Environmental Anthropology Engaging Ecotopia

An Introduction

Joshua Lockyer and James R. Veteto

We are living in a utopian moment. The majority of humans are already being negatively affected by a number of coupled social and environmental crises. These conditions are created in large part by hegemony of thought and practice that ontologically separates humans from nature, rationalizes the externalization of the social and environmental costs of production and consumption, justifies extreme inequality, and sees solutions only in a continuation of the same systems that generated the problems in the first place. Together these and other problems constitute a crisis that demands imaginative responses and viable alternatives. We contend that anthropology must find ways to engage with such existing possibilities.

The present crises are not new; the fundamental idea that the current situation cannot continue was recognized decades ago with the rise of international discourse on the topic of sustainable development (Brundtland 1987). The widely promoted concept of sustainability is ultimately utopian in nature; it is the good state that we must strive for but may not actually exist except in theory. Despite our best efforts, we do not know exactly what a sustainable society looks like. This has been the paradox of utopianism since Sir Thomas More ([1516] 1906) coined the term "utopia" in 1516, and it is the paradox of sustainability today.

The premise underlying this volume is the basic belief that, at its best, anthropology has always been about exploring real possibilities for a more just and sustainable world. From the early work of Lewis Henry Morgan on indigenous rights (Eriksen and Nielson 2001) and Franz Boas on dispelling popular misconceptions surrounding the concept of race (Boas 1928); to the mid-twentieth-century work of Laura Thompson and her interdisciplinary participatory efforts to improve social and environmental conditions within the Hopi tribe (Thompson 1950); to more contemporary examples such as Nancy Sheper-Hughes (2006) working to protect

the basic human rights of her informants, Robert Rhoades promoting the inclusion of mountain people's perspectives in sustainable development and planning (Rhoades 2000, 2007), and Eugene Hunn's (1999) legal testimony and advocacy work protecting the traditional subsistence rights of Native American tribes in the Pacific Northwest, anthropology has a long and perhaps underutilized tradition in providing solutions to socioenvironmental problems. With this volume, we seek to bring environmental anthropology into more productive engagement with the active pursuit of real ecotopian possibilities in our capacity as theorists, applied social scientists, and concerned citizens. In order to do this and in the spirit of engagement, we reach beyond the confines of academic environmental anthropology to connect with academics from other disciplines and, perhaps more importantly, with some of the leaders in the diverse social movements that are engaged in active pursuit of more just and sustainable lifeways and livelihoods.

This volume brings together anthropologists, environmental social scientists from other fields, and citizen activists who are engaged with three interrelated and often overlapping ecotopian social movements: bioregionalism, permaculture, and ecovillages. All of the contributors share a belief that in the current global context of increasingly negative news about interrelated social and environmental conditions, it is time to put forward work that is solution-focused rather than problem-oriented. As issues related to climate change, environmental degradation, and socioenvironmental injustices have increasingly become major areas of concern for communities around the world, people have begun asking themselves more frequently, "How can we create sustainable communities and livelihoods?" We share a belief that the bioregionalism, permaculture, and ecovillage movements offer potential and partial answers to this question and that engaging with them is one way to improve the relevance of anthropology to the wider world.

Our effort to bring together solution-focused instead of problemoriented work does not suggest a move away from critical analysis. Rather, it reflects an acceptance of the severity of social and environmental problems, a recognition that solutions are already being developed from the bottom up, and a realization that these grassroots solutions can potentially be strengthened and made more viable through academic analysis. What we are suggesting is a strategic decision to engage with citizen-activists around the world who share understandings of the nature of social and environmental problems and the forces that create them, and who build collective commitments to pursue more just and sustainable possibilities. Our collaborative work in this domain may be characterized by what E. N. Anderson called "ethnoanthropology of the ecological community" (1969: 275) or, following a similar line of thinking in participatory international agricultural development (e.g., Rhoades and Booth 1982), solutions-backto-solutions. This work is grounded in the premise that anthropologists must engage across disciplines and with practitioners around the world to pose, analyze, and refine viable possibilities, and in doing so, move beyond disengaged cultural critique. In fact—in going beyond our usual roles of recognizing, describing, analyzing, and deconstructing culture such work suggests that anthropologists can be co-creators, with engaged practitioners of our research projects, in the cultural process. To borrow and modify a concept from permaculture and ecology, we are proposing that an important avenue for environmental anthropologists is engaging in ecocultural edgework that moves beyond nature-culture dualisms and strengthens ongoing efforts to build a sustainable world.

Ecotopian Possibilities

The idea that anthropology is well positioned to contribute to an ecotopian future is not new. Indeed, this goal was expressed quite clearly in 1969 by Anderson in the well-known volume Reinventing Anthropology, edited by Dell Hymes. In his essay "The Life and Culture of Ecotopia," Anderson laid out a prescient picture of emerging socioenvironmental crises and proposed that anthropologists prepare themselves to participate in "restructuring the world as an 'ecotopia'" (275).

Along these lines, Anderson envisioned two general strategies. First, citing the work of Marvin Harris and Roy Rappaport, he promoted the use of an emergent cultural ecology framework for documenting the energy flow and resource use patterns of non-Western societies in the belief that these societies manifested more sustainable patterns of human-environmental relationships. Although cultural ecology has been critiqued for being overly functionalist and teleological in its treatment of traditional and indigenous cultures (e.g., Orlove 1980), we believe that the proliferation of self-identified "living laboratories" in the form of ecovillages grounded in a bioregional worldview and permaculture design principles opens up unique opportunities for applying the lens of cultural ecology. Another critique of cultural ecology and ecological anthropology has centered on their overuse of ecological analogies in describing human communities; yet bioregionalists, permaculturalists, and ecovillagers are explicitly trying to redesign their real-world communities according to the principles of ecology. How well are groups of people who use ecology as their primary navigational compass in constructing communities of place doing at achieving their goals? Despite the rapid proliferation of such groups, there is very little research aimed at assessing their endeavors. Such research, especially where it is ethnographically informed, promises to be revealing—both for the successes and shortcomings it may uncover—and has the potential to expand the analysis of both cultural ecology and ecological anthropology while simultaneously engaging questions of interest to political ecologists and other theorists (Veteto and Lockyer 2008; Chapter 5, this volume).

Second, building in part on empirical case studies, Anderson suggested that "anthropologists should concern themselves with planning for the world" (1969: 276). Invoking a reinvigoration of applied anthropology, Anderson's suggestion was that anthropologists could help formulate and test "organizational structures" that might lead us toward ecotopia by focusing in part on "how the balance of power can be redressed" (278). How, exactly, this was to be achieved remains unclear in Anderson's essay, although he mentions that "organizational strategies can be formulated and computersimulated" (278) and enters into a long description of what an ecotopian society might look like. Anderson alluded to the fact that some countercultural groups were actively trying to model such a society, but believed that their vision was simultaneously shortsighted and overly idealistic.

For a variety of good reasons, many anthropologists would balk at such a utopian project as planning for the world. Anthropological interventions in the world have, at times, had regrettable outcomes. However, we see an alternative possibility, one alluded to but not pursued by Anderson when he references countercultural groups as people who were potentially moving in the right direction. While the failure and collapse of the 1960s countercultural projects have been widely remarked upon, a closer examination indicates that emerging social movements—bioregionalism, permaculture, and ecovillages among them—are building on the successes and failures of the 1960s counterculture in an attempt to develop more effective strategies for moving toward ecotopia. Indeed, bioregionalists, permaculturalists, and ecovillagers are in effect "planning for the world" through active experiments in their own communities and the development of ecotopian models that may be altered, refined, and expanded as appropriate for other local biocultural contexts. This "bioregional planning" does not employ the totalizing meta-utopianism characteristic of industrial capitalism or socialism, but rather builds on Wendell Berry's insight that "[t]here is, as maybe we have all noticed, a conspicuous shortage of large-scale corrections for problems that have large-scale causes. Our damages to watersheds and ecosystems will have to be corrected one farm, one forest, one acre at a time" (2008: 45). Nor do these groups succumb to the escapist and oppositional mentalities that have often marginalized countercultural groups in the past. In fact, these movements today

typically seek to build bridges across a number of divides—ivory tower from village, Global North from Global South, and nature from culture.

