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The relationship of theory to practice has been a source of continued anguish for anthropology since its very beginning (Eddy and Partridge 1978; Leighton 1946; Malinowski 1929). The most exciting periods in the discipline have been those periods when anthropologists were most intimately engaged in dealing with real problems. The important work with native North Americans through the Bureau of Indian Affairs in the early years still stands as one of the most productive periods for the development of theories of kinship, social organization, and ethnicity in American anthropology (Gearing 1960; Lurie 1955; Piddington 1960; Spicer 1952; Tax 1958). The work of British social anthropology was shaped by the colonial experience, as anthropologists were sent out to help understand and rule African populations. Out of this very practical work came the still monumental contributions to theory of Evans-Pritchard and others in political anthropology, social organization, and law (Gluckman 1964). The best work to date on American communities goes back to the work of anthropologists with communities experiencing change, especially during the Great Depression and through the impact of the Soil Conservation Service and the Work Projects Administration (WPA) (Arensberg and Kimball 1965; Quimby 1979; Spicer 1979). The listing could go on and on. Anthropology would be a very different discipline today if anthropologists in those earlier times and places had recoiled from practice or failed to generate theory from practice. To do fieldwork in anthropology when that information is needed in earnest provides an excitement that a purely academic goal fails to have. Not only were all those earlier exciting periods productive for anthropological theory, but they often dealt with situations of rapid change, an ideal period in which to examine the human condition. It is under trying conditions that our species seems to open itself up to study (Moran 1979). Under rapidly changing conditions, human communities rally their accumulated wisdom while also allowing an unusual degree of flexibility to individuals to experiment with novel ways to solve the problems presented by a changing environment. We have often described these as near-laboratory situations,

when in fact they are much more than that. They are periods when the human condition calls us to make our theories work or be ready to scrap them. From these challenging settings we can build new theories better rooted in the experience of humanity (Eder 1982, 1987; Moran 1981, 1990).

In this chapter I examine the interaction of theory and practice in the academy from the vantage point of an environmental anthropologist. While in more ways than one it is a personal account, I also think that human ecology, cultural ecology, and all other variants of anthropological study of human-environment relations provide a nexus between theory and practice that makes a separation of the two not only difficult but impractical. Human-habitat interactions is one of a number of settings calling for a simultaneous application of theory and practice. Other authors in this collection will address other such settings.

Ecological Anthropology and Life in the Academy

In 1970 when I began graduate study in anthropology in a department with a surprisingly large number of faculty with interests in applied anthropology for that period, the tension between theory and practice which, even then, afflicted so many in academic anthropology was probably less seriously felt. The message that I gained from Sol Kimball, Paul Doughty, and others was that applied anthropology was not a separate field but, rather, that it had to do with the application of anthropological theory and method to the solution of human problems. This was a point of view clearly evident in Eddy and Partridge (1978), who as members of the department reflected in that volume on these ongoing faculty-student debates in the early 1970s. There was a discussion at the time about creating a degree in applied anthropology, and Kimball and others soundly rejected that path. They felt that a separate degree would be sure to lead to evaluation of those degrees as less valuable than those in academic anthropology and possibly to lesser theoretical sophistication as pressures for practical courses mounted through time for students of such a degree. Would anthropology dissolve into "public affairs"? This issue has been visited many times by many departments since then. In one version discussed by the Society for Applied Anthropology a few years ago, graduates would be "certified" as applied anthropologists if they followed a certified minimum set of certification requirements set by the professional society in certified departments. In another, applied anthropology would develop into a "fifth" field, with its own quota of students to consider for admission, its own support for those students (often based on external contracts), and its own courses and track for developing necessary skills. Since the time of Kimball, one or more universities have gone to a degree or degrees in applied anthropology. This is not an issue likely to go away and is indicative of the tension that exists between academic and applied graduate training. It is

very much tied to the number of requirements in place for the doctoral degree and the amount of flexibility the degree requirements give students to acquire the skills they need to work in development and applied anthropology. I would hazard to say that, in departments with flexible requirements or with a low number of required courses, one is less likely to see the emergence of the fifth-field solution or that of the separate degree. The latter represents a solution for departments where course requirements are so onerous that they leave little room for taking skill-oriented courses outside the discipline. It is a path likely to be chosen by a growing number of departments as a result not only of an excessive number of required courses but also of the intellectual battles currently afflicting cultural anthropology. But there is no inherent reason that departments cannot choose to dismantle onerous requirements resulting from past battles and compromises and establish flexible degree requirements that permit multiple ways to practice/theorize in anthropology.

