Colonialism among Nomadic Hunter-Gatherers in the American West

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Here we found a few Snake Indians comprising 6 men, 7 women, and 8 or 10 children who were the only Inhabitants of this lonely and secluded spot. They were all neatly clothed in dressed deer and Sheep skins of the best quality and seemed to be perfectly contented and happy. They were rather surprised at our approach and retreated to the heights where they might have a view of us without apprehending any danger. —Russell 1955[1914]:26, as recorded in 1835

# On the Road

In this chapter, we discuss material and social effects of colonialism among mobile hunter-gatherers living in the northwestern Plains and central Rocky Mountains, highlighting recent research in the Greater Yellowstone Ecosystem (GYE). As the title of this chapter suggests, our research has led us to explore the juncture of two major themes in contemporary archaeology: one is the study of mobility among huntergatherers, and the other is the study of colonialism and resistance. These major structural metaphors function not just within the discipline of anthropology but more broadly as symbols of the western frontier in American mythology and history.

Although archaeologists increasingly study the material and social impacts of colonialism among indigenous populations (Cusick 1998; Lightfoot 2005; Lyons and Papadopoulos 2002; Scheiber and Mitchell 2010; Stein 2005), work on colonial period hunter-gatherers (especially highly mobile ones) is more likely to come from ethnohistorians and cultural anthropologists. When we first conceived of the title, we considered our work to be unique in this regard. However, in 1993 Timothy Cresswell published a paper in *Transactions of the British Institute of Geographers* with the same name (Mobility as Resistance). In his article, Cresswell draws attention to the way that author Jack Kerouac uses mobility as a symbol of counter-culture resistance to 1950s America in the novel *On the Road*. Although distant in some ways from an archaeological study of nineteenth-century mobile hunter-gatherers, we find that these concepts from cultural geography are particularly salient for our study, and we have incorporated them in our analysis.

The setting for this study is the Absaroka Mountains, an area of generally high elevation in western Wyoming with numerous mountain ranges and broad desert basins that was the last colonial frontier of the conterminous United States. Indigenous nineteenth-century occupants—variously called Mountain Shoshone, Sheepeaters, and Snakes—are often portrayed as faceless hunter-gatherers who have been relegated to a minor role in the annals of history. Eyewitness and other written depictions of indigenous Mountain Shoshone are uninformative, and they leave persistent, inaccurate images of contact period Native life (Hughes 2000), with labels such as destitute and harmless (Norris 1881:35), and shy, secretive, and solitary (Irving 1910:237). Archaeological evidence from postcontact campsites reveals a very different story. The sites are few in number but contain the material record of nineteenth-century domestic life, otherwise untold in local and global histories (Wylie 1993).

We view the central Rocky Mountains and the Greater Yellowstone Ecosystem as one of the last potential Native strongholds in the heart of the American West. We question whether mountains and mountain mobility became a means of resistance to colonialism and postcolonial reservation life and consider whether changes in mobility may relate to the development of ethnic band divisions following the intensification of sheep hunting in the mountains and buffalo hunting in the basins and plains sometime in the eighteenth and nineteenth centuries. We view postcontact changes in mobility as a response to American settlement during the early nineteenth century having specific, measurable material manifestations. We investigate multiscalar forms of resistance, ranging from broad patterns of land use and resource procurement to campsite spatial layouts and technological choices (Scheiber and Finley 2010a).

In this chapter, we consider three material data sets. First, we model the landscape in which and through which these people traveled in a geographic information system (GIS) to illustrate the limitations to mobility in this environment. Next we focus on both obsidian and ceramic sourcing studies as direct evidence for changes in mobility strategies. We suggest that Mountain Shoshone mobility was not reduced but simply changed during postcontact times. Shoshone Indians continued (and continue) to use the mountains in new and traditional ways to satisfy both subsistence and ceremonial pursuits.

## Structural Metaphors

Mobility is one of the primary and distinguishing characteristics of huntergatherer societies (Kelly 1995; Lee and Daly 1999b), although some huntergatherers are and were more sedentary than others (see examples from the West Coast and the Southeast by Lightfoot, Sassaman, Randall, and Kidder, this vol.). Settlement pattern research and studies of foraging strategies remain a dominant research topic in contemporary archaeology (Barnard 2004a; Binford 2001; Shennan 2003). Considering mobility within the realm of a wider hunter-gatherer social geography has also gained scholarly attention during the last several decades (Bird-David 1990; Conkey 2001; Ingold 1999; Ingold et al. 1991). Despite years of debate as to a definitive hunter-gatherer as well as a series of revisionist analyses of the role of outsiders in forming their identities (Miracle and Fisher 1991; Wilmsen 1989), many agree that some degree of movement remains key.