While important and insightful work ensued in the years after 1969 and many of Anderson's suggestions were at least nominally taken up in the fields of ecological and environmental anthropology, his essay is still relevant today. The patterns of inequality, injustice, and ecological degradation that he referred to have only become more manifest in the world and are increasingly acknowledged and studied by environmental anthropologists. From early synchronic approaches in cultural ecology that used culture as the unit of analysis and answered fundamental questions about how groups made their living through subsistence strategies, the social structures that resulted from local adaptations, and the ways in which they rationalized that living ideologically (Steward 1955); to approaches in ecological anthropology that shifted the unit of analysis to the scale of population and measured human energy flows through ecological systems (Rappaport 1968); to more processual approaches that incorporated actor-based theory, history, and political economy (Orlove 1980) or contemporary environmental anthropology, with its blend of theory, political awareness, and applied policy concerns (Townsend 2009), environmental anthropologists have always been concerned with sustainability and human societies. It is only appropriate that anthropologists would take an increasingly active role in the transition to a post-carbon world.

Anderson's (2010) more recent volume, The Pursuit of Ecotopia, nominally an exposition on what traditional and indigenous societies can teach the world about the pursuit of ecotopia, is as much a lament of the fact that ecotopia still seems as far (or farther) away today than it did in 1969. We believe that the idea of anthropologists contributing to a more ecotopian society remains an important goal, and strategically choosing to engage with ecotopian movements is one valuable avenue for pursuing it. We also believe our efforts may shed light on some of the most fundamental questions in environmental anthropology, such as: What does a sustainable community look like in the twenty-first century? How can we transition to a world of socially just sustainable communities? What are effective political, personal, and social actions for achieving a sustainable world? What strategies can be undertaken to lessen the impact that highly extractive areas of the world have on less consumptive regions? How can we combine traditional ecological knowledge with appropriate technology in creating more sustainable communities?

In the following section of this introduction we provide a selective overview of the ideological and practical strategies of the bioregional, permaculture, and ecovillage movements and how they interrelate with approaches and concerns in environmental anthropology. We will then link these movements with contemporary thought in radical, solutionsbased environmental anthropology. We conclude this introduction with an overview of each chapter in the book and some common themes that run throughout the volume.

Bioregionalism, Permaculture, and Ecovillages

Our conceptualization of this book is rooted in many years of research in ecological and environmental anthropology and an even longer engagement with activism in the environmental and social justice arenas. In our academic work and activism, each of us engaged with bodies of ideas and groups of people who are attempting to enact just and sustainable alternatives to existing political and economic hegemonies. We sought, in part, to move beyond a politics of protest to engaging active utopian pursuits of just and sustainable futures. In the course of these explorations, we repeatedly returned to three movements, each of whose vision is global in scope, but with activities that are typically local in scale. These movements articulate and enact alternative development strategies that foreground moral concerns with justice and sustainability and attempt to contend with the complexities of biocultural diversity, power inequalities, and structural violence. In addition, each movement aims to build global networks that bridge diverse contexts while simultaneously maintaining focus on sustainable local livelihoods. These three movements, bioregionalism, permaculture, and ecovillages, have been largely ignored by mainstream development practitioners and anthropologists alike, while being employed extensively on a grassroots level. With this volume, we aim to provide at least a partial foundation for greater engagement with these socioecological movements.

Each of these three movements and their respective philosophies and practices represent essential components for transformation to a more just and sustainable world. Bioregionalism represents the worldview and resulting politics—a basic understanding that humans and human activities are fundamental components of ecosystems, not separate or even "coupled," and that human organization should be guided by natural systems instead of arbitrary political boundaries. Permaculture represents an ethically grounded methodological toolkit for putting the bioregional worldview into practice; it provides guidelines for developing sustainable human ecosystems wherein humans live simply, so that all may simply live. Typically, ecovillages are the incomplete and ever imperfect results of using permaculture to enact the bioregional worldview; each ecovillage is

a unique "socionature" that actively attempts to model just and sustainable human lifeworlds in a particular places.

While bioregionalism, permaculture, and ecovillages are simultaneously diffuse and interrelated, it is possible, at the risk of reification, to identify them individually. Each is to some degree rooted in countercultural currents of the late 1960s, although they burst onto the scene somewhat later and are in a constant state of dynamism. All three simultaneously incorporate a global-scale critique of industrial capitalism and a vision of locally based forms of sustainable development. Each of the movements has at its heart a fundamentally ecotopian imaginary; however, each movement also seeks to put those imaginaries into practice. Below, we provide a brief introduction to bioregionalism, permaculture, and ecovillages, and suggest areas where they intersect with environmental anthropology.

Bioregionalism

Bioregionalism emerged in the 1970s with the writings of Raymond Dasmann, Peter Berg, Gary Snyder, and Stephanie Mills, to name several of the more prominent bioregional thinkers. It is a philosophy that resonates with, and draws directly on, early theory and ethnography in ecological and environmental anthropology. Bioregionalists have built their theory and praxis in part by directly citing the works of A. L. Kroeber, Ruth Underhill, Marshall Sahlins, Karl Polanyi, Roy Rappaport, Robert Netting, and Gregory Bateson, among others, indicating that environmental anthropology has fundamentally contributed to the construction of ecotopian possibilities. It also suggests that we would be remiss not to engage with those who use anthropological theory and knowledge to effect sociocultural transformation.

A prominent precursor to, and influence on, bioregional thought is evidenced in the work of nineteenth-century geologist and anthropologist John Wesley Powell. Powell's contributions to early American anthropology are too often written out of the history of the discipline, despite the fact that he was founder and director of the Bureau of American Ethnology from 1879 until his death in 1902. In addition, his approaches toward classifying and organizing Native American cultures and languages still serve as a foundation for anthropological knowledge today. Yet, Powell was more than an anthropologist, and his attempt to bring together geological, geographic, and ethnographic knowledge in the interest of sustainable development in the American West is where the closest articulation of bioregionalism in the history of American anthropology can likely be found.

In his Report on the Lands of the Arid Region of the United States (1879), Powell recognized that sustainable human settlement and development of the West depended on topography, surface water sources, and cooperation grounded in the knowledge of these features. Based on this inherently bioregional perspective, he proposed a radically different plan for the settlement of the American West than the imperialist vision of Manifest Destiny. In Powell's articulation, land in the arid West would not be divided into rectangular quadrants, but rather into irregularly shaped parcels dictated by the undulations of watersheds. Cooperative communities of freeholders-modeled in part on Mormon customs and New Mexican acequia associations-would develop small- to medium-scale irrigation, timbering, and pasture systems appropriate to each specific locale. Such place-based cooperative organizations would prevent the exploitation of local resources by outside interests and ensure sustainable human settlements.

Needless to say, Powell's recommendations did not become the basis for policy and the West was divided and settled according to more familiar models grounded in the misguided meta-utopianism of Manifest Destiny—denoted by rectangular land parcels and more amenable to manipulation by powerful special interests. In retrospect, Powell's vision was prescient if imperfect. While today's anthropologists would certainly balk at his cultural evolutionism, bioregionalists and anthropologists alike can recognize the fundamental wisdom in his recognition of the humannature dialectic in the American West. Had his policy recommendations been adopted, the western part of the United States might have developed more along the lines that future bioregionalists later envisioned. Indeed, had his proposals been fully implemented, they may have negated the need for the bioregional movement to arise some seventy years after Powell's death.

Fundamentally, bioregionalism suggests, following Gary Paul Nabhan (1997), that human groups are "cultures of habitat." Bioregionalism roots human cultures in particular places. Bioregionalists seek to organize cultural, economic, and political life according to the criteria presented by vaguely defined eco-regions and more empirically identifiable watersheds. Bioregionalism proposes that economic activities should be dictated by ecological boundaries rather than arbitrary political divisions. It envisions a re-grounding of culture and community within particular watersheds and ecosystems.

