

INTRODUCTION

It is always a pleasure to start an REA volume introduction with a report of a new development in the series' long and proud history – now at the 37 year mark. This time, in fact, there are several. First, as some readers may have already noticed, REA is now officially sponsored by the Society for Economic Anthropology (SEA), a section of the American Anthropological Association. Volume 34 of REA (published in September 2014) was the first to bear this distinction, and the present volume is the second. Solidifying the relationship between SEA and REA – which had actually existed in an informal sense for many years – is expected to bring many benefits to both parties. One direct benefit to SEA members is the opportunity to purchase REA volumes at a discounted rate for a set amount of time following their publication. Please see the SEA website, or the REA corner on Emerald's website, for more information.

Another development worth reporting is the establishment of REA's Editorial Advisory Board (EAB), which was finalized shortly after Volume 34's publication. This ten-member panel of noted researchers will help support REA in various ways, such as by soliciting papers by experts in their fields, by assisting with the peer-review process when needed, and by spreading the word about new volumes. They will also lend their advice on REA projects and help steer the development of the series in general. They are (in alphabetical order): Jeffrey Cohen (The Ohio State University), Geert De Neve (University of Sussex), Jumpei Ichinosawa (Miyagi Gakuin Women's University), Carolyn Lesorogol (Washington University), Ty Matejowsky (University of Central Florida), Atsuro Morita (Osaka University), Lionel Obadia (Université Lyon 2), Noel B. Salazar (University of Leuven), Cynthia Werner (Texas A&M University), and Tamar Diana Wilson (University of Missouri). Finally, one more development: this is the first REA volume to focus exclusively on the phenomenon of climate and environmental change, one from which – it seems safe to say – no human living today is completely unaffected.

The aim of this volume is not to critically examine the politics of climate change – to lay blame, to analyze denials, or to expose cover-ups. This has already been eloquently and convincingly done by a variety of authors (Hoggan, 2009; Mann, 2012; Oreskes & Conway, 2010). After all, despite

the stubborn persistence of conflicting views, human culpability for global warming, the biggest attention-getter element of the general phenomenon of climate change, has already been proven beyond all reasonable doubt: "It is all but certain that human activity has caused a steady increase in global temperatures over the past 60 years, leading to warmer oceans and an acceleration in rising sea levels" declared a recent U.N. report (Washington Post, 2013). Adding to our worries over what we've collectively done to our world and ourselves, archeological research points to an increasing likelihood that climate change was a major factor in the demise of numerous ancient human civilizations (APF-JIJI, 2013a; Fiske et al., 2014).

The aim of the present volume, rather, is to contribute to a more thorough understanding of the ways in which people around the world have adapted (or struggled or failed to adapt) culturally to changing economic conditions caused by climate change and/or shifts in environmental quality. It does this by focusing primarily on specific situations in particular locations, showcasing and confirming the strength and value of intensive ethnographic investigation.

Part I of the volume is comprised of three papers focusing on situations in three separate parts of the world: Nepal, Reunion Island (in the Indian Ocean), and southeastern British Columbia, Canada. First here, Pasang Yangjee Sherpa analyzes institutional efforts at adapting to the effects of climate change in her own native land of Nepal – a land which, in addition to coping with these issues, is struggling to recover from a devastating earthquake at the time of this writing. One main point that arises from her essay is the finding that "climate change" may mean something different to different people living in the same general area, even if said people constitute a single "people." By focusing on four different activities, Sherpa demonstrates a need for a deeper understanding of local situations and culture – the local cultural world, no less – and for more sincere and effective outreach efforts on the part of institutional actors, in order to make meaningful contributions to climate change-related problems.

Next, Sophie Bouly de Lesdain raises a similar point by shining a light on decision-making processes among small-scale photovoltaic energy producers on Reunion Island, a distant French overseas department in the Indian Ocean, some 675 km off the eastern coast of Madagascar. On the one hand, there is a desire for greater independence from the local power grid. After all, electricity-generating fuels must be imported. This seems to have given rise to a fair degree of concern about household consumption levels. But there is also a more immediate, practical reason to put solar

panels on one's roof: frequent power outages that can last for some days. In addition, government policy – in the form of tax laws, direct support, and artificial electricity price adjustment – emerges as a major factor. The last of these has resulted in electricity rates that are equal across the board in all parts of France and its overseas departments. Uncertainty over the future of these policies, it is shown here, has contributed greatly to residents' choices to aim for energy independence. Importantly, pointing to the value of ethnological research on these kinds of global/state/local processes, the author reveals decision-making that is unexplainable by simple cost/benefit analyses. Concerning the recent proliferation of solar power initiatives around the globe, Sophie Bouly de Lesdain's findings here will no doubt prove to be applicable to a variety of similar situations.

Finally, this section of the volume closes with an essay by Patrick B. Patterson – who also contributed a paper to volume 26 of REA – on the effects that climate change are having on local perceptions of forest resources and work in British Columbia, Canada. Again, uncertainty comes to the forefront, as the future of a formerly highly dependable resource and centerpiece of the regional economy – the forest – becomes murky due to increasing pine beetle damage caused by a general warming trend. Worry over ability to continue serving as stewards of the forests, and even over the future of the industry itself, point to a host of challenges that climatic shifts appear to hold in store for human societies all over the world.