One of the oft-quoted characteristics of mobile groups is that they "vote with their feet" in order to resolve conflict (Lee 2006), that is, they move somewhere else in opposition to stress. We think researchers actually admire the ability of hunter-gatherers to do this, and in some ways they bestow our own American ideals of the symbolic value of mobility to these groups. The concept of mobility is influential as an American hallmark. It is a valued commodity closely connected with equally symbol-laden concepts of freedom and choice. The irony of this parallel is that research giving priority to economic values such as caloric return rates strips nomadic people of inherently active choices in deciding how and why to move from place to place. Indeed, if we accept Wendrich and Barnard's (2008:5) definition of mobility as "the capacity and need for movement from place to place," then we are forced to consider what happens when the need to move is constrained by external forces. This leads us to consider the role of resistance in mobility studies.

Equally valuable to the field of anthropology is the study of resistance and domination, especially in archaeological studies of social inequality and colonialism. Resistance to colonial oppression is seen as a key indigenous response, and studies of Native resistance have remained common since the early 1990s (Deagan 1990; Ferguson 1991; Mills 2002; Paynter and McGuire 1991; Prince 2002). Archaeologists acknowledge a variety of material manifestations of resistance, ranging from tool types and pottery decorations to architectural design and community organization. Recently, Silliman (2009) advocated an approach that emphasizes "residence over resistance" based in part on his work on the Eastern Pequot Reservation in Connecticut. A refocus on residence emphasizes survival and agency in day-to-day actions. That is, resistance is experienced through residing in traditional homelands. We argue that archaeologists also value resistance as a core American principle, harkening back to the first American colonies and the overthrow of British colonial control.

Although archaeologists have studied resistance particularly by sedentary societies, ethnographers of contemporary hunter-gatherers have considered hunter-gatherer resistance vis-à-vis interactions with their neighbors for the last several decades. Hunter-gatherers throughout the world experienced much more interaction with other groups (huntergatherers, farmers, pastoralists, nation-states) than anthropologists traditionally acknowledged. In some areas, foraging and farming coexisted for over a thousand years (Layton 2001; Zvelebil 1998). Just because hunter-gatherer societies came into contact with others, they did not then become the others themselves, in part because of social organization and value systems based on egalitarianism and sharing (Barnard 2004a). Some groups believe that sharing is why the environment continues to give food to people (Bird-David 1990). We could say that some hunter-gatherers resist giving up their mobility because of an underlying ethos of movement (Sassaman 2001).

#### Frontiers, Resistance, and Ethnogenesis

As important as the concepts of mobility and resistance have been within their respective spheres of archaeology, linkages between them

#### 170

have not necessarily been forthcoming (but see Sassaman 2001). Very few archaeological studies of New World mobile hunter-gatherers in colonial contexts exist (but see Harrison 2002; Harrison and Williamson 2004; Murray 2004; Paterson 2008; Schrire 1995 for examples from Australia and South Africa). Perhaps this gap exists because the topic has been so well studied by ethnohistorians and ethnographers (Sahlins 1972). Or perhaps culture change sustained by these groups makes them less likely to be selected as models of nomadism by archaeologists focused on finding so-called pristine societies with broad cross-cultural comparability.

The concept of pristine, unaltered, or unaffected societies is particularly problematic and has been explored in some detail within the context of hunter-gatherer revisionism. All groups are affected by contact with others (Headland and Reid 1989; Layton 2001; Spielmann and Eder 1994). Still, the notion that culture change associated with colonialism forever damages an original condition remains tacit in anthropological literature. These societies, especially in North America, are thus poor candidates for studying hunter-gatherers globally, or so the argument follows. Additionally, nomadic people often leave behind ephemeral sites that are particularly difficult to identify in archaeological contexts, so that the available data about their daily lives are limited.

Mobility is also a key concept in American mythology, imperialism, and Manifest Destiny. Frederick Jackson Turner (1962[1920]) coined the term "frontier hypothesis" to discuss the western advancement of American settlement, which continues to influence historical frontier research today. The frontier hypothesis states that the character of American society was heavily influenced by what happened in frontiers at the borders of civilization. According to Turner, frontiers are zones where the disaffected go to pursue alternative activities, sometimes changing their cultural ways of life in pursuit of new practices. Cusick (2000:48) defines a cultural borderland as a corridor between two expanding states, and a periphery as settlement on the edge of society. Frontier research in archaeology has been applied to both cultural borderlands and peripheries (Aron 2006; DeAtley and Findlow 1984; Donnan and Wilson 1994; Green and Perlman 1985; Klein 1997; Lightfoot and Martinez 1995; Rice 1998; Staski 2004; Usman 2004).

The concept of the American frontier, which encapsulates both traditions of mobility and resistance, is nowhere more present than in the

171

American West. Nomadic Indian occupants of the plains and mountains who found themselves living on French, Spanish, British, and American frontiers were able to resist some colonial powers and pressures in ways that Native peoples on the coasts or more populated areas, for example, could not. This ability was in part a product of their mobile lifestyles, made more mobile by the introduction of the horse in the early 1700s.

