

O N E

A Sloping Land: An Introduction to *Archaeological Landscapes on the High Plains*

Bonnie J. Clark and Laura L. Scheiber

Did they choose this place or did the land choose them?

—KATHLEENE WEST

IN 2006 HISTORY BUFFS CELEBRATED the 200th anniversary of the moment when explorer Zebulon Pike first saw the mountain that would later bear his name. A great deal of effort was expended in historical detective work, using Pike's accounts and maps to relocate the spot from which he first spied Pike's Peak. Hoping for a clear day, celebrants returned to this location on the High Plains (just outside Las Animas, Colorado) to read his journal and, for a moment, to attempt to see the world through his eyes. Of course, for thousands of years preceding Pike, the vista he encountered was well-known to the many indigenous groups of the Arkansas River Valley.

We begin with this historical sidebar because it illustrates some of the particular facets of the High Plains as a region. The story highlights something about the nature of the geography of an area tucked between the Rocky Mountains and the vast interior Plains of North America. Here one encounters

topographical surprises such as incised canyons, slanted escarpments, playa lakes, buttes, and views of mountains. This is not the sea-like, tall-grass prairie of the Northern and Central Plains. Occupied for at least 12,000 years, the High Plains geography is inscribed by human history. When celebrants attempted to return to the exact spot where Pike stood and wrote, they returned to an important locale as a way to link to the past and in so doing to refresh memories, writing them anew with a different cast of characters. As readers of this volume will discover, the writing of the past in places is something the people of the High Plains have been doing for almost as long as there have been people in the region. The stone marker placed at the Pike vista is the materialization of this ritual of renewal and memory, with a strong family resemblance to a number of the sites and features that will be discussed in the pages to come.

Landscape perspectives in archaeology focus on the relationships and intersections between land and people. Although traditionally interested in issues of spatial variation at a broad scale, archaeologists have recently addressed cultural construction of the landscape as it shapes and is shaped by people's lives. This edited volume presents recent case studies on this topic by archaeologists working in the North American High Plains. A meeting ground of different geographic regions, the area supported a wide variety of people in the past, making the region at times a crossroad and at others a frontier. Multiple generations traveled across the High Plains, while others settled and made it their home. It is cattle country, cowboy country, Indian country. It is also an area rich in ethnographic and historical heritages that are still very much present.

This book, which focuses on the archaeological landscapes of, as well as the archaeology of landscapes in, the High Plains, is an exploration of a specific place using a particular set of theoretical and methodological tools. In it we present research that bridges the arbitrary division between history and prehistory. The decision to focus on long-term change allows the authors to consider both ethnographic literature and environmental data of a deep time depth, which are strengths of Plains research. The result is a cohesive and synthetic group of case studies spanning thousands of years of human occupation. What is unique about this book is that it focuses on one particular geographic region, and it explores the different and changing ways people interacted with that place.

THE HIGH PLAINS

The High Plains lie between the Rocky Mountains to the west and the tall-grass prairies to the east and include portions of the modern states of Wyoming, Colorado, Nebraska, Kansas, Oklahoma, New Mexico, and Texas. The stan-

standard spatial definition of the High Plains follows definitions of the section of the Great Plains physiographic province, extending from the Pine Ridge Escarpment at the South Dakota/Nebraska border to the Llano Estacado in the Texas and Oklahoma panhandles (Fenneman 1931; Holliday et al. 2002). Because of great physical, climatological, and cultural similarities between the High Plains section and the area between it and the Rocky Mountains, we have expanded our area of concern to the three westernmost physiographic regions of the Great Plains as well—the Colorado Piedmont, Raton, and Pecos Valley sections (Figure 1.1). When we write of the High Plains in this volume, we are referring to that expanded area.

A tilted landscape, the High Plains gently slope as they rise from a low elevation of around 750 m (2,461 ft) above sea level along their eastern edge to 1,800 m (5,906 ft) where they meet the foothills of the Rockies (Trimble 1980). The area is a remnant of a vast plain formed by sediments deposited by streams flowing east from the ancestral Rocky Mountains. On much of the High Plains, a Miocene-Pliocene sandstone called the Ogallala Formation is the surface geological unit, which when exposed can be either sandy or gravelly. On the western edges, earlier sediments have been revealed by erosion from rivers and streams, especially of the three major High Plains river systems—the Platte, the Arkansas, and the Pecos. In some places farther to the east, erosion divides the vast tableland into buttes and mesas. Especially in northern areas of the High Plains, Quaternary aeolian deposits that include sheet sands, dune sands, and loess can overlie the Ogallala Formation sandstone.

