the Taiping Jing, and alchemical texts, respectively. The fourth Supplement is devoted to scriptures of tianyi (Orthodox One) school, which is the oldest Daoist religious tradition dating back to Celestial Masters Daoism of the 2nd century. However, a large amount of materials collected in the Daoist Canon either spiritual or religious. Their inclusion underscored Daoism as an indigenous religious tradition as much as Buddhism as an alien one. Among these materials is the Bencao Gangmu (Pharmacopoeia of the Form), attributed to the mythical ruler Shen Nong (the Farmer). Such materials are highly valuable research into the history of Chinese natural sciences and philosophies.

Religious Daoism and Popular Religion

Daoist religion is often regarded as a degenerate of philosophical Daoism. Confucian scholars not only tended to equate religious Daoism with superstition but also thought that it was politically dangerous. After Daoism spread to Korea and between the 4th and 7th centuries, its religious aspects were put under government control. The Daoist temples in Korea and the bureau of divination in Japan were state sponsored. Nevertheless, they never established itself as an organized religion in Korea or Japan, and its impact found expression in their folk beliefs and popular religions. Religious Daoism has a much closer tie with popular religion. Its liturgy plays an important role in the religious life of the community and has been adapted to the framework of local cults to expand and develop in Korea and Japan. Through the shared use of divinatory arts, such as the yin-yang cosmology, geomancy, and the Five Elements ideology, religious Daoism has an affinity with fortune-telling, divination, and geomancy. Daoist masters, for instance, are likely to be skillful geomancers. Furthermore, they readily perform rites and rituals to assist individuals' quest for fortune, wealth, and longevity in this world. Nevertheless, Daoist masters seek to ascend the mundane desires themselves, and thus members of a religion that is organized and worldly oriented.

— Zhiming Zhao

Further Readings


DARKNESS IN EL DORADO CONTROVERSY

Late in the year 2000, an intellectual tsunami hit anthropology in America and beyond. It was generated by the controversy surrounding the publication of a book by Patrick Tierney called Darkness in El Dorado: How Anthropologists and Journalists Devastated the Amazon. Five years after its publication, this unprecedented controversy was still rife with debate and far from settled. Moreover, it goes to the very heart of anthropology, with broad implications for every anthropologist. Primarily, it is a matter of professional ethics and more generally, of values.

Values have been a sincere concern of various practitioners of anthropology since its beginnings about 150 years ago. For example, many anthropologists have demonstrated their humanitarian commitment through advocacy work in promoting the survival, welfare, and rights of indigenous societies struggling under the pressures of Western colonialism and the genocide, ethnic conflict, and ecocide often associated with it. On the other hand, to this day, many anthropologists pursue science as if it were entirely amoral and apolitical.

The largest professional organization of anthropologists in the world, the American Anthropological Association, is committed to the integrity of the discipline and to the professional ethics of its members. This commitment is articulated in the Ethics Manual, which contains principles of professional conduct and practice. The Ethics Manual is a living document, and it is periodically revised to reflect the changing requirements of the discipline, the profession, and the society it serves.
Association (AAA), was established as early as 1902. However, the articulation of formal guidelines for professional ethics came decades later and grew only intermittently, through a succession of occasional declarations beginning with the brief “Resolution on Freedom of Publication,” issued in December 1948; then, a more extensive “Statement on Problems of Anthropological Research and Ethics,” in March 1967; next, the “Principles of Professional Responsibility,” in May 1971; and, most recently, the “Code of Ethics,” in June 1998. It was not until 1971 that the AAA finally established a standing Committee on Ethics, although by 1996, its function was reduced mostly to education. Usually, any concern with professional ethics within American anthropology has been more reactive than proactive, and more a matter of defensive maneuvering than constructively grappling with the issues head-on. Ethical concerns, and sometimes even actions, arise mostly during periods when scandals or controversies erupt, especially if they reach the public to threaten the image of the profession; but soon they decline, if not disappear completely, except if a publication record remains and/or through the research of historians. Many of these tendencies are exhibited in the most recent ethical crisis in the AAA, although it goes to the very heart of the discipline, with some enduring implications for every anthropologist.