Part II of this volume continues Part I's focus on the local, but the five papers that comprise it are tied together by a common concern with food production and/or procurement – a vital aspect of human adaptation to climate change, as warnings of food crises caused by the phenomenon have been sounding for quite some time now (e.g., *The Observer*, 2013). The first, by Ana Maria de Souza Mello Bicalho and Scott William Hoeffle, does not focus exclusively on food production – its concern with logging provides continuity with the closing paper of the previous section of the volume – but frontier peasant smallholders in and near conservation units in the Central Amazon constitute an important factor in the overarching question here of “whether new full-time or multifunctional part-time rural activities can significantly contribute to Amazonian livelihoods.” As is generally known, in addition to our planet's polar regions, the Amazon basin has long served as a powerful symbol of all that is ecologically wrong with human society today. On a concrete level, rapid deforestation coupled with rapid urban growth there presents especially difficult problems for Brazil's government and those individual and institutional actors who would seek

to preserve this sensitive environment (Romero, 2012). Here, “multifunctional” refers both to local adaptive strategies combining agricultural production and nonagricultural activities, and also to the research strategy employed by Bicalho and Hoefle. Ultimately, the goal is to help find a way to balance conservation with antipoverty measures in order to reverse deforestation and reduce (often violent) land disputes – a lofty one indeed, but one that might be achievable through successful multifunctional approaches.

The second and third papers of this part of the volume both remind us of the importance of hands-on, empirical research into the intersections of atmospheric events and local experience and knowledge if one is to fully comprehend the effects of climate change on human societies. They also both highlight specific crop choices made by local producers and give some insight into the temporal vicissitudes of producers’ underlying decision-making processes. First, Olivia Barnett-Naghshineh reminds us that conceptions of climate change – the discourse itself being a Western import in her geographical research locus of Papua New Guinea – are always subject to local cultural ontological reworkings. In other words, climate change discourses must take on local meanings for them to become locally relevant. But at the same time, in this case, local climate change ideas do not mesh in all respects with actual changes in crop production and exchange, as the food landscape concerned here evolves, along with the development of the market. The author’s point that local people are not mere victims of climatic shifts but rather agency-possessing actors in the unfolding drama deserves mention. Next, Jane I. Guyer revisits a long-term research site in Nigeria through previously collected ethnographic data to determine the ways in which shifts in the region’s climate have impacted farmers’ decisions on crop type and planting schedules, also taking into account market and technology changes. She finds that uncertainty regarding the weather has had a considerable impact. Just as Barnett-Naghshineh identified impacts of climatic and market transformations on food exchanges in Papua New Guinea, Guyer sees impacts of these on both subsistence strategies and monetary relationships in western Nigeria, indicating a possibility of increased social tensions caused by changes in climate.

The fourth and fifth papers of Part II are both heavily concerned with water – the first with shortages of it (drought) in southern China and the second with protein drawn from it off the coast of the island of Flores in Indonesia. In the China case, Meine Pieter van Dijk and Hao Li find that although there is a tendency for state policies to fail to have meaningful impacts “on the ground” so to speak, local producers – both individually

and collectively – employ a variety of adaptive strategies to deal with drought conditions to sufficiently irrigate their fields and provide their crops with water. The researchers identify problems such as a propensity for local elites to retain control, and also a common aversion to risk, but also find hope for better policy formulation and implementation at the local (rather than at the national) government level. They call for greater decentralization in China to deal better with changing climate conditions. In the final paper of Part II, Victoria C. Ramenzoni finds that small-scale fishermen are now less able than before to successfully practice their craft while relying on traditional lunar calendars to determine when and where to do so. This is important because it threatens to upset the balance between natural (common-pool) resources and societal needs for cash income and protein from the sea. Major implications of Ramenzoni's article include: (1) intense ethnographic research can elucidate complex micro-processes that wide-ranging government surveys miss, and (2) increased inability to effectively deal with mounting uncertainty may lead to over-exploitation of critical marine resources if adequate preventative steps are not taken.

Part III consists of three papers that are linked by a shared concern with climate change effects in urban environments. Monica L. Smith, also a contributor to volume 32 of REA, kicks off the last section of this volume with a paper that reaches back several thousand years to tackle the very broad issue of the emergence of the concept of sustainability in human societies – quite possibly to deal with diminished options for dealing effectively with climatic shifts due to sedentary life with increased population densities. But in these environments, according to Smith, the need to think about long-term sustainability became obscured by provision networks that reached farther and farther from the cities to bring needed items to them. Furthermore, Smith suggests, the human mind is wired now more for thinking about and dealing with short-term risks than for long-term ones (largely due to our social evolution) and that, therefore, the problem of sustainability for the (distant) future – although important now for obvious reasons – is not one that we are naturally equipped to tackle. Smith's insights may shed some light on interminable attempts to discredit climate change theories and findings.

In the second paper here, Ty Matejowsky – who has contributed numerous papers to REA in the past and who also co-edited volume 32 – explores retailers' coping strategies in the face of recurrent, and increasingly large and destructive, typhoons in the Philippines. This is a problem that can only be expected to worsen in the coming decades, as experts