Northern Engagement: Alaskan Society and Applied Cultural Anthropology, 1973-2003[1]

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Abstract: In this paper, we present an overview of the remarkable dispersion of cultural anthropology as applied and practiced in Alaska since 1973. While much of the cultural anthropologists' effort has been devoted to studies of Alaska Native subsistence, an analysis of subsistence is the subject of a separate essay in this volume of AJA. For that reason reference to subsistence research is included in this essay only insofar as the institutions we examine funded the work of cultural anthropologists to gather information related to Alaska Native subsistence.

INTRODUCTION: 30 YEARS LATER

The past 30 years have been a time of momentous change in Alaska. From an infant state with a geographically dispersed, subsistence-oriented and ethnically complex indigenous population representing the largest proportion of any U.S. state population, Alaska has been transformed in numerous ways. Large-scale industrial development, governmental expansion, Alaska Native land claims legislation, and enormous population increase (from 302,853 in 1970 to 626,932 in 2000 [http://www.census.gov/dmd/www/resapport/states/alaska.pdf]) due in large part to in-migration, have been major factors in the metamorphosis of Alaska.

This period has also seen an enormous increase in the professional presence of cultural anthropology in Alaska. Prior to statehood, cultural anthropology was practiced by professionally trained anthropologists in only a limited number of circumstances. However, cultural anthropology's impact, both directly through applied efforts and indirectly through the osmotic diffusion through the larger society of concepts such as cultural relativism ethnocentrism, throughout the larger society, has grown substantially over the past 30 years.

Due to its scientific attention to and validation of the significance of cultural differences and the right to cultural (including linguistic) self-determination, cultural anthropology attracted a number of Alaska Natives who have acquired college degrees in anthropology and themselves applied the anthropological perspective to their own professional practices (e.g., for example, doctoral degrees have been awarded to Rosita Worl (Tlingit), Phyllis Fast (Athabascan), Gordon Pullar (Alutiiq), Deanna Kingston (Inupiaq) and Oscar Kawagley (Yup'ik). There are presently other Alaska Native anthropology students at the graduate and undergraduate levels within the University

[1]A condensed Powerpoint version of this paper was presented at the Annual meeting of the Alaska Anthropological Association, 2003, Fairbanks, Alaska and is online at http://www.uaa.alaska.edu/anthropology/index.htm. The authors wish to thank the organizing committee of the Annual meeting of the Alaska Anthropological Association, 2003, for requesting this paper. Our intent is to provide a bibliographically based summary of applied cultural anthropology in Alaska between the years 1973 and 2003. Some critical analysis is provided but a thorough critical examination of the agencies involved, the political winds related to most of the issues discussed and the research products of the work described, must wait for another essay. Because many applied cultural anthropologists in Alaska are not aware of the history of the field, we provide a brief overview of that history and a typology of applied cultural anthropology projects. The authors wish to thank the following colleagues for providing information and perspectives on the past thirty years of applied cultural anthropology in Alaska: Helen Armstrong, Taylor Brelsford, Penelope Cordes, P. Kay Branch, Kenneth Pratt, Rachel Mason, Ted Birkedal, Ray Barnhardt, Janet Cohen, Don Callaway, Janet Cohen, Michael Burwell, Joseph Jorgenson and Herbert Anungazuk. The suggested revisions and comments offered by the four reviewers of the essay in its earlier form were very helpful. Any errors in this paper and the opinions expressed, however, are entirely those of the authors.

of Alaska statewide system and in Lower 48 universities such as Harvard University, Idaho State University, the University of Washington and the University of Arkansas.

APPLIED ANTHROPOLOGY: BRIEF HISTORICAL OVERVIEW

For most of anthropology's history, applied anthropology has not been considered a separate branch or a specific sub-field. Most of the research conducted worldwide during the early part of the 20th century and prior was funded by governmental organizations seeking information useful for the administration of indigenous peoples and others under colonialist regimes. Work by British anthropologists Malinowski and Radcliffe-Brown from 1915 to mid-century exemplifies this trend (Shore and Wright 1997). In the U.S., Henry Schoolcraft reported to Congress in the mid-19th century regarding Indian Policy (van Willigen 1993:19); Major John Wesley Powell sought inductive knowledge to ease the transition of Native Americans into current U.S. life (Hinsley 1979); James Mooney (1896) advocated for Plains Indians' Ghost Dance as their way of "coping with the severe dislocations produced by the U.S.-Indian wars and confinement to reservations" (Ervin 2000:15); and Franz Boas submitted two studies to the United States Commissioner of Education that attacked racial determinism (Ervin 2000:15). These are just a few of the scores of anthropological applied efforts prior to and after World War II (WW II) in the U.S. (Partridge and Eddy 1986) that involved nearly every major anthropologist of the era.

In Alaska, governmental agencies were likewise the funding source for much early anthropological research, including such seemingly non-applied ethnographies as those by Margaret Lantis (e.g., 1960), Richard Nelson (1969) and Robert Spencer (1959). Most of the anthropological research in Alaska today continues to be applied, funded by a governmental or private organization seeking information useful for fulfilling its mission, and not necessarily or primarily for the discipline of anthropology.

For some reason, many cultural anthropologists and others doing research in Alaska have not been aware or were reluctant to acknowledge that they have been engaged in applied anthropological research. However, if the funding agency and initiator of the anthropological work is a public or private organization seeking information for its own uses, the work qualifies as applied anthropology; that is, it is "anthropology put to use," which is how van Willigen (1993) describes applied anthropology.

The general disconnect between basic/theoretical and applied/practical social research in the U.S. occurred after the Civil War, according to historian Mary Furner (1975). Citing Furner, Laura Nader observes that in any part of the world except the U.S., "intellectuals qua intellectuals are expected to participate in large questions, and they do so even if such activity lands them in prison" (Nader 2000:4). U.S. professors, she notes, are peculiar in the "separation they make between theory and practice, between private and public careers, between their professional lives and their concerns as citizens." According to Furner, after economists at the University of Chicago were fired, demoted or blackballed for expressing views contrary to colleagues, supporters of the institution and the general community, social scientists in general retreated from social issues to abstractions, thereby producing the distinction between theoretical and applied social science, increasingly relying on technical language that laypersons could not comprehend easily. Theoretical research devoid of application became valorized as the primary way academics secured promotion and tenure; that attitude was passed on to students, often under the heading of "objective research."

As noted above, for most of anthropology's history, applied anthropology has not been considered as a separate branch or a specific sub-field. Rather, each of the four sub-fields (cultural, archaeology, physical, linguistics) was considered to have applied aspects. Although not yet abandoned (e.g., Bennett 1996), the views held by many anthropologists of the past generation have changed profoundly. Some anthropologists now consider applied anthropology as a distinct fifth sub-field. The reasons for this attitudinal shift vary but can in part be attributed to the growing number of anthropologists, many of them recent degree-earners, who are engaged in applied work, either full-time or part-time, both in and outside academia. The American Anthropological Association (aaa) acknowledged this change in 1983 when it recognized the National Association for the Practice of Anthropology (NAPA). Also contributing to this reorientation has been the significant theoretical and methodological contributions applied anthropology has made to the parent discipline. Together these factors have encouraged a new view of applied anthropology – one recognizing that applied work has produced a discrete body of new knowledge pertaining to the human condition that does not replicate the knowledge base of any of the other four subfields.

Definition of Applied Anthropology

What do we mean by applied anthropology? To what is it applied? In what manner is it applied – i.e., in what contexts and for whom?

By applied anthropology we mean the application of cultural anthropological concepts and perspectives, research methodologies and valuations, to social issues or problems with the goal of clarifying or ameliorating them. We also mean application and engagement by a person with anthropological training in which their anthropological training plays a substantial role, either directly or indirectly, in the activities in which that person engages.

Various kinds of applied anthropology have historically developed since the origin of the Society for Applied Anthropology (SfAA) in the U.S. after WW II and the publication of that organization's journal, *Human Organization* (originally named *Applied Anthropology)*. These have been identified as follows, although they are not always mutually exclusive:

Traditional Applied Anthropology: the impetus for the change project comes from outside the target population, perhaps by the academically-placed anthropologist whose intent is to be helpful but which seems paternalistic today;

Action Anthropology (today called Collaborative Anthropology): the host population controls the project's process and uses the anthropologist to supply information or advice;

Policy Anthropology: the goal of the research is to evaluate the outcomes of governmental (typically) policies in light of both their expected as well as unintended consequences, often with the intent of altering or developing new policies;

Practicing Anthropology: a classification that emerged in the 1980s based on the employment base of the anthropologist in a public or private organization outside of academia that seeks the kind of expertise possessed by the disciplinary practitioner);

Advocacy Anthropology: the anthropologist assumes a positive value-laden position vis-à-vis some group, organization or societal value, working for and speaking out on behalf of that group, organization or value;

Contract Anthropology: public or private organizations enlist the services of an anthropologist whose products and mode of work with them is defined by a contract (e.g., Davis 1976, 1979, 1986a, 1986b); a less discreet category than the others because contractual work can be engaged in for any purpose (cf. McNabb 1993): and,

Public Anthropology: frames and addresses social issues in an anthropological and publicly accessible manner, often with the intent of fostering social change; although extensively engaged in by cultural anthropologists in Alaska since 1973, we do not provide a focus on this use of anthropology due to its diffuse nature and space constraints.

Anthropology has been applied in Alaska to: 1) provide an understanding of the impact of economic and political policies and structures on Alaska Native populations and cultures (policy); 2) identify and clarify the nature of Alaska Native culture and society for specific policy makers (policy); 3) assist in the construction and implementation of policies and practices that more effectively deliver services or accomplish policies for Alaska Natives (advocacy, action, policy, practicing); 4) assist Alaska Natives in accomplishing their self-defined cultural goals and missions (advocacy, action); 5) often engage in the above either on a contract basis or as a Practicing Anthropologist employed in a public organization.

The "New Applied Anthropology": 1970s – 1980s

In the mid-1970s, Michael Angrosino (1976) referred to the "New Applied Anthropology" as being an anthropology that focuses on policy issues and the practice of anthropology. This multifaceted approach was mirrored in Alaska during the 1970s as swiftly as its emergence was being announced elsewhere in the U.S. through the work of Rosita Worl, Steve Conn and Steve Langdon, among others. This kind of anthropological research and activity was identified as policy anthropology, a new vision of anthropology's role in Alaska (Feldman and Langdon 1982; cf. Figure 1).

Figure 1. POLICY ANALYSIS: 5-STEP MODEL
(Feldman 1981a [Ukeles 1977:226])