The fundamental program of the bioregional approach is "reinhabitation." Reinhabitation entails a process whereby individuals and communities decide to commit themselves to a particular bioregion and live "as if" their descendents will be living there thousands of years into the future. The antithesis of the current global economic system, which rewards hypermobility and jumping at the chance for quick profit, reinhabitation means doing what is best for the long-term health and viability of the socioecological community (Snyder 1995). Bioregionalists often take the indigenous societies of their bioregions as models of long-term inhabitation and sustainability, but work within their own cultural traditions, with a sense of dynamism that does not reify or essentialize traditional placebased cultures. Reinabitation does not mean that people cannot travel or network with others at different scales within the global community; in fact, reinhabitatory bioregionalists are more properly understood as practicing a place-based form of what Escobar (2001) has described as a fully networked "localization."

Bioregionalism calls for commitment to this continent place by place, in terms of biogeographical regions and watersheds. It calls us to see our country in terms of its landforms, plant life, weather patterns, and seasonal changes—its whole natural history before the net of political jurisdictions was cast over it. People are challenged to become reinhabitory—that is, to become people who are learning to live and think "as if" they were totally engaged with their place for the long future. (Snyder 1995: 246-47)

Bioregionalists are also focused on experimenting with watershed-level forms of direct democracy and consensus decision making. The basic proposal is to create cultures that are informed by local ecological dynamics and empower citizens to govern their own bioregions based on a more ecological worldview. Nation-states and international governing agencies are viewed as power-hungry entities that make decisions in faraway places and impose arbitrary political boundaries (often based on profit motives) that are usually harmful to local people. States can be worked with when it is necessary and beneficial to local bioregional interests, but local governance is the political ideal. Bioregionalism can thus be properly viewed as a pacifist eco-anarchist formulation.

A risk familiar to environmental anthropologists posed by the bioregional movement is that of suggesting that environmental determinism be the guiding philosophy for future human organization. Bioregional thought does tend toward a watershed-level environmental determinism, and as anthropologists we suggest that bioregional conceptualizations remain fluid, dynamic, and negotiable to diverse groups of local people. This is, in fact, the reality that bioregionalists have experienced as they have sought to enact their imaginaries. In the current global context, bioregions and watersheds are crosscut by diverse groups of people from widely divergent ethnicities, languages, socioeconomic statuses, occupations, and worldviews. In fact, human groups have organized themselves throughout history in ways that do not always correspond exactly to constructed bioregion or watershed formulations. For example, in Ecuador, Rhoades (1999) found that when international development researchers tried to implement watershed-level management programs, local indigenous groups were spread out across multiple watersheds. This led to a situation where scientific watershed management, which has a lot in common with ecological bioregional thinking, became a top-down bureaucratic formulation being imposed on local people. Snyder, in recognizing the pitfalls of the scientizing tendencies of institutional ecological bioregionalism in California, has identified a parallel "cultural bioregionalism" that is more attuned to the nuances of local social constructions and human organization. Cultural bioregionalism is an excellent entry point for collaboration between cultural anthropologists and the bioregional movement:

Here is perhaps the most delicious turn that comes out of thinking about politics from the standpoint of place: anyone of any race, any religion, or origin is welcome, as long as they live well on the land ... [This] sort of future culture is available to whoever makes the choice, regardless of background. It need not require that a person drop his or her Buddhist, Jewish, Christian, animist, atheist, or Muslim beliefs but simply add to that faith or philosophy a sincere nod in the direction of the deep value of the natural world and the subjecthood of nonhuman beings. A culture of place will be created that will include the "United States," and go beyond that to an affirmation of the continent itself, the land itself, Turtle Island. (Snyder 1995: 234)



Figure 0.1. Ninth Continental Bioregional Congress, Earthaven Ecovillage, Katuah bioregion, summer 2005. Photo by Joshua Lockyer.

In ongoing efforts to enact this proposal, bioregionalists have since the early 1980s come together in bioregional congresses to share stories and strategies and to cooperate with neighbors to build bioregional communities. As Peter Berg says in his opening chapter in this volume, "There's a tremendous diversity among bioregions ... but the schema for growing native life-place politics starting with socialsheds of neighbors, joining these in watershed councils, and proceeding to the creation of bioregional federations or congresses can fit them all."

Thus, bioregionalism provides a potential model for human reinhabitation and a language for organizing processes that will unite people in enacting that model. The oldest bioregional group—the Ozark Area Community Congress—has been in existence since 1980 (see Campbell, Chapter 3, this volume) and the Continental Bioregional Congress, after an initial meeting in 1984, continues to meet every four or five years at sites in the United States, Canada, and Mexico.

Permaculture

Permaculture aims to create

consciously designed landscapes which mimic patterns and relationships found in nature, while yielding an abundance of food, fibre, and energy for provision of local needs.... I see permaculture as the use of systems thinking and design principles that provide the organising framework for implementing the above vision. It draws together the diverse ideas, skills and ways of living which need to be rediscovered and developed in order to empower us to move from being dependent consumers to becoming responsible and productive citizens. (David Holmgren 2002: xix)

If bioregionalism is an ecotopian philosophy/worldview and political ecology that is actively redefining socio-politico-ecological boundaries, then permaculture is an ecotopian methodology. Permaculture is an ecological design science grounded in a fundamental recognition that economic viability and social justice are interrelated with functioning ecological systems. Permaculture guides the redesign of systems for production, consumption, and inhabitation according to this foundational viewpoint.

The emergence of permaculture can be traced directly to the 1970s, when Australian bio-agronomist Bill Mollison and his student David Holmgren began experimenting with regional perennial polycrop food systems. They developed a framework for applying this system of design in various contexts and at various scales (from garden bed to entire landscape) and started traveling the world to teach people how to apply the framework in their home regions. Thousands of permaculture practitioners have since been trained and most can trace their genealogy back to Mollison and Holmgren. While permaculture maintains a primary focus on agricultural systems, this design science has been applied to all dimensions of human-environment interaction in rural and urban, overdeveloped and underdeveloped contexts:

[Permaculture] is about designing sustainable human communities, and preserving and extending natural systems. It covers aspects of designing and maintaining a cultivated ecology in any climate: the principle of design; design methods; understanding patterns in nature; climatic factors; water; soils; earthworks; techniques and strategies in the different climatic types; aquaculture; and in the social, legal, and economic design of human settlement ... Strategies for the necessary changes in social investment policy, politics itself, and towards regional or village self-reliance are now desperately needed. (Mollison 1988: i)

The permaculture paradigm encompasses a set of ethical principles and design guidelines and techniques for creating sustainable, permanent culture and agriculture. Guided by permaculture's three ethical principles—earth care, people care, and fair share—and its twelve ecological design principles (see below), permaculturalists around the world come together for gatherings, convergences, and trainings to share examples of permaculture design projects from their yards, gardens, farms, and broader communities. Permaculturalists have moved beyond an initial conceptualization of permanent agriculture to a vision of permanent, bioregionally rooted culture.

Permaculturalists worldwide have been involved in the type of ecological planning that Anderson (1969) recommended be undertaken by environmental anthropologists decades ago. Anthropologists have generally not answered the call, but citizen activists and planners in the permaculture movement have been contributing to building more sustainable communities, one garden at a time, across the entire globe for the past thirty-five years. As we have suggested elsewhere—with issues of ecological destruction, climate change, and peak oil looming before us-crossfertilization between permaculture and environmental anthropology is a timely and vital project (Veteto and Lockyer 2008; Chapter 5, this volume). In this volume, contributions by Aistara, Haluza-DeLay and Berezan, Randall, Fox, and Pickerill (see summaries below) give compelling examples of collaborations between anthropologists and permaculturalists; and in several cases, of projects where environmental anthropologists have been certified in permaculture design and are using skills from both domains to improve sustainability in communities where they both live and work. Permaculture provides these anthropologists with a methodology for challenging dominant paradigms and constructing alternative bioregional possibilities, both within anthropology and the world at large.

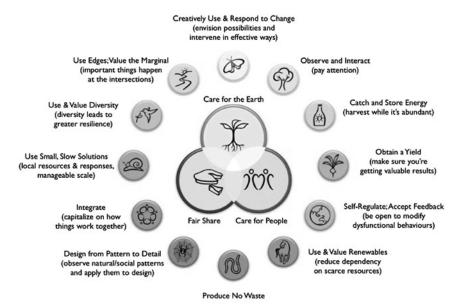


Figure 0.2. Permaculture ethical and design principles. Image courtesy of http:// www.permacultureprinciples.com.