Early anthropological studies assumed that culture change was inevitable in contact situations, but archaeologists have demonstrated that indigenous people resisted colonial domination in social, economic, political, and material realms, in both active and passive ways (Ferguson 1992; Jackson and Castillo 1995; Paynter and McGuire 1991; Scham 2001). Resistance to outside pressures and residence in the frontier may have contributed to processes of ethnogenesis as hunter-gatherer groups forged new identities in association with migration to new places.

Most inhabitants of the plains and mountains underwent significant cultural transformations between the seventeenth and nineteenth centuries, sometimes bringing together formerly disparate bands and clans to forge new identities and sometimes specializing in specific resources as a means of establishing unique cultural strategies. Early ethnographers working in the twentieth century tend to portray these nomads in a timeless past that we know does not reflect the active and complex social changes that occurred in the centuries prior to written accounts. Our study adds data from everyday experiences at actual sites abandoned by people who witnessed this change. These materials and locations tell stories independent of the ones remembered one hundred years later. This research also contributes to a growing archaeological literature on culture change and colonialism in nineteenth-century Native America (Lightfoot 1995; Mitchell and Scheiber 2010; Silliman 2009), one that tries to break down artificial divisions between prehistory and history.

# Mountain Shoshone in the Greater Yellowstone Ecosystem

The length of indigenous occupations of the Greater Yellowstone Ecosystem and by whom are debated topics involving contributions from historians, anthropologists, and archaeologists. Historically, the Shoshone



**Figure 9.1.** A Shoshone encampment in the foothills of the Wind River Mountains in Wyoming, 1870. (Photograph by William Henry Jackson; Library of Congress, LC-USZ62-115466)

were one of a few tribes that claimed rights to the GYE and are one of only two tribes permanently settled on reservations in the area (Shimkin 1986; Trenholm and Carley 1964). The creation of the Eastern or Wind River Shoshone is a historic phenomenon that is in part a product of the intense sociopolitical reorganizations and ethnogenetic negotiations surrounding contact between Indians and Europeans in the late eighteenth and early nineteenth centuries (fig. 9.1) (Stamm 1999). Several bands came together to form the Wind River Reservation in 1868, including people who regularly occupied the mountains, basins, and plains of western Wyoming and adjacent states. We could call these groups Plains and Mountain Shoshone, realizing that these terms are more convenient and geographical than solidified and separate band designations. Prior to that time, Plains Shoshone (i.e., Buffalo Eaters, or *Kukundika*) bands were horse nomads actively engaged in trade with American settlers. The Mountain Shoshone (i.e., Sheepeaters, or *Tuku-dika*) bands occupied the remote reaches of the Absaroka and Wind River Mountains taking a more reserved and guarded approach to social interactions with fur trappers, explorers, and immigrants (Hultkrantz 1961). We do not know to what extent these band divisions existed prior to the late eighteenth century, but we believe those social distinctions became more pronounced as contact intensified.

Mountain Shoshone archaeology is central to this study. We consider Mountain Shoshone history and ethnicity to be intermeshed with identities gained from living in a high-altitude mountain landscape. Mountains are symbolic loci of social identity but are also key to resistance and may have had dual effects on indigenous people. The Rocky Mountains are a natural fortress and were one of the last Native North American strongholds. Not until the last two decades of the nineteenth century and into the twentieth century was this area permanently settled by ranchers, due to what was conceived as an inhospitable environment. For instance, the town of Cody, Wyoming, was not incorporated until 1902.

Prior to that time, trappers, fur traders, lumberjacks, and cowboys (from many Indian and European nations) started moving into northwestern Wyoming and adjacent areas. In fact, the mythology of western expansion is gold cast by stories such as Sacagawea (herself a Lemhi Mountain Shoshone) leading the Lewis and Clark expedition through the Rocky Mountains. Native and Euroamerican encroachment into mountain territories undoubtedly affected the indigenous inhabitants. Circumscription to mountainous environments may have changed subsistence strategies that included intensified use of preexisting resources such as bighorn sheep, lithics, and clays. At the same time, resistance based on mountain isolation may have made possible syncretic use of aboriginal and introduced technologies in a way that allowed maintenance and persistence of social identities. The relationships between these social issues and materiality of daily lived experiences are the focus of our archaeological research.