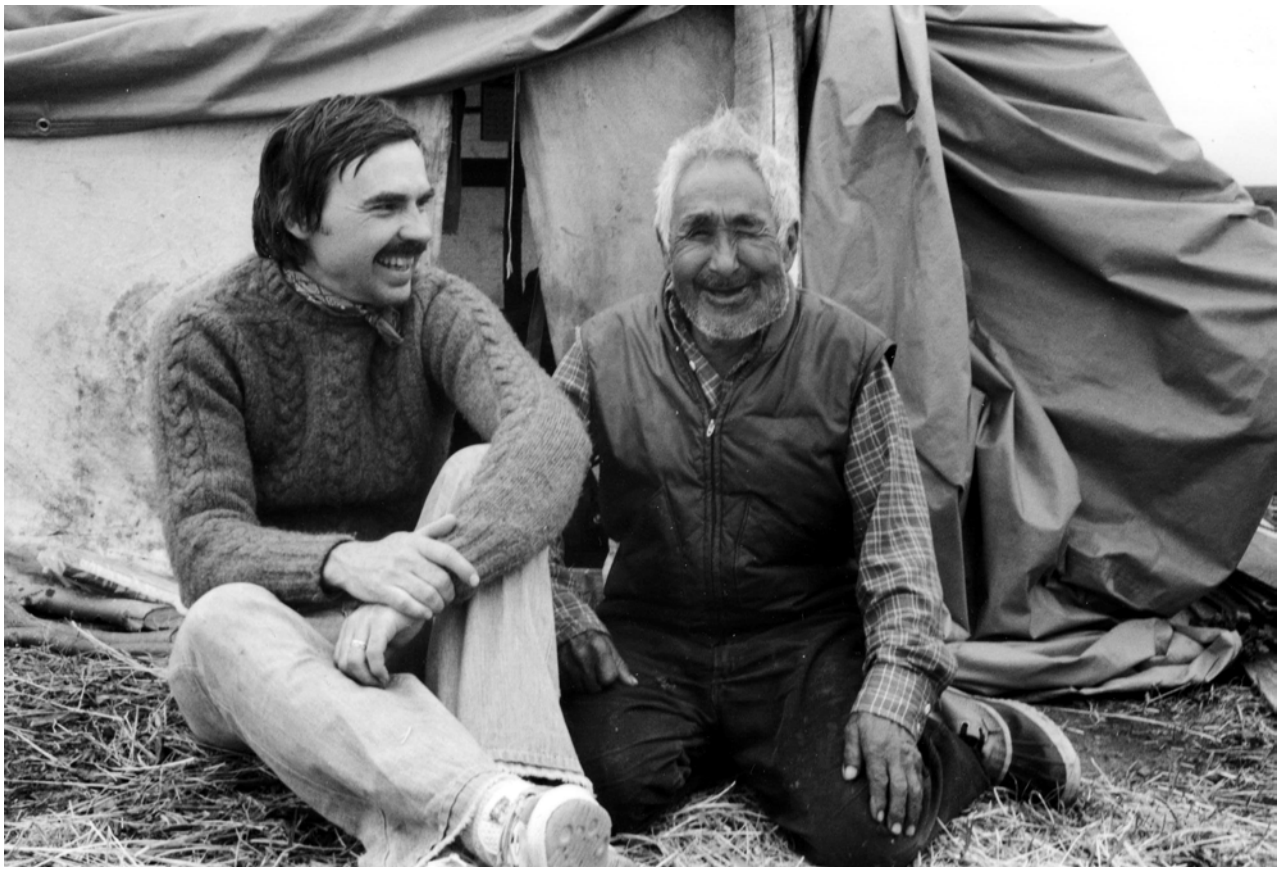
STEP ONE: assess policy-making environment

STEP TWO: identify policy issue needing resolution

STEP THREE: identify policy alternatives

STEP FOUR: identify criteria relevant to choosing among alternatives

STEP FIVE: assess pros and cons of each alternative



Kerry Feldman and Tom Carter from Buckland village at the 1980 beluga hunt on Elephant Point in Eschscholtz Bay. Project funded by the Alaska State Legislature to the Arctic Environmental and Information Data Center, University of Alaska. Rosita Worl, Principal Investigator.

The anthropologists noted above acknowledged their "value-laden" approach in contradistinction to prior anthropological work claimed to be "value-free," "objective science," that was itself in the process of being attacked by postmodern historians of science. In 1981, Langdon and Feldman organized a session at the meetings of the SfAA in Edinburgh, Scotland on "Anthropology and Public Policy in Alaska" that was published in the new journal, *Practicing Anthropology* (Feldman and Langdon 1982; Langdon 1982). In 1989 Feldman organized a session at the meetings of the SfAA on "Collaborative Applied Anthropology in the North: Alaska and Canada," reflecting the 1980s focus on anthropologists working in research teams as well as with local communities as collaborators. Among the presenters in that session were current and future applied and theoretical leaders in Alaskan anthropology: Phyllis Morrow, Chase Hensel, Steve Conn, Robert Wolfe, Taylor Brelsford, Bob Gal (National Park Service, archeology) and the prolific Steve McNabb (whose death in coastal Russian waters while engaged in research on health and social indicators was a tremendous loss to anthropology) as commentator (cf. McNabb 1989a, 1993, for his recommendation of human subjects review boards in Alaska Native rural communities to encourage collaborative research with the populations being studied). As the 1980s ended, anthropology's role as a policy science engaged in collaboratively with indigenous populations was clearly staked out in Alaska.

Since the 1970s, culture has become an important concept in major policy-making departments of Alaska government: in education, in the courts and legal system, in programs for the elderly, for appropriate care for those with mental or physical disabilities, as a pivotal concept in the raging debate regarding the appropriate allocation of subsistence fish and game on lands and coastal waters in Alaska, and more. Thirty years ago, the concept of culture was not widely regarded as relevant to public policy in Alaska. Today, the concept of culture is an undeniable force in public discourse and policy in Alaska – one that has resulted in hostility from those wanting to protect U.S. individualist values who fear the implications of culturally grounded arguments for public policy. For example, a "*Counterpoint*" comment in the Anchorage Daily News (ADN 4/11/90) attacked an editorial by the ADN that called for an amendment to the Alaska constitution to resolve the issue of priority subsistence use by Alaska Natives on federal lands:

> Certainly the Stone Age culture of Alaska's aboriginal Natives is not unique except as a remnant of times past. They should be encouraged to preserve elements of their culture they deem worthy just as survivors of other dead, dying and evolving cultures do…Preservation of cultural relics is not a proper function of government if such action diminishes the rights and privileges of the majority.

The critical *Counterpoint* comment was written by a wildlife management official who had worked for the state of Alaska from 1955 - 1978.

Have anthropologists contributed to the emergence in Alaska of culture as a potent policy factor? Or was the concept's emergence simply due to a nationally evolving consciousness from the 1960s that human institutions, products and values are always culturally defined? It is probably the result of several factors, including the work of anthropologists in law, health, education, social services, subsistence issues and more, but primarily to the insistence of Alaska Native peoples, who comprise nearly 20% of the state's population, that their cultural differences and values be respected. The economic clout of the twelve in-state, for-profit Alaska Native regional corporations created by the 1971 Alaska Native Claims Settlement Act (ANSCA) also played a role. It is difficult to determine to what extent anthropology has had a clearly identifiable impact on policy outcomes or has merely supplied information and perspective to social issues. The emphasis today, however, is clearly on empowerment of people to utilize anthropological expertise and knowledge as an instrument of their self-determination.

Professional Ethics and Applied Anthropology: New Issues After Thirty Years

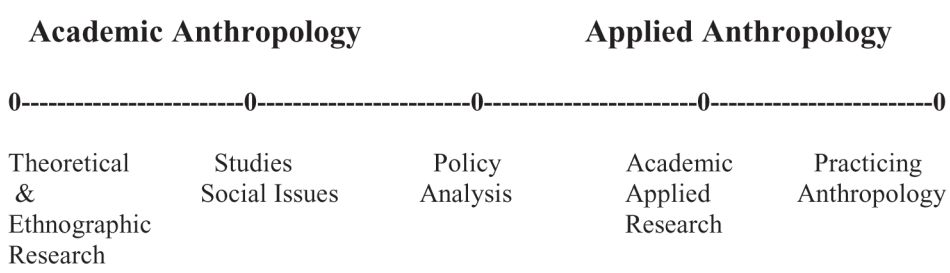
The Society for Applied Anthropology (est. 1941) developed the first statement of professional ethical principles in anthropology (1949, revised 1983). Two key principles guided those ethical concerns. First, there should be a complete disclosure of contracting agent, procedures, and products of the research to those being studied; and second, there should be a complete explanation of the possible impacts of one's research or project on those studied. This post-WW II anthropological commitment can be beset with considerable practical dilemmas today, in Alaska and elsewhere. For example, when a population is not unified in its view of a specific problem, whose interests are to be advanced and whose interests deterred? And, should anthropologists contribute their research to policy arenas such as Environmental Assessments or Environmental Impact Statements when likely negative impacts of proposed projects can be legally ignored? Before his untimely death, Steven McNabb (1989c) described in detail the problems associated with the Minerals Management Service (MMS) of the U.S. Department of the Interior's minimal use of the research he and his colleagues had produced. McNabb (1989b, 1989c) also offered powerful critiques of federal policies and their failure to utilize the social science research findings that they commissioned. The large amount of research funding available in Alaska during the 1980s was, McNabb (1993:216) noted, a "potentially insidious threat to quality research." It is now obvious to applied anthropologists that some forms of agency-sponsored anthropological research or work are required only to meet the letter of the law and the findings are not intended to play any significant role in the design of policies and practices. Another difficult circumstance arises when a researcher conducts work for a client, an agency or a private party who either desires certain findings and/or seeks to suppress certain findings. There is also the issue of a client demanding proprietary research not be disclosed to either the research population or the general public. Thirty years ago, these and other ethical issues were not as clearly identified as they are today in Alaska by applied anthropologists.[2]

THE APPLIED-THEORETICAL CONTINUUM/ ANTHROPOLOGY & THE LAW: "CULTURE" AS A POLICY CONCEPT

The continuum Ervin (2000) postulated between "academic/theoretical anthropology and applied anthropology" (Figure 2, as modified for this paper) is only minimally useful in understanding applied cultural anthropological work in Alaska. In Ervin's continuum, theory and method learned in academic programs at the left of the continuum, including ethnographic research, are the foundation for ever more intensive application as one moves to the right of the continuum until reaching Practicing Anthropology, at which point the anthropologist is employed outside academia. However, the limitation of Ervin's model is the implication, visually at least, that there is a real separation between the locations on the continuum. As the work of anthropologists described in this paper demonstrate, there isn't necessarily any real separation today between "theoretical" and "applied" cultural anthropology (certainly not between "applied" and "ethnographic research," in that all cultural anthropologists rely on ethnographic methodology) because both are en-

[2]The U.S.-based ethical guideline for conducting research in the Arctic was prepared by the Social Science Task Force of the U.S. Interagency Arctic Research Policy Committee (IARPC), approved by the IARPC on June 28, 1990 (Arctic Research of the United States [1995]).

Figure 2 Applied Anthropology Continuum*



* We changed the title of Ervin's model simply to "Applied Anthropology Continuum." The definition we offered earlier helps distinguish "applied anthropology" better than a continuum model that uses place of employment as a critical factor.

gaged in by the same individuals, often on the same project, and the researcher might be situated in a university or employed outside academia. The continuum model serves a useful purpose if one understands that applied anthropologists might engage in all activities in the model, but could be employed within or outside of academia.

This continuum can be seen in anthropology and law work in Alaska. Applied anthropology of legal practice *per se* (and not litigation about issues within the legal arena in which numerous anthropologists have functioned as expert witnesses) was undertaken in regard to various significant issues in Alaska during the past 30 years, the most notable being "bush justice" debates and the definition of "subsistence" use of fish and game resources. Stephen Conn began to be involved in the issue of "bush justice" in the 1970s while he was a faculty member of the Justice Center at the University of Alaska Anchorage (UAA) (e.g., Conn 1982, 1985, 1986, 1989 [summarized in Feldman 1981a]; Conn and Langdon 1988). Conn holds a degree in law and an M.A. in anthropology from UCLA, having engaged in anthropology and legal work among Lower 48 Native Americans prior to his work in Alaska. His application of anthropology to legal issues in Alaska involved, first, the profound problems associated with applying U.S. legal concepts and institutions to Alaska Native villages, and, second, proposing ways in which the legal process could better serve Alaska Natives by establishing institutions and practices that insured adequate understanding and assisted local communities in adjudicating their own affairs. Conn strongly advocated empowering local institutions and practices, and his efforts helped to prompt the Alaska legal system to examine its assumptions and practices. In the early 1980s, when the Alaska Native tribal sovereignty movement was in its infancy, Conn wrote a seminal paper and delivered lectures to Alaska Native village leaders across the State in which he espoused a "just do it" philosophy for tribal governance. In effect, he told Alaska Native leaders that the future of "tribes" as formal institutional players in the American political system would be determined by how they acted to make visible tribal existence through practice, without regard to federal or state recognition.

Serving as another significant example of anthropology's contribution as a policy science vis-à-vis law, and of the continuum that ideally exists between practice and theory, is Phyllis Morrow's (1993, 1994) analysis of the general ignorance and inattention of the state's legal system to/regarding cross-cultural communication. By examining the cultural miscommunication and confrontation apparent in the legal system, Morrow drew attention to how Yup'ik Eskimo speech patterns reflect ideas about the value and force of speech that are culturally specific to Yup'ik defendants, and how those patterns differ in significant ways from the cultural assumptions that inform the speech and subsequent actions of the state's judicial system. When acted out in the courts, the cultural preferences of attorneys and judges find Yup'ik speech patterns to be evasive and imprecise when they are, from a Yup'ik perspective, accurate and carefully articulated. Morrow called attention to the need for the police and courts to use highly sophisticated translators with Central Yup'ik speakers if minimal standards of justice were to be accomplished. Thus, through applied engagement, Morrow not only contributed to theoretical advancement in legal anthropology, but also offered specific policy recommendations towards the improvement of Alaska's judicial framework.

