

Tending the Field: Special Issue on Agricultural Anthropology and Robert E. Rhoades

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Robert (Bob) Rhoades (1942–2010) developed and adopted the term “agricultural anthropology” to describe his work to other social and biological scientists in the late 1970s and early 1980s, during his post as a Rockefeller Postdoctoral Fellow (and soon after, Senior Social Scientist) at the International Potato Center (CIP) in Lima, Peru (Rhoades 1980, 1984). At the time, and still today, research protocols and policies in the Consultative Group on International Agricultural Research (CGIAR) system were largely catered to and dictated by agronomists and biologists. Among CGIAR social scientists, economists were the most valued. Rhoades was the second anthropologist to work at CIP (following Robert Werge) and the predominant attitude toward anthropologists was one of confusion and relegation to second-class citizen status (Van Willigen 2002). It was not long before Bob (in collaboration with a fellow post-harvest colleague, biologist Robert Booth) turned the CIP approach on its head, suggesting that research should both begin and end with the farmer instead of the top-down approaches that prevailed at the time. Rhoades and Booth (1982) called their model “farmer-back-to-farmer” (see Crane; Nazarea; this issue), which quickly became an early and popular participatory approach in agricultural development, leading to the formation of an entire new program in the CGIAR system directed by Rhoades (Users Perspective with Agricultural Research Development—UPWARD, Asia) and the diffusion of appropriate technologies to millions of farmers worldwide. Rhoades defined agricultural anthropology as

the comparative, holistic, and temporal study of the human element in agricultural activity, focusing on the interactions of environment, technology, and culture within local and global food systems, and it has the practical goal of responsibly applying this knowledge to improve the efficiency and sustainability of food and fiber

production. Agricultural anthropology views agriculture neither as a mere technical process nor even as techno-economic combination, but as a complex human creation and evolutionary process that includes equally important sociocultural and ideological components in interaction with each one another and the natural environment. Agricultural anthropology is broader in scope than other agricultural disciplines which focus, and rightly so, on specialized and limited problems in agriculture. [1984:46]

This *CAFE* special issue stems from a session at the 2010 AAA Conference, which gathered together many of Robert Rhoades’s students and peers¹ to expand upon his work in the domain of agricultural anthropology. One of Rhoades’s fundamental assumptions throughout his career guides the conceptualization of this volume. Namely, we view agricultural anthropology as consisting of both an anthropology “of” and “in” agriculture. By this we mean that academic study of agricultural formations and processes as well as applied work within agricultural systems are interrelated and necessary for the subdiscipline of agricultural anthropology to flourish and remain relevant to contemporary global issues. Theory and basic research, within the academy and beyond, should not be considered as separate or opposed to applied/practicing agricultural anthropology. As Rhoades (2005:83) put it, “The bridge between theoretical anthropology and applied anthropology in the agricultural domain needs to be strong.” Additionally, this bridge should not be a one-way street. Walter Goldschmidt argued in his SFAA Malinowski Award lecture that applied and practicing anthropology need to feed back into theory in order to both make themselves more generally relevant and to strengthen anthropology as a whole (Goldschmidt 2001). The papers in this special issue have been written with the intertwined goals of contributing both theoretical insights and practical application toward the advancement of agricultural anthropology.

They are all meant to map out forward-looking agendas that draw upon key aspects of Rhoades's work.

Topically, the papers engage three themes that were important to Robert Rhoades throughout his distinguished career: agrobiodiversity conservation (Brown; Nazarea; Veteto; this issue), participatory and collaborative research (Crane; Nazarea; Skarbø and VanderMolen; Veteto; this issue), and the multilayered politics of agricultural development (Crane; Skarbø and VanderMolen; this issue).

Virginia Nazarea, Bob's collaborator for over 20 years, opens the issue with a short reflection on the trajectory of his career, with special attention to how his research intertwined with his passions and personality in "Potato Eyes: Positivism Meets Poetry in Food Systems Research." The essay weaves together Bob's compassion and his science; we are reminded in this piece that his, and indeed all of our, professional accomplishments and aspirations are necessarily embedded within our own sense of humanity.

In the second article, "Long in the Horn: An Agricultural Anthropology of Livestock Improvement," Tad Brown picks up Nazarea's thread of blending the personal and professional by delving into a topic that was close to Bob's heart at the end of his career—the preservation and breeding of Pineywoods cattle, a rare breed found only in the American Southeast. This subject was not only of academic interest to Rhoades—he was raising and breeding Pineywoods cattle on his own farm in Oglethorpe County, Georgia. Brown's exploration of the history and present of Pineywoods emphasizes the deep sociality and environmental particularity of livestock genetics; tracing how interactions between colonial-era practices, biophysical pressures, 20th-century agricultural policies, and personal passions of contemporary ranchers have made the Pineywoods breed what it is today. Brown concludes with the observation that evolutionary narratives of genetic change in livestock systems risk eliding the social nature of cattle biodiversity.

