Title: Ethnic Boundaries and Cultural Change in an Amazonian Population
Institution: University of California-Davis
NSF Program: Cultural Anthropology
Principal Investigator: Bunce, John A.
Rating: Excellent

Review:

What is the intellectual merit of the proposed activity?

The main questions this project would investigate—why human societies divide themselves into ethnic groups, and how these divisions change over time as a result of inter-group interaction—are classic questions in the social sciences. While sociologists and anthropologists have written reams on why people divide themselves into categories and their perceptions across categories, it seems to me that few studies actually collect good data to empirically test hypotheses generated from theory; this study proposed to do exactly this, and so I am very enthusiastic about it. The PI makes a convincing case for the merit of this project: it will help the world understand ethnic and cultural diversity, change, and conflict.

The PI proposes to spend almost a year learning the language and norms among Matsigenka, then five months doing the same thing among Mestizos, in neighboring villages in Manu, Peru. Then the PI would conduct experiments including choice vignettes to test a series of hypotheses from previous theory. Some of these hypotheses seem counter-intuitive to me—for example, I would think that a minority group's identity would become stronger when peacefully interacting with a more powerful group—but of course the research will ultimately confirm or reject each hypothesis, and the study design seems non-biased enough to do this fairly. The project also includes an agent-based modeling component that would include inter-individual variation in norm perception and unequal payoff matrices.

I am excited about the project because the author demonstrates considerable creativity combined with empirical feasibility in his attempt to test specific notions from the literature. The pilot study was clever and demonstrates the feasibility of the project. While many proposals propose to use participant observation, this proposal does a great job of explaining the utility of the method—the PI will break and uphold different norms over the course of fieldwork, and will learn about the norms through scold and praise just like anyone else learning culture.

To be a bit more critical, I do not really understand the hypotheses to be tested from the ABM—they are explained on page 2—I read and reread the second one several times, but it sounds completely tautological to me. I would also have liked a bit more information on (a) the market benefits for acting mainstream, which I assume is Mestizo, and (b) the kinds of interactions between groups; are they always positive? Was this true historically—is there a history of slavery, land grabbing, raiding, etc? (c) Why the person getting more benefits from an interaction has lower status seems counter-intuitive to me. This could be explained better, perhaps.
What are the broader impacts of the proposed activity?

The PI convincingly argues for the broader impacts of the study: the findings can be applied to situations of cultural survival and cultural conflict. A graduate student would receive training and experience. The study community will benefit from English language classes taught by the PI.

Summary Statement

This is a very clever study on topics that are classic in the social sciences, but which are rarely addressed with the level of methodological rigor proposed here. The broader impacts are meaningful and convincing. The budget is also quite reasonable. This seems like a good investment of NSF funds.
Title: Ethnic Boundaries and Cultural Change in an Amazonian Population
Institution: University of California-Davis
NSF Program: Cultural Anthropology
Principal Investigator: Bunce, John A.

Rating: Very Good

Review:

What is the intellectual merit of the proposed activity?

There are a number of strengths associated with this proposal. The use of a mixed-method approach to studying these issues is laudable. The proposed integration of qualitative and quantitative methods seems quite thoughtful and should result in a very rich data set. The measures seem to be appropriate to both the theoretical questions that are posed as well as relevant to the ecological experience of the participants. The analytic strategy proposed by the PI is detailed and appropriate for the data that is expected to be collected as well as for the research questions that are proposed. The PI clearly has the experience, dedication, and rapport with the Matsigenka and Mestizo communities that will be necessary to conduct the proposed research.

The proposal would have been strengthened by greater discussion of how issues of reliability and validity will be handled with regard to the ethnographies and participant observations. Will there be a collaborator with whom the PI will share his field notes? Will the results and interpretations of the study be shared with the Matsigenka and Mestizo participants in order to get their perspective of the observations?

Minor points: The PI should consider counterbalancing the six domains to be used to establish the Norm and Marker Complements so that they are not derived only from the interviews with the Matsigenka. Some of the domains should be based on the interviews from the Mestizo or else subsequent differences found between the groups on the Complements may be confounded.

What are the broader impacts of the proposed activity?

The activities proposed are likely to make significant contributions beyond those associated with the research findings. The PI will be providing direct services in the form of teaching English to the two communities in which the study resides. The project will also provide an excellent training experience for a graduate trainee. The PI also has a track-record of training Peruvian students as part of his research activities.

Summary Statement

The proposed research examines the role of inter-ethnic interaction on the norms, symbolic markers, and out-group perceptions of the Matsigenka and Mestizo people in Peru. Specifically, the proposed
project will utilize, ethnographic interviews, participant observations, field experiments, and agent-based modeling to address four main objectives. These objectives are: 1) identify and describe a set of norms and markers for each ethnic group as well as a set of intra- and inter-ethnic coordination interactions; 2) measure the distribution of identified norms. Markers, and interaction among individuals in each group; 3) compare the actual and perceived distribution of norms and markers, in relation to inter-ethnic interactions; and 4) develop a general agent-based evolutionary models of cultural change among the ethnic groups.
Title: Ethnic Boundaries and Cultural Change in an Amazonian Population
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Rating: Very Good

Review:
What is the intellectual merit of the proposed activity?