Morrow and Hensel (1992) analyzed the hegemonic dominance of Western legal concepts, folklore and beliefs vis-à-vis Yup'ik cultural discourse and logic in public arenas of "contested terminology" (i.e., "subsistence,"

Phyllis Morrow and Chase Hensel processing king salmon (for smoked strips), Mission Road, Bethel,1981.

"conservation," "customary and traditional use"). Their essay is a stunning example of the continuum between theoretical anthropology and the uses to which the anthropological paradigm can be put in Alaska. The authors also use ethnographic and theoretical illustrations from outside Alaska (from Africa, Canada, a Muslim community, and Europe) to frame and to support their argument that Yup'ik people are being forced to redefine their culture in Western categories, as well as to narrow their customary practices to conform to those categories. Their essay is a profound contribution to both theoretical socio-linguistics and applied anthropology. Through active engagement, Morrow and Hensel were able to gain a deeper understanding that could only be attained through an "immersion of doing" (Baba 2000:32), rather than by abstract intellectual manipulation of pre-existing ideas. Morrow and Pete (1991) provided another example of applied law and anthropology research in their analysis of customary Yup'ik adoptions vis-a-vis Western law.

Significant in this anthropological involvement with legal issues related to Alaska Natives is the work of Rosita Worl, a Tlingit anthropologist. Worl assisted in drafting the 1978 Alaska state legislation that made subsistence the priority use of Alaska fish and wildlife resources. She was instrumental in establishing a Division of Subsistence within the state's Department of Fish and Game and in having Tom Lonner appointed as its first Director. Subsequently, Worl and Langdon identified the important dimensions of distribution, sharing and exchange of subsistence products as crucial dimensions of how the subsistence system worked (cf. Berger 1985). Langdon (1984) also explained for the Berger commission how spiritual and ceremonial aspects were integrated into subsistence belief and practice. The 8-point criteria of customary and traditional use of subsistence resources used in the mid-1980s by the State Boards of Fish and Game gradually fleshed out characterizations of the dimensions and distinctiveness of Alaska Native subsistence practice from sport and commercial uses that Worl and Langdon emphasized (cf. Wheeler and Thornton, *this issue*). Later, the term "personal use" was created to distinguish the non-Native individual household system of hunting for one's family table from the Alaska Native subsistence system (Fall 1990).

When it was discovered that the Alaska courts were handing out significantly longer sentences to Alaska Natives for similar offenses compared to Caucasian defendants, analysis of the process of sentencing revealed the problem. It was not due to bias on the part of magistrates but to the practice of having probation officers prepare the overview of a defendant's history that was reviewed by a magistrate prior to sentencing. Probation officers might note that an Alaska Native defendant was unemployed or only seasonally employed, whereas in reality he was primarily a subsistence hunter and fisher, and thus working but not "employed." Worl provided educational lectures regarding Alaska Native culture to the Alaska Court system.[3] In 2002 Worl received one of the first human rights awards given by Cultural Survival, an international organization based in Cambridge, Massachusetts that promotes the rights of indigenous peoples (http://www.sealaskaheritage.org/worl_honored.htm).

In addition, anthropologists have been called on as expert witnesses in court cases. Their testimony was provided both for and against Alaska Native groups and other minorities seeking legal redress for perceived illegal actions by corporations and the state of Alaska, and regarding state statutes that contradict constitutionally guaranteed freedom of religious practice rights (e.g., the prohibition against hunting of moose out of season by Alaska Natives for mortuary potlatch rituals), and more. Feldman (1980) evaluated his negative experiences as an expert witness for Paugvik Village Corporation on the Alaska Peninsula in a landmark water rights case vis-à-vis the state of Alaska and a cannery, describing the difficulty of explaining to a court how Native peoples can acculturate to some aspects of western economic life while continuing to be Native in subsistence practices. The most significant use of anthropologists as expert witnesses in a legal dispute occurred after the 1989 Exxon Valdez oil spill (see below).

[3]Kerry Feldman was also invited in the 1980s to deliver workshops on cultural awareness to employees of the Alaskan legal system, including probation officers and prison employees.

FEDERAL LAND AND WATER USE ISSUES: NEPA, ANILCA & FEDERAL AGENCIES IN ALASKA

Two federal legislative enactments besides ANCSA brought applied anthropological research, methods and theory into the core of state social, political and economic decision-making: the National Environmental Policy Act (NEPA) of 1969 and the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. The purposes of NEPA were:

> To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality (Sec. 2 [42 USC § 4321]).

As a means to secure this end, NEPA specified:

> …all agencies of the federal government shall utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment (Sec. 102 [42 USC § 4332, A]).

ANILCA decreed that two-thirds (241.6 million acres) of Alaska's 364 million acres were put into new federal jurisdictions; parks, preserves, refuges, wild and scenic rivers among them (Callaway and Miller-Friend 2001:30). ANILCA also included a mandate to manage those lands in specific ways, one of which was to maintain "customary and traditional" uses by Alaska Natives of those lands, and gave a priority for subsistence harvests to rural residents. When in the1989 Kenaitze decision the Ninth Circuit Court declared, contrary to ANILCA, that under the Alaska constitution all state residents have equal access to harvests for personal use, federal agencies began the rocky road of managing subsistence hunting on federal public lands. The Federal Subsistence Management Program, begun in 1991 for the management of wildlife, expanded to include fisheries in navigable waters in 1999. As federal managers, the National Park Service, the Bureau of Land Management, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture Forest Service, in addition to the Bureau of Indian Affairs, are the five lead agencies in the interagency Federal Subsistence Management Program (Mason and Cohen 2001:33).

U.S. Fish & Wildlife Service

The U.S. Fish & Wildlife Service (USFWS) has always served a conservationist ethos or mandate since its origins by Congress in 1871 as the U.S. Commission on Fish and Fisheries, "charged with studying and recommending solutions to the decline in food fishes and to promote fish culture" (http://training.fws.gov/history/origins.html). In 1885 its name was changed to the Bureau of Biological Survey with plants and animals added to its mandate. The emphasis on the research paradigms and disciplinary values of biologists that dominates USFWS in Alaska today is historically grounded in the 1885 change in the agency's name. In 1918 the Migratory Bird Treaty Act protected migratory birds from hunting. In 1939 the Bureaus of Fisheries and Biological Survey were moved to the Department of the Interior and combined in 1940 to create the Fish and Wildlife Service. Pelican Island, Florida and other early Federal wildlife reservations were re-designated as "National Wildlife Refuges" in 1942. Just as significant for Alaska lands and indigenous peoples today, the "Wilderness Act of 1964 established the National Wilderness Preservation System and authorized the U.S. Congress to designate selected tracts of land as 'wilderness'. . ." (Pratt 1994:337). In 1980, ANILCA conservation legislation resulted in thirty-five Alaska "Wilderness units" being added to the National Wilderness Preservation System: 56 million acres or about 15% of the entire state became designated as "Wilderness," within nine new refuges and seven other refuges that were expanded. ANILCA, coupled with the 1997 National Wildlife Refuge System Improvement Act, provided the first holistic legislation for the management of the USFWS Refuge System, attempting to clarify the compatibility standard for public uses of refuges, and requiring the completion of comprehensive plans for every refuge. Providing for subsistence uses became a mandate for all refuges in Alaska except the Kenai Refuge. Title VIII of ANILCA mandated that subsistence uses have a priority over commercial and sport uses on federal public lands in Alaska.

Cultural anthropologists became employed by USFWS only after 1989 when the State of Alaska lost its management responsibilities of fish and game on federal public lands (described above). Until then a social scientist (not an anthropologist) had worked for USFWS to see that ANILCA was upheld on federal lands. Helen Armstrong, a cultural anthropologist, moved from MMS to the USFWS Office of Subsistence Management in

1991, after a year at the Bureau of Land Management (BLM) working on the Environmental Impact Statement for Subsistence Management for Federal Public Lands in Alaska. Taylor Brelsford, George Sherrod, Rachel Mason, Patricia McClenahan (retired in 2003), and Laura Jurgensen have worked as cultural anthropologists for the USFWS, as well. Currently, Helen Armstrong and Patricia Petrivelli (of Unangan descent) work as cultural anthropologists in the regulatory process. Their work focuses on reviewing and analyzing proposals to change customary and traditional use determinations for fish and wildlife subsistence use on Federal public lands (USFWS Refuges, National Parks, National Forests, and BLM lands). Proposals can be made by anyone, but are primarily made by Alaska Native groups, regional councils, or other subsistence users. Anthropologists also work with biologists on revising fish and wildlife regulations for subsistence hunting and fishing on federal public lands. The anthropologists, biologists, and council coordinators serve as support staff to the regional advisory councils as members of each of the 10 regional teams serving the regional councils. Title VIII of ANILCA required the establishment of the Regional Advisory Councils to provide recommendations and information to the Federal Subsistence Board (FSB) on all matters relating to subsistence uses.

The USFWS Office of Subsistence Management also has a cultural anthropologist, Polly Wheeler, in its Fisheries Information Service (FIS) division. The FIS anthropologists facilitate the social science project selection, provide assistance in developing FIS project proposals and investigation plans, prepare technical reviews, coordinate outside scientific reviews, and develop recommendations for the FSB. They also oversee and track fishery monitoring projects and ensure that harvest monitoring and traditional ecological knowledge components of the resource monitoring program are effectively designed. The FIS anthropologists coordinate closely with social science fisheries partners, social science investigators in state and federal agencies, as well as in the tribal and non-governmental organizations to promote successful projects that utilize sound methodologies and produce data that are applicable in the management area.

An example of the complex issues anthropologists examine at USFWS was the request by Iñupiaq inhabitants of Kaktovik to harvest a moose on federal lands for their Thanksgiving and Christmas feasts. Helen Armstrong viewed their request as flowing from the customary and traditional Messenger Feast of the region. Biologists argued that Christmas and Thanksgiving are not customary among the Iñupiaq and were also concerned that other communities statewide might request similar ceremonial harvests. Armstrong pointed out that Christmas and Thanksgiving have been celebrated for over 100 years in the region and are now customary and traditional holidays. Additionally, the federal subsistence regulations do not require that the ceremonies be Native traditions, only that they are ceremonial. Biologists also were concerned with over-harvesting moose in the area because the moose population has been quite low. The FSB adopted this proposal and allowed two moose to be harvested by Kaktovik villagers. Discussion surrounding this proposal highlighted the differences between the approaches taken by the two disciplines: biologists are charged with following conventional wildlife management principles and anthropologists work to assure that customary and traditional practices are allowed.

Under the Federal Subsistence Management Program, the Regional Councils, which are composed of local subsistence users, make recommendations to the FSB on regulatory proposals. The inter-agency FSB is mandated by Title VIII of ANILCA to adopt Regional Council recommendations unless there are conservation concerns or they would have a negative effect on subsistence users. As a result, the FSB adopts almost all of the proposals supported by the Regional Councils. The FSB's willingness to adopt regulations proposed and supported by the Regional Councils, as well as their willingness to adopt more inclusive designated hunter permits and community harvest regulations, has generally made Natives in Alaska supportive of the Federal Subsistence Management Program. Recently, Wolfe and Fischer (2003) prepared a report for USFWS that recommended methodologies for identifying rural and non-rural communities in Alaska, which is a critical part of the federal subsistence management program.

Alaska Natives have sometimes viewed the USFWS negatively, even when USFWS recommendations support Native subsistence practices but these recommendations are superceded by Congressional decisions. Pratt (1994) describes the resentment by Cup'ik Eskimo on Nunivak Island toward USFWS (and the federal government in general) due to the designation by the federal government of the lower half of their island as a Wilderness Area in 1980 (600,000 acres designated). This conservationists' victory was achieved in the view of the Nunivak Island Eskimo by the federal government's ignoring of their traditional use of the entire island for subsistence purposes and their more recent use of the southern area to also provide income-producing hunting and guiding services. The USFWS was blamed locally even though the agency opposed wilderness designation. Cabins are not allowed in Wilderness Areas (except those

erected by USFWS, able to be used by Native guides and their clients only in emergencies), in accordance with USFWS refuge policies and the 1964 Act's definition of a wilderness as "…an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain" (Pratt 1994:337). Nelson (1983:246, cited in Pratt 1994:338) described this cultural conflict succinctly for another Alaskan area: "The fact that Westerners identify this remote country [a Koyukon Athapascan region in interior northwestern Alaska] as wilderness reflects their inability to conceive of occupying and utilizing an environment without fundamentally altering its natural state." All federal agencies in Alaska charged with managing any subsistence activity on federal lands have now taken a more inclusive approach of Alaska Native views, and cultural anthropologists are engaged in documenting those views in virtually every federal agency. However, Congress can ignore the recommendations of a federal agency, which is what occurred in the designation of Nunivak Island's southern half as a wilderness area.