James Veteto continues with the topic of agrobiodiversity, building on Rhoades's work in mountain studies, cultural ecology, and ethnoecology in his article, "Seeds of Persistence: Agrobiodiversity in the American Mountain South." By analyzing how varietal richness emerges from the history of social, economic, and geographic marginality in southern Appalachia and the Ozarks,

Veteto shows how ethnotaxa levels rival highly agrobiodiverse areas in the Global South, particularly with regard to folk crop varieties of apples and beans. In addition, the article demonstrates that southern/central Appalachia is the most diverse foodshed in the United States, Canada, and northern Mexico (at the varietal level) studied to date. In the process of documenting agrobiodiversity, Veteto collaborated with a wide range of organizations interested in folk crop variety conservation in Appalachia and the Ozarks, empowering and enriching local seed-saving networks, and contributing to applied agricultural anthropology research.

Kristine Skarbø and Kristin VanderMolen further pursue the topic of how social history and geography interact to create differentiated vulnerability to climate stress in highland Ecuador (a long-term field site for Rhoades) in their article, "Irrigation Access and Vulnerability to Climate-Induced Hydrological Change in the Ecuadorian Andes." Adaptation to climate change is an increasingly urgent issue in the Andes, and Skarbø and VanderMolen show how farmers' experiences of climate change, in both personal and collective terms, influence their ability to respond effectively. By understanding current patterns of vulnerability as emergent from the old hacienda system and subsequent political reforms, the authors emphasize that adaptation to climate change is not just a question of technical fixes, but instead must directly address the political and development challenges of water rights reform.

In the final article, "Bringing Science and Technology Studies into Agricultural Anthropology: Technology Development as Cultural Encounter between Farmers and Researchers," Todd Crane offers a critical reconsideration of Rhoades's "farmer-back-to-farmer" model for the development of agricultural technologies. Threading together agrarian anthropology with science and technology studies, Crane points out that within the "farmer-back-to-farmer" model, anthropologists have been strong at analyzing rural culture and the logics it brings to socio-technical change, but have not adequately analyzed the institutions of science as cultural spaces that shape the ways scientists engage in participatory research. Crane proposes that an "STS turn" in agricultural anthropology would not only be theoretically useful in overcoming the staid, and ultimately false, dichotomy between "local knowledge" and "scientific knowledge," but would also better serve applied interests by recognizing

ing that some of the institutional barriers to development reside in our own research practices.

Taken as a whole, the five articles in this *CAFE* special issue offer both a reflection upon and an expansion of the diverse contributions of a founding member of the Culture and Agriculture section of AAA. In addition, four book reviews also ask us to better understand the context of 21st-century agriculture. Theresa Miller provides a comprehensive summary of *Seeds of Resistance, Seeds of Hope: Place and Agency in the Conservation of Biodiversity*, edited by Virginia D. Nazarea, Robert E. Rhoades, and Jenna E. Andrews-Swann. By incorporating a multiplicity of voices, including those of anthropologists, activists, conservation practitioners, and indigenous peoples, this robust volume offers readers a new way of conceptualizing biodiversity, consistently placing the farmer first, following Robert Rhoades's pioneering approach. Adriana Premat's *Sowing Change: The Making of Havana's Urban Agriculture*, reviewed by James Verinis, examines small-scale agriculture in contemporary urban Cuba in the context of inter- and transnational issues such as sustainable agriculture, urban greening, and social justice. Jonathan Malindine explores *Swamplife: People, Gators and Mangroves Entangled in the Everglades*, in which anthropologist Laura A. Ogden exposes the intricate connections between humans (mainly poor, rural white residents), household livelihood strategies, and the myriad animals and plants that compose the Everglades landscape. Finally, Eric Bowne reviews *Environmental Anthropology Engaging Ecotopia: Bioregionalism, Permaculture, and Ecovillages*. Edited by Joshua Lockyer and James R. Veteto, the book is a complex volume of papers that challenge us to explore the ways in which environmental anthropology can help foster serious public efforts to transition to more sustainable cultures. Turning to film, Jeanne Simonelli reviews the documentary *The Natural State of America: We All Live Downstream*. Produced and written by anthropologist Brian Campbell (a student of Bob Rhoades), and codirected by Timothy Lucas Wistrand,

Matthew Corey Gaittin, and Terrell Case, the film uses the perspectives of applied and environmental anthropology to tell the story of how residents organized and continue to fight herbicide spraying and environmental contamination in the Ozarks.

By blurring the supposed boundaries between science and humanism, theory and application, those of us who continue to draw inspiration from the dynamic work of Robert Rhoades hope to make useful contributions toward the future of a fully engaged and relevant agricultural anthropology.

Note

1. We would especially like to thank Ben Orlove and Carla Roncoli for participating as discussants in this session, entitled, "The Heights and Depths of Putting People First: A Tribute to the Work of Robert Rhoades."

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