Permaculture also stands to benefit from collaborative interaction with environmental anthropology, as its leading practitioners have taken notice of critique from the academy that permaculture is relatively weak on theory (Holmgren 2002). Although permaculture was initially conceptualized within an academic setting, its subsequent development has taken part largely as applications in real-world settings. This has been both a strength and weakness of the permaculture approach. While sustainable living systems have been developed in thousands of sites across the globe, the ecological theory that informed permaculture's theoretical foundations has not been updated to reflect developments in the field. Permaculture was and is heavily influenced by the ecological systems theory of both Howard T. (especially) and Eugene Odum (Holmgren 2002; Odum 1971). Since permaculture was developed by Mollison and Holmgren in the 1970s, it is not surprising that they were heavily influenced by the ecological approach of the time. However, theory and modeling in ecology have generally moved past system approaches that focused on negative feedback loops, homeostasis, climax, and equilibrium to more dynamic and diachronic approaches that incorporate the ecological realities of nonequilibrium, disturbance, chaos, complexity, and patchwork dynamics over deep time (Scoones 1999). Permaculture has not only failed to keep

up with such changes in ecological theory, it has also failed to engage the more contemporary functionalist systems-based ecological theories of resilience and panarchy (e.g., Folke 2006; Gunderson and Holling 2002). This is somewhat surprising. Given permaculture's evolving concern with peak oil and climate change, resilience theory would seem like an appropriate model for understanding how permaculture design systems can withstand and adapt to increasingly volatile environmental conditions. In addition, the erratic climatic patterns caused by anthropogenic climate change and other environmental factors can themselves be more successfully modeled and understood with non-equilibrium modern ecology. Permaculture's relative divorce from the academy over the past forty years has resulted in many successes in praxis, but has left it behind in theoretical development.

Environmental anthropology has much to contribute to theory and praxis in permaculture through its wealth of conceptual work in appraising human-environmental interactions in all times and all places across the planet and its accumulation of thousands of case studies in communities that have been or are living relatively sustainably—exactly the type of communities that permaculture seeks to design. Unlike bioregionalism, permaculture has incorporated almost nothing from environmental anthropology into either its conceptual or practical toolkit. Holmgren (2002) mentions ethnobiology as one of the most important intellectual disciplines that has contributed concepts to permaculture design, but both his book Permaculture: Principles and Pathways Beyond Sustainability and Mollison's Permaculture: A Designers Manual (1988) (arguably the two most foundational texts in the permaculture canon) do not include any works by ethnobiologists or other environmental anthropologists in their bibliographies. This is a situation that could be remedied through further engagement, as we have argued elsewhere (Veteto and Lockyer 2008; Chapter 5, this volume). For example, the subdisciplines of cultural ecology and political ecology are well positioned to inform permaculture. Cultural ecology's focus on environmental adaptations of groups of people in different areas of the world has produced a large amount of empirical data on sustainable livelihoods. This materialist data (particularly smallholder agriculture case studies) is the type of information that permaculturalists can use in sustainable design. A cultural ecology database that was made available for anthropologists engaged in permaculture research and application as well as to permaculture practitioners would be a robust sustainability tool.

Political ecology is another subfield that can productively collaborate with permaculture. Political ecology has brought political economy and power to the forefront of an ecological analysis that had been apolitical in its more traditional approach, highlighting how limited access to and control over resources has disempowered individuals and communities in local environments on multiple scales. A significant body of work in political ecology has focused on the relationship of power hegemonies in the Global North to nations and communities in the Global South. The political ecology approach to cultural critique articulates well with permaculture ethics, which encourage modern individuals to live a more simple and ecological lifestyle, thereby enacting a more democratic division of and access to global environmental resources. Both permaculture and prominent strains of political ecology are engaged in resistance to current globalization trends orchestrated by a capitalism whose political power is centered in the Global North. Permaculture offers political ecology the opportunity to study how citizens—particularly in the Global North—are experimenting with lifestyle and social changes to meet the sustainability challenge. Political ecology, among its other theoretical tools, offers permaculture the opportunity for practitioners to contextualize their own positions in global society, which are often privileged to various degrees (see Veteto and Lockyer, Chapter 5, this volume, for more suggestions on how permaculture can be usefully cross-fertilized with ethnoecology, historical ecology, and agricultural anthropology). Taken as a whole, environmental anthropology has much to add, particularly from a cultural perspective, to a permaculture framework that has been dominated by a biological gaze to date and has been less adept at studying human ecology despite its explicit aim of designing sustainable human communities.

Ecovillages

Ecovillages are "human-scale, full-featured settlements in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development and can be successfully continued into the indefinite future" (Gilman 1991: 10). Building on that foundational definition, ecovillages are intentional human communities that use integrative design, local economic networking, cooperative and common property structures, and participatory decision making to minimize ecological footprints and provide as many of life's basic necessities as possible in a sustainable manner. Ecovillages put bioregional thought and permaculture methodology into practice at the community level in service of the fundamentally ecotopian goal of sustainability. Permaculture, agroecology and organic agriculture, alternative energy systems such as solar, wind, and microhydro, and natural and green building methods are common features of these communities. Ecovillages are the most recent manifestation of a long historical phenomenon of intentional community

building. For thousands of years, intentional communitarians have actively sought to enact the vision of small, cooperative, commons-based community living in response to experienced hegemonies of church, state, corporation, and market.

Some ecovillages have their roots in the communes and intentional communities of the 1960s, but most came into being during and after the 1990s as the ecovillage model became a worldwide phenomenon and collective effort emerged to reformulate intentional community building based on more comprehensive ecotopian thinking. The Global Ecovillage Network (GEN) is currently tracking 522 ecovillages around the world, including 234 in the Americas (Global Ecovillage Network n.d.). Hundreds of other ecovillages are either forming or exist that are not documented by GEN. The ecovillage movement is largely centered in the United States and western Europe, but has spread to seventy-two countries around the world (Global Ecovillage Network n.d.). The government of Senegal, for example, has recently created a National Ecovillage Agency in cooperation with the GEN, its Senegalese affiliate GENSEN, the Global Environment Facility, and the United Nations Development Programme (see Dawson, Chapter 12, this volume).

Kasper (2008) has pointed out that ecovillages represent an on-theground attempt to overcome the nature-culture dualism identified by diverse disciplines such as anthropology, sociology, environmental history, environmental philosophy, and environmental economics as being at the root of the ecological crisis. Scholars have conceptualized multiple ways past this Western dualism: Latour's (1993) "nature-culture," Haraway's (1991) "cyborgs," and Swyngedouw's (1999) "socionature" are a few prominent examples. Ecovillagers, however, operate more in the realm of physical reality than academic discourse. They attempt to live in ways that reduce the patterns of social and environmental injustice resulting from uneven distribution of resources and resource use among rich and poor on both local and global levels. Ecovillagers essentially are attempting to internalize what economists refer to as externalities; they recognize that the global economy creates far-flung consequences that are not accounted for in the cost of what they consume. They are attempting to make these costs more visible by bringing production and consumption processes within a more local sphere. At a fundamental level, ecovillagers are trying to put environmental and social justice ethics into action by creating communities that are more locally self-reliant and premised on the notion that each person and community must take responsibility for the socioecological impacts of fulfilling their economic and subsistence needs. Ecovillagers attempt to realize their visions for sustainable and just communities by building them in various locales around the world. From the

1990s on they have been increasingly successful in working out sustainable solutions in communities that range from a few families to villages of several thousand people, such as the well-known ecovillage Auroville in southern India.