My own experience in this regard was to have gone to a department that at the time had a modest set of requirements, a quarter system that permitted taking far more courses in a two-year period than the semester system would have allowed, and advisors sympathetic to my need to develop skills in ecosystem ecology, soil science, agricultural economics, tropical agriculture, and modeling. All this was possible because my advisor, the late Charles Wagley, understood that we needed to have skills and that we needed to bring these back to anthropology, to address major questions with a level of competence that stood the test of the other fields we were venturing into. When I heard a soil scientist criticize eminent ecological anthropologists' work on soils, I simply asked him to take me out to the field and show me how to do it right, and he did. It was a degree that was customized to the research questions that I was posing, questions of a broad sort: What is the agricultural potential of the humid tropics? Are poor soils a limiting factor to the development of societies in the humid tropics above the level of acephalous swidden cultivators (as Meggers had claimed), or could populations solve this constraint through some kind of management? How do people who come from very different ecosystems adapt to or change the environment they migrate to? What happens to them over time? These questions have theoretical linkages to a broad literature in ecology and human ecology (see reviews in Ellen 1981; Moran 1979; Orlove 1980), and they have a clear link to economic development and other applied issues, such as how to manage soils with toxic levels of aluminum, low cation exchange capacity, poor roads and their implications to marketing crops (Moran 1993a).

I was fortunate to acquire skills useful to my work in academic anthropology and occasionally to produce policy recommendations and consulting reports that linked the social sciences and the agroecological sciences (Freeman et al. 1978), between development theory and development practice (Moran 1996). This came not from protracted epistemological discus-

sions but from a graduate program environment where the boundaries were not black and white, where there was respect for people like Sol Kimball, Elizabeth Eddy, Charles Wagley, Paul Doughty, William Carter, and others who had been exemplars of both theory and practice. They believed in the role of the anthropologist as broker, as someone caught in the middle but with a multilingual ability to translate, not just languages but theory and practice. Most importantly, they believed that role could only be played if one had competence in areas where one was brokering. For me it meant soils, ecology, and economics. For others it meant education or medicine. It would be a mistake, I think, to develop our own self-serving courses on the anthropology of "xxxxx" rather than encourage our students to go to the other schools or departments and learn the latest skills from the field with which we are interacting. Schools of education have proven the lack of wisdom of developing mathematics and science for education majors rather than insisting that educators learn real math and physics. It is more difficult; fewer will succeed, but they will be better able to have respect and their competence will be much greater. Likewise, we should applaud the efforts in medical anthropology to encourage taking master's in public health degrees as a way to certify competence in this area. Similar efforts should be encouraged in other applied areas of anthropology to ensure knowledge of the other paradigm, its bibliography, current research questions, and cutting edge issues: for example, encouraging students in ecological anthropology to get the equivalent of a degree in environmental science or some allied field as part of their training in anthropology, and encouraging doctoral students in environmental science to take formal coursework in social anthropology to develop into credible human ecologists.

As I studied cultural ecology and ecosystem ecology in the context of understanding the adaptation of immigrants to the Amazon, the boundaries between theory and practice disappeared. The effort to advance adaptationist theory ran immediately into the clear evidence for maladaptation of many individuals, households, and institutions (Moran 1983, 1989; see also Eder 1987). The academic exercise of measuring time inputs, production outputs, system properties, and demographic characteristics coincided with the facts of killer arboviruses; the high prevalence of malaria which sapped the energy of some, of trauma to immigrants inexperienced with the ways of falling trees, and of spoiled harvests in the fields due to lack of passable roads; and other challenges of a newly opened frontier (Moran 1981, 1989). While I did observe one anthropologist during that period who, while many natives died of disease because of contact, went to a native population and kept on collecting kinship information, most anthropologists when faced with these situations change their focus and begin looking for how to ameliorate the human condition in that setting through identifying bottlenecks to provisioning of medical services and determining the habitats that seems to lead to greater or lesser exposure to

disease and other practical policy recommendations informed by theory and practice in the field. In short, in studying the human species we bear an ethical responsibility for addressing their needs and making such knowledge available to them and to others who might be able to address them.

