Progress reports

Cultural landscape and ecology II: regions, retrospects, revivals

Kent Mathewson

Department of Geography and Anthropology, Louisiana State University, Baton Rouge, LA 70803, USA

I Introduction

This is the second report in a series of three. The first reported on recent publications that combine a focus on cultural landscape(s) and ecological dynamics and dimensions (Mathewson, 1998). It also included a survey of coverage of cultural landscapes and ecology in *Progress in Human Geography* (1977–) since its inception, and also referred to items in its predecessor, the annual review *Progress in Geography* (1969–76). To be sure, both categories have appeared in reports with varying rubrics over the past 30 years, but not as the titular nor main focus of them. Moreover, cultural landscape and ecology were rarely viewed in combination, and rarer still as a unity. This seems somewhat curious given that the nexus of relations, variously referred to as nature-society, human-environment, man-land and so on, constitutes one of the three or four consistent and fundamental divisions or arenas of geographic learning and labor (Agnew et al., 1996; Rediscovering Geography Committee, 1997). And within this sector, by any reasonable account, the concepts of cultural landscape and ecology are central (Turner, 1997). Whatever the past editorial rationales for this elision, a forum has now been provided. It comes at a critical time. General interest in human impacts on the global environment – past, present and future – has probably never been greater. Of course, geographers do not have exclusive proprietary claims to this immense topic, nor should they. Increasingly, the practitioners are as apt to be environmental historians, historical ecologists, landscape archaeologists and kindred specialist-synthesizers (to use Turner's, 1989, term) as geographers. At lesser scales and finer resolutions, particularly wherein the study of cultural landscape and ecology meet and merge, a case for geographic liens (on certain neighbors' interventions) based on provenance and development would be legitimate. In the meantime, geographers might be flattered by the mimicry, but also alert to opportunities to make it clear that geographers first occupied and developed this domain, and that geographers continue to be the principal contributors.

The intersections of culture, landscape and ecology offer not only geographers but also anthropologists, archaeologists, ethnobiologists and historians in particular seemingly limitless possibilities. Wherein the chorologic enterprise of the early to middle decades of this century reached the limits of its logic well before it covered the earth even superficially, regionally based historical-cultural ecological studies show little sign of obsolescence. In fact, it may be that this approach has only begun to demonstrate its wider potential. This is but one aspect of research waiting to be done within the culture/landscape/ecology sphere. Examples of this and related approaches are featured in this report.

Berkeley work: eternal returns?

Although I suggest that regionally based historical-cultural ecology comprises a research arena scarcely begun, the work of Berkeley school geographers since the late 1920s provides a sustained and serviceable foundation. Save for the occasional article or some of the dissertations written by Sauer's students during the 1950s (viz. Aschmann, 1954; Gordon, 1954; or Innis, 1958), the place of ecology in conjunction with cultural landscapes may not be all that explicit in titles of Berkeley school studies. It is implicit and pervasive, however, in much of what falls within the bounds of this large and complex body of research. Similarly, the chorologic character and contributions of much of the Berkeley work are mentioned in afterthought if at all. Yet, of the thousands of research topics explored and publications produced by the school's several hundred adherents over five or six academic generations, the majority are grounded in real regions, places and landscapes, and reconstruct or record the past or present agencies of people within their environments. Nor does there seem to be any end in sight for this tradition, despite the emergence of new varieties of cultural geography whose practitioners jejunely and routinely issue uninformed dismissals of what has preceded them (Price and Lewis, 1993).

One measure of the continued interest in Sauer and the Berkeley school's brand of geography are the recent publications pertaining to them. The Geographical Review, under the direction of its new editor Paul Starrs, has published several Sauer-centered pieces in the past year. Tapping Sauer's correspondence in Berkeley's Bancroft Library, Parsons (1996b) documented the extent to which Sauer was in contact with a range of poets and writers, and the high regard with which they held his work. Sauer's association with luminaries such as Lewis Mumford was well known. Less evident until now, was his connections with poets such as Robinson Jeffers, Charles Olson, Ed Dorn, Robert Creeley and Gary Snyder, or his more diffuse influences on some of our best nature/culture prose stylists such as Peter Matthiessen and Barry Lopez. Sauer and by extension those who studied at Berkeley during his tenure – the list is long, distinguished and includes figures such as Lowenthal, Tuan and Zelinsky - continue to inform the study of culture, landscape and nature within a number of adjacent disciplines.

In a recent special issue of the Geographical Review on Latin America themes, Sauer and his continuing influence are evident throughout. Three articles deal directly with aspects of his regional calling. Bruman (1996) recollects his own dealings with Sauer and the stress put on questions rather than answers (and the stresses felt by students in response!). Parsons (1996a), again mining the Bancroft's archives, recounts Sauer's vision during the 1930s and 1940s of an independent Institute for Latin American Studies. Though never constituted along the lines he sketched, i.e., supported by foundations and not subsumed within academic institutions, some of what he proposed was realized with the formation of academic area studies centers after the second world war. In marked contrast, however, to these cold-war creations, Sauer envisioned a collective of North Americans and Latin American nationals pursuing questions at the conjunctions of cultural and natural history. Denevan (1996) reappraises the contributions Sauer and his students made to the debate over the population of the Americas at the time of European contact. Geographers, following Sauer's lead and his geographical approach (emphasizing environment, food production and settlement size, number and location), have generally favored large estimates. This perspective and methodology continues in recent work by geographers on historical demographic questions (Denevan, 1992; Whitmore, 1992; Lovell and Lutz, 1995; Newson, 1995). Three other articles in the special issue explore images and ideas of places and landscapes: Arreola (1996) on Mexican border cities, Frenkel (1996) on Panamanian tropicality and Price (1996) on Venezuela's Andes. All evoke at a distance Sauer's own imagery-of-place pieces, one of his less remembered ventures.