Cultural anthropologists in Alaska continue to engage in applied work within competitive worldviews of "nature" and our appropriate relationship to it. Western conservationists, biologists, developers, land and resources managers in addition to urban sports hunters/fishermen in general view "nature" as a concept that excludes humans, but over which humans have (even divinely given) managerial responsibilities and rights. Indigenous peoples might not even have a term for "nature" because they view humans as part of the world, with responsibilities toward "nature" based on spiritual beliefs. The latter are not necessarily conservationist beliefs but might appear to be so from a western perspective.

National Park Service

The complex history of the National Park Service involvement with subsistence issues in Alaska is provided by a NPS historian (Norris 2002). The impact of ANCSA and ANILCA on applied cultural anthropology would require a separate paper to fully describe. Here we will highlight some of the major contributions of applied cultural anthropology in the tasks flowing from ANCSA and from ANILCA that involve nine National Parks and Monuments and ten National Preserves in Alaska. From 1978 to April 1983, NPS and the Bureau of Indian Affairs (BIA) shared responsibility for implementing the 14(h)(1) program of ANCSA "that allowed ANCSA-created Alaska Native regional corporations to receive a portion of their acreage entitlements in the form of historical places and cemetery sites" (Pratt 1992:74). The BIA ANCSA Office (established in 1978) worked with professional staff provided by a division of NPS (the Anthropology and Historic Preservation branch of the Cooperative Park Studies Unit [AHP-CPSU]) who directed the anthropological and archeological aspects of the research until NPS transferred its ANCSA 14(h)(1) responsibilities to the BIA in 1983. AHP-CPSU, under the leadership of Zorro Bradley, designed and conducted cultural resource studies to assist in planning for the new Alaska parks. A major focus of this program concerned Alaska Native uses of park lands. A number of significant studies appeared through this program such as Holly Reckord's two volumes on Ahtna (Athabascan) uses of land and resources within the Wrangell-St. Elias National Park area (Reckord 1983a, 1983b), among her reports on non-Native users. The ANILCA functions of the AHP-CPSU were transferred to the Alaska Regional NPS Office in Anchorage in 1983. No cultural anthropologist worked in that office at that time, although ethnographic studies were conducted under the aegis of the Regional Archeologist.

The first such study (1985-1992) was the Lake Clark Ethnographic Project, conceived and developed by Regional Archeologist Craig Davis. In 1986, Ted Birkedal became the Regional Archeologist and assumed administrative responsibility for the Lake Clark Ethnographic Project as well as advocacy for applied cultural anthropology within the Division of Cultural Resources. The Lake Clark Ethnographic Project resulted in three major products: 1.) *Nuvendaltin Quht'ana: The People of Nondalton*, a general ethnography of the Dena'ina of the Lake Clark National Park region by Linda Ellanna and Andrew Balluta (1992); 2.) An enhanced and expanded edition of *Tanaina Plantlore: An Ethnobotany of the Dena'ina Indians of Southcentral Alaska* by Priscilla Russell Kari (1987); and, 3.) "*The Dena'ina Fish Cache,*" a collaborative interpretive video produced with the Native elders of Nondalton. The reason behind the production of these products and others of the time (i.e., Gudgel-Holmes's [1991] Native place name study in the Kantishna Drainage), according to Birkedal (2003, Personal Communication), was to fulfill the mission of the emergent service-wide cultural anthropological programs of the NPS. This mission is to identify, protect, and interpret cultural and natural resources that have traditional value for contemporary communities with cultural ties to National Park units.

In 1991, in his new capacity as Chief, Division of Cultural Resources, Birkedal was allotted special Alaska Science Initiative monies to establish a new position: Re-

gional Cultural Anthropologist, Alaska Region. Tim Cochrane filled this position and developed an effective National American Graves Protection and Repatriation Act (NAGPRA) program for the region, continuing to promote the growth of anthropology, especially through cooperative agreements and contracts with university-based anthropologists. In the late 1990s, Don Callaway replaced Cochrane as Senior Cultural Anthropologist in the newly re-structured Cultural Resources Team in the Alaska Support Office. The re-structuring of the mid-1990s gave more power to the parks throughout the NPS, and regional staff became advisory only. Callaway, who came from the former Division of Subsistence within NPS, gained responsibility for both cultural heritage studies as well as contributing anthropological expertise to subsistence decision-making. Currently, the Cultural Anthropology unit in Anchorage contains three anthropologists: Don Callaway, Janet Cohen and Rachel Mason, as well as Herbert Anungazuk (who is also an Iñupiaq whaling captain from Wales, Alaska). Other full-time applied cultural anthropologists are also in parks statewide, including David Krupa at Gates of the Arctic National Park and Preserve and Yukon Charley Rivers National Preserve, Eileen Devinney at the Western Arctic Parklands, Karen Gaul at Lake Clark National Park and Preserve/ Katmai National Park and Preserve/Aniakchak National Park and Preserve, and Barbara Cellarius at Wrangell-St. Elias National Park and Preserve.

NPS applied cultural anthropology tasks include research on Customary and Traditional Uses on federal lands, when communities or individuals request access to specific resources such as brown bear or all fresh water fish in a geographic area based on prior use of the resource (Mason and Cohen 2001:34). In this way, community residents acquire status as federally qualified rural subsistence users of a park, preserve or other federally owned land. In addition, ethnographers provide research that establishes specific park "Resident Zone" communities and individuals who, with that status in hand, are not required to have a subsistence use permit prior to engaging in subsistence activities on NPS-managed lands. Traditional Ecological Knowledge research is conducted as part of the Federal Subsistence Management Program that oversees a Fisheries Research and Monitoring Program (Mason and Cohen 2001:34). Likewise, as in national parks in the Lower 48, the Alaska Region of NPS conducts Ethnographic Overview and Assessments that "summarize existing data and identify gaps in the available ethnographic information about groups affiliated with the parks" (Mason and Cohen 2001:34). The NPS Cultural Landscapes program currently involves ethnographic projects at the Klondike-Gold Rush National Historical Park, Glacier Bay National Park and Preserve, and the former Red Light District in Seward, Alaska; collaboration is underway on an international study of ethnographic landscapes across the circumpolar north (Mason and Cohen 2001:35). Oral histories and place name studies have also been funded (e.g., Callaway and Miller-Friend 2001). Ethnographic videos were produced by NPS in 1992 and 1994.[4] In addition, the Shared Beringian Heritage Program:

Tiger Burch interviewing Amos Hawley regarding family life for his dissertation, 1965.

> …continues to foster research and community exchanges across the Bering Strait between the U.S. and Russia. The funded projects are representative of the types of activities that would be enhanced and encouraged by the eventual designation of an international park linking conservation units in Alaska and Chukotka, Russia. In 2000 and 2001 the NPS joined with the

[4]NPS in progress reports and publications include those: on Inupiaq by Anderson et al. (1998), Brewster and Schneider (n.d.), Burch (1994, 1998, 1999), Magdanz, Ramoth and Lee (2000), Magdanz and Lee (2000), Magdanz (2001), Schaaf (1996), North Slope Borough (2000); on Denali National Park and Preserve by Haynes, Simeone and Andersen (In Progress), Gudgel-Holmes (1990); on Aniakchak National Monument by Morseth (1998); on Tlingit (esp. in relation to Glacier Bay National Park) by Langdon (2001), Gmelch (1982, 1990), Langdon and Brakel (2001) Theodoratus, (n.d.), Thornton (In Progress), Worl (1996, and n.d.), Austin (n.d.), Ramos (2001), Hunn et al. (2002) on sea gull harvests in Glacier Bay National Park, and Thornton (1998) on Sitka National Historical Park; on Kenai Fjords National Park by Fall and Stanek (1997), Galginitis (1996); on Katmai National Park and Preserve by Branson (1999), Clemens and Norris (1999); on the Han of interior Alaska by Mishler and Simeone (2003), Nelson, et al. (1982) on the Koyukon people of Interior Alaska; on the Klondike Gold Rush by Thornton (2004), and others on Healy Lake by Callaway (2001).

> Chukotka Academy of Sciences and the Chukotka Native organizations to study the economic consequences of the transition to a market economy on the subsistence lifestyle and the traditional use of natural resources on the Chukotka Peninsula (Arctic Research of the United States 2002: 36-45 [authored by but not credited to Ted Birkedal]).

Beringian research (Alaska and Russian communities) includes work by Callaway (2002), Ellanna and Sherrod (2004), Martin (n.d.), Schweitzer (1993), Schweitzer and Golovko (n.d.), and Simon and Gerlach (1991).

There are as many applied cultural anthropologists in the Alaska Region of NPS as in all of the Lower 48 NPS units combined, because the NPS Superintendents in Alaska recognize the usefulness of ethnographic information in making decisions regarding subsistence use of parks by customary and traditional users of those lands (Don Callaway 2003, Personal Communication). The continuum between academic theoretical or abstract anthropology and applied anthropology is clearly seen in the NPS history in that theory and ethnography contribute to making policy decisions, and applied questions result in new knowledge that is of use to the discipline of anthropology. The strong links NPS has made with Alaska Native communities in data-gathering and writing illustrates the improved quality of data that can result from applied work that is perceived by Alaska Native or other peoples as being potentially of benefit to them. Interpretive errors can be corrected on the spot. One of the NPS Cultural Anthropologists is Herbert Anungazuk, an Iñupiaq speaker and subsistence user/whaling captain from Wales. His background is non-academic but his contribution to northern region study is considered indispensable by the NPS Cultural Anthropology unit.

Minerals Management Service (MMS)

The interest of the federal government and oil companies in developing oil reserves found in 1968 at Prudhoe Bay and in moving the oil south to Valdez via the trans-Alaska pipeline, was the catalyst not only for the resolution of Alaska Native land claims in 1971 (which had been left unresolved in the 1867 purchase of Alaska from Russia) but also for numerous anthropological studies from 1975 to the present. (See Dixon [1978] for the impact of the construction of the Alaska oil pipeline on the city of Fairbanks, Naylor and Gooding [1978] for Alaska Native employment in the construction of the trans-Alaska pipeline, and Jorgenson [1990] for the negative impact of oil exploration and development on three northern Eskimo villages, a study based on funding from MMS). Federally owned off-shore oil reserves were also of interest. The legislative foundation for outer continental shelf (OCS) research was the Outer Continental Shelf Lands Act of 1953 (OCSLA) (as amended numerous times). OCS land is defined as submerged land beginning three nautical miles offshore that is claimed by the U.S., and extending offshore for about 200 nautical sea miles. The state of Alaska owns submerged land up to three miles off-shore. The Minerals Management Service (MMS) was established in 1982 by the Secretary of the Interior to further implement OCS legislation. Since then, MMS has devoted significant funding to environmental studies - more than $650 million to over 900 research projects, including over 160 in Alaska (http://www.mms.gov/eppd/socecon/techsum/alaska.htm) – at least 66 involving cultural anthropologists (e.g., Stephen R. Braund and Associates 1988a, 1988b), driven by both OCSLA and NEPA legislation.

> Numerous amendments were incorporated in the Outer Continental Shelf Lands Act amendments of 1978 (P.L. 95-372). Title II of these amendments provides for the cancellation of leases or permits if continued activity is likely to cause serious harm to life, including fish and other aquatic life. The Act also stipulates that economic, social, and environmental values of the renewable and nonrenewable resources are to be considered in management of the OCS. In addition, "Since exploration, development and production of OCS minerals will have significant impacts on coastal states and other affected states, and recognizing the national interest in the effective management of the marine, coastal and human environments, Congress declared that: these states and their local governments may need assistance in protecting their coastal zones and other areas from adverse effects …" (http://laws.fws.gov/lawsdigest/outcont.html).