In the years that followed, I found this to be a continuing experience. If I began with an applied project, I found myself inevitably inspired to ask academic questions about ecological theory and to bring the applied and development work back into the mainstream of academic anthropology. This was the case, for example, in early consulting work in the Cape Verde Islands, where my work on an agricultural sector assessment (Freeman et al. 1978) later became an article on the historical experience of drought of the archipelago and the adaptation of its people, not to the physical environment but to international flows of assistance mobilized by earlier outmigrants (Moran 1982). This gave me an opportunity to take a contrarian view to then-current cultural ecology, which seemed to focus on adaptation to environment as if this environment was always a physical one rather than a social network or a politically mobilized diaspora. The consulting document, the "practice" side, was used for several years by consultants arriving to work in the area (Tim Finan, personal communication, 1985). Likewise, purely academic projects, such as one on community social structure in a new frontier area, led to questions about how to structure assistance to frontier communities, given the cacophony of social structures present but not yet socially negotiated at the level of the community or settlement, different notions of health and illness, and the challenge of providing medical services under those conditions.

There are few things as energizing to an academic anthropologist than practice. A life spent developing theory, without putting to the test its fit with the problems faced by human communities, strikes me as a life only half-lived. The preference to denounce the forces of change and how they negatively affect people, whether in our own or in far away societies, is a deeply ingrained tendency of our discipline. It has gained us sympathy in many quarters. It has also led to many practical people seeing us as Cassandra's not able to make useful recommendations because we deplore change. The discipline (as represented by its academic faculty) has a remarkable aversion to becoming a "policy science," that is, one capable and expected to provide analysis in and recommendations for making policy decisions at any number of levels. This, perhaps more than anything else, limits anthropologists' impact in the world today. A growing body of anthropologists have kept anthropology as an important partner in the development process that speaks for cultural diversity and development with a human face (Colson 1971; Horowitz 1996; Horowitz and Painter 1986; Scudder 1990), for medical services that treat the whole person and not just their apparent symptoms (Kleinman 1980; McElroy and Townsend 1979; Weidman 1978), and for classrooms that provide equal and fair ac-

cess to members of a multiethnic society (Obgu 1974). But these active practitioners' contributions seem to pale in comparison with the long-standing stereotype of anthropologist-as-museum-curator of disappearing cultures.

The richness of practice for anthropological theory should not need defense. Easily half of all new anthropology Ph.D. holders will find employment in nonacademic positions. This has been the case for more than a generation now, and it was true for the period from the 1930s to the 1960s. These have been fulfilling, productive settings in which to continue examining the rich tapestry of human communities. That they do not have comparable impact in the discipline of anthropology comes from a failure of the discipline and departments to incorporate in meaningful discourse practitioners with academics. Academic departments need to develop a regular relationship with public and private sector employers and with the anthropologists engaged in practice in their regions to enrich the academic departments with the wealth of experience they have, to provide bridges between theory and practice which can enrich both, and to create a more diverse anthropological community, a community perhaps less prone to the academic fads that sweep through our ivory towers every decade or so and only rarely for our benefit.

One of the positive things we can already see in many, but by no means all, departments today is a growing presence of applied, development, environmental, economic, medical, education, and other anthropological fields with a strong practice tradition. This has led not only to most major departments offering courses in applied and development anthropology but to new faculty lines focusing on developing internships, linkages with nonacademic employers, and opening up the curriculum to acquire skills needed to effectively operate in those settings: statistics, epidemiology, rapid assessment techniques, and a broader set of skills in the social sciences. This happened by the efforts of a few rather than by the consensus of the many. In most cases it happened *informally* rather than by fiat or formal decision making at the level of the whole department. It was a case of grassroots activism by a small number of faculty and sometimes of the pressure of students who spoke up for their need for practical courses and skill-oriented courses.

One more factor, which has been discussed a great deal less, is the transformation of anthropology itself by the people whom we have been studying (Moran 1996). The classic preindustrial populations that were the grist for the development of anthropology are changing at a rate that the discipline does not always wish to recognize. They are peoples on the move, who are shaping and being shaped by media, who are engaged in the struggle for human rights and the right for food, and who are organizing themselves in grassroots popular movements better able to serve their needs than "communities" or "the state." The earlier anthropological assumption of permanence and of unchanging traditions has yielded in the

past 25 years to a picture of anthropological subjects who have never stopped changing and who welcome change as a potential opportunity for betterment despite its high transitional costs. While some in the academy may still resist this notion, I believe the great majority of anthropologists today accept this as a given. The implications of this developmental inclination of human societies, whether preindustrial, developing, or developed, have changed the discipline (Moran 1996).