The High Plains are the land of the short-grass prairie. Trees are relatively scarce, generally found only along waterways and in upland zones. The dominant native plant species are grasses: buffalo grass (*Buchloe dactyloides*), blue grama (*Bouteloua gracilis*), and hairy grama (*Bouteloua hirsuta*). The short-grass vegetation community supported large herbivores such as bison (*Bison bison* and prehistorically *Bison antiquus*) and pronghorn (*Antilocapra americana*), as well as smaller inhabitants such as rabbits (*Sylvilagus* spp. and *Lepus* spp.) and the signature Plains rodent species, the prairie dog (*Cynomys ludovicianus*). A wealth of amphibians, especially toads and snakes, as well as both migratory and non-migratory birds, also make the region home. This ecosystem supported several prey species, especially coyotes (*Canis latrans*) and a variety of hawks, eagles, and falcons. In specific niches within the High Plains, other, less widespread animal and plant species can be found.

Anyone who has spent a significant amount of time in the High Plains knows that climatological factors greatly affect the region. Flanking the east of the Rockies, the area is home to convective systems that produce winds

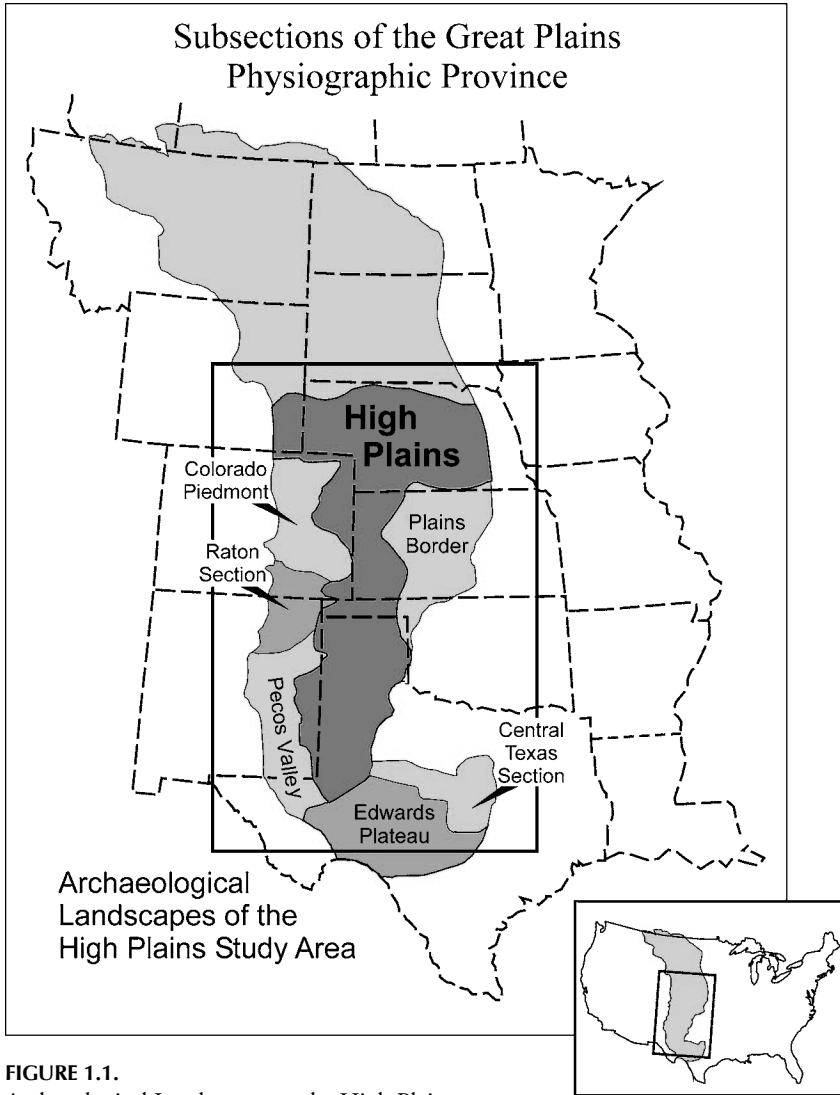


FIGURE 1.1.
Archaeological Landscapes on the High Plains study area based on Great Plains physiographic subsections. Illustration by Kevin Gilmore.

both stronger and more common than in areas to either the east or the west (Klimowski et al. 2003). It is a semiarid region with a mean annual precipitation that ranges from about 25 cm per year along the western margins to 50 cm in the east. Temperatures in the area are highly influenced by season and time

of day. For example, in the center of the High Plains near the border of Kansas, Colorado, and Oklahoma, over 100 years of historical climate data for the town of Elkhart, Kansas, indicate that in the coldest month, January, low temperatures average 19° F, with an average high of 48° F. During July, historically the hottest month, the low temperature averages 64° F, climbing through the day to an average high of 93° F. The average annual precipitation since January 1, 1900, is 43 cm (High Plains Regional Climate Center 2008). As with much of the American West, however, averages capture only a part of the picture, as both temperature and precipitation can widely fluctuate seasonally. Indeed the highest temperature ever recorded in the High Plains is 121° F, and the area is periodically subjected to both flooding and drought.