The socio-political complexity of a federal agency that oversees 7,600 active leases on 40 million acres in OCS waters of the U.S. (http://www.doiu.nbc.gov/orientation/mms2.cfm) is obviously a topic beyond the confines of this summary of applied cultural anthropology in Alaska since 1973. Little revenue has been produced from MMS OCS oil production in Alaska. The federal government does receive royalties from the state of Alaska-based Northstar oil field because the oil reser-

voir extends under coastal waters into OCS land and oil reserves.[5]

As has become obvious to most anthropologists familiar with OCS/MMS actions, the agency is required to identify and analyze probable or possible negative impacts related to oil development assessment and leasing for exploration but not necessarily to ameliorate them, or to deny development due to them. Since 1982, though, MMS has pursued a vigorous outreach program, and the agency consults often with stakeholders on developing new mitigation strategies.

The first OCS lease sale in Alaska in 1976 was preceded by a contentious relationship between OCS Alaska and the anthropologist who prepared the socio-cultural environmental impact draft prior to the lease sale (cf. Feldman 1981b). Feldman became part of the state of Alaska's legal suit to halt OCS lease sales in the 1970s until adequate protection of affected coastal, mainly Alaskan Native, communities could be assured. The final Environmental Impact Statement (EIS) for that sale altered Feldman's contracted report regarding his estimate of high impacts on coastal communities in Southeast Alaska due to oil exploration and discovery. (A federal court in Washington, D.C. ultimately ruled against the state of Alaska, concluding that national interests justified the lease sale.) Feldman organized a session at the 1976 annual meeting of the Alaska Anthropological Association regarding ethics and oil lease EIS research, and invited OCS personnel to participate. The anthropologically empathetic OCS archeologist who attended pointed out the different notions of "author" of EIS reports held by academics and federal agencies. (OCS viewed itself as the 'author' of any EIS it issued regardless of who the individual scientists might be who prepared the EIS documents; OCS therefore felt it had the right to alter any high/low impact opinions in a contracted report so that they conformed to the OCS's overall position regarding social and cultural impacts of oil lease sales) (Feldman 1981b). This contentious experience was followed by the creation in the OCS of a fulltime position for a socioeconomic/cultural impact assessment professional, and eventually the creation of MMS. At that time, the OCS office in Alaska viewed its role as preparing OCS lands for lease sale regardless of the perceptions of local inhabitants that such activity would harm them socially, culturally and economically. That completely pro-development, environmentally indifferent, and probably racially charged attitude has been changed over the past 30 years, as described below. The National Academy of Sciences report (National Academy of Sciences 1994) that reviewed the adequacy of environmental information for OCS oil and gas decisions in Alaska included an Alaskan anthropologist (Steve Langdon) as one of the 15-member National Research Council committee.

Anthropologists have been willing to prepare MMS Environmental Impact Statements for over 25 years because the opportunity provided funding for basic research and because language might be written into the permit or lease stating what would be done to mitigate exploration and development impacts of oil resources deleterious to Native people. For example, today a lease might require community observers to be stationed on oil rigs to look for oil leaks, or, no drilling would be allowed during broken ice conditions offshore, or, seismic activity would not be allowed during the bowhead migration so as not to deflect the whales or cause subsistence whalers to travel further out to sea to harvest them (Michael Burwell 2003, personal communication).[6]

Currently, MMS prides itself on having "a trust relationship with Alaska Natives" (Michael Burwell 2003, personal communication). Burwell thinks that because the MMS office in Alaska is a relatively new Interior Bureau, it suffers less from historical precedent and can, in some ways, be more flexible in developing an outreach program. This situation encourages the agency to pursue "a broad outreach process with Alaska Native communities, and more dialogue with subsistence whalers and hunters to identify studies that need to be done

[5]As of 2001, 26,420 tracts of OCS land were offered for lease, 1,621 tracts were leased to oil companies, 83 wells were drilled, and only 2 wells resulted in planned production; there are no producing wells yet in OCS Alaska. The Beaufort Sea has 55 current leases, plus 34 new leases recently acquired in the Beaufort Lease Sale 186 (9/24/03) and there are 2 more in Cook Inlet. The remainder of the leases have either expired or been turned back to the federal government. Nevertheless, OCS leasing in Alaska has brought in hundreds of millions of dollars in lease sales alone, and 27% of MMS 8 (g) monies—those monies collected from revenues generated from federal lease sales that lie within 3 to 6 miles offshore of the Alaska coast—since 1982 have contributed substantial revenues to the State of Alaska. The State of Alaska receives 27% of all revenues generated as a result of federal leases that lie within 3 – 6 miles offshore of the Alaska coast, and 50% of this money is funneled into the Alaska Permanent Fund (MMS Alaska OCS Region News Release February 20, 2003).

[6]Anthropologists who have worked in the OCS or MMS Environmental Studies sections include Chuck Smyth, Tracy Andrews, Don Callaway, Ed Glazier and Harry Luten. Currently, the Socioeconomic Specialist for Environmental Assessment in MMS is Michael Burwell who holds an MFA degree in writing and is currently pursuing a B.A. in anthropology at the University of Alaska Anchorage. He began working at MMS in the mid-1980s as an editor, then technical editor of Environmental Impact Statements, and currently writes EIS and other documents, maintaining personal contact with local communities (mainly Alaska Native communities) on the North Slope and in the Cook Inlet region. He also works with other federal agencies responsible for managing key biological resources (e.g., with the U.S. Fish and Wildlife Service vis-à-vis natural resources such as polar bears, birds, sea mammals on federal land in Alaska and with the U.S. Bureau of Land Management, the primary agency responsible for onshore oil leasing on federal land in Alaska).

regarding their questions about developmental impacts of oil leasing." It is not a co-management relationship, but the recent direction of federal agencies in Alaska is toward more agency-stakeholder dialogue. More recently, federal agency-stakeholder dialogue has been strained by the BLM's efforts to rewrite existing mitigation for leasing in the Northwest NPR-A.[7]

Michael Burwell, Socioeconomic Specialist for Environmental Assessment at the Minerals Management Service, Anchorage.

Burwell writes subsistence and environmental justice analyses, as well as socio-cultural impact analyses related to MMS activity, and assisted the U.S. Bureau of Land Management office in preparation of its Northeast and Northwest NPR-A lease sale EISs. One of the results of the work of MMS and NOAA, National Marine Fisheries Service management in collaboration with the AEWC to protect arctic subsistence whaling is that there is not a community in the Beaufort Sea region that has not landed a whale, according to Burwell, since 1994. The whaling quotas that were established in conjunction with the Alaska Eskimo Whaling Commission have by-and-large been met. What is unknown is the total environmental impact of oil exploration activity on the entire arctic land/ocean region, in part because no overall study has been commissioned. This is due to how the territory is divided among various federal jurisdictions: some land is managed by the BLM under National Petroleum Reserve-Alaska (NPR-A) designation, other land is designated as Arctic National Wildlife Refuge (ANWR [Fish & Wildlife Service]), while other areas are under jurisdiction of the National Park Service. The NPR-A was set aside by President Harding in 1923 for possible oil exploration and development; it encompasses an area the size of the state of Indiana. Nearly $169 million has been spent on exploration leases, with a goal now of pumping oil from the eastern edge by 2008 (ADN April 16, 2003, p. A-1). The ecosystem(s) of the entire arctic region from Canada to the Bering Sea and from the Arctic Ocean south to the Brooks Range have never been assessed as a whole vis-à-vis changes in sea mammal productivity and subsistence harvests, caribou productivity and migrations, polar bear habitat use, waterfowl migrations, freshwater fish stocks and in the abundance or decline of other natural resources crucial to a subsistence lifestyle. The entire area is subject to, and could experience, oil and gas exploration and development in the coming decades. MMS maintains an open dialogue with Alaska Native communities because it has to. Drilling on the Alaskan offshore has traditionally been unpopular with subsistence whalers and this has made MMS in Alaska particularly sensitive to the concerns and issues of Arctic coastal communities. As a result, traditional knowledge of arctic communities is now taken seriously by MMS, according to Burwell, after many years where local and indigenous views were not included in Environmental Impact statements. Now traditional and local views and concerns are documented in sociocultural, environmental justice, and subsistence impact assessments, encouraging Native hunters to ask how their concerns will actually affect MMS decisions.

The Alaska OCS Region of MMS writes the impact assessments, but the decisions to lease particular areas offshore and the specific mitigation provided to mitigate impacts if exploration or development occurs, are made in Washington, D.C. by the Secretary of the U.S. Department of the Interior who serves the political objectives of the President, as is true of all Department of Interior agencies. In response to years of Native stakeholders asking that their words be included, and the impetus of recent Executive Orders on environmental justice and government-to-government consultation, MMS now publishes the perceptions of local populations regarding negative impacts of oil leasing or development. The MMS has also learned that courts most often rule in their favor if they can demonstrate that their decision was made only after having *considered* all potential negative impacts resulting from leasing activities. Recommended

[7] The Clinton administration actually mandated, via Executive Orders, more government-to-government relations with Alaska Natives (among other Native American groups) as well as environmental justice analyses (i.e., poor or powerless ethnic communities should not bear the brunt of the nation's polluting as it produces energy). Executive Orders are not legally binding, however, as are congressional actions, and can be undone by other U.S. Presidents.

mitigation to address potential negative impacts can often simply be words on paper, however. Of concern, if oil production occurs in federal offshore areas, is an uncertain enforcement practice vis-à-vis monitoring whether oil companies actually abide by mitigation measures inserted into the lease or development permit. The present protocol for exploration and development is for MMS to ask oil companies if they are abiding by the mitigation procedures, the oil companies write that they are doing so, and that becomes the MMS record of compliance. On the other hand, with production facilities, a more specific inspection regime is followed.

Many cultural anthropologists have written EIS assessments for the MMS since 1975 and would note that at least the facts and the local perceptions about potential negative impacts on socio-cultural or natural environments were accurately recorded. It is the political climate in Washington, D.C. that can choose to ignore or follow them when making decisions. Required mitigations *can* have legal teeth, and oil companies can be held accountable for observing them, depending on the political climate of the state and nation.

A highly anticipated synthesis of the socioeconomic research and summary conclusions of oil and gas industry activity on the Alaska OCS region by Stephen R. Braund and Associates was scheduled for completion in mid-2004. MMS states that this review will provide an analysis of what research has been done by MMS in the past and how successful it has been in assisting MMS's analytical process. Another intention of this report is to provide a synthesis of over fifty volumes of sociocultural research; thus, assisting stakeholders in understanding and utilizing this large body of research. This study is but one of several current projects funded by MMS's Environmental Studies Section that advances the MMS mandate for fulfilling its mission "to manage the mineral resources on the Outer Continental Shelf (OCS) in an environmentally sound and safe manner."[8] The question still remains whether contract cultural anthropologists have, at times, been co-opted by the funding made available to them for cultural studies pertinent to their discipline which can then be used by pro-development political and economic forces within and outside Alaska to further their interests *regardless of the impacts* on local people and environments. Regardless of the political climate, these cultural studies often remain as the definitive research on certain Alaskan locations and on certain topics, and these studies remain in great demand by the scientific community.[9] Conflicting federal agency paradigms – conservationist or pro-development – can often make inter-agency work problematic for any federally employed anthropologist involved in inter-agency work.

Bureau of Land Management - Alaska

The Bureau of Land Management in Alaska (BLM-Alaska) only recently (2001) employed cultural anthropologists as fulltime program staff, although archeologists and cultural resource management have long been part of the Bureau's work in Alaska. To understand the context of this development a brief summary of its mission and history are necessary.