Wallach's (1998) memorial piece on James Parsons puts Parsons' legacy, and by association, the Sauer–Berkeley school record in strong relief. Donkin's (1997) 1995 Carl O. Sauer Memorial Lecture reflects back on his own career 'serving two masters', his apprentice work as a medievalist geographer under Darby at Cambridge and after a visit to Berkeley, his subsequent pursuit of disparate themes including aboriginal New World terracing, animal domestications and language as an aid to diffusion studies. As both Wallach's emotionally charged eulogy and Donkin's dry-to-wry observations attest, as long as geographers are drawn to study real people in real places and their relations with actual environments, then the enterprise will not only persist, but probably prosper.

III South by Southwest

Perhaps the most impressive evidence for this projection in the past year is *The evolving landscape: Homer Aschmann's geography* (Pasqualetti, 1997). It is a posthumous collection of, and commentaries on, Homer Aschmann's work and writings. Published by The Johns Hopkins University Press in co-operation with the Center for American Places and its director George F. Thompson, the volume may serve as a model for future retrospective appreciations of craftsmasters of historical-cultural ecology. The volume is divided into eight sections, each featuring a suite of Aschmann's essays and articles. In turn, the sections are evocatively introduced by scholars who knew Aschmann and his work well. Rather than simple summations of, or critical asides on the material ahead, the introductory essays stand as worthy pieces on their own – part précis but also biographical vignettes that bring the subject back alive. Like so much in the volume, this editorial feature is worthy of emulation in future ventures of this sort. The front material includes a foreword by J.B. Jackson and an essay on Aschmann as iconoclast

by the editor. The sections and their interlocutors in order are: 'Southern California' (Daniel Arreola), 'Baja California' (Conrad Bahre), 'Latin America' (James Parsons), 'Flora and fauna' (Charles Hutchinson), 'Linguistics' (William Loy), 'Deserts' (William Doolittle),' Native environments' (George Carter) and 'Wildlands and wilderness' (Karl Butzer). In all, 32 publications are presented, allowing current readers to revisit his field sites and insights.

In overview, the image that materializes is that of Ashmann as a consummate interpreter of human-environmental relations within the Hispanic arid lands and Mediterranean regions; from California to Chile, together with some disjunct excursions to other arid littorals and interiors. Sauer, of course, made southern California and northwestern Mexico his first sustained site of fieldwork after a decade in the Middle West and border states, and before moving more southward and deeply into records of the human past. Ashmann, on the other hand, made the lower Californias his career base camps, accumulating great and intimate stores of knowledge of their cultural and biophysical environments. Although Ashmann's geography can be seen as a protracted and expanded exemplar of *Heimatkunde*, or 'home geography' as Sauer called it, having spent a lifetime (1920–92) in a single region, it also provided a base for comparative work in kindred places. Happily, this is not a singular volume in the sense it has no counterparts. At least one other book has appeared in the last year that begs comparison on differing levels, along with recent work by specialists on topics Ashmann helped initiate (Blumler, 1995; Harner, 1995).

A new selection of writings by J.B. Jackson (1909-96), the legendary vernacular landscape essayist, offers ample occasion to note his affinities as well as minor divergences with the Berkeley cultural geographers, especially Ashmann (Jackson, 1997). Some 50 items, from notes and comments to several of his most celebrated essays are collected here, along with valuable biographical material presented by the volume's editor Helen Horowitz (1997). Originally from the élite East, Jackson found his calling and country in the Southwest and made New Mexico his home base. Opening entries in the volume, 'Chihuahua as we might have been' and 'Looking at New Mexico', put us behind the eyes of one that region's clearest observers. Perhaps best known for his explorations of, and meditations on, quotidian (e)qualities in American landscapes, the intellectual sources of his inspiration have been less apparent. Horowitz (1997: xxi–xxii) recounts Jackson suggesting that a youthful reading of Spengler and Mumford, but especially Spengler, had a profound effect on him. In part, Spengler's culture-civilization continuum/antimony posed the provincial vs. the World City, the vernacular vs. the formal. In unaffected ways, Jackson's writings from the launching of Landscape magazine in 1951 to his death may indeed reflect a sustained view of America informed by these early encounters.

To date, G.P. Marsh (Lowenthal, 1958) is the only figure in American geography squarely within the society-nature (man-land) tradition that has been the subject of book-length biographical study. Biographies have also been written on various geographers with contributions to this tradition. They include Nathaniel Shaler (Livingstone, 1987), Ellsworth Huntington (Martin, 1973) and Isaiah Bowman (Martin, 1980). Vermonter Marsh figures more as a precursor and the others were Harvard trained from American academic geography's first generation. Uncovering the intellectual foundations and unfoldings of the likes of J.B. Jackson, Sauer and his consociates, and other actors in the more recent phases of historical, ecological and cultural

landscape studies will probably require full biographies. In these stories, out-of-fashion culture history and theory will certainly surface, but the base should be chorologic; California, the Southwest and much of the rest of the Iberian and indigenous Americas will be central places.