One example of an established ecovillage is Dancing Rabbit, a community of approximately fifty members located on 280 acres of farmland in northeastern Missouri. Their stated goal is to live ecologically sustainable and socially rewarding lives, and to share the skills and ideas behind that lifestyle with broader publics. The members of Dancing Rabbit have agreed to organize their lives around defined lists of ecological covenants and sustainability guidelines. Because they recognize the impacts of fossil fuel extraction on ecosystems and communities and the implications of high levels of fossil fuel use for global climate change, they have agreed not to use fossil fuels to power vehicles, heat or cool homes, provide refrigeration, or heat domestic water supplies. The members of Dancing Rabbit have put in place renewable energy systems that use locally produced biofuels, passive solar building design, renewable and communityscale energy sources, and decreased energy demand in order to lessen their dependence on fossil fuels and, by extension, their contributions to further ecological degradation and social injustice.

In addition to addressing energy use, Dancing Rabbit has policies in place that specify the sourcing of lumber used in constructing their buildings. Ecovillage members agree to only use lumber harvested within their own bioregion for building projects. Recognizing that this is difficult in the rolling prairies of northeastern Missouri (where wood resources are scarce), they allow exceptions for recycled lumber. As a result, Dancing Rabbit members frequently participate in building demolitions in their local area and harvest the reclaimed lumber for use in the growing number of residential and community buildings in their village. In addition to seeking more sustainable patterns of energy and material consumption, the members of Dancing Rabbit address ways to deal with waste as well. One of their ecological covenants states that all organic and recyclable material used in the village will be reclaimed for use by the community. One manifestation of this is the extensive food waste composting Dancing Rabbit practices. They use compost to build soils, thus contributing to their goal of becoming more food self-reliant while simultaneously restoring the fertility of the degraded farmland that they inherited from previous generations.

Numerous opportunities exist for anthropologists to collaborate with ecovillagers. We (Lockyer and Veteto) have recently initiated an exploratory comparative project with both Dancing Rabbit and Earthaven Ecovillage (located in North Carolina) to help identify and assess sus-



Figure 0.3. Dancing Rabbit Ecovillage (northeastern Missouri) community building. Photo by James R. Veteto.

tainability goals and projects, educational and outreach programs, and future aspirations that guide each ecovillage and their resident members. This information will be used in a longer-term project of developing and implementing a set of methods, tools, and indicators aimed at assessing and comparing each community's progress toward their goals of sustainable living and effective educational outreach. Neither community has been satisfied with existing sustainability measurement tools, such as ecological footprinting, which is geared toward individuals who live more mainstream modern lives. Dancing Rabbit has been measuring their fossil fuel and other energy use since the founding of the community, but otherwise lacks the ability to effectively communicate (outside of on-site living demonstrations) to the outside world how their lifestyle compares with mainstream Americans. Our project will help them better evaluate the effectiveness of their environmental lifestyles in comparative contexts.

Although anthropological involvement with intentional communities has been relatively minimal (for notable exceptions, see Brown [2002] and Bennett [1967]), there are four interdisciplinary societies that promote and engage in scholarly research on historical and contemporary intentional communities (with many members both living within and conducting participatory action research in collaboration with extant communities) the US-based Communal Studies Association, the International Communal Studies Association, the Society for Utopian Studies, and the Utopian Studies Society in Europe. Ecovillages have been an increasing subject of study in each of these academic societies, which provide established

platforms by which environmental anthropologists can both engage with ecovillagers and share their research with other scholars.

As noted by Dawson (Chapter 12, this volume), in recent years the ecovillage movement has moved from an inward focus on self-sufficiency to an outward focus on building alliances with neighbors, citizen groups, and educational organizations. The difficulties of buying land, developing village infrastructure, and maintaining viable and healthy consensus-based decision-making processes have slowed down ecovillage development in recent years after initial excitement in the 1990s and early 2000s. Those ecovillages that have survived the test of time are now serving as educational models and living laboratories of sustainability. The Findhorn Foundation, based in Scotland and one of the oldest and most prominent ecovillages in the world, has ongoing collaborative projects with the United Nations and was named a UN "best practice" community. Ecovillages around the world are partnering with nearby cities and towns in the Transition movement, a worldwide phenomenon initiated by Rob Hopkins in Ireland that is helping communities move toward sustainability in a post peak oil world increasingly threatened by unpredictable climate change. Elsewhere, schools such as Berea College in Kentucky and Pacific Union College in California are developing partnerships with or constructing on-campus ecovillages for students to learn about and experiment with sustainable living. Living Routes, an ecovillage study abroad program that places college students in ecovillages worldwide, is detailed by Daniel Greenberg in his contribution to this volume (Chapter 15). The increase of partnerships between ecovillages and the academy are an excellent opportunity for applied environmental anthropologists to engage in socially relevant and meaningful work.

Environmental Anthropology Engaging Ecotopian Possibilities

Anthropology ... can contribute to the critique of current hegemonies as a question of the utopian imagination: can the world be reconceived and reconstructed from the perspective of the multiplicity of place-based practices of culture, nature, and economy?

—Arturo Escobar, "Culture Sits in Places"

We could start with a kind of sociology of micro-utopias. —David Graeber, Fragments of an Anarchist Anthropology

In his Distinguished Lecture in General Anthropology at the 1992 meeting of the American Anthropological Association, Roy Rappaport noted

the paradox that Western economic rationality was both a main cause of growing social and environmental problems and the dominant discourse being used to frame their potential solutions. Rappaport asserted that solutions to such problems demanded a more holistic view, informed by ecological thinking and social justice. In response, he called on anthropologists to engage our research in pursuit of solutions to the world's problems, specifically calling for renewed commitment to cultural critique and applying anthropological knowledge to the empowerment of local solutions (Rappaport 1993).

Returning to the theme with which we began this introduction, some may object to the idea of anthropology engaging in such a romantic and subjective undertaking as the pursuit of ecotopia. Indeed, words like utopia and ecotopia carry largely negative connotations. Utopia is often associated either with naïve idealism or with hegemonic metaprojects such as nationalism, state-based socialism, and global neoliberalism. However, it could also be argued that utopian striving for a better world is a fundamentally human condition and that anthropology would be remiss not to engage with it.

Some of anthropology's most productive scholarship has focused on utopian endeavors. Richard Fox's cultural history of Gandhian utopianism in twentieth-century India is but one prominent example (1989). In this work, Fox portrays Gandhi and other Gandhians as utopian experimentalists struggling against hegemonies of modernization and British colonialism, a struggle that was essentially cultural in nature: "[T]hey were social experimentalists, struggling with new visions of culture" (Fox 1989: 6). They also shared a grand vision of a better India: "The Gandhian utopian vision asserted that India, given its traditions, could develop a more humane and rewarding future society than either Western socialism or Western capitalism had accomplished" (Fox 1989: 7).

Fox acknowledges that his cultural history is an account of a utopian vision that was never fully realized. Nonetheless, the pursuit of the vision was quite real; it constituted the daily struggle of Gandhian utopians engaged in spiritual public service, home rule, and civil disobedience over many decades. Their experiments took at least some hold in the wider world: "As the experiments accumulated over time ... this utopia became a complex culture trait. That is, it became a set of cultural meanings ... constituting social identity and practice in twentieth-century India" and laying the groundwork for future utopian experiments (Fox 1989: 8).

Gandhian utopian experimentalists confronted the structures of the world system and the hegemonies that system generated. Fox used such confrontations to address the question of what role individuals or groups and their utopian visions may play in cultural change. Ultimately, Fox concluded that "an effective cultural resistance, such as Gandhian utopia, can arise from confrontations with an existing cultural hegemony, even though the resistance never fully escapes that hegemony" (Fox 1989: 14). In this view, the pursuit of utopia (or ecotopia) is significant as a process in itself, and the focus shifts from an unachievable endpoint toward the effort to get there, and ideas and practices guiding the journey (Lockyer 2009).