This crisis exploded in late 2000, only partially subsided by the middle of 2002, and then erupted again in early 2005. It is characterized by unprecedented magnitude, complexity, difficulty, and ugliness. (An extensive archive is available on the Douglas W. Hume Web site.) The crisis arose in response to investigative journalist Patrick Tierney’s book, with its provocative title and subtitle, *Darkness in El Dorado: How Anthropologists and Journalists Devastated the Amazon*. His painstakingly detailed book is based on more than a decade of field and archival research. Tierney tried to document numerous and diverse allegations of violations of professional ethics and even of human rights by Napoleon A. Chagnon and his associates in their field research with the Yanomami. Some points in the book were challenged after investigations by various individuals and organizations. Nevertheless, many other points were confirmed by the AAA Task Force on Darkness in El Dorado and other researchers.

This task force was established at a meeting of the AAA Executive Board, February 3–4, 2001. The AAA had no choice but to initiate a serious inquiry of the firestorm that erupted around the book in international media and cyberspace, which was a public relations disaster. (Tierney’s book received several prominent awards, from the *Globe*, *New York Times*, and *Los Angeles Times* as a finalist for the National Book Award.) After only a year of systematic and meticulous investigation of selected issues on May 18, 2002, the task force issued a final report that subsequently was posted on a Web site. Members of the task force included M. Chernella, Fernando Coronil, Raymond J. Forbes, Jane H. Hill (Chair and former AAA president), Trudy R. Turner, and Joe E. Watkins. However, the appearance of a conflict of interest, because a former student of Chagnon and is a long-time colleague in his research, grants, and publications.

This scandalous controversy pivots on Chagnon, who accumulated a total of about 1,000 lifeways of Yanomami, in Venezuela, over a period of nearly three decades, starting in 1968. Through various publications and films, he established a reputation in the United States and beyond as a primary ethnographer in the study of the Yanomami, whom he depicted as one of the most violent “primitive” cultures surviving in the world. However, usually ignored is the fact that several anthropologists lived with the Yanomami longer, such as Kenneth R. Good for more than a dozen years, and Jacques Lizot for about a century.

Unlike many other anthropologists who have worked with the Yanomami in Venezuela a Chagnon consistently characterized them as “fierce people,” in a manner reminiscent of Hobbes’s caricature of “savages” with brutish lifeways. Many of the other anthropologists who have lived with the Yanomami, such as Lizot, have opined that Chagnon became obsessed with the violence in that society and exaggerated the point of gross distortion. Moreover, Lizot in a book edited by Robert Borofsky cited irrefutable evidence that this image was created in the Brazilian media and then used by unscrupulous government and military officials as part of the rationalization for their efforts to mine the rights of the Yanomami to their territory. This became, and remains, a major issue, since Chagnon failed to speak out
use of his statements and to defend the human rights of the Yanomami in Brazil, according to the Brazilian Anthropological Association and others. Moreover, after some 4 years of controversy, Chagnon has yet to really speak out in his own defense, although he has had numerous opportunities to do so.

When the controversy over this and many other serious allegations in Tierney's book exploded in world media, a small but vocal group associated in Chagnon quickly came to his defense. Among the defenders in various degrees and ways are James Boster, Lee Cronk, Irven DeVore, Jeffrey D.erenreich, Kent V. Flannery, Robin Fox, Thomas A. Siger, Daniel R. Gross, Raymond B. Hames, Kim J., William G. Irons, Jane B. Lancaster, A. Magdalena Hurtado, Andrew D. Merriwether, Stuart Plattner, Neil Tiger, John Tooby, and Trudy R. Turner. Some of Chagnon's defenders have repeatedly challenged Chagnon's defenders rather than simply ignored the controversy and AAA inquiry ignore sources of the more serious suffering among Yanomami. However, Tierney's book was mostly about the alleged abuses committed by Chagnon and his associates, and the executive board charged the AAA to conduct an inquiry about them. Other issues within the AAA, such as the Committee for Human Rights, have taken action repeatedly, although Hurtado disparaged that in an earlier article in the April 1990 AAA Anthropology News. Also, the ProYanomami Commission, an anthropological advocacy organization in Brazil, has been the most effective in addressing Yanomami health problems, this, in collaboration with the French group Without Borders.