While I have not carried out a quantitative analysis of the changing composition of academic departments in the past 25 years, I would hazard to say that, whereas most Ph.D.-granting departments had one or fewer faculty who listed applied anthropology as one of their primary interests, today we would find most such departments with anywhere from two to five such faculty, depending on their total size. This faculty is likely not only to teach courses in development and applied anthropology but also to teach economic anthropology, ecological anthropology, medical anthropology, industrial anthropology, political anthropology, research methods, and a number of other core courses in the graduate and undergraduate curriculum.

This development has meant that academic anthropologists working in applied anthropology are much less likely to be treated as less theoretically sophisticated than their academic colleagues. The price that has had to be paid for this respect is that it probably reduced the frequency and length of the consulting work that many have undertaken to ensure that enough attention could be given to the academic publications and other academic tasks. This may have reduced the depth of experience that some may have acquired if they had had a more single-minded focus on applied work. But I think it was a price worth paying if one wished to work in the academy and at the same time improve the environment for applied anthropology within the academy.

The expansion in hires in applied anthropology rarely came through formal recognition of the equal value of applied anthropology in academic anthropology. Rather, it came from hires in those areas of theory in anthropology that have tended to be characterized by quantitative materialistic research, such as economic, medical, and ecological anthropology; from the discipline's traditional interest in area studies expertise; or from macro-theoretical interests such as political economy and gender. If applied anthropology was an additional concentration of the person all the better, but I have rarely seen it listed over the years as the primary area in hiring announcements. I think this reflects a still secondary role for this area in academic anthropology and the primacy of theory and cultural area in hiring decisions. This has changed in some departments, but it is probably a persistent pattern among many of the Ph.D.-granting departments in the country.

In short, the past 25 years have seen a clear expansion in the number of faculty in academic departments who list applied anthropology as one of their areas of expertise. This comes from an internal concern with stu-

dent placement and from the recognition that the peoples anthropology studies are much more interested in change than we had recognized. A focus on change—not only cultural but also economic, environmental, and political—plays a major part in bringing us to a discussion of the situation in the decades ahead.

Global Environmental Change, the Academy, and Practice

Just as the inclination of the world's societies to embrace change has changed anthropology in the past 25 years, so is the current globalization processes taking place with full media coverage likely to transform anthropology and the ways we carry out our work (Moran 1996). The key words in the research community as we tackle these issues are *adaptation*, *mitigation*, and *vulnerability*. These are dynamic terms, words about action. They have strong theoretical underpinnings, but they also highlight the immediacy of the need to provide solutions for human communities whose life support system may be devastated by the global forces of climate change, sea-level rise, deforestation, and a growing frequency of devastating natural hazards (National Academy of Sciences 1992). Effective responses to global environmental change will require good theory and timely practice.

Since 1989 we have seen the emergence of a dynamic community of academic and applied scientists concerned with the state of the earth and particularly with the human dimensions of global environmental change (Turner et al. 1990). The call has been international and funding for this work has grown steadily. In 1996 the U.S. Global Change Research Program spent \$1.8 billion. Social science funding within this effort grew from \$1.3 million in 1989 to \$25 million in 1996. The scale of this work is expected to continue for at least another decade if not more. As such, it is likely to influence the way anthropology participates in a changing global landscape. Two out of the six centers funded by the National Science Foundation as centers of excellence for the study of the human dimensions of global change have anthropological participation: Indiana University's Center for the Study of Institutions, Population and Environmental Change, and Penn State's Center for the Study of Regional Integrated Assessment. A growing number of anthropologists have obtained individual investigator awards for work on these topics, now with the participation not only of the National Science Foundation but of National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, and the Population Program at the National Institute for Child Health and Human Development. The MacArthur Foundation not only has a program on environment, as does the Rockefeller Foundation, but has one on Population, Consumption and the Environment in which several applied anthropologists participate. Individuals are pursuing topics and connections on their own too. Ben Orlove, as an example, spent 1998 at the Columbia Earth Institute, at Columbia University, working with climatologists to document

and determine the accuracy of Andean folk systems of predicting dry years and their fit with El Niño forecasts. Is this theory? Is this applied? Does it matter?