While the bioregionalism, permaculture, and ecovillage movements have been little explored in anthropology, they resonate with both Rappaport's and Fox's analyses. Each movement builds moral economies grounded in forms of discourse other than dominant Western economic rationality and guided by the compass of justice and sustainability. James Scott (1976) has shown that Southeast Asian peasants organize social life and economic livelihood activities around a fundamental belief that everyone has a right to adequate subsistence and react strongly when colonial modernization projects impinge on this right. Bioregionalists, permaculturalists, and ecovillagers in the Global North hold to this same belief, but they expand outward to a global scale and turn it on its head. They recognize that their own lifestyle practices obstruct the ability of less affluent people in faraway places to obtain adequate subsistence and continue their traditional customs. Consequent lifestyle changes represent an attempt to decrease consumption and increase simplicity at home in order to take pressure off individuals in the Global South and provide space and support for subaltern movements for cultural rights and economic justice. Like Fox's Gandhian utopians, these ecotopians struggle against a hegemony of thought and practice from which they can scarcely break free—but within which they create real, if partial, alternative possibilities. They are building on the foundation of 1960s countercultural experimentation and are broadening the possibilities of dynamic ecotopian imaginaries and practices.

Our engagement with bioregionalism, permaculture, and ecovillages also resonates with some of the best contemporary anthropological theory building and activist work. Arturo Escobar's engagement with groups constructing alternative political ecologies and subaltern strategies of localization in the Colombian Pacific region and David Graeber's work with the praxis of direct democracy in the Global Justice movement are two prominent examples. Both Escobar and Graeber engage with these movements not only as social scientists, but also as citizen activists who desire, paraphrasing Graeber (2004), to develop social theories that can be actively applied to assisting projects of social transformation toward a more just and sustainable world. Escobar and Graeber's contributions are representative of broader themes in anthropology to which we hope to contribute modestly with this volume.

Escobar's work with social movements in the Colombian Pacific region brings together concepts of place, networks, and social movements in an effort to engage with, analyze, and further processes of economic and cultural localization (2001, 2008). By pointing to "the continued vitality of place and place-making for culture, nature, and economy" in existing communities (Escobar 2001: 141), Escobar provides a counternarrative to real processes in globalization that disembed cultures and economies from places and to accompanying trends in sociocultural theory that claim an end to local cultural ecologies. Although he does not use the same terminology, Escobar engages with many of the same ecotopian themes that we and our bioregionalist, permaculturalist, and ecovillage interlocutors do when he asks "to what extent can we reinvent both thought and the world according to the logic of a multiplicity of place-based cultures?" (2001: 142). His engagement with networked social movements who share dual commitments to preserving ecological diversity and integrity as well as renewing local economies and communities leads him to recognize that such a transformation is a real possibility. The bioregionalism, permaculture, and ecovillage movements share similar commitments and manifest similar possibilities.

While defending the importance of place for both activist communities and in the realm of social theory, Escobar notes that place-based movements are simultaneously connected to transnational networks even as they are primarily focused on the defense of home territories. Paradoxically, in the era of globalization, these transnational networking strategies prove especially important to the viability of reinhabitation. Simultaneous attention to global networks and local projects enable reinhabitory movements—and the scholars who engage them—to combine an understanding of larger political economic forces that impinge on local places with a phenomenological understanding of how local communities experience place and assign meaning and value to it. Perhaps even more significantly, global networks of place-based movements provide unique opportunities to share strategies and lessons for the defense of place and to build collective strengths.

Following Escobar's logic further, a focus on local, reinhabitory, and restorative movements enables both scholars and citizen activists to shift emphasis away from global political economic forces as the dominant problematique and to reorient their gaze onto what Harvey (2000) might call "spaces of hope." As Escobar suggests, "to construct place as a project, to turn place-based imaginaries into a radical critique of power, and to align social theory with a critique of power by place requires that we venture into other terrains" (2001: 157). This argument reflects our desire to shift scholarly engagement from a problem-oriented trope to one that is more solution-focused, a move that we believe—following Graeber builds upon the fundamental anthropological project of providing real, alternative possibilities to dominant hegemonies. Indeed, this exploration of alternative possibilities is exactly the kind of work that reinhabitory movements are engaged in: "For the most farsighted social movements, whether the situation is read in an ecological or a cultural register or a combination of both, the basic idea is the same: overcoming the model of modern liberal capitalist society has become a must for survival, and perhaps a real possibility" (Escobar 2008: 303).

Both Escobar and Graeber pay particular attention to the relationship between theory and practice and between activism and scholarship. They recognize that the participants in the movements they focus on are, along with scholars, social analysts as well, and that the forms of theory and practice engaged by both activists and scholars have potential for crossfertilization. In this line of thinking, the constituent members of social movements are recognized as political ecologists in their own right and active producers of knowledge (Escobar 2008). As exemplified in the use of environmental anthropology by bioregionalists, these social movement actors draw on critical social knowledge produced by academics as they construct and refine their ecotopian visions and practices. In such situations, "one obvious role for a radical intellectual is ... to look at those who are creating viable alternatives, try to figure out what might be the larger implications of what they are (already) doing, and then offer those ideas back, not as prescriptions, but as contributions, possibilities—as gifts.... such a project would actually have two aspects, or moments if you like: one ethnographic, one utopian, suspended in a constant dialogue" (Graeber 2004: 12).

Conclusion

Someone has to do something that is consistent with the vision of fitting into ongoing natural processes before any reasonable person will support that vision.

—Peter Berg, Envisioning Sustainability

Active bioregionalists don't merely raise their hands to vote on issues but also find ways to interact positively with the life-web around them. They work with neighbors to carry out projects and build a bioregional culture together. Put another way, they are the working practitioners of what academics and others term "a paradigm shift."

—Peter Berg, Envisioning Sustainability

We hope the selections contained in this volume illustrate Berg's comments by showing how diverse groups of people are actively modeling real ecotopian possibilities. We also hope they demonstrate the value of engaging with those constructing such possibilities. Former Association of American Geographers President James J. Parsons expressed a similar sentiment in 1985 when he commented on the emergence of bioregionalism:

Recently a whole new subculture of bright, energetic and dedicated amateurs has emerged, especially in the western U.S. and Canada, that is reasking in new ways questions that have long been fundamental concerns of geography about the human use and abuse of natural systems. They have been dressing up old ideas and concepts about the interrelationships between nature and human culture and responsible stewardship of the earth with refreshing originality and vitality. They are potential allies and they have things to say to us that are deserving of our attention. (Parsons 1985: 1; see also Chapter 2, this volume)

Just as Parsons recognized affinities between bioregionalists and geographers, we note a similar affinity among bioregionalists, permaculturalists, ecovillagers, and ecological/environmental anthropologists and multidisciplinary political ecologists.

While these citizen activists may appear at first glance as romantic idealists, a closer examination reveals endeavors that are simultaneously ecotopian and practical. Such individuals may have grand visions, but they recognize those visions are not within immediate reach and are engaged in a constant iterative process of critical analysis, reassessment, and consequent adjustment of their projects. They share some of our fundamental ideals regarding justice and sustainability, incorporate anthropological knowledge into their projects, provide living laboratories of cultural change, and represent opportunities to make environmental anthropology more relevant to immediate concerns.

Just as Rappaport (1993) suggested two decades ago that ecological health has been subverted by the discourse of short-term economic growth in the fields of development and sustainability, so too have hope and idealism been subverted by practical (and supposedly objective) as well as overly critical postmodern and Marxist approaches in mainstream anthropology. Yet, it remains true that much of anthropology is fundamentally guided by a moral compass: a utopian impulse to contribute to positive change in the world guided by our accumulated knowledge of the forces and factors that create human suffering or flourishing. What we are suggesting is an ecotopian anthropology that engages with movements for environmental justice and sustainability and applies its knowledge, methods, and forms of critical analysis toward ultimate goals and values we share with those groups. We hope this effort will help lead us simultaneously toward a deeper understanding of the processes of cultural change and toward a more sustainable future.

Ecotopian Possibilities for a Sustainable Future: The Contributions

This volume contains sixteen contributions from scholars and citizen-activists of diverse backgrounds. We divided the book into three sections focused on bioregionalism, permaculture, and ecovillages, but readers will notice that overlaps among the sections reflect integration among these movements in both theory and practice. Collectively, the contributions enhance our knowledge and understanding of these three movements while also posing important nodes for critical analysis aimed at advancing the goals of justice and sustainability and addressing broader theoretical issues.