The proposed project aims to enhance understanding of inter-ethnic relations and the process of cultural conflict and change with a population of majority Mestizo and minority indigenous Matsigenka ethnic groups in communities inside and outside Manu National Park in southeastern Peru (engaged in market-based versus traditional subsistence economies, respectively, in Amazonian South America). Through an integrative ethnographic approach to studying interpersonal interactions and cross-cultural perceptions of the norms (beliefs about acceptable behavior) and culturally symbolic markers (e.g., dress, language) of individuals of these ethnic groups, the project proposal builds on a pilot study by the PI and offers the potential for future longitudinal investigations. Also of notable merit, the project proposal draws on conceptual and empirical work in anthropology, sociology, and social psychology, thus the results may contribute useful interdisciplinary implications.

The proposed activity plan, timeline and procedures for data collection and analysis, and access to resources appear well conceived, organized, and justified.

Less clear to this reviewer, however, was how this project would attend to potential within-group ethnic differences with the sample. Will the sample exclude participants on "either side of a Matsigenka-Mestizo boundary" who are Matsigenka individuals who left the Manu National Park community and now live in the Mestizo community? Regarding the PI's definition of ethnic boundaries whereby individuals who may belong to more than one ethnic group tend to identify with only one at time and preserve ethnic boundaries, this reviewer wondered how conceptions of bicultural ethnic identity development might inform the proposed project. In addition, the proposal included a section on "Emic Boundary Perspectives" and discussed that among the multiple nested social identities that might be elicited in various contexts for different purposes "(e.g., Amazonian Indian, Peruvian, Matsigenka, Manu resident)" (p. 4), the researcher would need to assess with individuals "that the ethnic boundary of interest is in fact the social boundary perceived to be most relevant to the subjects in the context under study" (p. 4). How would the PI accomplish this?

What are the broader impacts of the proposed activity?

The results of this project may provide useful information to address common issues for access to economic and political resources with indigenous ethnic groups in Amazonian South America who face cultural conflicts between adopting market-based strategies of socioeconomically powerful ethnic
groups versus maintaining traditional strategies (e.g., low-impact subsistence practices that preserve cultural traditions and the biodiversity and ecological integrity of the environment).

The proposal rightly notes how challenging yet imperative will be the responsibility to carefully consider and develop culturally and politically appropriate approaches to presenting the research findings to the Matsigenka and Mestizo communities and Manu National Park administration. It appears this task will likely be facilitated by the partnership relationships that the PI has established and will develop with these communities. The plan is for results to be disseminated through focused summaries to these communities in their languages (Matsigenka and Spanish, respectively), as well as through technical reports and scientific publications.

The project also integrates research and teaching by the PI: (a) offering English language classes to Matsigenka adults interested in working in local eco-tourism lodges; (b) offering instruction to the Mestizo community students and adults on the cultural and biological diversity of the region; and (c) collaborating in the final phase of the project with a graduate student to promote his or her research training and professional development.

Summary Statement

Overall, the quality of the proposal is very good and the project merits support.

One suggestion: As this reviewer is not a cultural anthropologist, the use of that discipline’s terminology in the proposal made it difficult at times to decipher. Thus, revising is recommended to make it understandable for broader audiences.
What is the intellectual merit of the proposed activity?

This study proposes a rigorous study of a process that has been ubiquitous in the media and a source of popular fascination: what happens when an indigenous group comes into regular contact with non-indigenous people? Do they, as conservation biologists like Terborgh would have us believe, forsake their culture and become irrevocably dependent on the larger, dominant culture? Does their unique culture disappear? Or do they retain their cultural identity? What factors can help us understand the circumstances in which one process versus another is likely to take place?

I think it is very likely that many reviewers would have a somewhat negative reaction to this proposal. After all, here is a researcher who has thus far only published on titi monkeys and guppies proposing a study of the mestizo and Matsigenka communities! Moreover, the evolutionary model seems to reduce a very complex dynamic of inter-cultural contact down to norms, markers and coordination interactions. In addition, Bunce's examples (p. 5) of cultural change lacked a familiarity with the larger socio-political context. Some Secoya have taken up ranching not just because they see it as an attempt to 'control their lives, land and resources' but because they have been incentivized to do so as a result of the policies implemented by Occidental Petroleum, which has operated in their lands. The Coffn was stated as taking a different approach that is more 'traditional' and conservation friendly, but Bunce refers only to a sub-group of Coffn, those who live in the community of Zfbalo and who are closely allied with Randall Borman, the son of missionaries who has acted as a cultural broker for this indigenous group. The PI is clearly not a political ecologist, yet he does not claim to be, and his study can be complementary to the predominant, descriptive approach of understanding intercultural contact between Native Amazonians and outsiders.