LANDSCAPE AS PLACE AND PERSPECTIVE IN ARCHAEOLOGY

The concept of landscape has exploded in the literature of social thinkers since the mid-1990s. As numerous others have concluded, a single landscape approach does not exist (e.g., Fisher and Thurston 1999; Hicks 2002; Stoddart and Zubrow 1999) but is instead encompassed in several perspectives, theories, and epistemologies. In considering the meaning of the word *landscape* itself, a multitude of definitions emerge:

- “Meaning imputed by local people to their cultural and physical surroundings” (Hirsch 1995:1).
- “Created out of people’s understanding and engagement with the world around them” (Bender 1998:5) and “[p]eople’s engagement with the material world” (Bender 2002:S103).
- “Interdependent relationships that people maintain with the physical, social, and cultural dimensions of their environments across space and over time” (Anschuetz, Wilshusen, and Scheick 2001:159).
- “An entity by virtue of its being perceived, experienced, and contextualized by people” (Knapp and Ashmore 1999:1).
- “A set of real-world features, natural or cultural, which give character and diversity to the earth’s surface” (Zvelebil, Green, and Macklin 1992:194).
- “A dynamic component of the physical, natural environment,” “a record of that environment and of environmental changes,” and “an important influence on site formation process” (Holliday 2004:234).

What most of these definitions have in common is an emphasis on the negotiation between people and their physical surroundings. Each of our authors uses or provides a definition of landscape that shares this concern

with humans and the material world, ranging from traditional geomorphic views of landscape to more phenomenological or cultural visions. A few of our authors take pains, however, to deconstruct typical definitions of landscape. Mark Mitchell, for example, delves into the history of the western concept of landscape, pointing out that the term assumes an ontological division between the environment and the humans in it. On the other hand, Oskar Burger, Lawrence Todd, and Paul Burnett take issue with anthropocentric definitions, reminding readers that the landscape is always the result of a complex and ongoing relationship among cultural, climatological, and geological processes, as well as biological entities beyond humans.

The definitions of landscape used by our authors are operationalized through what we call Landscape Perspectives, approaches taken, in this case, to better understand the archaeology of the High Plains. Given the diversity of the definitions of landscape, what then do we mean by Landscape Perspectives in archaeology? Interest in the relationships between people and the land is obviously not new to archaeology (Feinman 1999; Trigger 1989:279–303). Today, Landscape Perspectives are often explicit in several distinctive contexts. The first approach incorporates traditional settlement pattern studies, land use models, and regional-scale approaches with methodological advances in spatial analysis, Geographic Information Systems (GIS), and non-site-based applications (Rossignol 1992; Wandsnider 1998). These studies often emphasize economic, political, and ecological issues and macro-scale models (Stoddart and Zubrow 1999; Wandsnider 1998). This way of looking at the landscape is emphasized in a number of the regional-scale studies in this volume, especially Eileen Johnson's and Michael Peterson's chapters.

The second approach explicitly considers landscapes to be the loci of social and symbolic interactions between people and the environments within which they live. These perspectives often emphasize memory and continuity (Bender 1998, 2002; Head 2000), ritual and sacred places (Parcero Oubiña, Criado Boado, and Santos Estévez 1998; Zvelebil 1997), and links among people, pathways, and places (Cooney 1999). The relationship people have with the land is always active and dynamic (Bender 2002). It involves something done *with* the environment, not something done *to* it. People often have a connection to the land in which they live and work, what Keith Basso (1996) calls a "sense of place." An emphasis on a sense of place (Basso 1996; Ingold 1993; Lovell 1998) brings to the forefront the historical contingency of people's relationships with the land. Because of the concern for the active role of human communities and individuals in the creation of these landscapes in their daily lives, agency and practice theory also play a role in shaping interpretations

about the past (Bourdieu 1977; Giddens 1984; Tilley 1994), an approach that informs many of the chapters in this volume, most explicitly that by Mitchell. Landscape is inextricably involved in the recursive relationship among identity, community, and daily activities (Fisher and Thurston 1999). A number of chapters in this volume engage with individual and group identity and the landscape, especially the one by Kevin Gilmore.

A final way Landscape Perspectives assist in interpretations of the past relates to the contemporary practice of doing archaeology. At the most fundamental level, our methodologies overdetermine our later interpretations. In their chapter, Oskar Burger and coauthors present thought-provoking experiments with one of the most basic tools of landscape archaeology: surface survey. Landscapes are always simultaneously both past and present. We made an explicit decision with this volume to concern ourselves with the full temporal breadth of the High Plains cultural landscape. This approach allowed for insights about place that breach the prehistory/history divide, such as those presented in the chapter by Bonnie Clark. By not removing our own present from the past we study, we come to better understand how archaeologists are just one set of stakeholders, which also include government officials, landowners, and descendant communities, each of whom have different relationships with the land and the people who lived on it. Our engagement with archaeological places, both on an academic and a personal level, is explored in Laura Scheiber's chapter. Such an acknowledgment makes it difficult to step away from the fact that all landscapes—past and otherwise—are in some ways contested in the present world (Bender 2002). The ways one such past contestation became materialized in places is explored in this volume by Minette Church.