We begin the first section on bioregionalism with a classic piece of activist literature first published by Peter Berg in the bioregional journal Raise the Stakes in 1986. This chapter builds the foundational framework and vision for bioregionalism and is appropriately rooted in the specific experiences of activists in a particular place—the Shasta bioregion of northern California. Moving beyond an ecotopian vision, Berg explores the possibilities and practicalities of expanding bioregional governance across various contexts—including urban areas, continental bioregional networking, and coalition building with other movements.

Berg's chapter is followed by one by former Association of American Geographers President James J. Parsons, originally published in The Professional Geographer (1985), wherein he notes a distinct affinity between bioregional thought and action on the one hand and academic theory building in geography on the other. While no distinct and persistent engagement between academic geographers and bioregional activists emerged in response to this call for collaboration (for exceptions, see Carr [2004], Frenkel [1994], and McTaggart [1993]), Parsons's chapter foregrounds one of the main aims of this book—to bring scholarship and activism together in pursuit of shared goals of social justice and environmental sustainability.

In Chapter 3, Brian C. Campbell presents an overview of the longeststanding bioregional network in the United States, the Ozark Area Community Congress (OACC). Grounded in collaborative ethnographic fieldwork, it is a cultural history of the network, focusing on the challenges these bioregionalists have faced and the significant accomplishments they can claim. Campbell's research demonstrates the role of place, in this case the Ozark landscape, and symbolism in constructing sustainable intentional communities and the importance of learning from established agrarian populations. Through the integration of traditional and modern ecological knowledge and praxis, OACC serves as an example for contemporary post-industrial society's necessary venture into sustainable community building.

The bioregionalism section ends with Steve Alexander and Baylor Johnson's account of a unique educational program, the Adirondack Semester at St. Lawrence University in New York, which uses bioregional thinking and experience as a foundational pedagogical tool. This semester-long, off-campus, residential program integrates academic coursework, direct and deliberate experiences, and a purposeful living and learning community to generate a bioregional ethos in the program's operations and participants. Were such approaches more widely available to younger generations through education programs, reorganizing society along more bioregional lines, or at least according to "cosmopolitan" bioregional ethics, might be a more distinct possibility.

Section II, on permaculture, begins with a reprint of our 2008 article in the anthropological journal Culture and Agriculture, "Environmental Anthropology Engaging Permaculture: Moving Theory and Practice Toward Sustainability." In this chapter, we identify the historical development of the permaculture paradigm, show how permaculture is being employed at Earthaven Ecovillage in the Katuah bioregion in the United States, and identify fruitful theoretical and practical areas of collaboration between permaculturalists and environmental anthropologists. We close with a suggestive vignette on what the future of environmental anthropology might look like from the vantage point of situated ecovillage life and research.

In Chapter 6, Guntra A. Aistara examines the reception of permaculture practices among Latvian eco-farmers. The chapter builds on ethnographic research Aistara conducted with the Eco-Health Farm Network and the Latvian Organic Agriculture Association from 2003 to 2010, and includes farmers' reflections on the potential for a locally adapted permaculture to further enhance on-farm resilience and long-term sustainability. Aistara builds bridges between permaculture concepts and theoretical ideas within environmental anthropology from a range of thinkers including Tim Ingold, Bruno Latour, and Anna Tsing.

Randolph Haluza-DeLay and Ron Berezan, in Chapter 7, focus on the development of a permaculture network in Edmonton, Alberta, Canada. This network serves, they argue, as a "distributed ecovillage" and a social field productive of ecological habitus. A Bourdieuian theory of practice is applied to the permaculture network, asking to what degree it contributes to ecological habitus. The authors trace the processes of social learning and the development of hybridized and complicated socio-natures in the Edmonton urban permaculture movement. The dialogical structure of the chapter has each author commenting on key themes from their respective vantage points of reflective practitioner and activist-scholar.

In Chapter 8, Bob Randall details the process of how he, as an environmental anthropologist, used lessons learned from a sixteen-year research period in the southern Philippines (1971-1986) to design a sustainable agriculture organization called Urban Harvest that has partially transformed the Houston metropolitan foodshed. Key to Randall's efforts were his training in permaculture design with Bill Mollison and the use of permaculture as an organizational design tool to unite diverse Houston groups in a collective endeavor to transform the city's foodways.

Katy Fox compares the conceptualizations and processes of progress, hope, and commons thinking among rural Romanian farmers and United Kingdom permaculturalists in Chapter 9. Her chapter elucidates the issue of how these different social groups engage with change in times of ecological, economic, and social crisis. Two central questions frame her ethnography. First, what is the model of progress underlying how people imagine their life projects? Second, how is hope reimagined and practiced in the two groups? For permaculturalists in the UK, permaculture principles provided a pragmatic and dynamic framework for situated action that made it possible to envision the future differently in practice. For Romanian peasants, a discrepancy existed between their narratives about the future and the way in which their practices unfolded. This, Fox argues, is related to two different notions of transition at work in the two groups, and the effects of implicitly and explicitly envisioning better futures.

In Chapter 10, Jenny Pickerill analyzes Low Impact Developments (LIDs) in Britain. This chapter uses the LID example to explore the practices and implications of the permaculture approach when put into holistic practice. LID is a radical approach to housing, livelihoods, and everyday living that began in Britain in the 1990s as a grassroots response to the overlapping crises of sustainability. It is also a direct response to social needs for housing, an anti-capitalist strategy forging alternative economic possibilities, and a holistic approach to living that pays attention to the personal and political simultaneously. As such, it is shaped by the three ethical foundations of permaculture (earth care, people care, fair share) and explicitly aims to put these into practice. Pickerell uses results from ethnographic studies of four British LIDs to critically explore the practices of permaculture and its use within solution-orientated approaches to environmental problems. Moreover, she identifies key lessons from such projects—both practical and academic—that can inform ongoing attempts to shape a more sustainable future.

In the concluding chapter of the permaculture section, Aili Pyhälä looks at how permaculture can, on the one hand, inform development policy and practitioners working on community development and disaster relief and, on the other hand, reframe the whole development policy agenda through a closer look at ethics. Using recent case studies from across the world, combined with theoretical analyses, Pyhälä examines how the principles and ethics of permaculture can be applied in the field of development cooperation to resolve current challenges facing both donors and recipients.

The final section of the book—focused on ecovillages—begins with a contribution by Jonathan Dawson, the former president of The Global Ecovillage Network (GEN), who gives a historical overview of the ecovillage movement and a summary of current developments in ecovillage thinking. Dawson charts how ecovillages—most recently rooted in the intentional community building of the 1960s and 1970s and reaching their apex in the 1990s and early 2000s as "grown-up" endeavors focused on ecological sustainability—have recently made a strategic shift from an inward emphasis on self-sufficiency toward more outward concentration on educational efforts and making cross-linkages with citizen initiatives such as the Transition movement.

In Chapter 13, Brian J. Burke and Beatriz Arjona examine two Columbian ecovillage experiences. The authors assert that ecovillages are alternative political ecologies in the making and that their construction requires transformations at both personal and community scales. Arjona's personal story exemplifies the most common ecovillage experience in Columbia—that of disaffected middle or upper class urbanites seeking a more fulfilling life through a connection with nature and community and the range of motivations and challenges such ecovillages face. The authors then examine the exceptional case of Nashira, an ecovillage of low-income single mothers—many of whom are victims of violence and displacement—to consider possibilities for developing ecovillages among structurally disadvantaged populations. By placing these two examples in comparative context, Burke and Arjona aim to combat stereotypes of both the Global North and the Global South that impede clearer analyses of the actual social conditions that give rise to and constrain ecovillage projects worldwide.

Todd LeVasseur, in Chapter 14, documents the challenges that five members of an ecovillage training program held in 2000 at the Findhorn Foundation community in Scotland have faced in subsequently implementing the ecovillage vision in diverse locales around the world. Oral history interviews with five individuals—all of whom were co-participants with LeVasseur in the training—show on-the-ground obstacles and

successes in implementing ecovillage-inspired development plans in the Philippines, El Salvador, Brazil, and Austria. Comparing experiences in the Global North and the Global South, LeVasseur shows how local structural relationships contextualize the ecovillage endeavor.