Defenders of Chagnon have accused his critics of being merely jealous, failed anthropologists, antiYanomami human rights, and/or postmodernists. Among the critics of Chagnon who have worked most closely with Yanomami for many years are Bruce Albert, Gale Goodwin Gomez, Kenneth R. Good, Jacques Lizot, and Alcida R. Ramos. Other critics of Chagnon over the decades variously include Arvelo Jimenez, Timothy Asch, Gerald D. Domman, Manuela Carneiro da Cunha, R. Brian Fagan, Carolyn Fluehr-Lobban, Clifford Geertz, Arvin Harris, Timothy Ingold, David H. P. Irons, Gregor H. Plattner, Marshall D. Sahlins, Nancy Scheper-Hughes, Leslie E. Sponsel, and Terence S. Turner. The publications and reputations of these various critics do not accurately reflect the accusations of Chagnon's defenders. More important, many of the points these critics raised over a period of three decades never attracted serious attention from the AAA and many individual anthropologists until Tierney summarized them in his book. Had the various criticisms been given serious consideration by the profession and Chagnon as they arose, then Tierney's investigation and the subsequent public scandal and ensuing embarrassment to the AAA and profession might well have been avoided.

The main political tactic of Chagnon's defenders has been to distract attention from questions about the abuses of professional ethics, and thereby violation of Yanomami human rights in some of the instances, by focusing mostly on the causes of the measles epidemic during the 1968 expedition of Chagnon and his associates. During that expedition, the scientists attempted to continue to conduct research despite a rapidly spreading epidemic of measles. Geneticist James V. Neel was the leader of the expedition. He sacrificed only a small portion of the research time for himself and the other medical doctors on the team to administer some limited health care to sick and dying Yanomami. The defenders claim that this medical attention saved numerous Yanomami lives. Probably it did so, although this has never been documented. However, as some critics have pointed out, by the same reasoning, probably many other lives would have been saved had the medical doctors fully honored their Hippocratic Oath and along with other team members temporarily suspended all of the data collection to give their full time and attention to the needs of the Yanomami in this dire medical emergency. In any case, although by now more than 4 years have transpired since Tierney's book, most of the defenders of Chagnon have yet to seriously address most of the questions about the violation of professional ethics and human rights.

To date, the AAA and profession in general have yet to adequately address many of the allegations made by Tierney. Yet as mentioned before, many of his allegations are not new by any means. Only when Tierney summarized and amplified them and added others in his book did the AAA and profession in general begin to be concerned. For instance, 5 years before Tierney's book, in a meticulous systematic analysis of the
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Yanomami, R. Brian Ferguson asserted that Chagnon increased intervillage aggres-
sion by giving large concentrations of steel tools to
selected villages in payment for cooperation in his
data collection during brief visits. No uproar fol-
lowed. Later, Tierney discussed this issue, but the task
force neglected to investigate it, even though it was
among his most serious allegations, and the fifth of
the five general allegations that the executive board
requested be pursued in their inquiry.

There has also been much constructive discussion
and debate among other anthropologists who were
able to transcend the particulars, including any per-
sonal differences and animosities, to deal forthrightly
with the serious implications for the Yanomami as
well as the broader ramifications for professional
practice and ethics. Some of this discussion even
transpired within the AAA. For instance, a very useful
set of six briefing papers developed by the Committee
on Ethics is available on the association’s Web site. A
far more expansive and useful arena for discussion on
this controversy is the Web site for Public Anthropology
developed by Borofsky.

The top leadership of the AAA claimed that the
association did not have any formal procedures to
legally sanction, morally censure, or reprimand an
American anthropologist for serious violations of
ethics, unlike the professions of law and medicine.
Nevertheless, in late spring 2002, the AAA Executive
Board publicly denounced Chagnon’s proven viola-
tions of professional ethics and abuses of the human
rights of the Yanomami by accepting the final report
of the AAA Task Force on El Dorado. The AAA
disapproved of Chagnon’s conduct regarding at least
five matters: (1) He failed to speak out against mis-
uses by others of his negative characterization of the
Yanomami as “the fierce people” to block the
Yanomami reserve in Brazil and thereby undermine
their ancestral territorial, land, and resource rights.
(In fact, this reflects an ethical principle already enun-
ciated at least as early as 1948 in the AAA “Resolution
on Freedom of Publication”); (2) he failed to obtain
adequate informed consent for taking blood and
other biological samples from the Yanomami, and he
failed to honor the promise that these would provide
future medical benefits; (3) he made unfounded and
damaging public attacks, including in the Brazilian
press, on Yanomami leaders and spokespersons as
well as on advocacy anthropologists and nongovern-
mental organizations assisting the Yanomami and
promoting their human rights, this, in the midst of
the catastrophic illegal invasion of gold miners into
the southern territory of the Yanomami; (4) he col-
laborated with corrupt politicians in Venezuela engaged
in criminal activities designed to create a much-
reduced Yanomami reserve to facilitate illegal mining
and to develop a private territory for his own research;
and (5) he repeatedly transported groups of out-
siders with Venezuelan public funds into Yanomami
communities without proper quarantine precautions,
thereby risking and probably causing outbreaks of
serious illnesses among the Yanomami.

