

# Anthropology as Biosocial Science

## The Future of Cross-Cutting Research

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My essay begins as many anthropological essays do, with observations made while participating in daily rhythms of a strange social group. In this case, the strangers are my anthropological colleagues. My observations are threefold and fundamentally related. The first concerns a complaint that anthropologists are not getting major grants from the big NSF programs like Coupled Human and Natural Systems and that this reflects a bias on the part of NSF panels. Second, at Stanford at least, there is folklore about what kinds of proposals particular agencies look for. This takes the form of “You’ll only get funded if you have three falsifiable hypotheses” or “NSF only funds human behavioral ecology” or whatever theoretical approach of which the speaker disapproves. Finally, there is the grousing that some public intellectual (pick your favorite) is posing as an anthropologist by writing books that overly generalize, simplify or otherwise poorly represent our field. These observations are, I believe, powerful illustrations of what’s wrong with our discipline, and addressing them can improve our field and preserve anthropological traditions in the academy of the future.

cross-cultural field traditions. These trends beg the question: What is the role, if any, for anthropology—and scientific anthropology in particular—in the academy of the twenty-first century?

Anthropology can continue to play a fundamental role in the academy because of the evolving nature of research in university settings, but to do so we must tenaciously hold on to the very features that are being abandoned at so many institutions. Interdisciplinarity is undeniably the emerging theme in the organization of academic programs and funding agencies. This observation is reflected not simply in cross-cutting NSF programs but in the wholesale reorganization of many US research universities. A key theme emerging in this interdisciplinary discourse is the integration of biological and social information. Done well, this integration holds tremendous potential for advancing understanding, but the great danger of interdisciplinary research is that by accommodating different disciplinary perspectives it becomes shallow and lacking in any true explanatory power.

Four-field anthropology is a biosocial discipline that integrates information from all levels of biological and social organi-

zation. How do we accomplish this revitalization? First, a better balance must be struck between anthropologists’ desire to particularize and the broader scientific need to make general statements. Generalization does not preclude the specification of rich contextual detail. The ability to make empirical generalizations without losing sight of context and the panoply of human diversity is, in fact, the great comparative advantage that anthropologists hold. Detailed contextual information helps us determine the direction of causation or understand the nature of outliers in aggregate analyses. It is also a rich source of future hypotheses. Second, anthropologists need to extend their methodological toolkit. Methodological advances made in cognate fields have the potential to simultaneously satisfy the scientist’s sensibility for generalization and the anthropologist’s sensibility for the particular and subjective. Two examples from my own area of research—advances in the analysis of relational data (ie, social networks) and statistical methods for analyzing data with intrinsically hierarchical structure—have great potential for anthropological application.


### Revitalization Strategies

Most importantly, anthropologists must be willing to work in interdisciplinary teams. The boundaries of new knowledge lie in the interstices of traditional disciplines and extending these boundaries can not be accomplished by the traditional lone ethnographer working in isolation. Indeed, the very characteristics of four-field anthropologists make them natural leaders for interdisciplinary research projects. My experience on review panels for interdisciplinary research initiatives tells me that there is always of shortage of quality social science expertise in the submitted proposals, despite the fact that

the programs require a social science component. Too often, the social science has a shave-and-a-haircut quality in an otherwise natural science proposal.

But anthropologists will not get grants for which we do not apply. Nor will we make significant contributions to understanding biosocial phenomena if we obsess about gatekeeping or worrying about who is getting what fraction of the small pie funding agencies provide. If we demonstrate, through our research leadership, the utility of anthropological perspectives, we can expand the pool of resources that permit our work to thrive. A key facet of this leadership is communicating broadly and effectively to audiences beyond our seminar rooms, lecture halls and conferences. Rather than complain about the misrepresentation of our field by intellectual interlopers, why don’t we take an active role in framing our work for the general public?

Are there consequences of capitulating to a business-as-usual dismantling of four-field anthropology? Where else are students going to hear about the scope of human diversity? For all the rhetoric of cross-cultural understanding in a “globalized” world, where else but in anthropology do students learn about the truly extraordinary ecological adaptations, social structures, traditions and institutions of the non-western, non-market, non-state world? You know, the one that accounts for 99% of human history? There is instrumentality here, for certain. The range of cultural, social and physiological responses to perturbations past and present may provide us insights into how to respond to the massive changes the world is likely to experience in the near future. Our shared condition places a new premium on understanding human diversity. Are we up for the challenge?

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### COMMENTARY

#### Interdisciplinarity

As a social science discipline, anthropology stands at a crossroads. At many elite research universities, anthropology departments have turned away from scientific methodology and abandoned the four-field approach that made American anthropology so distinctive. Furthermore, though a major strand of anthropology’s disciplinary uniqueness centered on cross-cultural fieldwork, other social science disciplines that once lent their names in hyphenated fashion to subspecialties of anthropology (eg, psychological anthropology, political anthropology, economic anthropology) have now developed their own

zation. To understand human behavior, the four-field anthropologist considers genetics and physiology; the history of the human lineage; historical, cultural and social processes; the dynamics of face-to-face interactions; and global political economy. Each of these individual areas is studied by other disciplines, but no other field provides the grounding in all, along with the specific mandate to understand the scope of human diversity. The anthropologist stands in a unique position to serve as the fulcrum upon which the quality of an interdisciplinary research team balances. Revitalizing the four-subfield approach to anthro-