The PI recognizes that the relationships and dynamics he proposes to study are complex, yet by examining these patterns via concrete, measureable variables (e.g., individual variation in the frequency and nature of inter-ethnic interactions, covariance of markers and norms), he can potentially elucidate trends in inter-ethnic contact to move our understanding forward, away from prevalent assumptions of unidirectionality. Bunce's research design is clearly explained and well developed, and the pilot study results are intriguing (although for that I want to know if his interview questions were back-translated for accuracy and I wondered how good Bunce's pronunciation of Matsigenka is).

Pilot study notwithstanding, the expertise of the PI to carry out the proposed research is questionable. I would have liked to have seen more justification of his ability and preparation to undertake this work, why he has chosen to undertake such a shift from his earlier research, and how the Advisory
Committee (which has some really high caliber scholars) will be involved in the research. Elaboration of the last point specifically could go a long way to allaying my concerns on this issue.

What are the broader impacts of the proposed activity?

Besides illuminating how Matsigenka culture changes across an ethnic boundary as disseminated by reports to the study community, administration at Manu National Park and a local university, the broader impacts of the study are actually unrelated to the study and involve the PI's involvement in teaching environmental education, English and math. There is some limited training of one graduate student. This component is quite weak, which is even more problematic given the potentially important applied lessons of the research.

Summary Statement

This proposal has solid intellectual merit in the commendable development of a research design that examines hypotheses about the relationships among individual interactions, individual perceptions, and ethnic group-level cultural characteristics. It is a high-risk proposal for funding because of the uncertain aptitude and expertise of the PI, who is a primatologist and has little expertise and no publications working with indigenous peoples (e.g., how good is his Spanish? It is not enough to mention that he speaks it is he fluent?). In many ways, Bunce is proposing a major shift in his academic focus, and this proposal is akin to him undertaking a second dissertation. My score of the proposal reflects the intellectual merit most of all, as I have reservations about the broader impacts and the ability of the PI to successfully carry out this research.
What is the intellectual merit of the proposed activity?

Through a survey of norms and ethnic markers, this study seeks to generate a formal model of inter-ethnic behavior. The PI will also create a data set that will allow other researchers to test alternative models on inter-group behavior. Though there are anthropologists who see "culture" as something that can quantified and modeled (within a positivist view of science) and would see this proposal positively, I have a very different view of the state of the field and the challenges of working with (not "on") Indigenous peoples.

The proposed fieldwork seems more akin to social psychology than anthropology. In this proposal there is none of the ethnographic sensibility or reflexivity that has concerned anthropologists for the last several decades. This conceptualization of "culture" (as the frequency of norms and markers) is a pre-Geertzian view that is out of step with the ways in which many contemporary cultural anthropologists work with Indigenous peoples. There is no mention in this proposal of the leading figures in the anthropology of the Amazon including Jean Jackson, Terence Turner, Hugh Raffles, and Shane Greene. On the anthropology of Indigeneity, the absences are even more striking. To restrict our focus only to Peruvianists, it is remarkable that there is no engagement with the work of scholars like Stefano Varese, Carlos Ivan Degregori, Marisol de la Cadena (at UC Davis!), María Elena García, Orin Starn and others.

Aside from the bibliographic silences, there is a striking lack of concern for the politics and ethics of field research. Teaching English lessons (and only to adults interested in "ecotourism") is not the kind of collaborative and horizontal engagement that has been encouraged by recent discussions regarding the "decolonization" of methodology (see eg Linda Tuhiwai Smith). This works still has the feeling of the old imperial and colonial "gaze" that provoked the crisis in representation in the discipline. This work seems to have missed that crisis (and the lessons learned from it) entirely.

There is also an incredible lack of awareness of the political context in the country (and the Amazon), one which has involved the expanded reach of extractive industry and which created a tense environment for "inter-ethnic" relations. To ignore conflicts that received national and international attention, and focus narrowly on norms and markers, is to come very close to missing the forest for the trees.

I see no significant contribution to our understanding of "culture" or "cultural change." If anything, the reification of culture signals a disappointing return to essentialist and behaviorist models of anthropological inquiry.
What are the broader impacts of the proposed activity?

The creation of a dataset does have the promise of making available data to a broad scholarly community. However, extracting "experience-near" data from complex contexts for the use of "experience-distant" formal models has many problems and risks. It assumes that this small number of variables, and not broader political, historical, or cultural contexts, shape the way entire groups behave.