In Chapter 15, Daniel Greenberg uses Living Routes—a semester-long study abroad program that he directs—to explore the pedagogical possibilities that exist for developing stronger linkages between the academy and ecovillages. He identifies ecovillages as an excellent platform for breaking down barriers between ivory tower and village, as well as between thought and praxis. Greenberg calls for increased collaboration between academia and ecovillages as we strive to create sustainable solutions to global environmental problems.

Ted Baker, in the final chapter of the book, makes interconnections between anti-capitalist literature and increasing interest in ecovillages. His chapter asks some critical questions: How are we to conceive of the relationship between intentional communities and the capitalist context they exist within? More specifically, what are the tensions and contradictions engendered by the attempt to construct sustainable communities (ecovillages) within an unsustainable context (capitalism)? Baker grounds his analysis in an ethnographic examination of an ecovillage in southwestern Ontario, Canada, and then proceeds to a more theoretical examination of the relationship between ecovillages and capitalism. Drawing mostly from thinkers in autonomist Marxist and anarchist traditions, he then suggests an anti-capitalist approach that not only provides us with valuable ways to conceptualize this relationship, but can also be enriched and further developed by being brought into contact with the concrete realities of ecovillages.

References

Anderson, E. N. 1969. "The Life and Culture of Ecotopia." In Reinventing Anthropology, ed. Dell Hymes. New York: Vintage Books.

—. 2010. The Pursuit of Ecotopia: Lessons from Indigenous and Traditional Societies for the Human Ecology of Our Modern World. Santa Barbara, CA: Praeger.

Berg, Peter. 2009. Envisioning Sustainability. USA: Subculture Books.

Bennett, John W. 1967. The Hutterian Brethren: The Agricultural Economy of a Communal People. Palo Alto, CA: Stanford University Press.

Berry, Wendell. 2008. "The Way of Ignorance." In The Virtues of Ignorance: Complexity, Sustainability and the Limits of Knowledge, ed. B. Vitek and W. Jackson. Lexington: University Press of Kentucky.

Boas, Franz. 1928. Anthropology and Modern Life. New York: W.W. Norton & Company.

- Brown, Susan Love. 2002. Intentional Community: An Anthropological Perspective. Albany: State University of New York Press.
- Brundtland, Gro Harlem. 1987. Our Common Future: The World Commission on Environment and Development. Oxford: Oxford University Press.
- Carr, Mike. 2004. Bioregionalism and Civil Society: Democratic Challenges to Corporate Globalism. Vancouver: University of British Columbia Press.
- Eriksen, Thomas Hylland, and Finn Sivert Nielson. 2001. A History of Anthropology. London: Pluto Press.
- Escobar, Arturo. 2001. "Culture Sits in Places: Reflections on Globalism and Subaltern Strategies of Localization." Political Geography 20: 139-74.
- —. 2008. Territories of Difference: Place, Movements, Life, Redes. Durham, NC: Duke University Press.
- Folke, Carl. 2006. "Resilience: The Emergence of a Perspective for Social-Ecological Systems Analysis." *Global Environmental Change* 16: 253–67.
- Fox, Richard G. 1989. Gandhian Utopia: Experiments with Culture. Boston: Beacon Press.
- Frenkel, Stephen. 1994. "Old Theories in New Places? Environmental Determinism and Bioregionalism." Professional Geographer 46 (3): 289-95.
- Gilman, Robert. 1991. "The Eco-village Challenge." In Context 29. http://www .context.org/ICLIB/IC29/Gilman1.thm (accessed 6 August 2010).
- Global Ecovillage Network. n.d. "Homepage." http://gen.ecovillage.org/ (accessed 22 October 2011).
- Graeber, David. 2004. Fragments of an Anarchist Anthropology. Chicago: Prickly Paradigm Press.
- Gunderson, Lance H., and C. S. Holling. 2002. Panarchy: Understanding Transformations in Human and Natural Systems. Washington DC: Island Press.
- Harraway, Donna. 1991. Simians, Cyborgs, and Women: The Reinvention of Nature. London: Routledge.
- Harvey, David. 2000. Spaces of Hope. Berkeley: University of California Press.
- Holmgren, David. 2002. Permaculture: Principles and Pathways Beyond Sustainability. Hepburn, Australia: Holmgren Design Services.
- Hunn, Eugene S. 1999. "The Value of Subsistence for the Future of the World." In Ethnoecology: Situated Knowledge/Located Lives, ed. V. D. Nazarea. Tucson: University of Arizona Press.
- Hymes, Dell, ed. 1969. Reinventing Anthropology. New York: Vintage Books.
- Kasper, Debbie Van Schyndel. 2008. "Redefining Community in the Ecovillage." Human Ecology Review 15 (1): 12-24.
- Latour, Bruno. 1993. We Have Never Been Modern. Cambridge, MA: Harvard University Press.
- Lockyer, Joshua. 2009. "From Developmental Communalism to Transformative Utopianism: An Imagined Conversation with Donald Pitzer." Communal Societies 29 (1): 1–14.
- McTaggart, W. Donald. 1993. "Bioregionalism and Regional Geography: Place, People, and Networks." Canadian Geographer 37 (Winter): 307–19.
- Mollison, Bill. 1988. Permaculture: A Designer's Manual. Tylagum, Australia: Tagari Publications.

- More, Sir Thomas. [1516] 1906. Utopia. London: A Constable and Co.
- Nabhan, Gary Paul. 1997. Cultures of Habitat: On Nature, Culture, and Story. Washington DC: Counterpoint.
- Odum, H. T. 1971. Environment, Power, and Society. New York: John Wiley and Sons.
- Orlove, Ben. 1980. "Ecological Anthropology." Annual Review of Anthropology 9: 235-73.
- Parsons, James J. 1985. "On 'Bioregionalism' and 'Watershed Consciousness." The Professional Geographer 37 (1): 1-6.
- Powell, J. W. 1879. Report on the Lands of the Arid Region of the United States. Washington DC: Government Printing Office.
- Rappaport, Roy A. 1968. Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People. New Haven, CT: Yale University Press.
- -. 1993. "Distinguished Lecture in General Anthropology: The Anthropology of Trouble." American Anthropologist 95 (2): 295–303.
- Rhoades, Robert E. 1999. Participatory Watershed Research and Management: Where the Shadow Falls. Gatekeeper Series 81. London: International Institute for Environment and Development.
- -. 2000. "Integrating Local Voices and Visions into the Global Mountain Agenda." Mountain Research and Development 20 (1): 4–9.
- —. 2007. *Listening to the Mountains*. Dubuque, IA: Kendall/Hunt.
- Rhoades, Robert E., and Robert Booth. 1982. "Farmer-Back-to-Farmer: A Model for Generating Acceptable Agricultural Technology." Agricultural Administration 11: 127-37.
- Scoones, I. 1999. "New Ecology and the Social Sciences: What Prospects for a Fruitful Engagement?" Annual Review of Anthropology 28: 479–507.
- Scott, James. 1976. The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia. New Haven, CT: Yale University Press.
- Sheper-Hughes, Nancy. 2006. "The Primacy of the Ethical: Propositions for a Militant Anthropology." In Anthropology in Theory: Issues in Epistemology, ed. H. Moore and T. Sanders. Malden, MA: Blackwell.
- Snyder, Gary. 1995. A Place in Space: Ethics, Aesthetics, and Watersheds. Washington DC: Counterpoint.
- Steward, Julian. 1955. Theory of Culture Change: The Methodology of Multilinear Evolution. Urbana: University of Illinois Press.
- Swyngedouw, Erik. 1999. "Modernity and Hybridity: Nature, Regeneracionismo, and the Production of the Spanish Waterscape, 1890-1930." Annals of the Association of American Geographers 89: 443-65.
- Thompson, Laura. 1950. Culture in Crisis: A Study of the Hopi Indians. New York: Harper & Brothers.
- Townsend, Patricia K. 2009. Environmental Anthropology: From Pigs to Policies. 2nd ed. Long Grove, IL: Waveland Press.
- Veteto, James R., and Joshua Lockyer. 2008. "Environmental Anthropology Engaging Permaculture: Moving Theory and Practice Toward Sustainability." Culture and Agriculture 30 (1-2): 47-58.