This final report and the controversy in general
had at least seven positive effects: (1) The AAA proved
to be capable of carrying out an inquiry into viola-
tions of its Code of Ethics by particular individuals
and their specific actions, despite initial denials by
the leadership and partisans of the alleged violators;
(2) an aroused and engaged membership overcame
attempts by the AAA leadership to whitewash, cover up,
and otherwise divert the investigation. For instance,
the AAA administration was forced to provide a Web
page on the association’s Web site for open discussion
following the release of the preliminary report of the
task force, from February 10 to April 19, 2002 (that
report was removed from the Web site after the final
report was posted); (3) the release of a public docu-
ment by a research unit of professional colleagues
reporting findings of unethical conduct negated
the protestations that the AAA could not apply mean-
ingful sanctions (at the time of this writing, the
task force report is being challenged by a referendum to rescind
the results introduced by Gregor and Gross for a vote on the
March ballot of the AAA); (4) the misrepresentation
of ethnographic and historical reality in the serials
of an anthropologist’s theories that demean the
Yanomami culture and people was held to have nega-
tive consequences that fall under the Code of Ethics
(5) the responsibility of anthropologists to speak
out publicly against uses of their work by others
damage the interests of their research subjects was
affirmed; (6) it was explicitly recognized that science
as an anthropological project, not only deals with
objective facts and building theory, but is a social
activity with effects on the research subjects and the
community that may have ethical implications; and
(7) a more general constructive outcome of the con-
troversy has been a flurry of several edited books on
professional ethics in anthropology. However, some
contain contents that further propagate misinformation.
and disinformation, thereby generating additional ethical problems.

It should also be noted that other inquiries into Tierney's allegations were conducted by the American Society of Human Genetics, the International Genetic Epidemiology Society, the National Academy of Sciences, the Society for Visual Anthropology, and overseas, by a medical team of the Federal University of Rio de Janeiro in Brazil and a special commission of the Venezuelan government. However, these inquiries were much more limited in scope and duration than that of the AAA; they produced conflicting conclusions regarding the few allegations by Tierney that they pursued; they did not take into account the AAA inquiry, since they were conducted and reported prior to the release of the final report of the task force; and the inquiry in Venezuela remains incomplete and therefore inconclusive. Albert edited the report in Brazil, and the others can be found through links at the Web sites of the AAA, Chagnon, and Hume.

Another central figure in this controversy besides Chagnon has remained almost completely silent in the years following the initial explosion of discussion and debate: Tierney. Various inquiries have exposed problems with many points in his book, although many other points have been confirmed. To date, Tierney has not addressed all of the problems by revising the book for a new third edition, although this may be forthcoming. Science, academia, and other fields progress through a cumulative process of identifying and correcting errors, discovering gaps and addressing them, noting weaknesses in an argument and strengthening them, and so on. Nevertheless, undoubtedly Tierney has made a major contribution to anthropology by generating ethical awareness, concern, discussion, and debate in the profession like never before. It is embarrassing that the catalyst came from outside of the profession and that this transformation has been obstructed by some of Chagnon's defenders and by the apparent apathy of a silent majority.

In 1996, more than 4 years before the El Dorado controversy exploded, Myron Perez Glazer asserted that any anthropologist genuinely concerned with professional ethics must inquire about the ethics of power, reciprocity, respect, and accountability. In his perceptive review of professional ethics in anthropology, Glazer raises these penetrating questions: Are researchers invariably exploiting the people they study, and if so, how can this be minimized? Do the subjects benefit from the research in ways that they themselves consider meaningful and fair? Does the researcher adequately respect the integrity of the subjects' culture, avoid undue interference, and minimize disturbance? How are anthropologists held accountable for their behavior, research, and publications?