Sites across the region dating between about AD 1300 and 1800 provide evidence for a well-defined set of material attributes that includes tri-notched and triangular projectile points, a distinct form of Shoshone

knife, Intermountain Ware ceramics, steatite vessels, sheep and antelope traps, cribbed log structures, conical pole lodges (often called wickiups), and Dinwoody rock art (Larson and Kornfeld 1994). One unique facet of Mountain Shoshone archaeology is extensive wooden and stone hunting features used to trap and kill bighorn sheep (fig. 9.2). Most features date to circa AD 1800 (Frison 1987, 1991; Frison et al. 1990) and may be an indicator of intensification of high-altitude resources. Nowhere are these attributes better expressed than in the mountainous reaches of the GYE where they have been attributed to the Sheepeaters or Mountain Shoshone (Dominick 1964). While Julian Steward (1938) was among the first to associate Shoshone ethnic divisions with staple food resources, Swedish ethnographer Åke Hultkrantz (1957, 1979) was responsible for embedding the notion of Sheepeaters into the common knowledge and lore of Yellowstone National Park and the area's indigenous occupants. Hultkrantz writes that all Shoshone bands were involved in some way in the fur trade, which effectively ended in the 1840s. Yellowstone National Park was established in 1872, and the story of Indian occupations in and around the park was effectively countered by the narrative of a mythical untamed wilderness that was unmodified by prior human occupations (Nabokov and Loendorf 2004). This narrative is not unique to Yellowstone, but was one of the means for nineteenth-century governmental officials and conservationists to "naturalize" places in order to convince a skeptical American public that saving the forests should be a national concern during a time of unchecked industrial expansion (Reiger 2001)(see Hull, this vol., for comparisons in Yosemite National Park).

The extent to which a unique Mountain Shoshone identity existed prior to contact is debatable. Some archaeologists argue that a distinct Mountain Shoshone lifeway focused on bighorn sheep hunting and other montane resources existed for millennia (Francis and Loendorf 2002; Holmer 1994; Husted 1995; Loendorf and Stone 2006; Nabokov and Loendorf 2004; Swanson and Bryan 1964), while others argue for a relatively recent genesis (Butler 1978; Wright 1978). Regardless of the timing of occupation, the Rocky Mountains are a key source of social identity. Although many modern Americans value mountains for their stunning beauty and pristine isolation, the wilderness reality dictates a special set of subsistence and settlement strategies that lend themselves



**Figure 9.2.** A sheep-trap catch pen at Indian Ridge in Wyoming. (Photograph by Laura L. Scheiber)

to the development of a unique social identity of "mountain people" (Foster 1988; Keefe 2000; Nagel 1998).

#### Exploring Mountain Landscapes

One of our hypotheses is that people identified as Snakes, Shoshones, and Sheepeaters in early American literature used mountains as places of refuge and safety from others. Some early travelers and writers describe these people as renegades and outlaws, driven to the mountains by militaristic lowlanders (Clayton 1926; Nabokov and Loendorf 2004; Sheridan 1882). Although we do not think "renegade" is the most appropriate term, we do see merit in the idea that people either retreated or more accurately *chose* to remove themselves from certain situations and contacts by occupying high-altitude places:

Notwithstanding the savage and almost inaccessible nature of these mountains, they have their inhabitants. As one of the [Bonneville] party was out hunting, he came upon the track of a man in a lonely valley. Following it up, he reached the brow of a cliff, whence he beheld three . . . running across the valley below him. He fired his gun to call their attention, hoping to induce them to turn back. They only fled the faster, and disappeared among the rocks. (Irving 1837:192–193)

At elevations between 7,000 and 12,000 feet above sea level, the rugged terrain of the Absaroka Mountains in the eastern GYE structures the nature of Native mobility. Because of the rough terrain and remote nature of this area in the eyes of contemporary wilderness travelers, we view the mountains as central to resistance to colonial pressures. To date only a handful of postcontact archaeological sites have been positively identified. This is in part due to the imprecise nature of dating the sites. If metal or glass are not identified in assemblages, these sites are rendered invisible on the historic landscape, and categorized as Late Prehistoric. But we know not all people had access to nor chose to use Europeanmanufactured goods even after they were present in local areas. This is a chronological and temporal issue that will require further consideration.

Similarly, conducting archaeological research in the mountains to locate additional sites is difficult, due to field logistics and site visibility.

Many sites are buried under several hundred years of pine needles. One consequence of the federal fire suppression policy, increased drought conditions, and pine beetle infestation of mature tree stands is that lightening strikes are likely to burn several thousand hectares of forest every summer. The fires expose archaeological sites in the mountains that we did not know existed before. We are targeting both burned and unburned parts of the forest for further survey, guided by assumptions about the ways people would have moved in and through these areas in the past. We can document more sites with new technological advances for spatializing landscapes.

Our research is based on the assumption that people favor certain factors of the natural environment in their settlement choices. We model the human landscape in a GIS environment as a tool to refine our approach to archaeological survey. With GIS we can calculate various least-cost travel corridors that incorporate many data sets. Human mobility, particularly foot travel with families and households, is particularly constrained by slope. Particular drainages are key travel routes, and few mountain passes exist even today. Thus identifying these pathways is critical for predicting the location of potential contact period archaeological sites. We are using the spatial distribution of known sites in the area as a basis for finding similar, undocumented sites. These are important starting points for accessing wilderness land-use strategies and to construct archaeological survey designs. We start with natural and geological features such as bedrock, slope, precipitation, and sheep habitat to develop predictions of likely site locations (Nicholson et al. 2008).