Moving beyond the generation or two of geographers formed in the first half of this century, there are new orientations ('occidentations' might be more apt) to both older and newer questions and topics. Influences from New Western History movement (more on it below) seem not to have had much impact yet on studies of Southwestern culture, ecology and landscape. Some traces are evident in B.J. Morehouse's (1996) otherwise conventional history of the greater Grand Canyon area with an eye to shifting spatial claims and demarcations of its inhabitats, its resource extractors, its preservationists and its scenic consumers. Among the most emblematic places in the American Southwest, the Grand Canyon's grandeur is magnified by the image of human absence. But as Morehouse's study shows, the place is all too human, with a contested history that turns on multiple use claims.

Arizona-based environmental historian Stephen Pyne, on the other hand, has written a series of books on fire (Pyne, 1982; 1991; 1995), the most recent being Vestal fire: an environmental history, told through fire, of Europe and Europe's encounter with the world (1997b), in which fire is accorded a role coequal to its coevolved human partner in creating much of the earth's landscapes. A veteran of some ten seasonal stints as a firefighter on the North Rim of the Grand Canyon before finishing a doctorate in history and not quickly finding academic employment in its wake, Pyne drew on this experience for initial subsistence and inspiration for his monumental 'Cycle of fire' project. Thus far Pyne's quest has taken him from the Southwest to and through much of North America, Australia and Europe in rewriting the regional fire history of these continents. He has also written a book on his journey to Antarctica, Australia's fireless, ice-capped Gondwanan-descended twin (1986). Perhaps more effectively than any of the current environmental historians, Pyne not only puts 'natural' processes on a par with human agency in the histories of landscape transformations, but also fuses them in a pyrocultural perspective that offers much toward the writing of a global environmental history.

IV **Rewriting the Northwest**

Unlike the Southwest, where geographers with landscape and ecology interests always had a niche, albeit overshadowed at times by the sheer numbers of anthropologists and archaeologists, the Northwest coast until recently has been largely the uncontested terrain of anthropologists and to a lesser extent historians. Geographers have begun to play a growing role in the study of Northwest landscapes and ecology. Situated somewhat outside the exchange circuits of conventional wisdoms and paradigmatic policings, geographers are coming up with new views and hard evidence for resolving old debates.

Perhaps the most promising research topic involves reconsiderations of indigenous resource management strategies. Long thought to be 'nonagricultural' at the time of European contact, the Northwest coast has been viewed as an anomolous case. Given the sedentism, resource affluence, large-scale chiefdom levels of sociopolitical organization, the intense production of material items for trade and ritual redistribution, together with other general indices of 'complexity', it stands as one of anthropology's most enduring society and subsistence 'riddles'. Of course, abundant salmon and other coastal protein sources were the quick and seemingly simple answer. Approaching the question from cultural ecological and landscape archaeological perspectives, geographer Douglas Deur (in press) has uncovered evidence of widespread cultivation practices among both the precontact and postcontact Kwakiutl and other groups involving elaborate rockwall-enclosed garden plots for raising estuarine rhizomes and other starchy roots. These discoveries will almost certainly precipitate a number of interdisciplinary projects (Deur and Turner, forthcoming). Complementing work on the coastal zones, Eitemiller *et al.* (1995) and Gritzner (1994) have produced geographic studies of plant resource management in the interior Northwest, most emphasizing anthropogenic fires and the production of camas root (long recognized as an exploited but not necessarily managed starchy staple). Deur (1996) has examined the environmental information evident in indigenous place-names from the contact period.

The historical geography of postcontact periods has also been a topic of study among historians as well as geographers. Cole Harris's (1997) The resettlement of British Columbia: essays on colonialism and geographical change provides, in his words, a set of 'soundings' rather than attempting a comprehensive history. Nevertheless, Harris plumbs the points he chooses with characteristic skill and good senses. The places, patterns and processes examined are: the impacts of smallpox, the fur trade, mining and tourism, colonizing the Lower Mainland and the Fraser Canyon, the nature of farming and rural life, the population in 1881 and making an immigrant society. Landscape, ecology and, to a lesser extent, culture find their places in each of Harris's essays. Most were published previously, but some reworked to include his own recent engagements with social and postcolonial theory. Somewhat in contrast, much of the new work by Northwest environmental historians will have a déjà vu quality for geographers. The ideas of Meinig, Sauer, Tuan among others provide foundational support for studies such as Robbins' (1997) Landscapes of promise, the Oregon story 1800–1940. Richard White (1995), the region's best recognized environmental historian, has written an incisively slim volume on the remaking of the Columbia River. A meditation on nature and power, energy and work, White counsels we consult Emerson and Mumford more, and Thoreau and Muir less, in thinking about these categories. Transcending what even Emerson might have imagined America's energies becoming, art historian Peter Hales' (1997) Atomic spaces gives us a massive accounting of the occluded places of the Manhattan Project. The three key sites were Oak Ridge, Los Alamos and Hanford (in the South, Southwest and Northwest, respectively). Hales (1997: 4) sees them as constituting 'a new form of cultural landscape' created for a single purpose: to produce an almost unimaginable megaweapon to '[drop] on the Japanese'.

Postcolonial positions have made their marks on portions of Northwest coast landscape studies. Brealey (1995) reveals the ways in which Euro-Canadian cartographic representation has been employed to dispossess indigenous lands. Willems-Braun (1997a) has uncovered the neocolonial contradictions within the writings of contemporary environmentalists. In representing western Vancouver Island as pristine wilderness, they alternately overlook or romanticize the Nuu-Chah-Nulth who dwell there. Willems-Braun's article was also the object of critique by Sluyter (1997) and a response by Willems-Braun (1997b). The main bone of contention in this exchange over 'buried epistemologies' was the interment of the Sauerian tradition, without autopsy or

identification, which according to Sluyter not only confronted the same questions and issues regarding nature–culture colonizations as occupy the postcolonial critical mind, but that the tradition is alive and at work. Whether seen as ghost dancings or roots-without-end, the frequency with which the terms of this general debate are ground suggests both an undullable axe, and an indelible axis, around which a significant portion of society–nature scholarship will continue to cut and cohere.