Although we have presented these three views of landscape (landscape ecology, lived places, and simultaneous landscapes) as different, one of the uniting factors of alternate Landscape Perspectives is the ability to expose artificial boundaries and unnecessary dichotomies—between history and prehistory, nature and culture, environmental archaeology and built environments, processual and post-processual archaeologies, and time and space—and to bridge the gaps between them (Anschutz, Wilshusen, and Scheick 2001; Bender 2002; Conkey 2002; Ingold 1993).

LANDSCAPE RESEARCH ON THE HIGH PLAINS

Although landscape archaeology and Landscape Perspectives are not new, they are most commonly applied in European contexts, in agricultural societies of the New World, and at sites with visible surface architecture and features.

We believe they can also be fruitfully employed to conceptualize the past of nomadic hunter-gatherer societies of North America, as well as other peoples of the High Plains. In particular, Landscape Perspectives can be useful for linking macro-scale and micro-scale analyses.

The study of relationships among people, environments, and resources is certainly not new to Plains archaeologists (Blouet and Luebke 1979; Frison 1991; Wood 1998). Indigenous Plains inhabitants were highly mobile and often moved onto the High Plains from near and distant lands. Macro-scale analyses and settlement pattern studies are needed to understand these seasonal and permanent excursions. Knowledge of the land and its resources was essential information for past peoples, and models from landscape ecology can be helpful in conceptualizing these relationships (Foreman 1995).

On the other hand, more active and contextualized micro-scale Landscape Perspectives enrich interpretations of activities at particular locales. Specific places were intricately tied to ritual calendars in numerous Plains societies (Connor 1962; Finley 2002; Grinnell 1922; Jorgensen 1972; Lowie 1922; Parks and Wedel 1985). Hunter-gatherers primarily conceptualize rather than construct their landscapes, that is, they imbue features on the land with meaning rather than physically alter the land itself. Archaeologists tend to think of hunter-gatherer movements in terms of their relationships with subsistence resources. However, people regularly return to certain places for many reasons—some of them practical, some of them social, some of them ritual. The concepts embodied in a social landscape perspective highlight many reasons for how and why (and to where) people choose to move across the land. The landscape is not just practical but is also given ritual, sacred, and other significant meaning (Anschuetz, Wilshusen, and Scheick 2001; Basso 1996; Zvelebil 1997). People have ongoing sets of relationships with the physical, social, and symbolic aspects of landscapes (Head 2000; Ingold 1996), which provide archaeologists with additional means to conceptualize embedded strategies.

Explorations of long-term culture change and continuity (the *longue durée*) in particular regions beg for multiscalar perspectives, moving back and forth between single occupations and regional patterns (see Duke 1992 for an application to the Northern Plains). Barbara Bender and coauthors (1997) call this moving-between “Nested Landscapes,” and in fact several of the authors in this volume invoke a nested view of landscapes (see also Knapp and Ashmore 1999). Alison Wylie (1989) calls this tacking back and forth between analytical levels. Reviewers of Landscape Perspectives have commented on the diversity of approaches that “lack a unifying metaphor” (Fisher and Thurston 1999:631). On the High Plains, we believe the metaphor is the land itself.

THIS VOLUME

This book began in a series of conversations between the two editors, Scheiber and Clark, about the archaeology of the High Plains. Although we both had worked on the Colorado prairie, we met in California. Our talk often turned to the High Plains. Both of us were homesick for that part of the world, as described by Willa Cather in *Death Comes for the Archbishop*, where the earth is the floor of the sky. Like our contributors Philip Duke (Duke and Wilson 1995) and Mark Mitchell (2006), we were concerned with the way Plains archaeology engages with theory. We knew many of our colleagues were doing really good work, both theoretically engaged and methodologically challenging, but that they, and the region where they worked, received too little attention. We decided to organize a session for the Society for American Archaeology meetings in the spring of 2003 to showcase a particular arena in which the archaeology of the High Plains was pushing the field: the archaeology of landscape. The session, "Landscape Perspectives on the North American High Plains," was very well attended, and our presenters agreed that the synergy of those meetings should reach an even wider audience. Chapters by most of the original presenters can be found in this volume, with other contributors brought in to expand the scope of the book. A final summary chapter is provided by Philip Duke, who served as the discussant when many of these chapters were first presented in Milwaukee.