In 1837, while camping with a group of Sheepeaters in our study area, Osborne Russell recorded that "One of them drew a map of the country around us on a white Elk Skin with a piece of charcoal after which he explained the direction of the different passes, streams, Etc." (Russell 1955[1914]:27). This act reminds us that we should also consider additional, perhaps more emic assessments of land use. For instance, anthropologist D. B. Shimkin recorded Shoshone place names and traditional medicinal and food resource maps when he conducted fieldwork among the Wind River Shoshones in 1937 and 1938. Shimkin (1947) shows trails that ran through the area under investigation, still important when he recorded them in the middle of the twentieth century. In the next stage, we may also consider other factors, which we

might call "viewsheds of resistance." Spatially modeling resistance may include variables such as surveillance, interstitial spaces of invisibility, wind patterns, and sound patterns. We hope to incorporate these other kinds of data into our GIS model as well.

#### **Obsidian Source Analysis**

In the culture contact literature, the introduction and adoption of European-manufactured materials by Native people have received much attention. With the availability of metal arrowheads and firearms, in addition to horses, people experimented with new hunting practices and new technologies, and sometimes new forms of interpersonal conflict. Native peoples continued to use stone tools even after other materials were available (Cobb 2003; Rodríguez-Alegría 2008), and this is true in west-ern Wyoming through the nineteenth century. When Osborne Russell encountered unmounted Shoshones in what is now Yellowstone Park in 1835, they were using obsidian-pointed arrows, bows decorated with quills (not beads), and stone pots. The Shoshones traded animal furs for awls, axes, kettles, tobacco, and ammunition (Russell 1955[1914]:26). Although they were not using the objects associated with contact, the fact that they were carrying furs for trade suggests that they were already affected by it.

With all of the rubric and focus on stone-to-steel transitions, understanding how access to traditional stone sources may have changed is key to considering issues of mobility and resistance (Scheiber and Finley 2010b; Silliman 2003, 2005). Obsidian is a common lithic raw material type in the study area that provides important insights regarding diachronic changes in mobility or exchange (Eerkens et al. 2008; Lyons et al. 2001). Chemically distinct obsidian sources are available in southeastern Idaho, northeastern Idaho, Jackson Hole (Wyoming), and Yellowstone National Park. In another study, we assembled a data set of nearly 2,300 sourced obsidian artifacts from western Wyoming, eastern Idaho, and southwestern Montana, including more than 170 obsidian artifacts from four postcontact sites (fig. 9.3).

The purpose of the study is to examine diachronic patterns in regional obsidian source use, testing the idea that source use changed from precontact (i.e., Paleoindian, Archaic, and Late Prehistoric) to postcontact (i.e., Protohistoric and Historic) periods. The analysis identified eighteen



**Figure 9.3.** Archaeological sites and obsidian sources. (Scheiber and Finley 2010)

chemically distinct obsidian sources dating to the last 12,000 years. We classified the data set according to region, source area, and age. We applied the Shannon diversity index (Beals et al. 2000) to analyze regional temporal variation (Scheiber and Finley 2010a).

We hypothesize that high-diversity measures equate to increased mobility or exchange. By this, we mean that more obsidian sources reflected in the artifacts at a site indicate that people were more highly mobile or were more frequently engaged in trading with outsiders. Conversely, reduced diversity for any period indicates a change in mobility patterns or exchange with neighboring areas. For the purposes of this chapter, we focus on the Late Prehistoric to Historic period transitions in northwest Wyoming (the Greater Yellowstone area) and southwest Wyoming (the Wyoming Basin), traditional homelands of the Mountain Shoshone and Plains Shoshone, respectively.

Distinct patterns emerge in the data set, with both regions showing the highest diversity during the Late Prehistoric period (AD 500–1700) but a sharp decline in source diversity during the Historic period. During the contact period, Yellowstone obsidian from northwestern Wyoming rarely occurs in Wyoming Basin sites to the south. Instead obsidian from eastern Idaho (i.e., Malad and Bear Gulch) and Jackson Hole are most common. On the other hand, obsidian from southeastern Idaho is rare in GYE archaeological sites, which are dominated by Yellowstone and northeastern Idaho sources. Variation in northeastern Idaho and Jackson Hole sources drives the diversity measure as northeastern Idaho sources drop from historic Wyoming Basin assemblages and Jackson Hole sources drop from historic GYE assemblages. Because of ethnographic regional associations between Shoshone bands, we argue that pre- to postcontact changes of obsidian source utilization reflect changing mobility patterns and exchange between the two regions that may ultimately reflect the formation of distinct Mountain and Plains Shoshone social identities. This change in the material record is a historic phenomenon and is one that we argue is the direct result of culture contact and colonialism in the central Rocky Mountains. People chose to restrict their movements to local procurement areas. This pattern runs counter to assumptions that Plains inhabitants became more mobile after the arrival of horses. We believe that the impact of the horse on historic settlement patterns is another mobility trope that needs to be investigated rather than assumed. We also suspect that some of the designated Late Prehistoric sites in fact date to the very early part of the Historic period, when the newly mounted Shoshone dominated Plains trade relations (Secoy 1953). The sites thus designated as Historic may actually represent a territorial retreat or retraction in response to highly organized mounted and armed indigenous neighbors such as the Blackfoot.