V Back tracking to middling Wests

In earlier historiography before there was an American Middle West, there was an Old Southwest and an Old Northwest. In an earlier geography, over the Appalachians but short of the Great Plains, mid-continent from north to south was west. These were the new wests of early national America. While they are still largely trackless lands at the feet of environmental historians, several generations of geographers, archaeologists and material culturalists have surveyed their landscapes and subregions, especially north of the Ohio and Missouri River Valleys. A major exception was Cronon's (1991) *Nature's metropolis: Chicago and the Great West.* With a foot in both environmental history and geography, Cronon charted Chicago's relations with its hinterland – especially the commodity flows that formed its economy and transformed its dependent landscapes. Though a major and acclaimed accomplishment, Cronon's big canvas effort has not inspired much in the way of lesser-scaled imitation. It has provoked, however, trenchant critique in a few quarters, including a special issue of *Antipode* (Walker, 1994). In the meantime, cultural and historical geographers have continued to produce studies that focus on Deep South and Midwestern landscapes and ecology in customary ways.

Aiken (1998) has brought together three decades of study and writings to publish a major volume on the post-bellum cotton plantation South. Of course, land and ecology figure into the story, but the main actors and emphases are on the plantation systems' black laborers and their legatees. Not only does Aiken (as many others have done) balance plantation declension with New South ascension, but he devotes a third of the book to the civil rights movement as an organic outcome of this process. Black settlement pattern and landscape changes are also depicted and interpreted in relation to shifting social and political geographies. Mart Stewart (1996), an environmental historian, has given us not only the best environmental history yet set in the Deep South but also a model of conjoining culture, landscape and ecology in regional historical writing. His study, subtitled 'life, labor, and landscape on the Georgia Coast, 1680-1920', confidently uses geographic concepts such as landscape and 'sense of place' as organizing devices, but grounds them in land and labor interactions on three levels: who did it, who controlled it and their relationship to natural energy flows. The American South, in whichever of its many forms or phases - Old/New, Deep/Upper/Border, popular/élite, black/white and so on - remains largely unstudied in its ecological-cultural history, whether with new twists, or on old terms. It is wide open for in(tro)spection.

The American Midwest, functional hearth and heartland of American academic geography, and as mentioned above, has long had its regional and landscape interpreters. Even though scientific ecology in North America was first developed there, especially from its early base at the University of Chicago, vigorous hybrids, particu-

larly with recessed cultural and historical genes have been slow to emerge. Therefore, Hugh Prince's (1997) Wetlands of the American Midwest: a historical geography of changing attitudes is a welcomed arrival (and revival). Prince chronicles the shifts in attitudes toward the region's wetlands from indigenous uses, to early nineteenth-century avoidances, to a century of destruction and 'improvements' to the last half-century's increasing concerns for conservation and restoration.

Another volume that puts-it-all-together with more than ample attention to culture, landscape and ecology is Wisconsin land and life (Ostergren and Vale, 1997). Appropriately understated, confidently state-of-the-art, this is clearly (nonstatist) state geography at its best! It is also a collective effort that includes students, professors and emeriti in equal relief and measure. It is more a Festschrift for a set of places and processes than for a single individual or program, although emeriti professors Francis Hole and Clarence Olmstead from the U.W.-Madison Geography Department are singled out for having spent much of their careers studying the local scene. One of the more evident countercurrents within globalization's spins is selective revalorizations of the local. Public response to the volume's precursor project, the Cultural map of Wisconsin (Woodward et al., 1996), suggests popular interest in geographic work continues to grow along with academic revivals of earlier regionalisms. This volume plays to those sentiments and more. Divided into sections on 'natural environments and wild landscapes', 'settlement processes and cultural patterns' and 'regional economies and landscapes', 26 chapters explore a range of topics. Several focus on Euro-settlers and immigrants as agents of landscape change. Conzen (1997) reconstructs the impacts of lead and zinc mining, Rohe (1997) lumbering, Alanen (1997) iron mining, Bawden (1997) North Woods recreation. Three articles deal with the indigenous occupance and relations with the land. Gartner's (1997) contribution stands out for its succinct and synthetic coverage of present knowledge of precontact subsistence practices and settlement landscapes, including his own work on anthrosols and agricultural landforms such as mounds and ridge fields. Pearson (1997) looks at the impact of the shift from hand to mechanized wild rice harvest on Ojibwa lands, and Silvern (1997) assesses the state of Ojibwa treaty rights in light of the past and current contentions surrounding nature resource management.

VI New western geographies?

Contributors to a special issue of *Ecumene* ask this question from several but related perspectives (Craddock, 1998; Henderson, 1998; Mitchell, 1998a; 1998b). More than a decade has passed since Limerick (1987) and other social, feminist and environmental historians began raising collective voices for radical rescriptings of histories of the American West. Geographers heard the calls, but answering them has taken time. Perhaps the most responsive and accomplished listener has been Don Mitchell. His Lie of the land: migrant workers and the California landscape (1996) is a well reasoned mediation between traditional cultural geographers' concern for the materiality and morphology of landscape and the newer focus on questions of representation and ideology. Mitchell argues for, and demonstrates that, an ontology of labor is both central and crucial to the study of landscape. That cultural landscapes are both the products and repositories of human labor should be obvious to all who profess an interest in them. The conditions under which this labor is organized and reproduced are less obvious; in most cases they must be relocated and reconstructed. Lie of the land is not only inspired labor history but it also works effectively in showing how a more materialist (new) cultural geography can be constructed.