The Bureau of Land Management is an agency within the U.S. Department of the Interior that administers 261 million acres of public lands, located primarily in 12 western States. Its mandate is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. BLM-Alaska's primary responsibility in Alaska that is related to anthropology focuses on land use issues, overseeing the Joint Pipeline Office (a partnership with the state and other federal agencies with oversight responsibility of the Trans-Alaska Pipeline), and responding to the public demand for use of public land. Eighty-six million acres of Alaska land are managed by BLM-Alaska. The BLM manages a wide variety of resources and uses that potentially involve anthropologists, including energy and minerals; timber; forage; fish and wildlife habitat; wilderness areas; archeological, paleontological, and historical sites; and other natural heritage values (http://www.ak.blm.gov/whoarewe.html). Since 2001 BLM-Alaska has employed fulltime anthropologists Stacie McIntosh (Northern Field Office, Fairbanks) and Taylor Brelsford (senior specialist on subsistence issues for the new BLM State Direc-

[8]There is also a project that will compile subsistence area maps of the communities potentially most affected by OCS activity — Nuiqsut, Kaktovik and Barrow — in GIS format and will compare 1990 subsistence activities with the present to determine the cumulative effects of oil and gas activities in those communities. Also, the Ukpeakgvik Iñupiat Corporation is conducting an MMS funded effort to locate, collect and organize for CD-ROM storage all traditional knowledge information associated with the North Slope. EDAW, Inc. of San Diego will provide a quantitative description of potential impacts of OCS activities on Bowhead Whale hunting and subsistence activities in the Beaufort Sea. An interesting objective of the latter study will be to document, analyze and explain patterns of variation or agreement on desired futures for the Iñupiat, especially in relation to hunting whales and associated traditional and customary lifeways amidst the presence of OCS oil and gas activity specifically, and modern life in capitalist society generally. The summary findings must be presented to the North Slope public in English and Iñupiaq (final report due late 2004). These current projects likely demonstrate the ethical responsibility felt presently by MMS personnel, and probably mirror the same sense of responsibility expressed by contract cultural anthropologists who have prepared many of the reports for the OCS/MMS since 1975.

[9]Interestingly, the Bristol Bay Native Corporation announced in June 2003 that it now supports oil and gas development both on shore and off shore, contrary to its 1990s opposition; commercial salmon runs have been disastrous recently and prices for salmon declined from $2.60 per pound to about 40 cents per pound currently (Anchorage Daily News June 15, 2003, B-3).

tor for Alaska). McIntosh identifies gaps in subsistence knowledge information and works with Alaska Native communities, particularly regarding the National Petroleum Reserve-Alaska (described above in MMS section). Brelsford works on implementation of the federal subsistence priority, including regulations and policy development, State-Federal coordination, subsistence fisheries research, and effective public involvement with rural Alaskans.

The institutional culture of BLM does not generally draw on the social sciences to develop a self-conscious tradition of analyzing its own history (Taylor Brelsford 2003, personal communication). For many BLM staffers whose primary career experience was in the Lower 48, "subsistence was an issue from another planet" (Taylor Brelsford 2003, personal communication), but BLM did have experience in cultural resource management issues. Following an early 1980s lawsuit against BLM-Alaska, for its lack of data regarding how the development of its public lands would impact subsistence in Alaska, the agency relied in large part on an archeologist to develop a policy regarding how to identify significant impacts on subsistence.

In 1990, the BLM assumed new responsibilities as part of the Federal Subsistence Management program. Until then, the State of Alaska managed subsistence on all lands in Alaska, a unified program that ended when the Alaska Supreme Court ruled that the Alaska constitution did not allow any designation of priority use for rural Alaskans, contrary to ANILCA. The BLM subsistence-related personnel were primarily biologists, some of whom were opposed to the idea of a subsistence priority for rural Alaskans on federal lands. Developing expertise and commitment to the federal rural subsistence priority has taken time. This paralleled the more severe differences of opinion within the Alaska Department of Fish and Game, between the Subsistence Division (where cultural anthropologists usually support a subsistence priority for rural, especially Alaska Native, people) and the other divisions. The current situation of divided state and federal management is complex. Alaska Natives feel that the Federal Subsistence Board listens to them more than does the State of Alaska, which does not currently recognize rural subsistence priority on state lands. The Alaska Department of Fish and Game, Subsistence Division, regularly faces the threat of non-funding by the State legislature.

In the late 1990's, as the BLM energy development agenda accelerated, rather than hire cultural anthropologists, BLM-Alaska outsourced energy development impact assessments. The agency finally realized in 2001 that it needed in-house cultural anthropological expertise to effectively deal with subsistence issues related to energy development proposals on federally owned land in Alaska, especially NPR-A land. A subsistence advisory board for NPR-A was established that includes representatives of local "tribes" with whom McIntosh works on behalf of the BLM field station in Fairbanks.

A firestorm of criticism greeted the BLM-Alaska 2002 Draft EIS that was prepared to support the continuation of the Trans-Alaska Pipeline (TAPS) for another 30 years, and Brelsford was assigned to respond to these concerns in the final document. The environmental research group in Chicago that (over a one-and-a-half year period) prepared the EIS draft, was understaffed in social science expertise (i.e., the one social scientist involved was a non-Alaskan). The draft EIS for TAPS used the findings of the non-Alaskan cultural anthropologist (Paul Bohannon, cf. below under the Exxon-Valdez oil spill) who studied the impacts of the Exxon-Valdez oil spill and concluded that due to acculturation there was little residue of traditional culture left among Alaska Native peoples in the area. This "reductionist attitude toward subsistence - that as income increases subsistence needs decline - infuriated Alaska Natives as did the failure to describe the importance of Alaska Native political self-assertion" (Taylor Brelsford personal communication, 2003). Brelsford used empirical data, especially from the North Slope Inupiaq village of Nuiqsut, to show that direct energy development impacts might not be adverse to subsistence activities but cumulative impacts were significant as energy development moved further into Alaska Native lands (e.g., how far hunters had to travel to find game between 1985 – 1995).

Unlike the NPS mandate and history, BLM has not traditionally been a conservationist organization, being known nationally as a multiple use agency involved in leasing or conveying public land, allowing ranchers to use public lands for grazing, and for fire protection efforts, primarily in western states. The ethical issues facing applied cultural anthropologists in Alaska described abstractly at the outset of this history are, hopefully, concretely illustrated in our detailed summaries of practicing anthropology employment in various agencies. Currently, for example, the Secretary of the Interior, Gale Norton, is considering reducing previously negotiated mitigations in the NPR-A northeast lease of 1998. (The environmental review for a northwest NPR-A lease sale is currently in process). The waterfowl mitigations that were included in the northeast NPR-A lease sale stated that no surface occupancy would occur near Teshekpuk Lake that has a

202,000 acre lake surface, with a total area of restrictions encompassing 600,000 acres, including land south and west of the lake, with about 2 billion barrels of oil possibly in the lake area (Anchorage Daily News, April 16, 2003, p. A-1 ff.). The North Slope Borough earlier accepted NPR-A energy development because that lake and its environs were protected for waterfowl use; tens of thousands of geese, ducks and other birds migrate there each summer. BLM leaders now wonder why drilling should be banned there in the winter. The Secretary's (and the Bureau of Land Management's) suggestions that the mitigations established in the 1990s might now be altered could make NEPA into a joke in Alaska. It might give anthropologists pause before responding to requests for research if this kind of revisionist decision-making harms subsistence activities and becomes a modus operandi of the Department of the Interior regarding agreed-to prior mitigations for energy development efforts in Alaska.

Bureau of Indian Affairs – ANCSA

> Since its inception on March 11, 1824, the Bureau of Indian Affairs has been a witness to and the principle player in the history of federal-tribal relations. Once an instrument of federal policies to subjugate and assimilate American Indian tribes and their peoples, the BIA has changed dramatically as have those policies over the past 177 years.
>
> In the early years of the United States, Indian affairs were governed by the Continental Congress, which in 1775 created a Committee on Indian Affairs headed by Benjamin Franklin. Fifty years later, the BIA was established under the War Department, and eventually moved to the Interior Department in 1949.
>
> …as federal policy has evolved away from the subjugation and assimilation of American Indian and Alaska Native people and into one of partnership and service to them, so has the BIA's mission (http://www.doiu.nbc.gov/orientation/bia2.cfm).

The passage of the Alaska Native Claims Settlement Act (ANCSA) in 1971 by the U.S. Congress resolved the legal issue of what lands Alaska Natives owned, an issue not dealt with since the purchase of Alaska from Russia in 1867. Without their land claims being resolved with the U.S. government, Alaska Natives could prevent the building of the trans-Alaska oil pipeline from Prudhoe Bay to the port of Valdez. Anthropologists were not involved in any negotiations or research related to ANCSA, which is a curious omission, to say the least (in Canada, anthropologists were involved in land claims issues). Various scholars, such as applied anthropologist Patrick Dubbs (Dubbs 1986 http://www.ankn.uaf.edu/congruence.html), question whether ANCSA promotes the best interests of Alaska Natives as an attempt to wed subsistence based tribal peoples and values with corporate capitalism or is just the last salvo in the effort to detribalize indigenous citizens and eventually transfer their land to private ownership, which is a capitalist mantra.

In 1978, the Bureau of Indian Affairs of the Department of the Interior[10] established the Alaska ANCSA Office to satisfy the agency's mandate under ANCSA Section 14(h). As described above in the National Park Service section, the BIA ANCSA Office and the NPS worked cooperatively in ANCSA 14(h)(1) investigations until 1983, after which the BIA ANCSA Office implemented the program by itself.

The BIA ANCSA Office has the task of investigating, reporting on and certifying Alaska Native historical places and cemetery sites. The peak years of field investigations were from about 1980-1990, with an average of four field crews (6-10 members each), and 15 office staff. Kenneth Pratt has been in a Supervisory Archeologist position with BIA ANCSA since 1985, and has served as Manager of the ANCSA program since 1996. Currently, three staff "archeologists" report to him. Pratt, however, views his and their work as primarily ethnohistorical in nature (Kenneth Pratt 2003, personal communication).

The extensive field research data sets (including maps and site reports) have not received significant interest from other anthropologists, which is unfortunate. The ANCSA 14(h)(1) artifact collection alone contains 14,000 items. The BIA ANCSA research inventory includes 130 composite field maps, 40,000 – 50,000 photographs, and 2,300 sites fully investigated (i.e., reported on and certified) with 500-600 more sites documented. Over 2,000 oral history recordings (an estimated 99% from Alaska Native elders) have been produced, and notes were made on about 600 more non-recorded oral history interviews. Over the life of the program, about 1,000 Alaska Native individuals were interviewed by some 150 different interviewers (Kenneth Pratt 2003, personal communication). The future archeological and ethnohistorical

[10]The BIA subsistence program is not discussed here because applied anthropological work on subsistence is the focus of another essay in this AJA volume.

research potential of these data are extraordinary. For example, "Dates of construction and occupation for specific (historic) houses on a site have frequently been collected [in the BIA ANCSA data] …" (Pratt 1992:77). And the enormous BIA ACNSA ethnohistorical information regarding the Yukon-Kuskokwim (Yup'ik Eskimo) region of southwest Alaska provides an unparalleled antidote to the paucity of archeological research and historical sources for that region.

Of concern to some anthropologists is what is to be done with the BIA ANCSA collection. Pratt suggests that the material might be designated as a "Museum Property Collection" (as defined by the Department of the Interior), funded and managed locally.

The BIA ANCSA materials, however, are not moribund. In 2001, Interior Secretary Babbitt declared many closed ANCSA 14(h)(1) sites potentially eligible for re-opening and re-certification due to possible errors in how they were previously investigated or evaluated. As with most public agencies, one never knows if political winds will blow the agency off the anthropological map, or expand its need for cultural anthropologists.

EXXON VALDEZ OIL SPILL IMPACTS

The greatest human-induced environmental disaster in Alaska, and the greatest oil-spill disaster in U.S. history, was the Exxon Valdez oil spill that occurred in Prince William Sound in 1989. Anthropologists were drawn into impact assessment and analysis of this event almost immediately. Areas of major applied research included general impact research funded by the Oiled Mayor's Conference and conducted by the firm, Impact Assessment Inc., owned by an anthropologist from the Lower 48. Their research looked holistically at the broad range of psychological, social and cultural impacts on populations living within the spill area. They looked at both Native and non-Native communities. A substantial body of literature resulted from this effort. A second area of research undertaken as a result of Exxon Valdez was the effects of the oil spill on subsistence resources, subsistence activities and the perception of risk felt by Alaska Natives in the aftermath of the spill. A major finding of this research concerned the dramatic impact of such disastrous events on perceived risk by populations in the damaged area. Finally, a third area of research was the cultural loss experienced by the Native communities impacted by the oil spill as they were unable to conduct subsistence activities and transmit subsistence skills and values to their children and grandchildren. This research, involving many anthropologists (including Joe Jorgenson and Steven R. Braund and Associates), was undertaken as part of the legal case seeking damages from the oil companies as a result of losses to Alutiiq cultural survival. Braund, the Alaska Department of Fish and Game Division of Subsistence, and other anthropologists were witnesses for the Alutiiq village plaintiffs in the case arguing that the inability to conduct subsistence activities represented a major damage to current Alutiiq residents and to their ability to transmit their cultural heritage to their children. They were opposed by two anthropologists from the Lower 48 hired by the oil companies, Paul Bohannon and Chris Wooley (1995).

