attended the sessions, although the Chair of Anthropology, Conrad Kottak, was on the first panel.

As intended, the colloquium series did expand discussion within and beyond the university. The central issues it addressed included the goals of knowledge production, the relationship between researcher and subject, conceptions of scientific research, the ethics of writing, international disparities of power in academic arenas, colonial and imperial relations and their impact on research subjects, and the agency and voice of indigenous people. The three-part series included speakers representing positions disregarded by the University of Michigan statements: Alcida Ramos, Terence Turner, and Brian Ferguson.

The colloquium series, which drew a large audience from a variety of fields, addressed broad issues of the university's changing role in national and international arenas.¹⁴ The initial session, "The Politics of Representation," featured Alcida Ramos (University of Brasilia), a noted ethnographer and indigenous rights activist, who highlighted national differences in cultural politics as well as the impact of disparities of power within and among nations. "In Brazil as in other Latin American countries, professional anthropologists take on . . . the social responsibility to both respect and defend the rights of our research subjects, particularly indigenous peoples" (2001). Inequalities of power, she noted, inflect relations among Brazilian and U.S.

scholars and institutions, shaping the evaluation of claims made by scholars in Brazil according to the U.S. norm of value-free science and setting limits as to who can be heard within the scientific community.¹⁶

Michael Kennedy (Department of Sociology, University of Michigan) argued that such disparities underline the need to assess what it means to be a global university, to evaluate differing kinds of “knowledge politics,” and to consider how research at the University of Michigan might “transcend the cultural politics of the American state and nation” by engaging with the needs and concerns of peoples who were research subjects (Cornil et al. 2001b).¹⁷

“The Ethics of Inquiry” session addressed the history of scientific research projects among the Yanomami as well as changes in conceptions of ethical norms and indigenous rights. In his address, Terence Turner expressed regret for the harm that his leaked e-mail had caused, but he also argued that the critics of Tierney’s book had themselves ignored the ethical problems it raised and had erroneously conflated criticisms of specific scientific practices with an attack on science itself. This resulted in the misplaced claim that science was under siege, and in attacks on individuals rather than in empirically based discussions of research practices and ethics (Turner 2001d). Turner’s new study of Neel’s archived papers on the disputed 1968 expedition provided evidence, he asserted, that Neel’s project, despite good intentions, followed protocols and pursued goals that placed Yanomami welfare in a secondary position (2001b).

Despite these unresolved tensions between sociobiology’s and historical anthropology’s approaches to the issues, Kay Warren argued, the colloquium was helping move the debate beyond the notion of science versus politics and bring attention to the perspectives from which claims to science are made and the varied ethical considerations they bring into play.

In “The Uses of History” session Brian Ferguson (Department of Anthropology, Rutgers University) challenged the notion that the Yanomami are a warlike people, arguing that conquest and colonialism had long subjected them to violence and disruption through a variety of indirect means, including the circulation of Western goods and assaults on indigenous lands and labor, that reshaped relationships among neighboring groups and between indigenous peoples and colonizing agents. Disputing the scientific versus moral models division, Ferguson argued that empirically based work focused on material conditions presented a scientific alternative to sociobiology’s theory of primitive warfare.

On the basis of the evidence the colloquium provided, the director of

the Anthrohistory Program requested that the provost withdraw the university's statement on Tierney's book. In response, the provost, in collaboration with Coronil, issued a new statement on the controversy. Though unheralded and unassumingly titled "May 29, 2001, update regarding 'Darkness in El Dorado,'" this document represented a reversal of the preceding report (Cantor 2001). It acknowledged that the colloquium presentations, together with government and professional reports and academic publications, had demonstrated there was a scholarly consensus that Tierney's book, despite its errors, had raised fundamental questions concerning the ethics of research.

These are complex questions that do not yield simple or definitive answers. Yet, as communities of scholarship, universities have appropriate means for examining these difficult issues, such as class discussions, interdisciplinary colloquiums, and academic publications. In addition, scholarly associations, through their ethics committees and special task forces, also provide mechanisms for investigating these questions.²⁶

Although the Office of the Provost did not retract or comment on the original report, which in all likelihood remained the university's position in the eyes of much of the public, the process of discussion culminating in the colloquium had shifted the terrain on which boundaries were drawn from a pinnacle of power.¹⁹

The University of Michigan, as a major university with global responsibilities, can best respond to the issues raised by Tierney's book by promoting their discussion through regular academic channels. Our discussions at Michigan have helped place the examination of these controversial issues within a scholarly and constructive framework directed at evaluating the impact of research sponsored by U.S. universities among peoples anywhere in the world and ensuring that priority be given to their welfare.