The above and many other ethical questions have yet to be adequately explored, let alone resolved, in the case of the controversy over Tierney's multitude of diverse allegations. However, a new book is by far the most thorough, penetrating, balanced, and fair assessment of the entire controversy. The editor, Robert Borofsky, provides an overview not only of the controversy but also of its broader implications and ramifications. This is followed by a series of detailed roundtable discussions by six authors who have had various lengths and types of experience with the Yanomami and who reflect the opposing sides in the controversy: Bruce Albert, Raymond B. Hames, Kim Hill, Leda Leitao Martins, John F. Peters, and Terence S. Turner. The book is also unique in its pedagogical devices, which assist students and other readers in wrestling with the numerous and diverse questions and issues involved in this convoluted controversy. This book is intended to generate some genuine deep soul-searching in the profession and perhaps even some fundamental transformations. Meanwhile, the Yanomami continue to suffer from threats to their land and resource base as well as disease and epidemics, among other serious problems. Borofsky writes that any royalties from the book will go to a health fund for the Yanomami, a very rare ethical consideration that more anthropologists might well emulate.

This unprecedented scandalous controversy will probably simmer for decades and occasionally boil over, and then subside, like others such as the supposed hoax involving the Tasaday in the Philippines. In any case, by now, there is ample literature on professional ethics, including case study material as well as on the El Dorado controversy in particular. Thus, there is absolutely no excuse for any future researcher, teacher, or student to not be familiar with these subjects and to not seriously consider various ethical guidelines in their own work. Still, seldom can anyone actually specify to an individual precisely what to do in any particular situation; that must be left to the professional maturity, moral character, and common decency of the individual. On the other hand, it should be obvious that some actions are just plain unprofessional and unethical, as revealed by instances in this El Dorado controversy.
There are many lessons to be learned from this controversy that also have much broader relevance for the profession. Perhaps the most important one of all is the lesson that many ethical problems might have been avoided had the dignity and rights of the Yanomami as humans been fully recognized and respected. Instead, clearly, they were viewed as some “primitive” survivors of the evolutionary past. Among several other places, this attitude is documented in the film by Neel, Chagnon, and Asch, called *Yanomama: A Multidisciplinary Study.*

Ultimately, the bottom line for professional ethics in anthropology, as elsewhere, is to avoid harm, and to do good. Fortunately, many other anthropologists have been ethically responsible and socially relevant in their work with the Yanomami. For instance, in 1991, President Annette Weiner and the Executive Board of the AAA established a special commission to investigate the situation of the Brazilian Yanomami. The members of this international commission included Bruce Albert, Jason Clay, Alcida Rita Ramos, Stephan Schwartzman, Anthony Seeger, and Terence S. Turner (Chair). Special consultants included Claudia Andujar, Manuela Carneiro da Cunha, and Davi Kopenawa Yanomami. The report of this Commission; an OpEd in the *New York Times* by Turner on June 18, 1991; and a letter protesting Brazilian government policy drafted by Schwartzman and signed by eight U.S. Senators, which was sent to President George H. W. Bush, all combined to influence a positive change in the policy of the Brazilian government, especially its proposed archipelago scheme. (The latter was to be a series of 19 separate minuscule reserves that would markedly increase Yanomami community size, while greatly reducing the natural resource area available to each as well as facilitate penetration of miners, together guaranteeing a catastrophe for the Yanomami.) Thus, the Yanomami commission’s action may have helped to make the difference between survival and extinction of the Yanomami in Brazil. This commission was the largest single case of intervention that the AAA has ever undertaken in the defense of the cultural rights of an indigenous group. Another example of ethical responsibility is provided by Bruce Albert and Gale Goodwin Gomez, who together researched and authored a bilingual Portuguese-Yanomami health manual to aid medical personnel to more effectively communicate with Yanomami in treating their medical problems. Such initiatives demonstrate that the pursuit of scientism and careerism alone is (or should be) an anachronism that is no longer tolerable and honorable in anthropology. When people are suffering and dying from epidemic diseases and/or have other serious problems, then “research as usual” is simply untenable. Science without conscience is a monstrous pursuit in any situation. Fortunately, a tectonic shift may be in the making for professional ethics in anthropology.

— Leslie E. Sponsel

See also Chagnon, Napoleon; Ethics and Anthropology; Yanomano

**Further Readings**