The project does mention some collaboration with local people and one graduate student, but this is very limited. There is little room for meaningful participation of community members, aside from performing the tasks already designed by the researcher.

Summary Statement

In short, I am sorry to say that I don't see any intellectual merit or positive broad impacts from this research. Others may have different views of the merits of this project, but I see it perpetuating outdated and overly rigid notions of culture, ones that I had hoped our discipline had left behind.
What is the intellectual merit of the proposed activity?

I find the establishment of merit perplexing. Following the argument of the PI, the research will possibly yield a model for predicting cultural change in contexts of inter-ethnic interaction. However, the methodological strategy - which combines, ethnographic, experimental, and agent-based modeling - derives from a peculiar kind of 'science' that flattens the complexity of the categories at stake. For example, markers, norms, and so forth are assumed to operate as variables that stand for deeper meanings (ethnicity, cultural identity) and to change through relations between two populations. This is intuitively correct, but given the context there is an absolute flattening of the very different legal and economic regimes that underlies the lives and positions of these populations. Categories like æstatus' fail to capture these very different social, political, and economic fields. The notion of ethnic markers and norms also collapses salience and meaning of very different kinds of social relationships that shape intra- and inter-ethnic relations. These are connected in very different ways to the making of meaning (symbols) between and within groups, and cannot be reduced to interchangeable norms and markers. That is to say, a beaded necklace is not the same kind of index of meaning of æethnicity' as are certain kinds of exchange relationships, that entail very different manifestations of social connection and belonging. Cultural change is not simply about the display or abandonment of æmarkers.' This is a rather shallow, if not na´ve conceptualization of culture.

There is also the overlay of the park itself, which already prefigures æidentity' in many ways, thus disrupting the methodological exercise that the PI puts forth. Impressive as it is in many ways, it seems more appropriate for the primates that the PI studied in the past. Ethnographers of South American indigenous peoples have long examined these same questions through methods of participant observation. None of this literature is referenced (most recent, in my mind, is B. Dean's Urarina Society, though there is a long history of study of culture change, assimilation, mestizo-indigenous relations, etc. in this region). Since I am not familiar with the concerns of the agent-based model of cultural evolution at stake, perhaps these comments are irrelevant. However, based on my knowledge of the ethnological literature, the predictions promised are superficial and intuitive (and many are established). Of much greater intellectual merit would be a project û somewhat like this one û which examined the more specific ways that tenure regimes like natural parks shape these cultural prospects and possibilities, and does so in tension with the wider politics of indigeneity in places like Peru. This would disrupt the PI's apparent sense that a universal science built on such æideal populations' can be had (it cannot). Nonetheless, it would add much more to our understanding of how conservation regimes reconfigure historical and territorial relations that derived from colonial state formation (as we
see throughout Latin America, and indeed throughout the world). The PI writes as if the park (as it might be for his non-human primates) is simply a place, rather than what it really is, a legal, ecological, geographic political, and economic structuring process.

What are the broader impacts of the proposed activity?

As above, since I do not see the value of the agent-based cultural evolutionary modeling for this kind of setting, I see little broader impact. An unspecified possible impact of the project is the generation of data that further weakens the bargaining position of the indigenous peoples vis-à-vis the park and their mestizo neighbors. Alternatively, if we follow the PI's claims, this may help the Matsigenka in some way, although it is not clear that this is the kind of research and data that may actually be of use to them.

Summary Statement

Perhaps I am the wrong type of reviewer for this type of project, but I do not believe it is the kind of cultural anthropology project that the NSF should be funding.
Title: Ethnic Boundaries and Cultural Change in an Amazonian Population

Institution: University of California-Davis

NSF Program: Cultural Anthropology

Principal Investigator: Bunce, John A.

Rating: Excellent

Review:

What is the intellectual merit of the proposed activity?

This study has far-reaching implications for the advancement of our understanding of human interaction and how it is mediated by ethnic identification both on a conscious level and on an unconscious level. The data will be invaluable across several fields of study, including, but not limited to social psychology, cultural anthropology, cognitive psychology and anthropology as a springboard for further investigation.

What are the broader impacts of the proposed activity?

I can fathom far-reaching implications with regard to cross-cultural human relations politically, economically and socially. This is timely work and represents a potentially crucial addition to our understanding of human nature as we move rapidly into an uncertain future.

Summary Statement

Dr. Bunce demonstrates a comprehensive knowledge of human nature based on extant empirical studies. His synthesis of this broad range of theory is impressive. His conceptualization is comprehensive, from development of hypotheses to the details of practical issues involved in such endeavors. However, one issue that is not fully delineated (as far as I surmise) is how Dr. Bunce will protect the indigenous peoples from Western-carried disease. The most remote tribes residing in the Amazonian basin, such as the Matsigenka, are known to be highly susceptible to Western illness due to their lack of immunity (akin to the devastation transmitted to Native American peoples in prior centuries).