There are also unapologetic expressions of the 'old cultural geography'. Jordan et al. (1996) have drawn on three decades of fieldwork on material culture constructions from sites ranging from New Mexico to Alaska in their volume The mountain West: interpreting the folk landscape. The methodology is vintage Kniffen and the epistemology militantly empirical and avowedly anti-theoretical, particularly as regards social scientific theorization. The volume verges on an affirmation of the new cultural geographers' parodic reductions of traditional cultural geography to little more than inventories of folk houses, barns and fence posts. Amid the dusty declamations on methods and attitudes, the authors demonstrate impressive powers of observation and knowledge of landscapes and their material constructions. More nuanced and critical, but still in the vernacular camp, Paul Starrs' Let the cowboy ride (1998) surveys much of the same terrain along with large parts of the plains to write the cultural and regional geography of western cattle ranching. Starrs' opus complements Jordan's (1993) definitive cultural-historical study of North American cattle ranching's origins, diffusions and differentiations. Starrs brings the story up to date providing insider knowledge of cowboy culture and informed observation of regional politics and economics of ranching, range management and land-use policy within the contexts of local landscapes and ecologies. He is particularly effective in showing how customary practices and production scales often clash with federal land-use laws, and how these tensions help produce new forms of anti-statism and cultural fundamentalism.

VII Westward [still] the course . . . ? Or Pacific rims in reflux

Jared Diamond, physiologist, biogeographer and now Pulitzer prize winner, has written a widely publicized and readable account of human history since the end of the Pleistocene. Guns, germs, and steel: the fates of human societies (1997) fits into the growing category of popular environmental history, seemingly initiated by Crosby's (1972) The Columbian exchange, but foreshadowed as early as Marsh's Man and nature (1864) or later, but obversely, by the well selling environmentalist literature (e.g., Huntington, Semple, Taylor) during the 1920s and 1930s. Specialists will find much to qualify or quibble with, whereas most geographers will be dismissive of (appalled at?) his main thesis that 'environmental differences' explain disparities between advanced civilizations and survivals of neolithic societies such as found (until recently) in New Guinea. Yet here is a global history of post-Pleistocene human societies that contends 'continental differences in wild plant and animal species available as starting materials for domestication' (Diamond, 1997: 406) explain that history. Given these ambient advantages, he sees Eurasian societies getting the jump on all others, and parlaying these initial conditions into civilizational superiorities in terms of power and domination. Despite its explicit biogeographical determinism and pandemic simplifications, Diamond's book will introduce a wide audience to questions, topics and perspectives that cultural geographers and prehistorians have had largely to themselves until now.

Political economist and dean of underdevelopment studies Andre Gunder Frank (1998) has written a global geohistory that also places priority on the Eurasian landmass. Unlike Diamond, his concerns are much less with ecologies than economies. Frank argues for nothing less than an Asian origin and centrality of the world economy, and downsizes the scope of European primacy to that of an interlude to be followed by an Asian restoration. A diverse set of theorists from Marx, Weber, Polanyi, Rostow, Braudel to Wallerstein are all made to stand on their heads. Vertigo aside, from this perspective Eurocentrism is divested of much of its footing and authority. Frank may not be a thick describer of the telluric bases of the economies under discussion, but he does offer useful insights into their cultural and ecological contexts. As with his earlier critiques of development theory (1967), his recent ventures into global history (Frank and Gills, 1993) have widened and deepened the intellectual space in which cultural and historical ecologists might navigate.

Whereas Diamond's world history project grew out of a question asked him by a New Guinean friend – why the massive disparities between societies in their capacity to produce and exchange material goods? - antipodean geographers and historians have been asking: why import environmental history models from afar when abundant materials exist for their own constructs (Powell, 1996; 1997b)? A number of recent studies indicate this proposition has been considered, approved, and work is underway (Griffiths, 1996; Birtles, 1997; Wynn, 1997; Anderson, 1998). One of the better registers of the progress is *Ecology* and empire. Environmental history of settler societies (Griffiths and Robin, 1997). Although only three of its 16 essays deal with Australia directly (Flannery, 1997; Powell, 1997a; Rolls, 1997), an austral perspective underwrites much of the rest, with chapters on South Africa (Beinart, 1997; Grove, 1997; Milton, 1997), Latin America (Melville, 1997) and Antarctica (Hains, 1997), and four comparative essays that draw on Australasia, the Americas, Africa and to lesser extents, Asia for material (Carruthers, 1997; Dunlap, 1997; Pyne, 1997a: Robin, 1997; Williams, 1997) and two contemplative pieces on the main themes (Lowenthal, 1997; MacKenzie, 1997). The title of Griffiths' (1997) introductory essay 'Ecology and empire: toward an Australian history of the world' sets one of the tones. Flannery plays on Australia's ecological and environmental exceptionalism – low-energy ecosystems on a largely dry and flat continent – compared to other cases involving empires' 'fates' in variable settings. His analyses fold nicely into Diamond's argument, but Flannery makes far less of them. Powell, in contrast, focuses singly on Australia's home-grown water management history, with only slight footnoted nods toward larger theoretical questions or comparisons, such as Worster's (1985) Wittfogelian-inspired work on western American hydraulic history. MacKenzie, in summary and overview, provides useful taxonomic ordering of not just the volume's contents, but traditions and trends within the historiography of empires and their environments. He suggests four principal approaches: the apocalyptic (cf. Crosby, 1972), the neo-Whiggish (cf. Grove, 1995), the longer perspective (cf. Gadgil and Guha, 1993) and the fully integrated cultural school (cf. MacKenzie, 1988, or Griffiths, 1996). He also suggests that these four ways of looking at, and doing, imperial environmental history are just opening bids. Given the continuing strong interest in things imperial and ideas postcolonial, this is probably a safe bet.