The literature on archaeological landscapes is voluminous. This volume was never intended to serve as an overview, something a number of authors have provided quite effectively (see, for example, Anschuetz, Wilshusen, and Scheick 2001; Ashmore and Knapp 1999; Ucko and Layton 1999). Rather, we wanted to present the way a cross-section of researchers are applying the concepts in their own work in a region with which we are familiar. As illustrated in Figure 1.2, the case studies gathered here range across hundreds of miles of the High Plains. As with all compendiums, we have not been able to include all examples of such work, and we are well aware that other people are conducting interesting research in the area. Still, we feel we have presented to our readers an enticing sampler plate, providing examples of a wide array of approaches to various types of resources at a range of scales.

One of the best reasons for pursuing a landscape approach to archaeology is the holistic view it enforces. It forces researchers to keep in mind multiple scales of analysis, both spatially and temporally. Thus a landscape approach is ideal for the North American High Plains. Here aridity, largely stable landforms, and open vistas create a landscape record that is particularly visible. Settlement and agriculture in some areas have erased earlier marks on the land.

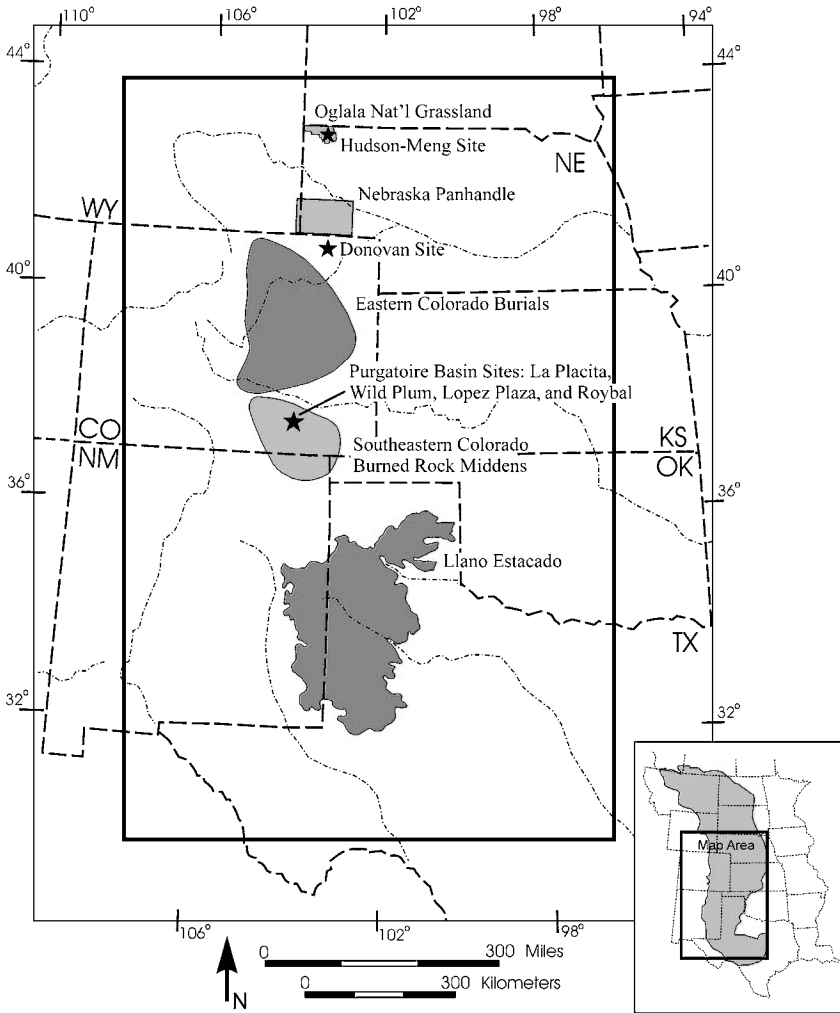


FIGURE 1.2.
Map of the High Plains, highlighting case studies discussed in this volume.
Illustration by Kevin Gilmore.

But the lion's share of the High Plains has a population of under twenty-five people per square mile of land, a situation quite unlike areas east of the 100th meridian or in the mountain valleys and coasts to the west (Riebsame 1997). Low population, when coupled with relatively low-impact land use such as grazing (see Burger, Todd, and Burnett, this volume), has helped preserve the

record of at least 12,000 years of use. These prairies hold a cultural landscape that is remarkably legible. Our authors have taken advantage of this fact to read various pages of that record.

There was no consensus about how best to approach the landscape of the High Plains, nor did we expect one. Gilmore and Mitchell engaged with the High Plains as possessing a suite of features of ritual importance. Excavation data provided the grist for detailed life histories of High Plains places for both editors in our individual chapters. Explicitly multiscalar were Johnson's and Church's approaches, as they placed individual sites within a regional and, in Church's case, international context. Similarly, for Burger and his coauthors, the High Plains is both a macro-environment and a micro one, where a crawling survey reveals a world missed from the view of a typical standing surveyor. For Peterson, the High Plains are a series of overlapping ecotones, each drawing prehistoric peoples in at least mildly predictive ways.