What characterizes much of this work is its multidisciplinary. Like most practice but not most theory, it requires many types of expertise to begin to make sense of a human community's predicament. Anthropology's well-known tradition of brokering between fields came from applied anthropological experiences not from purely academic anthropology. This has only grown in complexity with the change in scale from local to regional to national to global levels of analysis. In the projects in which I have participated in the past five years, there have been ecologists, botanists, soil scientists, geographers, planetary scientists, climatologists, plant pathologists, and others (Brondizio et al. 1996; Moran 1993b; Moran et al. 1996). We could still use some additional technical skills to hone our analysis still further. We use survey research, vegetation stand inventorying, spatial analysis using geographic information systems (GIS) and remote sensing, soil sampling, demographic census analysis, biomass sampling, photosynthesis analyzers, radiometers, and so forth (Brondizio et al. 1996; Moran et al. 1996). We write it up in social science, botany, ecology, agronomic, and other disciplines' journals. We suggest policies that may be less destructive and produce more economic well-being to local populations, we engage the people we study by explicating during research what the satellite images indicate about deforestation and land use, and we leave with each interviewed family a copy of the satellite image for their land so that they can look at it at their leisure and think about what they have done (that is, as a tool in environmental education). It is exciting to see farmers reflect on their decisions and begin a process of reevaluation right before your very eyes.

Research on the human causes of global change over the past decade has shown that human activities such as deforestation and energy consumption are multiply-determined by population growth, economic policies, available technology, cultural forces, values and beliefs, institutions, policies, and their interactions (Moran 1993b). In addition, this work gives considerable weight to identifying human vulnerabilities to change and identifying ways to adapt or mitigate the impact of these vulnerabilities. This may be done by building more robust institutions, anticipating change, or putting into place better monitoring methods (Moran et al. 1998a). Anthropological contributions in this area in the past have been many, as in the development of famine early warning systems in Africa.

The issues that are likely to gain in significance in the near future and that call for anthropological participation are:

1. understanding the social determinants of consumption patterns (Stern et al. 1997);
2. understanding how people choose to reduce energy use or evaluate alternatives to current energy uses;

3. improving monitoring of environmental hazards and believable forecasts of possible vulnerabilities at local to regional scale;
4. better understanding links between local, national and international institutions, the role of policy instruments in changing institutions, and the role of property rights institutions (Ostrom 1990);
5. better understanding the social driving forces of land use change at various scales (Liverman et al. 1998); and
6. improving decision making by incorporating nonmarket valuation, and judgmental processes (Moran et al. 1998a).

It is no secret to the applied anthropology community that human patterns of consumption play a major role in equity and distributional issues. What is much less well understood, and where our community has a rare depth of experience, is in explaining the kinds of lags that exist between increases in income and adoption of particular consumption routes. More importantly, under what conditions does one find improved income and health, without a necessary increment in energy consumption, meat consumption, and other environmentally costly consumption choices? Particular human needs and wants can be satisfied by a variety of products and processes which bring about very different magnitudes of environmental change. What choices are most costly in environmental terms, and which contribute most notably to human health, security, or well-being are concerns shared by those of us long interested in development and human ecology? Culture, fashion, advertising, and globalization all contribute at present toward emulation of high energy consumption patterns. Can this be changed? A volume was recently published by the National Research Council reviewing the state of knowledge on social determinants of consumption that also lays out a detailed account of research needs (Stern et al. 1997).

Since at least Margaret Mead, applied anthropologists have been interested in the process of technological change. The current questions are somewhat different. Instead of how technology affects preindustrial populations, the new questions seem to be: under what conditions do people choose environmentally friendly technology and choose to lower energy consumption or energy consuming products while still maintaining desirable living standards? Like the issue of consumption, one of the important interests here seems to be how people "learn" about the costs of technological choices, who is responsible for limiting choices to high-energy/low-immediate-cost, and to using the same means to produce a consumption society concerned with other goals such as long-term benefits, low-energy/high-immediate-cost considerations. More than a decade ago, the late Roy Rappaport had gotten University of Michigan students engaged in the study of energy utilization at the level of households as a window into the patterns of American energy consumption during the last "energy

crisis." Unfortunately, there was little follow up in this regard by others in the discipline.

The current work in early warning systems is increasingly technical and sophisticated, using orbital satellites to regularly assess the probabilities not only of famine but of disease outbreaks and many other hazards. This work in the future will require familiarity with GIS and remote sensing at some level so as to participate effectively in impact analyses. This work does not overlook the on-the-ground methods advocated by some but values linking these field methods to larger-scale observational systems. These systems have moved from a focus on famine to international forecasts related to phenomena like El Niño and ways to reduce devastating losses to producers by shifting types of crops and the timing of planting. Alongside improved forecasting through use of orbital satellite data, there are urgent needs to develop ways to provide effective warning systems, not only about famine but about health hazards from pollution, nuclear proliferation, and the new viruses and antibiotic resistant diseases (Liverman et al. 1998). The poorest of the poor tend to be disproportionately affected and the development community has much to offer academic efforts to effectively address these problems.