In a third and final report on cultural landscapes and ecology, I hope to highlight, among other research trends, work in regional historical ecology. In this regard, Kirch and Hunt's new volume (1997) on prehistoric environmental and landscape change in Oceania is exemplary. From Kirch's (1997) introductory essay on the environmental history of the Oceanic islands to this epilogue on 'Islands as microcosms of global change?' he and the other contributors ask important questions and provide solid answers. It is in these kinds of collaborations that elements of the culture/landscape/ecology triad are being most successfully combined and synthesized.

Acknowledgements

This time around Doug Deur, Eric Perramond, Paul Starrs and the publicity managers at a number of scholarly presses answered calls for help, advice, information and materials.

References

- Agnew, J., Livingstone, D.N. and Rogers, A. 1996: Human geography: an essential anthology. Oxford: Blackwell.
- **Aiken, C.S.** 1998: The cotton plantation south since the civil war. Baltimore, MD: Johns Hopkins University Press.
- Alanen, A.R. 1997: Homes on the range: settling the Penokee-Gogebic iron ore district of northern Wisconsin and Michigan. In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life, Madison, WI: University of Wisconsin Press, 241-62.
- Anderson, K. 1998: Science and the savage: the Linnean Society of New South Wales, 1874-1900. Ecumene 5, 125-43.
- Arreola, D.D. 1996: Border-city idée fixe. Geographical Review 86, 356-69.
- Aschmann, H.H. 1959 [1954 diss]: The Central Desert of Baja California: demography and ecology. Ibero-Americana 42.
- Bawden, T. 1997: The Northwoods: back to nature? In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life, Madison, WI: University of Wisconsin Press, 450-69.
- Beinhart, W. 1997: Vets, viruses and environmentalism at the Cape. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 87-101
- 1997: First contact: colonial Birtles, T.G. preconceptions tropical European of Queensland rainforest and its people. Journal of Historical Geography 23, 393–417.
- Blumler, M.A. 1995: Invasion and transformation of California's valley grassland, a Mediterranean analogue ecosystem. In Butlin, R.A. and

- Roberts, N., editors, Ecological relations in historical times: human impact and adaptation. Oxford: Blackwell, 308-32.
- Brealey, K.G. 1995: Mapping them 'out': Euro-Canadian cartography and the appropriation of the Nuxalk and Ts 'ilhqot' in First Nations' territories, 1793-1916. The Canadian Geographer 39, 140-56.
- Bruman, H.J. 1996: Recollections of Carl Sauer and research in Latin America. Geographical Review 86, 370-76.
- Carruthers, J. 1997: Nationhood and national parks: comparative examples from the postimperial experience. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 125-38.
- Conzen, M.P. 1997: The European settling and transformation of the Upper Mississippi Valley lead mining region. In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life, Madison, WI: University of Wisconsin Press, 163-96.
- Craddock, S. 1998: Tuberculosis, tenements and the epistemology of neglect: San Francisco in the nineteenth century. Ecumene 5, 33-80.
- Cronon, W. 1991: Nature's metropolis: Chicago and the Great West. New York: W.W. Norton.
- Crosby, A.W., Jr 1972: The Columbian exchange: biological and cultural consequences of 1492. Westport, CT: Greenwood Press.
- Denevan, W.M., editor, 1992: The native population of the Americas in 1492 (2nd edn). Madison, WI: University of Wisconsin Press.
- 1996: Carl Sauer and native American

- population size. Geographical Review 86, 385–97. Deur, D.E. 1996: Chinook jargon placenames as points of mutual reference: discourse, intersubjectivity, and environment in an inter
 - cultural toponymic complex. Names 44, 291-321.
- in press: Salmon, sedentism, and protocultivation: towards an environmental prehistory of the Northwest Coast. In Hirt, P. and Goble, D., editors, Northwest lands and peoples: an environmental history anthology, Seattle, WA: University of Washington Press.
- Deur, D.E. and Turner, N.J., editors, forthcoming: Foragers or cultivators? Northwest Coast indigenous resource management reconsidered. Seattle, WA: University of Washington Press.
- **Diamond, J.** 1997: Guns, germs, and steel: the fates of human societies. New York: W.W. Norton.
- Donkin, R.A. 1997: A 'servant of two masters'. Journal of Historical Geography 23, 247-66.
- Dunlap, T.R. 1997: Ecology and environmentalism in the Anglo settler colonies. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 76-86.
- Eitemiller, D., Fraser, H., Sullivan, A. and **Uebelacker**, M. 1995: Traditional resource patterns in the Upper Yakima River basin. Ellensburg, WA: Central Washington University Press.
- Flannery, T. 1997: The fate of empire in low- and high-energy ecosystems. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press,
- Frank, A.G. 1967: Capitalism and underdevelopment in Latin America. New York: Monthly Review
- 1998: ReOrient: global economy in the Asian age. Berkeley, CA: University of California Press.
- Frank, A.G. and Gills, B.K. 1993: The world system: five hundred years of five thousand? New York: Routledge.
- Frenkel, S. 1996: Jungle stories: North American representations of tropical Panama. Geographical Review 86, 317–33.
- Gadgil, M. and Guha, R. 1993: This fissured land: an ecological history of India. Berkeley, CA: University of California Press.
- Gartner, W.G. 1997: Four worlds without an Eden: pre-Columbian peoples and the