Given the variety of approaches, the way these chapters coalesce on particular themes is both surprising and illustrative. Many were concerned with place-based identity, others with how landscapes are mnemonic devices. Some were concerned with what it means to be a person of the High Plains, of vistas and wind. The predominant theme is that the High Plains contain important locales, ones to which people, over either generations or millennia, return. Sometimes this appears to involve collective memory, as in the revisitation of burial sites discussed by Gilmore. Sometimes this plays out, as it does in Scheiber's and Mitchell's research areas, in the way features are used in strikingly similar ways over time, suggesting generational teaching and learning. In other cases, as at the multiple component sites discussed by Johnson and Clark, later users were likely culturally unconnected. Yet more recent users appear to have read the histories inscribed into landscape and used them to inform their own understandings of place. When those histories are in written form, as discussed by Church, we can see how different understandings of and claims to the same place can be contested through something as seemingly simple as repeated renaming. And while Peterson presents factors with which we might predict where important locales may be found, Burger and his fellow authors remind us that often what we identify as an archaeological place may have more to do with our sampling strategy than with behavior in the past. Taken as an ensemble, the chapters in this volume grapple with, as so eloquently phrased by a local resident, the "elementary gravity of the place" (see Scheiber, this volume). All of the assembled authors have long-term personal and professional connections to this land, which shows in their individual works and in the collection as a whole.

Archaeologists commonly feel the place where they work is special and unique in a number of ways, and we are no exception. Our desire to present this volume is not just due to our belief about the special characteristics of the archaeology and landscape of the High Plains but also because both are relatively unknown. We hope that, like Zebulon Pike, readers unfamiliar with this area will discover it for themselves. For those who know about the High Plains and its human occupation, we hope you come to understand it in a new way, one keenly aware of how complex the relationship is among a sloping land, a grassy plain, and the people who made their mark on it.

ACKNOWLEDGMENTS

The author-editors would like to thank all the contributors for their dedication to finishing this volume. We also acknowledge the original participants of the Society for American Archaeology symposium, some of whom were not able to submit chapters in the final book. We thank Darrin Pratt, director of the University Press of Colorado, whose patience and cheerfulness throughout the process of completing this project were much appreciated. Two anonymous reviewers greatly strengthened the coherence of this edited volume as well as the individual chapters. Kevin Gilmore drafted all the base maps used in each chapter, which provide a unifying visual spatial element in tying together the individual case studies. We also thank the anthropology departments at our respective institutions, the University of Denver and Indiana University, for their support. We each have unique archaeological foundations in Colorado and Wyoming, but it was in California that our mutual interests in the High Plains were jointly explored. We would lastly like to acknowledge the many influential friends and colleagues from UC-Berkeley: Steve Archer, Kevin Bartoy, Margaret Conkey, Kathy Corbett, Emily Dean, Carolyn Dillian, Kathleen Hull, Scott Hutson, Rosemary Joyce, Jenny Kahn, Stacie King, Kent Lightfoot, Jeanne Lopiraro, Amy Ramsay, Steve Silliman, Kathy Sterling, Kathy Twiss, Barb Voss, Bill Whitehead, and Laurie Wilkie.

REFERENCES CITED

- Anschuetz, Kurt F., Richard H. Wilshusen, and Cherie L. Scheick
2001 An Archaeology of Landscapes: Perspectives and Directions. *Journal of Archaeological Research* 9 (2):157–211.
- Ashmore, Wendy, and A. Bernard Knapp (editors)
1999 *Archaeologies of Landscape: Contemporary Perspectives*. Blackwell, Oxford.

A Sloping Land: An Introduction to Archaeological Landscapes on the High Plains

Basso, Keith

- 1996 *Wisdom Sits in Places: Landscape and Language among the Western Apache*. University of New Mexico Press, Albuquerque.

Bender, Barbara

- 1998 *Stonehenge: Making Space*. Berg, Oxford.
2002 Time and Landscape. *Current Anthropology* 43 (Supplement):S103–S112.

Bender, Barbara, S. Hamilton, and Christopher Tilley

- 1997 Leskernick: Stone Worlds, Alternative Narratives, Nested Landscapes. *Proceedings of the Prehistoric Society* 63:147–178.

Blouet, Brian W., and Frederick C. Luebke (editors)

- 1979 *The Great Plains: Environment and Culture*. University of Nebraska Press, Lincoln.

Bourdieu, Pierre

- 1977 *Outline of a Theory of Practice*. Trans. Richard Nice. Cambridge Studies in Social and Cultural Anthropology. Cambridge University Press, New York.