### **Ceramic Source Analysis**

The continued use of clay ceramic vessels and stone bowls offers additional insight into cooking strategies at a time when metal pots would have become more readily available. Sheepeaters were carrying stone bowls when they met Francois Larocque in 1805 and Osborne Russell in 1835 (Russell 1955[1914]; Wood and Thiessen 1985). So far, linking quarries to stone (steatite) vessels has not been possible (Adams 2006). Although we do not have written eyewitness accounts of pottery use, Intermountain Ware ceramics are recorded at archaeological sites of the region. Archaeologists working at Shoshone sites in the adjacent Great Basin have successfully studied patterns of mobility in prehistoric contexts based on ceramic sourcing (Eerkens 2003).

Intermountain Ware ceramics are found at regional Shoshone occupations, yet little is known about Wyoming ceramics in particular (Haspel 1984; Marceau 1982). Our geochemical analysis of ceramic clay provides an important, complementary analysis to the obsidian research. We initiated a pilot study to identify compositional variability in raw materials used to form ceramics from Shoshone sites in western Wyoming. We examined fifty sherds from four sites, one in the Wyoming Basin and three in the GYE, in order to begin understanding the variability in clay use and whether ceramic vessels were made locally or in distant places (Ferguson and Glascock 2007). All sites date to the terminal Late Prehistoric or early Historic periods within the last 400 years (AD 1500–1800s).

As with obsidian source use, geochemical analysis of ceramics provides important insights regarding pre- and postcontact changes in mobility. The Wyoming Basin and the GYE are suitable for this approach because of their distinctly different geology. The Wyoming Basin is largely a Tertiary sedimentary environment while the GYE is dominantly an extrusive, igneous landscape (Love and Christiansen 1985). Thus, following the logic of the obsidian analysis, we would expect greater ceramic clay source diversity during the Late Prehistoric, precontact period and reduced diversity during the Historic, postcontact period.

Our initial instrumental neutron activation analysis shows very promising results. Eight chemically distinct compositional groups were identified with only two sherds unassigned to specific groups. Little overlap exists between sites or regions, again suggesting local production with little exchange. While this current sample of sites and ceramic sherds is still small, the preliminary results are intriguing and with obsidian artifacts indicate that the Wyoming Basin and GYE were socially distinct areas during the early contact period. Future work with the ceramic study requires addition of more sites and ceramic samples in order to refine regional diachronic patterns that may indicate broader patterns of regional interaction, mobility, and ethnogenesis of distinct mountains and plains social identities.

#### Conclusions

In this chapter, we showed how archaeological sites and artifacts could reveal new information about colonial hunter-gatherer lifeways. Likewise, a focus on colonial period historical contexts can tell us more about hunter-gather variability more broadly. By asking if nomadic huntergatherers of the central Rocky Mountains were employing the timehonored practice of "voting with their feet" as a means of expressing resistance to external colonial pressures, we try to link two dominant traditions of archaeological practice. We ask if mobility can be structure and resistance simultaneously. Indigenous inhabitants of the Rockies made active choices that included restrictions and modifications in mobility strategies, in clear response to the presence of outsiders. Concrete examples from human landscape use, obsidian procurement, and ceramic production trace changes in movement strategies, undoubtedly impacted by new people, diseases, and pressures in the area.

We contend that the concepts of mobility and resistance have additional meanings on the American western frontier that are enmeshed in our own American value system. While we acknowledge the symbolic capital surrounding our research, we hope to show how archaeological data can further reveal the underlying structural metaphors too often implicit in the study of western indigenous colonial practices.

### Acknowledgments

We would like to thank Kenneth Sassaman and Donald Holly for inviting us to participate in this volume. We also thank the Shoshone National Forest, Indiana University, Northwest College, the Wyoming Bureau of Land Management, and the George C. Frison Institute. Chris Clerc, Maureen Boyle, and two anonymous reviewers provided additional feedback. Obsidian source analysis from our research sites was performed at the University of California Berkeley Archaeological X-Ray Fluorescence Laboratory and the Geochemical Research Laboratory in Portola Valley, California. Ceramic sourcing is part of collaborative research with Jeffrey Ferguson and Michael Glascock at the Archaeometry Laboratory of the Research Reactor Center at the University of Missouri. This project was partially supported by Indiana University's New Frontiers in the Arts and Humanities Program, funded by the Lilly Endowment and administered by the Office of the Vice Provost for Research; by a Grant-in-Aid of Research from the Vice Provost for Research at Indiana University; and by the National Science Foundation (Award #0714926).