A particularly rich opportunity for advancing knowledge and human well-being is present in the need to better understand how social institutions influence environmentally significant human actions. Social institutions help us make more effective and well-informed decisions; they set targets for participants that represent shared information and in many cases consensus. But the challenge of better coordinating local institutions with national, and international institutions remains. There is a very broad range of institutional approaches for resource allocations: some market-driven, others using social needs, or hybrids of these. More needs to be known about what characteristics of national institutions are more conducive to sustainable resource use by local institutions. The challenge here is to understand the linkage between local, national, and international institutions, especially how to evaluate the robustness of local institutions in taking responsibility to implement, for example, resource conservation, where power differentials and violence may be used against leaders in local institutions charged with implementing national and international accords (Ostrom 1990).

One of the areas of the human dimensions of global change to which applied anthropology has contributed has been understanding land use and land cover change. Many important research questions remain that provide a fertile link between academic and applied anthropology: We still do not adequately understand how individual perceptions, attitudes, and socioeconomic status affect land-use choices and how external forces (such as trade, international political economy, local rules for access to resources, distance to markets, infrastructure, and so forth) interact in the calculus that people use in making decisions. The role of population in

land use is accepted, and there is growing consensus that in the future migration, rather than fertility and mortality, will be the key link between population and environment. Environmental changes will cause people to move, and population movement will likely change the environment more rapidly than fertility or mortality did in the past. These flows are now not just intra- and interregional but increasingly international in nature. Not only will the aggregate migration flow, but its ethnic and economic composition and traditions will play a role in what kind of landscape change will occur (Entwistle et al. 1998).

As in the case of reducing vulnerabilities, land use and land cover studies will continue to emphasize improved methods for spatial analysis of landscapes and human communities. This data will increasingly be georeferenced so that spatial and temporal changes can be monitored. Advances in collecting prospective migration data which incorporate social network analysis and link these to biophysical and spatial data provide powerful tools for understanding human impacts. For example, instead of saying, as we have in the past, that "a large number of migrants into a forested area affects the amount of forest cover," we can now specify what rates of deforestation will be associated with a migrant pool of a given age and gender composition over the course of a generation under a range of available credit policies and other policy interventions (Moran et al. 1998b).

One of the areas where interaction between academic and development anthropology could be particularly fruitful in the future is in advancing current understanding of decision-making processes, especially those involving nonmarket and noneconomic valuation. A number of programs have targeted this area as of high priority to advance our current understanding of how we may adapt to or mitigate global change scenarios. These issues have been prominent in development anthropology as we have struggled to argue for the importance of native systems of knowledge and the value of social systems, community processes, and social capital. Conflict between market and nonmarket criteria for decisions at any number of levels are present and their calculus remains poorly understood (Moran et al. 1998a).

Conclusions

The relations between theory and practice have changed academic anthropology in modest ways. While anthropology departments remain focused on theory far more than on practice, there is a notable increase in the presence of applied anthropology in major departments as a secondary field to more theoretical fields, such as cultural ecology and economic anthropology. In some departments, applied anthropology has taken the role of leader as a product of the interests of students and the needs of today. The boundaries between these areas are not always clear

and reflect the openness, or lack thereof, of the rest of the department to applications of anthropological knowledge. In this process, applied anthropology has been a voice for rigor in methodology. Courses in research methods in cultural anthropology are likely to be offered more often than not by faculty with experience in quantification and interests in verifiability in field data. These interests have not been central in recent years in cultural anthropology, except in ecological and economic anthropology and development anthropology. Insofar as we can look forward in the next century to a return of anthropology to a concern with human needs, development, ecological, and economic anthropology may stand at the very center of anthropology departments, trying to restore the discipline with the kind of breadth that brought most of us into anthropology. If anything, the agenda of the human dimensions of global change further challenges our discipline. Students and the public continue to expect us to address the challenges posed by adaptation and mitigation of global change by attention to theory and practice and attention to a fast moving landscape where human vulnerabilities loom large.

Greater (rather than lesser) flexibility in degree requirements, emphasis on a broad set of skills from other disciplines, a regularly occurring dialogue between academic and practicing anthropologists for their mutual benefit and that of students, and a greater concern with the full spectrum of people's lives (and especially their vulnerabilities) are needed in the years ahead. With growing frequency, our informants in the field ask us, What is this research going to do to improve my life and that of my family? A fair question, and one that we can only begin to answer when theory and practice are one.

Notes

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