Conkey, Margaret W.

- 2002 Comments, Timekeeping in Anthropology. *Current Anthropology* 43 (Supplement):S115–S116.

Connor, Stuart W.

- 1962 Archaeology of the Crow Indian Vision Quest. *Archaeology in Montana* 23 (3):85–127.

Cooney, Gabriel

- 1999 Social Landscapes in Irish Prehistory. In *The Archaeology and Anthropology of Landscape: Shaping Your Landscape*, ed. Peter Ucko and Robert Layton, 46–64. Routledge, New York.

Duke, Philip

- 1992 Braudel and North American Archaeology: An Example from the Northern Plains. In *Archaeology, Annales, and Ethnohistory*, ed. A. Bernard Knapp, 99–111. Cambridge University Press, Cambridge.

Duke, Philip, and Michael C. Wilson

- 1995 *Beyond Subsistence: Plains Archaeology and the Postprocessual Critique*. University of Alabama Press, Tuscaloosa.

Feinman, Gary

- 1999 Defining a Contemporary Landscape Approach: Concluding Thoughts. *Antiquity* 73:684–685.

Fenneman, Nevin M.

- 1931 *Physiography of Western United States*. McGraw-Hill, New York.

Finley, Judson

- 2002 Symbolic Space and Settlement Patterns. Paper presented at the 67th Annual Meeting of the Society for American Archaeology, Denver.

Fisher, Christopher T., and Tina L. Thurston

- 1999 Dynamic Landscapes and Socio-Political Process: The Topography of Anthropogenic Environments in Global Perspective. *Antiquity* 73:630–631.

Foreman, R. T. T.

- 1995 Some General Principles of Landscape and Regional Ecology. *Landscape Ecology* 10 (3):133–142.

Frison, George C.

- 1991 *Prehistoric Hunters of the High Plains*. 2nd ed. Academic Press, New York.

Giddens, Anthony

- 1984 *The Constitution of Society*. University of California Press, Berkeley.

Grinnell, George Bird

- 1922 The Medicine Wheel. *American Anthropologist* 24:299–310.

Head, Lesley

- 2000 *Cultural Landscapes and Environmental Change*. Oxford University Press, New York.

Hicks, Ronald S.

- 2002 Ways of Inhabiting the World: Landscape Archaeology. *American Anthropologist* 104 (1):315–339.

High Plains Regional Climate Center

- 2008 Historical Climate Data Summary, Elkhart, Kansas. Electronic document, <http://www.hprcc.unl.edu/data/historical/>; accessed February 11, 2008.

Hirsch, Eric

- 1995 Introduction: Landscape between Place and Space. In *The Anthropology of Landscape: Perspectives on Place and Space*, ed. Eric Hirsch and Michael O’Hanlon, 1–20. Oxford University Press, Oxford.

Holliday, Vance T.

- 2004 *Soils in Archaeological Research*. Oxford University Press, New York.

Holliday, Vance T., James C. Knox, Garry L. Running IV, Rolfe D. Mandel, and C. Reid Ferring

- 2002 The Central Lowlands and Great Plains. In *The Physical Geography of North America*, ed. Antony R. Orme, 335–362. Oxford University Press, New York.

Ingold, Tim

- 1993 The Temporality of Landscape. *World Archaeology* 25 (2):152–174.

A Sloping Land: An Introduction to Archaeological Landscapes on the High Plains

- 1996 Hunting and Gathering as Ways of Perceiving the Environment. In *Redefining Nature: Ecology, Culture, and Domestication*, ed. Roy Ellen and Katsuyoshi Fukui, 117–155. Berg, Oxford.
- Jorgensen, J. G.
1972 *The Sun Dance Religion: Power for the Powerless*. University of Chicago Press, Chicago.
- Klimowski, Brian A., Matthew J. Bunkers, Mark R. Hjelmfelt, and Josiah N. Covert
2003 Severe Convective Windstorms over the Northern High Plains of the United States. *Weather and Forecasting* 18 (3):502–519.
- Knapp, A. Bernard, and Wendy Ashmore
1999 Archaeological Landscapes: Constructed, Conceptualized, Ideational. In *Archaeologies of Landscape*, ed. Wendy Ashmore and A. Bernard Knapp, 1–30. Blackwell, Oxford.
- Lovell, Nadia
1998 Introduction: Belonging in Need of Emplacement? In *Locality and Belonging*, ed. Nadia Lovell, 1–24. Routledge, London.
- Lowie, Robert
1922 *The Religion of the Crow Indians*. Anthropological Papers 25 (2). American Museum of Natural History, New York.
- Mitchell, Mark D.
2006 Research Traditions, Public Policy, and the Underdevelopment of Theory in Plains Archaeology: Tracing the Legacy of the Missouri Basin Project. *American Antiquity* 71 (22):381–386.
- Parceró Oubiña, Cesar, Felipe Criado Boado, and Manuel Santos Estévez
1998 Rewriting Landscape: Incorporating Sacred Landscapes into Cultural Traditions. *World Archaeology* 30 (1):159–176.
- Parks, Douglas R., and Waldo R. Wedel
1985 Pawnee Geography: Historical and Sacred. *Great Plains Quarterly* 5:143–176.
- Riebsame, William E. (editor)
1997 *Atlas of the New West: Portrait of a Changing Region*. W. W. Norton, New York.
- Rossignol, Jacqueline
1992 Concepts, Methods, and Theory Building: A Landscape Approach. In *Space, Time, and Archaeological Landscapes*, ed. Jacqueline Rossignol and Luann Wandsnider, 3–19. Plenum, New York.
- Stoddart, Simon, and Ezra Zubrow
1999 Changing Places. *Antiquity* 73:686–688.