- Wisconsin landscape. In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life, Madison, WI: University of Wisconsin Press, 331-50.
- **B.L.** 1957 [1954 diss.]: Human Gordon, geography and ecology in the Sinú country of Colombia. Ibero-Americana 39.
- **Grif fiths, T.** 1996: Hunters and collectors. The antiquarian imagination in Australia. Cambridge: Cambridge University Press.
- 1997: Ecology and empire: toward an Australian history of the world. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 1-16.
- **Griffiths, T** . and **Robin, L**., editors, 1997: *Ecology* and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press.
- Gritzner, J.H. 1994: Native-American camas production and trade in the Pacific Northwest and northern Rocky Mountains. Journal of Cultural Geography 14, 33-50.
- Grove, R.H. 1995: Green imperialism: colonial expansion, tropical island Edens and the origins of environmentalism, 1600-1860. Cambridge: Cambridge University Press.
- 1997: Scotland in South Africa: John Croumbie Brown and roots of settler environmentalism. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 139–53.
- Hains, B. 1997: Mawson of the Antarctic, Flynn of the Inland: progressive heroes on Australia's ecological frontiers. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 154-66.
- Hales, P.B. 1997: Atomic spaces: living on the Manhattan Project. Urbana, IL: University of Illinois Press.
- Harner, J.P. 1995: Cultural-historical continuity between Sonora and Arizona. Journal of Cultural *Geography* 15, 17–33.
- Harris, R.C. 1997: The resettlement of British Columbia: essays on colonialism and geographical change. Vancouver: University of British Columbia Press.
- Henderson, G. 1998: Close encounters: the significance of geography to the new western history. Ecumene 5, 30–52.
- Horowitz, H.L. 1997: J.B. Jackson and the discovery of the American landscape. In Jackson, J.B., Landscape in sight: looking at

- *America*. New Haven, CT: Yale University Press, ix–xxxi.
- Innis, D. 1958: Human ecology in Jamaica. PhD dissertation, Department of Geography, University of California, Berkeley.
- Jackson, J.B. 1997: Landscape in sight: looking at America. New Haven, CT: Yale University Press.
- Jordan, T.G. 1993: North American cattle-ranching frontiers: origins, diffusions, and differentiation. Albuquerque, NM: University of New Mexico Press.
- Jordan, T.G., Kilpinen, J.T. and Gritzner, C.F. 1996: *The mountain West: interpreting the folk landscape*. Baltimore, MD: Johns Hopkins University Press.
- Kirch, P.V. and Hunt, T.L., editors, 1997: Historical ecology in the Pacific Islands. Prehistoric environmental and landscape change. New Haven, CT: Yale University Press.
- Limerick, P.M. 1987: The legacy of conquest: the unbroken past of the American West. New York: W.W. Norton.
- Livingstone, D.N. 1987: Nathanial Southgate Shaler and the culture of American science. Tuscaloosa, AL: University of Alabama Press.
- Lovell, W.G. and Lutz, C.H. 1995: Demography and empire: a guide to the population history of Spanish Central America, 1500–1821. Dellplain Latin American Studies 33. Boulder, CO: Westview Press.
- Lowenthal, D. 1958: George Perkins Marsh. Versatile Vermonter. New York: Columbia University Press.
- —— 1997: Empires and ecologies: reflections on environmental history. In Griffiths, T. and Robin, L., editors, *Ecology and empire*. *Environmental history of settler societies*. Seattle, WA: University of Washington Press, 229–36.
- MacKenzie, J.M. 1988: The empire of nature: hunting, conservation and British imperialism. Manchester: University of Manchester Press.
- —— 1997: Empire and the ecological apocalypse: the historiography of the imperial environment. In Griffiths, T. and Robin, L., editors, *Ecology and empire. Environmental history of settler societies*. Seattle, WA: University of Washington Press, 215–28.
- Marsden, S. and Galois, R. 1995: The Tsimshian, the Hudson's Bay Company, and the geopolitics of the northwest coast fur trade,