# **REFERENCES CITED**

- Adams, Richard. 2006. The Greater Yellowstone Ecosystem, Soapstone Bowls and the Mountain Shoshone. *World Archaeology* 38(3):528-546.
- Aron, Stephen. 2006. American Confluence: The Missouri Frontier from Borderland to Border State. Indiana University Press, Bloomington.
- Barnard, Alan (editor). 2004. Hunter-Gatherers in History, Archaeology and Anthropology. New York, Oxford.
- Beals, L., M. Goss, and S. Harrell. 2000. Diversity Indices: Shannon's H and E. <u>http://www.tiem.utk.edu/~mbeals/shannonDI.html</u>.
- Binford, Lewis R. 2001. Constructing Frames of Reference: An Analytical Method for Archaeological Theory Building Using Hunter-Gatherer and Environmental Data Sets. University of California Press, Berkeley.
- Bird-David, Nurit. 1990. The Giving Environment: Another Perspective on the Economic System of Gatherer-Hunters. *Current Anthropology* 31(2):189-196.
- Butler, Robert B. 1978. A Guide to Understanding Idaho Archaeology: The Upper Snake and Salmon River Country. Third ed. Idaho State Historic Preservation Office, Boise.
- Clayton, A.G. 1926. A Brief History of the Washakie National Forest and the Duties and Some Experiences of a Ranger. *Annals of Wyoming* 4(2):277-295.
- Cobb, Charles R. (editor). 2003. Stone Tool Traditions in the Contact Era. University of Alabama Press, Tuscaloosa.
- Conkey, Margaret W. 2001. Hunting for Images, Gathering up Meanings: Art for Life in Hunting-Gathering Societies. In *Hunter-gatherers: An Interdisciplinary Perspective*, edited by Catherine Panter-Brick, Robert H. Layton and Peter Rowley-Conwy, pp. 267-292. Cambridge University Press, New York.
- Cresswell, Tim. 1993. Mobility as Resistance: A Geographic Reading of Kerouac's 'On the Road'. *Transactions of the Institute of British Geographers* 18(2):249-262.
- Cusick, James G. (editor). 1998. *Studies in Culture Contact: Interaction, Culture Change, and Archaeology*. Occasional Papers No. 25, Center for Archaeological Investigations, Southern Illinois University at Carbondale, Carbondale.
- 2000. Creolization and the Borderlands. *Historical Archaeology* 34(3):46-55.
- Deagan, Kathleen A. 1990. Accommodation and Resistance: The Process and Impact of Spanish Colonization in the Southeast. In Archaeological and Historical Perspectives on the Spanish Borderlands East, edited by David H. Thomas, pp. 297-314. vol. 2. Columbian Consequences. Smithsonian Institution Press, Washington.
- DeAtley, Suzanne P., and Frank J. Findlow (editors). 1984. *Exploring the Limits: Frontiers and Boundaries in Prehistory*. BAR International Series 223.
- Dominick, David. 1964. The Sheepeaters. Annals of Wyoming 36(2):131-168.
- Donnan, Hastings, and Thomas M. Wilson. 1994. An Anthropology of Frontiers. In Border Approaches: Anthropological Perspectives on Frontiers, edited by Hastings Donnan and Thomas M. Wilson, pp. 1-14. University Press of America, Lanham, Maryland.