- Tilley, Christopher
1994 *A Phenomenology of Landscape*. Berg, Oxford.
- Trigger, Bruce
1989 *A History of Archaeological Thought*. Cambridge University Press, Cambridge.
- Trimble, Donald E.
1980 *The Geologic Story of the Great Plains*. Geological Survey Bulletin 1493. United States Government Printing Office, Washington, D.C.
- Ucko, Peter, and Robert Layton (editors)
1999 *The Archaeology and Anthropology of Landscape: Shaping Your Landscape*. Routledge, New York.
- Wandsnider, Luann
1998 Regional Scale Processes and Archaeological Landscape Units. In *Unit Issues in Archaeology: Measuring Time, Space, and Material*, ed. Ann F. Ramenofsky and Anastasia Steffen, 87–102. University of Utah Press, Salt Lake City.
- West, Kathleene
1997 Martin Luther's Children. In *Leaning into the Wind: Women Write from the Heart of the West*, ed. Linda Hasselstrom, Gaydell Collier, and Nancy Curtis, 170–173. Houghton Mifflin, New York.
- Wood, W. Raymond
1998 Introduction. In *Archaeology on the Great Plains*, ed. W. Raymond Wood, 1–15. University Press of Kansas, Lawrence.
- Wylie, Alison
1989 Archaeological Cables and Tacking: The Implications of Practice for Bernstein's Options beyond Objectivism and Relativism. *Philosophy of the Social Sciences* 19 (1):1–18.
- Zvelebil, Marek
1997 Hunter-Gatherer Ritual Landscapes: Spatial Organisation, Social Structure and Ideology among Hunter-Gatherers of North Europe and Western Siberia. *Analecta Praehistorica Leidensia* 29:33–50.
- Zvelebil, Marek, Stanton W. Green, and Mark G. Macklin
1992 Archaeological Landscapes, Lithic Scatters, and Human Behavior. In *Space, Time, and Archaeological Landscapes*, ed. Jacqueline Rossignol and Luann Wandsnider, 193–226. Plenum, New York.

ARCHAEOLOGICAL LANDSCAPES
on the
HIGH PLAINS

edited by
LAURA L. SCHEIBER *and* BONNIE J. CLARK

U N I V E R S I T Y P R E S S O F C O L O R A D O

© 2008 by the University Press of Colorado

Published by the University Press of Colorado
5589 Arapahoe Avenue, Suite 206C
Boulder, Colorado 80303

All rights reserved
Printed in the United States of America



The University Press of Colorado is a proud member of
the Association of American University Presses.

The University Press of Colorado is a cooperative publishing enterprise supported, in part, by Adams State College, Colorado State University, Fort Lewis College, Mesa State College, Metropolitan State College of Denver, University of Colorado, University of Northern Colorado, and Western State College of Colorado.



The paper used in this publication meets the minimum requirements of the American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials. ANSI Z39.48-1992

Library of Congress Cataloging-in-Publication Data

Archaeological landscapes on the High Plains / edited by Laura L. Scheiber and Bonnie J. Clark.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-87081-931-5 (alk. paper)

1. High Plains (U.S.)—History, Local. 2. High Plains (U.S.)—Antiquities. 3. Excavations (Archaeology)—High Plains (U.S.) 4. Historic sites—High Plains (U.S.) 5. Landscape archaeology—High Plains (U.S.) 6. Archaeology and history—High Plains (U.S.) 7. Social archaeology—High Plains (U.S.) 8. Indians of North America—High Plains (U.S.)—Antiquities. 9. Human ecology—High Plains (U.S.)—History. I. Scheiber, Laura L. II. Clark, Bonnie J.

F590.7.A73 2008

978'.01072—dc22

2008029530

Design by Daniel Pratt

17 16 15 14 13 12 11 10 09 08 10 9 8 7 6 5 4 3 2 1