Bohannon argued that Alutiiq culture was no different in any significant respect from that of the surrounding society due to acculturation, first coerced by Russians and now acquiesced to. Wooley further testified that Alutiiq culture had received its most serious damage and disruption during the period of Russian occupation and the damage from the oil spill to what remained of it was basically inconsequential. Jorgenson's (1995) lengthy analysis of the case and the judicial opinion is an illuminating eye-opener on the difficulties of effectively conveying the meaning and value of cultural experiences to those, such as a U.S. court judge, who have never experienced those values and have no conceptual or cognitive framework with which to address them (Feldman [1980] made a similar observation). It is a sobering treatise on the impotence of culture as a legal category in American justice.

EDUCATION

Margaret Lantis' (1960) and Charles Hughes' (1975) investigations of Central Yup'ik and Siberian Yup'ik cultures were early anthropological examinations of cultural transmission within the context of childrearing practices. Anthropological attention to formal education and Alaska Natives, however, did not receive attention until the late 1960s. Collier (1973) published path-breaking work using film to document successful and unsuccessful educational practices in Central Yup'ik classrooms and schools.

Perhaps second only to the Alaska Native Land Claims Settlement Act in significance to Alaska Natives during the period under review was the so-called "Molly Hootch" case. Brought by Alaska Native village plaintiffs disturbed by the negative impacts that the removal of children to boarding schools for high school education was causing, the State of Alaska settled out of court, agreeing to improve equal educational opportunity by providing local secondary education for communities with eight or more elementary school age children. Through-

out rural Alaska, a massive construction boom occurred to meet the 1976 Tobeluk Consent Degree mandate as new high school structures were built statewide.

These new schools presented special conditions. First, they served a small village population, largely unexposed to the greater society. In some places, the Alaska Native language was the first language in the household or used by many in the community. Second, facilities would not be able to provide the full-range of options in the same approach used in larger districts. Third, who would teach in these schools and what would they teach?

A number of teacher-anthropologists began addressing these issues via the Center for Northern Education Research at the University of Alaska Fairbanks (UAF). This was soon transformed into the Center for Cross-Cultural Studies at UAF under the leadership of Ray Barnhardt (cf. Barnhardt 1998; Barnhardt and Kawagley 1999a, 1999b; Kirkness and Barnhardt 2001). Barnhardt has been at the heart of applied anthropological initiatives to support local culture and language through culturally appropriate programs since the 1970s (Barnhardt 1974, 1977, 1982, 2002; Orvik and Barnhardt 1974). He also headed up the Alaska Rural Teachers Training Corps that provided training for new teachers in cross-cultural educational techniques for rural Alaska Native villages. Aimed at providing Alaska Native teachers for Native schools, the program has not been maintained by the university. There are still too few Native teachers for rural schools.

In the mid-1990s, Barnhardt collaborated with Yup'ik educator Dr. Oscar Kawagley to develop the Alaska Rural Systemic Initiative. Funded by the National Science Foundation as part of its Rural Systemic Initiatives program nationwide, this program compiled cultural information from Native elders in Alaska and developed materials based on that information for school curricula. These efforts sought to link education in mathematics, science and other areas directly to traditional Native knowledge. It also includes a strong core of language emphasis to ground Native students in the concepts of their cultures. The Alaska Native Knowledge Network (http://www.ankn.uaf.edu/arsi.html), a website providing access to traditional cultural materials, is a major accomplishment of the Alaska Rural Systemic Initiative in which the vision of applied anthropology plays a significant role.

Recently, Lipka et al. (1998) published a study of how Yup'ik Eskimo teachers who formed the Ciulistet ("Leaders") Group in 1987 in southwestern Alaska worked with university based educators and Yup'ik elders to develop themselves as professional Yup'ik teachers in a western elementary school system. Not only was local knowledge via Yup'ik elders brought into the curriculum but also Yup'ik teaching styles. Lipka (2003) recently reported on the relevance and positive impact on standardized test scores of a Yup'ik mathematics curriculum for native and non-native students in an elementary school based on a three-year study. The 1998 book by Lipka, Mohatt and the Ciuleistet Group received an American Book Award in 1999, an award sponsored by the Before Columbus Foundation.

In urban educational applied research, Feldman (1992, 1994) served as ethnographer of a four-year demonstration project (1991-1996) funded by the U.S. Department of Health and Human Services with the Anchorage School District. This was one of 40+ experimental projects nationwide to determine if and how the insertion of Head Start practices into public schools grades K-3 would improve educational achievement of children from low-income families. Anthropologists also contributed to several significant informal educational efforts about Alaska Native peoples and cultures via traveling museum exhibitions such as the *Looking Both Ways* exhibit, 2001-2003, directed by Aron Crowell (an archeologist) of the Smithsonian Institution's Arctic Studies Center located at the Anchorage Museum of History and Art (Crowell, Steffian and Pullar 2001) in collaboration with the Alutiiq Museum and Archaeological Repository in Kodiak, Alaska. Alutiiq elders and communities participated in the exhibition. Patricia Partnow, an applied anthropologist, was responsible for the school curriculum developed for the exhibition (http://www.mnh.si.edu/lookingbothways/text/project.html). Partnow also served as Vice-President for Education of the Anchorage based Alaska Native Heritage Center from the late 1990s to 2002. In the 1980s, prior to completing her doctoral studies in anthropology, Partnow served as the Curriculum Development Specialist for the Indian Education Program in the Anchorage School District, creating education modules about Alaska Native cultures for use in school curricula. Her applied educational work today is also funneled through a non-profit organization, of which she was a founding member: *Healing Racism in Anchorage*. She also facilitates cross-cultural communication between rural and urban Alaskans via *Hands Across Alaska*, a partnership formed in 2002. Rosita Worl, as director of the Sealaska Heritage Foundation/Institute, created a Tlingit-immersion language program in Juneau, one goal of which is improved standardized test scores of the students who participate in that program.

HEALTH CARE

While medical anthropology has long been an important area of applied anthropology, anthropological applications to medical practice and health care delivery have been limited in Alaska (cf. McNabb [1990] for an overview of Alaska Native health and health policy issues in the 1980s, which remain similar today). Penelope Cordes is one of the few medical anthropologists who addressed health issues in Alaska. She has conducted independent research on the Alaska rural health care delivery system that has subsequently been used to inform aspects of the Community Health Aide Program. As a consultant to the Alaska Head Start Health Improvement Initiative, she also worked with a multi-disciplinary team to design, implement and evaluate a home visitor program for improving mental health outcomes for Alaska Head Start children and families. Now employed with the State of Alaska, Section of Epidemiology, she has applied an anthropological perspective to public health issues, especially HIV prevention, using anthropological methods and other social science research tools to assess prevention needs of and evaluate preventive programs aimed at the often stigmatized and hard to reach populations most affected by HIV. Understanding cultural sensitivities and the dynamics of rural communities has been important in helping small communities respond to this disease, and holistic and critical perspectives have informed her work related to policy development including position papers and draft legislation related to HIV/AIDS (Penelope Cordes 2003, Personal Communication) (e.g., Cordes and Bell 2003; Cordes 1985, 1986, 1993, 1994, 1997, 1998, 2002). Cordes is one of the few doctoral level anthropologists working in Alaska (Ray Barnhardt is another) whose doctoral degree was in applied anthropology.[11]

P. Kay Branch has focused since the mid-1990s on applied gerontological work in Alaska, primarily with elderly Alaska Native peoples (Branch 1994, 1998). Currently she is Coordinator of Rural Long Term Care Development in the Division of Senior Services of the State of Alaska. Branch worked recently with UAA applied anthropology graduate intern Amanda Johnson Shearer to improve the status, training and retention of personal care attendants in rural villages (Shearer and Branch 2003). These Native women serve elderly and others with disabilities in villages so that their clients do not need to move to an urban center for care. Branch brings the holism of anthropology to her work, and the methods of action anthropology; she assumes the answers to the questions of how to serve Alaska's elderly in remote villages are with the people in those villages, answers that she draws out through extensive discussion, sometimes involving focus group methodology. The only prior anthropological investigation of Alaska Native elderly was conducted by an interdisciplinary team of faculty and students regarding the needs of Alaska Native elderly who resided in the urban environment of Anchorage (Feldman, Hines and Cordes 1978). One of the results of that National Science Foundation project was to focus attention on the significance of ethnicity in conducting or responding to any needs assessment of Alaskan elderly.

CULTURAL ANTHROPOLOGY AS "MISSING IN ACTION"

The Alaska Native Claims Settlement Act of 1971 is one of the landmark political and institutional changes in Alaskan history. Its creation of a corporate framework and shareholder status for Alaska Native membership in institutions housing financial and land assets has had enormous consequences for Alaska Native life, as well as for the State of Alaska in its entirety. While anthropologists have weighed in with a variety of analytical perspectives on the impact of the act, they were not invited by either Alaska Natives or governmental policy makers to become involved in the initial formulation of settlement frameworks nor in the deliberations leading up to the final form of ANCSA. Nor did anthropologists play any identifiable role in the establishment of corporations and corporate policies. This is a striking disconnect, perhaps due to the overwhelming focus on economic activity and the establishment of legally defensible corporate procedures as Alaska Natives with little or no experience or training in these areas grappled with the new institutions. It might also be due to the relative absence of any applied cultural anthropologists in the state at that time.

In Canada, by contrast, in the round of land claims settlements that began in 1973, anthropologists played central roles as advisors, not only in negotiations with the Canadian government regarding programs and institutions, but also with Native organizations in identifying goals and thinking about institutions which were compatible with people's practices and wishes. Interestingly, Canadian Native organizations involved in land claims in the 1970s

[11]Kerry Feldman received experience and training in applied anthropology on a graduate student fellowship at the Institute of Behavioral Science, Department of Anthropology, University of Colorado, under the mentorship of Robert A. Hackenberg, and received guidance in applied anthropology history and practice from Deward Walker and Friedl Lang of the same department, 1969-73. Steve Langdon and David Natcher took a course in applied anthropology at Stanford University and the University of Alberta, respectively. Their doctoral degrees were not in applied anthropology, however.

and 1980s invariably informed themselves about the impact of ANCSA in Alaska by sending emissaries to meet with Alaska Natives directly and sometimes by hiring anthropologists to provide them with an assessment of ANCSA impacts (Chance 1990; Langdon 1986).

Anthropologists have not been involved to any significant extent in the following domains in Alaska:

- television deployment and mass media impacts in rural Alaska (e.g., is there a correlation between the increase in diabetes among Alaska Native youth and hours spent watching television; can local input into village corporation website construction provide more effective intra-village communication regarding traditional values or ecological knowledge in addition to improved economic ties outside the village);
- transportation policy and impacts (i.e., how does the increase or decrease in air traffic affect rural populations in terms of alcoholism, employment, subsistence);
- substance abuse (e.g., do "dry" villages in terms of the sale of alcohol experience an increase in injection drug use; what are the perceived relationships between the use of tobacco or alcohol and the health of unborn babies);
- domestic violence and family disruption (e.g., are there correlations between Permanent Fund distributions and incidence of substance abuse or familial violence; how effective are tribal courts regarding juvenile delinquency);
- interethnic relations other than Alaska Native issues (there are over 90 languages spoken among children in the Anchorage School District alone that could benefit from anthropological study, i.e., under what conditions do teenagers from ethnic groups residing in Anchorage become members of gangs involved in criminal activity; how do cultural beliefs about health and illness limit the effectiveness of western medical services);
- tourism (e.g., how does increased tourism to rural or urban areas impact Alaska Natives in terms of the preservation of cultural traditions; how does tourism impact crafts, music and dance);
- Alaska Permanent Fund Dividend Program (e.g., does this program encourage larger families; do the dividend funds decrease local economic development initiative).