OFFICE OF THE PROVOST, MAY 29,
2001, UPDATE REGARDING
DARKNESS IN EL DORADO

Knowledge as Struggle

The Anthrohistory Program brought a transdisciplinary approach to a polarized conflict mired in a complex tangle of theoretical disagreements, disciplinary norms, administrative procedures, personal/professional loyalties, and institutional interests. In part by virtue of its nondepartmental and interdisciplinary status, the program was able to raise questions that

jostled settled boundaries and upset the quotidian politics of mutual avoidance and forgetting that had made possible the administration's unchallenged response to Tierney's book. The ensuing discussions, at once disquieting and engaging, questioned how scholarly expertise is organized, and they challenged claims to value neutrality that obscure and reinforce disparities of power. The knotty issues raised around the Yanomami controversy were of course not resolved, but the discussions that the colloquium drew on and prompted were marked by the recognition that efforts to develop knowledge in more equitable, collaborative, and responsible terms is a shared responsibility and an ongoing struggle. An example had been set by Brazilian anthropologists who, in conjunction with indigenous leaders, redefined informed consent for indigenous communities as a continuing process of negotiation in which the communities become active participants in consenting to research and in defining how they may benefit from it, through measures ranging from rights advocacy to contributions to medical facilities (Albert 2005c, 220–27).²⁰

In this instance of disciplinary battles and embattled disciplines, anthrohistory, understood as a reflexive practice that challenges naturalized boundaries, helped bring attention both to broad issues concerning the ends of knowledge and to the concrete effects and possibilities entailed in academic work. The colloquium series spoke to scholars across the conventional boundaries of topic, region, and discipline that often confine discussion. It also questioned a gap that typically separates observers from observed, particularly across hierarchies of class, ethnicity, and nation. This gap was painfully alive at the University of Michigan, as the Yanomami were present not only as subjects of debate but in the form of blood samples obtained without their consent and kept against their will in its laboratories and at other institutions.²¹ As this controversy brought out, there have been recurrent claims for their return by Yanomami communities, and for researchers, whose careers benefit from the cooperation of their research objects, to contribute to improving the conditions of indigenous people in forms ranging from advocacy to redistribution (Albert 2005b).²² The question of how to negotiate the conflicting demands of those within and far outside the academy refuses simple solutions, but it is being addressed in some instances.²³ Yet the blood that flows through research and goes into the making of scholarly texts, as Eiss's chapter in this volume compellingly evokes, has to be acknowledged in our struggles to fashion forms of knowledge that undermine the comfortable boundaries

that hierarchically separate those who seemingly produce knowledge and those who provide them with materials from which to fashion it.²⁴

NOTES

1. Borofsky's book *Yanomami: The Fierce Controversy and What We Can Learn From It* (2005) provides the most complete and fair-minded account of the controversy as it played out among anthropologists from various subdisciplines. Borofsky provides an analysis of the issues, resources for students, and perhaps most important, a discussion of Yanomami perspectives. The book is linked to Public Anthropology website's Community Action project designed to involve undergraduates in discussing and taking action on pressing contemporary issues (<http://www.publicanthropology.org/>).

2. See, for example, Albert 1989; Albert and Ramos 1989; Albert 2005a, 2005c; Carneiro da Cunha 1989; Ferguson 1995; Shapiro 1976; Turner 1994.

3. Neel was a member of the American Academy of Sciences since 1963, recipient of the National Medal of Science, and founding member of the American Society of Human Genetics. See his obituary in the *American Journal of Human Genetics* (Weiss and Ward 2000).

4. Borofsky cites sources that claim this book is the best-selling ethnography in history (2005, 39). At the time of the controversy, the book was still used widely in introductory anthropology courses.

5. This article proved highly controversial. The French anthropologist Bruce Albert and Brazilian anthropologist Alcida Ramos, both ethnographers of the Yanomami in Brazil, critiqued Chagnon's argument on ethnographic and theoretical grounds, taking issue with the translation of its central terms and with its assertion that Yanomami were particularly violent (Albert 1989; Albert and Ramos 1989).