- 1787–1840. *The Canadian Geographer* 39, 169–83.
- Marsh, G.P. 1864: Man and nature. New York: Charles Scribner.
- Martin, G.J. 1973: Ellsworth Huntington: his life and thought. Hamden, CT: Archon Books.
- —— 1980: *The life and thought of Isaiah Bowman*. Hamden, CT: Archon Books.
- Mathewson, K. 1998: Cultural landscapes and ecology, 1995–96: of oecumenics and nature(s). *Progress in Human Geography* 22, 1115–28.
- Melville, E.G.K. 1997: Global developments and Latin American environments. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press, 185–98.
- Milton, S. 1997: The Transvaal beef frontier: environment, markets and the ideology of development, 1902–1942. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press, 199–212.
- Mitchell, D. 1996: The lie of the land: migrant workers and the California landscape. Minneapolis, MN: University of Minnesota Press.
- —— 1998a: Special issue: new western histories and new geographies. *Ecumene* 5, 3–6.
- —— 1998b: Writing the western: new western history's encounter with landscape. *Ecumene* 5, 7–29.
- Morehouse, B.J. 1996: A place called Grand Canyon: contested geographies. Tucson, AZ: University of Arizona Press.
- Newson, L.A. 1995: Life and death in early colonial Ecuador. Norman, OK: University of Oklahoma Press.
- Ostergren, R.C. and Vale, T.R., editors, 1997: Wisconsin land and life. Madison, WI: University of Wisconsin Press.
- Parsons, J.J. 1996a: Carl Sauer's vision of an institute for Latin American studies. Geographical Review 86, 377–84.
- —— 1996b: Mr. Sauer and the writers. *Geographical Review* 86, 22–41.
- Pasqualetti, M.J., editor, 1997: The evolving landscape: Homer Ashmann's geography.
 Baltimore, MD: Johns Hopkins University Press.
- Pearsons, T.E. 1997: The wild rice harvest at Bad River: natural resources and human geography in northern Wisconsin. In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life.

- Madison, WI: University of Wisconsin Press, 505-20.
- Powell, J.M. 1996: Historical geography and environmental history: an Australian interface. Journal of Historical Geography 22, 253–73.
- 1997a: Enterprise and dependency: water management in Australia. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies, Seattle, WA: University of Washington Press, 102-21.
- 1997b: Past imperfect, future tense: 'civic' conjugations in Australia and New Zealand. Journal of Historical Geography 23, 389–92.
- **Price**, M.D. 1996: The Venezuelan Andes and the geographical imagination. Geographical Review 86, 334-55.
- Price, M.D. and Lewis, M. 1993: The reinvention of cultural geography. Annals of the Association of American Geographers 83, 1–17.
- **Prince, H.** 1997: Wetlands of the American Midwest: a historical geography of changing attitudes. Chicago, IL: University of Chicago Press.
- **Pyne, S.J.** 1982: Fire in America: a cultural history of wildland and rural fire. Princeton, NJ: Princeton University Press.
- 1986: The ice: a journey to Antarctica. Iowa City, IA: University of Iowa Press.
- 1991: Burning bush: a fire history of Australia. New York: Henry Holt.
- 1995: World fire: the culture of fire on earth. New York: Henry Holt.
- 1997a: Frontiers of fire. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press,
- 1997b: Vestal fire: an environmental history, told through fire, of Europe and Europe's encounter with the world. Seattle, WA: University of Washington Press.
- Rediscovering Geography Committee 1997: Rediscovering geography: new relevance for science society. Washington, DC: National and Academy Press.
- Robbins, W.G. 1997: Landscapes of promise, the story, 1800–1940. Seattle, University of Washington Press.
- Robin, L. 1997: Ecology: a science of empire. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press, 63-75.
- Rohe, R. 1997: Lumbering: Wisconsin's northern urban frontier. In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life. Madison, WI:

- University of Wisconsin Press, 221-40.
- Rolls, E. 1997: The nature of Australia. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press, 35-45.
- Silvern, S.E. 1997: The geography of Ojibwa treaty rights in northern Wisconsin. In Ostergren, R.C. and Vale, T.R., editors, Wisconsin land and life. Madison, WI: University of Wisconsin Press, 489-504.
- Sluyter, A. 1997: On 'buried epistemologies': the politics of nature in (post)colonial British Columbia. Annals of the Association of American Geographers 87, 700-702.
- **Starrs, P.F.** 1998: Let the cowboy ride: cattle ranching in the American West. Baltimore, MD: Johns Hopkins University Press.
- Stewart, M.A. 1996: 'What nature suffers to groe': life, labor, and landscape on the George coast, 1680-1920. Athens, GA: University of Georgia Press.
- Turner II, B.L. 1989: The specialist-synthesis approach to the revival of geography: the case of cultural ecology. Annals of the Association of American Geographers 79, 88–100.
- 1997: Spirals, bridges, and tunnels: engaging human-environment perspectives in geography? Ecumene 4, 196-217.
- Walker, R. 1994: Editor's introduction. Antipode 26, 113-15.
- Wallach, B. 1998: In memoriam: James J. Parsons, 1915–1997. Annals of the Association of American *Geographers* 88, 316–28.
- White, R. 1995: The organic machine: the remaking of the Columbia River. New York: Hill & Wang.
- Whitmore, T.M. 1992: Disease and death in early colonial Mexico: simulating amerindian depopula tion. Dellplain Latin American Studies 28. Boulder, CO: Westview Press.
- Willems-Braun, B. 1997a: Buried epistemologies: the politics of nature in (post)colonial British Columbia. Annals of the Association of American Geographers 87, 3-31.
- 1997b: Reply: on cultural politics, Sauer, and the politics of citation. Annals of the Association of American Geographers 87, 703-708.
- Williams, M. 1997: Ecology, imperialism and deforestation. In Griffiths, T. and Robin, L., editors, Ecology and empire. Environmental history of settler societies. Seattle, WA: University of Washington Press, 169-84.
- Woodward, D., Ostergren, R.C., Brouwer, O.,

Hoelscher, S.D. and Hane, J. 1996: Cultural map of Wisconsin: a cartographic portrait of the state. Madison, WI: University of Wisconsin Press.

Worster, D. 1985: Rivers of empire: water, aridity and

the growth of the American West. New York: Pantheon.

Wynn, G. 1997: Remapping Tutira: contours in the environmental history of New Zealand. Journal of Historical Geography 23, 418-46.