ACTION WITH AND FOR ALASKA NATIVES

As Alaska Natives have become increasingly able and willing to engage in research to meet their own objectives, anthropologists since the 1980s have engaged in significant collaboration with Alaska Natives in a number of areas, adding to the significant development of Native Anthropology in the U.S. Anthropologists have also been hired by Alaska Native groups to conduct research or advise on specific policy areas. Ann Fienup-Riordan was requested by the Yupiit Nation in the late 1980s to conduct oral research on Yup'ik traditional patterns of law and political organization. Also, her subsequent collaboration (Fienup-Riordan 1996) with Yup'ik elders in widely respected museum and book projects about Yup'ik masks have led to a major redefinition in the manner in which she has chosen to continue anthropological work: through *collaborative* research with Alaska Natives/communities.

Steve Langdon (middle) with a Tlingit father and son in Hoonah, Alaska: George Dalton (left) and Richard Dalton (right), 1980. Langdon's research was done to prepare a document for a court case to re-open Inian Island purse seining that had been halted by the State of Alaska in 1973.

Steve Langdon (1979, 1980b, 1981, 1982, 1984, 1986, 1999b, 1999c, 2000) has been asked on numerous occasions during the past three decades to assist Alaska and Canadian Native organizations by providing research information, and by developing ideas and strategies for enhancing Alaska Native participation in commercial fisheries. He assisted the Gulf of Alaska Coastal Communities Coalition in developing a proposal submitted to the North Pacific Fishery Management Council to authorize community cooperative ownership of halibut and sablefish under the Individual Fishing Quota (IFQ) program by villages that have little economic base (Langdon 1999a, 1999b). Earlier, in the 1970s, he examined and analyzed

commercial fishing permit transfers for the Alaska State Legislature, demonstrating that rural and especially Native holders were losing permits due to sales of commercial fishing permits (Langdon 1980a). The methodology for reporting transfers that he designed continues to be used by the Alaska Commercial Fisheries Entry Commission and has also been adopted by the National Marine Fisheries Service to examine impacts of the IFQ program on communities and regions. Langdon's research was used as a "case example" in the *Training Manual in Policy Ethnography* by van Willigen and Dewalt (1985), a volume in the American Anthropological Association series of applied anthropology training manuals edited by William L. Partridge. Langdon also examined, explained and developed strategies for the Bristol Bay Native fishermen to gain access to the emerging sac roe herring fishery in the Togiak district. This work was performed for the Bristol Bay Native Association (Langdon 1982). With nine other scientists he co-authored *The Community Development Quota Program in Alaska* for the National Academy of Science (National Research Council 1999).

Stephen R. Braund & Associates have conducted several research projects related to the bowhead whaling practices of coastal Iñupiat in northwest Alaska. One of Braund's most significant and innovative undertakings was to *quantify* the *cultural*, not merely nutritional, need for a given level of bowhead harvest that would be needed to maintain and support the contemporary pattern of Iñupiat life. This research, funded by the Bureau of Indian Affairs at the behest of the North Slope Borough and Alaska Eskimo Whaler's Commission, was presented to the International Whaling Commission as part of the United States presentation to establish a reasonable level of bowhead harvesting for the Eskimo whalers.

Feldman (1978, 1979) conducted research on behalf of Paugvik Village Native Corporation regarding water rights on the Alaska Peninsula; contrary to his testimony, the court ruled that Native people in Naknek/South Naknek used the land around them no differently than rural people anywhere in Alaska, and did not need the water for irrigation of crops. His research on behalf of King Salmon Traditional Village Council in that same area resulted in that Council's reception of Indian Reorganization Act (I.R.A.) village status in 2000 (Feldman 2001). Earlier, in 1980, Feldman completed a study of the role of the beluga whale in Alaska Native diet and culture (funded by the Alaska State Legislature in response to a proposal from an Iñupiaq legislator), which was part of the successful effort to prevent the International Whaling Commission from creating subsistence harvest quotas for beluga in Alaskan/Russian waters (Feldman 1986 [R. Worl, Principal Investigator]).

Alan Boraas's numerous contributions (e.g., Boraas and Kari 1991) to the Dena'ina Kenaitze Athabascans of the Kenai Peninsula were recognized in 2000 by honorary membership in the tribal council, presented at a potlatch ceremony. Since the early 1970s, Boraas has also been extensively involved in public anthropology including: involvement on the collections committee and as an advisory board member for the Pratt Museum in Homer, Alaska; advising the State of Alaska regarding Historic Sites preservation; involving Kenaitze youth in historic and archeological research on their own culture; as well as providing public lectures and a prolific number of newspaper essays that offer an anthropological framing of controversial social issues in Alaska (e.g., racism in Alaska, Alaska Native language and culture preservation, and the war in Iraq).

The late Peter Kalifornsky and Alan Boraas in 1989 at the Kenai Peninsula College Anthropology Lab working on Dena'ina stories that were included in *A Dena'ina Legacy, K'tl'egh'i Sukdu: The Collected Writings of Peter Kalifornsky,* edited by James Kari and Alan Boraas, Alaska Native Language Center, 1991.

Also, anthropologists have recently been hired by emerging Native salmon and fisheries management organizations to assist in the acquisition of knowledge through research, developing strategic plans, and assisting in acquiring funds through grant writing to pursue Native research interests related to salmon. Most significant has been the employment by Alaska Native organizations of anthropologists who are recent graduates of UAF or UAA. For example, Robi Craig was hired as a village anthropologist by the Sitka Native Corporation in the late 1990s and was adopted into a Tlingit clan. Amber Glenzel is a Koyukon Athabascan who serves as the Cultural Heritage Director and Tribal Archeologist for the Kenaitze Indian Tribe I.R.A.. Gilbert Burkman serves as Tribal

Advocate for the same tribal I.R.A. Holly Cusack-McVeigh, a Dena'ina Athabascan from Nondalton, is Project Coordinator for the Native American Fish and Wildlife Society and presents workshops for state and federal agencies regarding Traditional Ecological Knowledge. James Simon worked for the Tanana Chiefs Conference from the late 1990s to 2002. Polly Wheeler engaged in projects for the Tanana Chiefs Conference in the late 1990s, as well as for the Alaska Sea Otter Commission. Erika McCall worked for the Native village of Eyak. Matt Ganley is employed by the Bering Straits Native Corporation. M.J. Longley, an Iñupiaq from Nome, Alaska, is currently the Chief of Operations Officer of the Cook Inlet Tribal Council.

The number of Alaska Natives with BA, BS and graduate degrees in anthropology who occupy leadership and other roles in Alaska Native and western institutions continues to expand. However, they must often explain to elders, families and friends why they chose a career in a discipline still suspect as colonialist and exploitative in intent and practice, although the image of anthropology among Alaska Native peoples has improved considerably during the past 30 years as anthropological knowledge has often proven useful in defending and preserving Alaska Native languages, cultures and sovereignty rights. Another challenge Alaska Native cultural anthropologists face is the research paradigm of the discipline which specifies that studies should ideally be carried out among people to whom the anthropologist is a stranger, in order to increase the objectivity of the study. Among various Alaska Native peoples (particularly among Tlingit and Haida as explained to University of Alaska Anchorage (UAA) anthropology faculty by a graduate student from those groups), it is considered unethical and improper to analyze the oral literature and traditions of any group other than one's own, partly due to the belief that these are the intellectual property of each tribal group. The challenges facing Alaska Native anthropologists due to such conflicting paradigms should be explored soon, so that future generations of Native anthropologists are prepared for the emotional and intellectual conflicts they will encounter.

FUTURE DIRECTIONS

Applied cultural anthropologists working in Alaska over the past 30 years have witnessed the small and relatively isolated communities in which they have worked become increasingly enmeshed in the wider socio-political scene. Owing to the rate of change occurring at both the local and global levels, new challenges have opened up for applied cultural anthropology in Alaska. In years to come the question of professional identity for applied cultural anthropologists will continue to be debated, particularly given the multiple roles these anthropologists will be asked to assume. As seen elsewhere in the U.S. and world, the contemporary role of the applied anthropologist – as consultant, mediator, advocate, or practitioner in public and private organizations – represents an ongoing challenge to the discipline, as new identities are forged while staying true to the underpinnings of the field. While there is no returning to an ethnography that lacks the ethnographer's critical reflection as a positioned subject, ethnography will continue as the foundation of cultural anthropology in its applied or non-applied practice. Cultural constructs, insights and information through first-hand, ideally extended, fieldwork at the community level will continue to be the hallmark of cultural anthropology. There will be a continuing need to translate local concerns to the wider public arena so that comparison and discussion can illuminate broader trends and relationships, identifying hegemonic domination of discourse wherever it occurs. As in the past, the challenge will remain as to how best to bring this knowledge to the wider arena of debate, both in an academic sense and in the forum of public policy. It is hoped that the next generation of applied cultural anthropologists will make this endeavor part of their life's work.

Overwhelmingly, applied cultural anthropology in Alaska has been about the challenges to the cultures and status of Alaska Native peoples. Perhaps more importantly, the studies have been concerned primarily with issues associated with Alaska Natives in rural contexts. This particular bias and/or focus in applied cultural anthropology occurred over a period in which the urban locations of Alaska (Anchorage, Fairbanks, and Juneau) grew dramatically; for example 28,000 Alaska Natives now reside in the Anchorage area. These urban processes and related outcomes have seen very little attention by applied anthropologists, and should be a future direction of work. In Anchorage alone there are over 90 languages spoken by children in the Anchorage school district. These languages represent cultural traditions and values that deserve study to understand how they intersect with the majority culture, how they are being maintained or changed, and the challenges they present to educational, economic, health and social service systems. Along these lines, in fall 2003 Feldman and a team of UAA anthropology majors responded to a request from the Anchorage Neighborhood Health Center (ANHC) to provide information about cultural beliefs and practices related to illness and health among Southeast Asian hill tribe and Samoan immigrants to Anchorage. The approximately 400 Hmong families in Anchorage continue to use traditional herbal remedies and consult local sha-

manistic healers, prior to seeking medical assistance at the ANHC, which adds complexity to the task of ANHC to provide appropriate health care.

Recognition of applied cultural anthropology's service to and need by the State of Alaska is seen in the 1999 establishment of a Master's degree program in anthropology at the UAA with applied anthropology tracks. This program, supported by the anthropology department of the University of Alaska Fairbanks, currently has 36 graduate students enrolled, with a third of them in the applied cultural anthropology track. The students in the applied cultural anthropology track must enroll in a course on Applied Anthropology in order to learn the history of the field, methods useful in the field, the ethical issues involved in applied work, and the major projects that have occurred in the U.S. and worldwide. A one-semester internship is also required, under the mentorship of a practicing anthropologist in an agency that is, usually, related to the career goals of the student. Agency-based anthropologists in Anchorage are often on their graduate committees, as is the custom at most applied anthropology programs nationwide (cf. COPAA list at http://www.heritage.umd.edu/About%20COPAA.htm).[12]

As we speak of challenges we must also work out the future relationship between Native peoples and the anthropological community. Certainly, and rightly so, the traditional distinction between the researcher and subject/informant has become blurred in recent years. Because many anthropologists are now finding employment on a fulltime or contractual basis with Native communities and organizations, anthropologists will be asked to conduct research that Native organizations find useful when negotiating with industry and government agencies. Such opportunities should be welcomed by our discipline as these role reversals will undoubtedly create new and invigorated relationships between the applied anthropologist and our research partners.

[12]Theses or internship foci include: co-management of the Copper River fishery (thesis completed by Davin Holen 2002, who is now employed by the State of Alaska Subsistence Division, with William Simeone serving as Holen's internship mentor); traditional ecological knowledge and co-management of the salmon fishery on the Yukon River (Catherine Moncrieff, thesis completed 2004); impact of the Federal Aviation Commission on rural Alaska Native communities (Josh Wisniewski, with Diane Hanson, U.S. Corps of Engineers, as internship mentor); creating a rural community interaction model for a private agency that provides developmental disability service in Alaska (Travis Hedwig, with Roy Scheller of Hope Community Resources, Inc., as internship mentor); Amanda Shearer working currently as the Native Liaison, U.S. Army, Garrison-Alaska (the support side of the Army) coordinating Government-to-Government relationships between the U.S. Army and federally recognized tribes in Alaska; traditional ecological knowledge of Yup'ik people in the Togiak region is the focus of thesis research by Robbin LaVine following her internship with the U.S. Fish and Wildlife Service, mentored by Patricia McClanahan. Traditional and modern Iñupiaq birthing practice among North Slope Iñupiaq women and their perceptions of fetal examinations via ultrasound technology is the thesis topic of Mace Manire, although he is not in the applied track because an internship could not be identified for him.

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