6. See Gaynor's statement in Coronil et al. 2001b.

7. On the views of Yanomami representatives, see Kopenawa Yanomami 1991; AAA El Dorado Task Force 2002; Borofsky 2005.

8. While Chagnon published a rejoinder to the letter in *Anthropology News* (1989), it refused to publish the Brazilian Anthropology Association's reply to him, a slight recalled during the Anthrohistory colloquium.

9. Brazilian miners massacred sixteen Yanomami at Haximu in 1993. Bruce Albert led an investigation for Brazilian authorities (Albert 2005c, 215–16), as did Terence Turner for the AAA.

10. Colleagues of Neel were indignant these charges were made when Neel could not defend himself, since he died in February 2000.

11. According to Flannery, "approximately 20 persons—physicians, epidemiologists, geneticists, biological anthropologists, ethnologists, ethnohistorians, archaeologists, documentary film specialists, and eyewitnesses to James Neel's and Napoleon Chagnon's field work, are working together to figure out why such hideous allegations would be made about them in the media" (n.d.).

12. See his presentation at the Anthrohistory colloquium, "Toward a Portrait of the University as Author of the Text," on the absence of standards by which such an investigation should be undertaken and proceed (Coronil et al. 2001b).

13. The AAA appointed the El Dorado Task Force to investigate the book's charges; Fernando Coronil, Director of the Anthrohistory Program, was on the task force, and the Venezuelan government and the Federal University of Rio de Janeiro in Brazil undertook their own investigations.

14. Efforts by the colloquium organizers to invite University of Michigan supporters of Neel and Chagnon's position to participate on the panels met with little success. Randolph Nesse, professor in the Department of Psychiatry and the Institute for Social Research, and a supporter of Neel, did speak on the second panel.

15. The Anthrohistory website provided related documents and links as reference for discussion (<http://www.umich.edu/~idpah/SEP/sepmenu.html>).

16. In response to the Tierney measles allegations, Bruce Albert organized a fact-finding commission in Brazil to study the Neel expedition. Its report found the measles vaccination claims by Tierney to be false and irresponsible. Yet it also concluded that Neel's project had procedural and ethical failings and that Tierney's book, "despite its serious documentary and conceptual failures . . . has made possible a more profound discussion reflecting upon the ethics of research among indigenous populations and minorities in general." The U.S. media and the AAA ignored this report (Lobo et al. 2000).

17. Kennedy pointed out that the University of Michigan had just made a large commitment to the Life Sciences Initiative that placed ethics and values at the core of its mission, yet there had been no debate around "the geopolitical ethics of the life sciences."

18. For the full statement, see Coronil et al. 2001.

19. It should be noted that the initial provost's statement continues to be cited by supporters of Chagnon (e.g., in Wikipedia entries).

20. See also Albert and Gomez 1997; Albert 1997. For a nuanced discussion of ethics in anthropology, including this case, see Fluehr-Lobban 2003.

21. Yanomami blood samples are still kept at the National Cancer Institute and a smaller amount at Pennsylvania State University. To the alarm of Yanomami advocates, they could be used to develop DNA that could be commercialized, as had occurred with other Brazilian indigenous groups, without the consent of the individuals nor with any benefit to them or their communities (Albert 2005c; Ramos 2000). In 2006, following a request by Attorney General of Roraima State, Brazil, and Public Anthropology student letters, high-level administrators of the National Cancer Institute and of Penn State agreed to return the blood to Brazil. However this has not occurred as of this writing and the Public Anthropology campaign has intensified (see <http://www.publicanthropology.org/Yanomami/09-Fall/background.htm>).

22. The El Dorado Task Force of the AAA, after much internal discord and membership critique, released its final report in 2002. It included the results of an unprecedented gathering of Yanomami village representatives in the Venezuelan

Amazon, attended by task force members, in which demands for a reciprocal relationship with researchers and criticisms of the long-standing asymmetrical relations characterizing most biomedical and anthropological research were clearly set forth (AAA 2002: <http://www.aaanet.org/edtf/index.htm>).

23. U.S. anthropological norms specify a narrow notion of ethics focused on the individual, and the pursuit of more equitable relations with collectivities often meets with obstacles. However, the Brazilian NGO Pro-Yanomami Commission, as well as the Public Anthropology project, have raised funds to contribute to Yanomami medical care.

24. See Coronil's essay in this volume on the concrete ethics of struggle.