- Eerkens, Jelmer W. 2003. Residential Mobility and Pottery Use in the Western Great Basin. *Current Anthropology* 44(5):728-738.
- Eerkens, Jelmer W., Amy M. Spurling, and Michelle A. Gras. 2008. Measuring Prehistoric Mobility Strategies based on Obsidian Geochemical and Technological Signatures in the Owens Valley, California. *Journal of Archaeological Science* 35(3):668-680.
- Ferguson, Jeffrey R., and Michael D. Glascock. 2007. Instrumental Neutron Activation Analysis of Intermountain Ware from Four Sites in Northwestern Wyoming. Archaeometry Laboratory, Research Reactor Center, University of Missouri.
- Ferguson, Leland. 1991. Struggling with Pots in Colonial South Carolina. In *The Archaeology of Inequality*, edited by Randall H. McGuire and Robert Paynter, pp. 28-39. Basil Blackwell, Oxford.
- ——. 1992. Uncommon Ground: Archaeology and Early African America, 1650-1800. Smithsonian Institution Press, Washington DC.
- Foster, Stephen William. 1988. The Past is Another Country: Representation, Historical Consciousness, and Resistance in the Blue Ridge. University of California Press, Berkeley.
- Francis, Julie E., and Lawrence L. Loendorf. 2002. Ancient Visions: Petroglyphs and Pictographs from the Wind River and Bighorn Country, Wyoming and Montana. University of Utah Press, Salt Lake City.
- Frison, George C. 1987. Prehistoric, Plains-Mountain, Large-Mammal, Communal Hunting Strategies. In *The Evolution of Human Hunting*, edited by Matthew H. Nitecki and Doris V. Nitecki, pp. 177-211. Plenum, New York.
- 1991. Prehistoric Hunters of the High Plains. 2nd ed. Academic Press, New York.
- Frison, George C., Charles A. Reher, and Danny N. Walker. 1990. Prehistoric Mountain Sheep Hunting in the Central Rocky Mountains of North America. In *Hunters of the Recent Past*, edited by Leslie B. Davis and Brian O.K. Reeves, pp. 208-240. Unwin-Hyman, London.
- Green, Stanton W., and Stephen M. Perlman (editors). 1985. *The Archaeology* of Frontiers and Boundaries. Academic Press, New York.
- Harrison, Rodney. 2002. Archaeology and the Colonial Encounter: Kimberley Spear Points, Cultural Identity and Masculinity in the North of Australia. *Journal of Social Archaeology* 2(3):352-377.
- Harrison, Rodney, and Christine Williamson (editors). 2004. After Captain Cook: The Archaeology of the Recent Indigenous Past in Australia. AltaMira Press and University of Sydney Archaeological Laboratory, Walnut Creek, California.
- Haspel, Howard. 1984. Study of Shoshonean Ceramics of Wyoming: the Bugas-Holding Ceramic Assemblage. *The Wyoming Archaeologist* 27(3-4):25-40.
- Headland, Thomas N., and Lawrence A. Reid. 1989. Hunter-Gatherers and their Neighbors from Prehistory to the Present. *Current Anthropology* 30:43-66.
- Holmer, Richard N. 1994. In Search of Ancestral Northern Shoshone. In Across the West: Human Population Movement and the Expansion of the Numa, edited by David B. Madsen and David Rhode, pp. 179-187. University of Utah Press, Salt Lake City.

- Hughes, Susan S. 2000. The Sheepeater Myth of Northwestern Wyoming. *Plains Anthropologist* 45(171):63-83.
- Hultkrantz, Åke. 1957. The Indians in Yellowstone Park. *Annals of Wyoming* 29(2):125-149.
- ——. 1961. The Shoshones in the Rocky Mountain Region. Annals of Wyoming 33(1):19-40.
- —. 1979. The Fear of Geysers among Indians of the Yellowstone Park Area. . In *Lifeways of Intermontane and Plains Montana Indians*, edited by Leslie B. Davis, pp. 33-42. Museum of the Rockies Occasional Papers, No.1, Bozeman, Montana.
- Husted, Wilfred M. 1995. The Western Macrotradition Twenty-Seven Years Later. Archaeology in Montana 36(1):37-92.
- Ingold, Tim. 1999. On the Social Relations of the Hunter-Gatherer Band. In *The Cambridge Encyclopedia of Hunters and Gatherers*, edited by Richard B. Lee and Richard Daly, pp. 400. Cambridge University Press, Cambridge.
- Ingold, Tim, David Riches, and James Woodburn. 1991. Hunters & Gatherers, Vol. 1: History, Evolution & Social Change. Berg, New York.
- Irving, W. 1910. Astoria. Century, New York.
- Irving, Washington. 1837. The Adventures of Captain Bonneville, USA. J.B. Miller, New York.
- Jackson, Robert H., and Edward Castillo. 1995. Indians, Franciscans, and Spanish Colonization: The Impact of the Mission System on California Indians. University of New Mexico, Albuquerque.
- Keefe, Susan E. 2000. Mountain Identity and the Global Society in a Rural Appalachian County Paper presented at the Center for Ethnicity and Gender in Appalachia, Huntington, West Virginia. Available online at <u>www.marshall.edu/csega/research</u>.
- Kelly, Robert L. 1995. *The Foraging Spectrum: Diversity in Hunter-Gatherer Lifeways*. Smithsonian Institution Press, Washington.
- Klein, Kerwin L. 1997. Frontiers of Historical Imagination: Narrating the European Conquest of Native America, 1890-1990. University of California Press, Berkeley.
- Larson, Mary Lou, and Marcel Kornfeld. 1994. Betwixt and Between the Basin and the Plains: The Limits of Numic Expansion. In Across the West : Human Population Movement and the Expansion of the Numa, edited by David B. Madsen and David Rhode, pp. 200-210. University of Utah Press, Salt Lake City.
- Layton, Robert H. 2001. Hunter-gatherers, Their Neighbours and the Nation State. In *Hunter-gatherers: An Interdisciplinary Perspective*, edited by Catherine Panter-Brick, Robert H. Layton and Peter Rowley-Conwy, pp. 292-321. Cambridge University Press, New York.
- Lee, Richard B., and Richard Daly (editors) 1999. The Cambridge Encyclopedia of Hunters and Gatherers. Cambridge University Press, Cambridge.
- Lee, Richard Borshay. 2006 Commonalities and Diversities in Contemporary Hunter-Gatherers: From Settlement Archaeology to Development Ethnography. Archeological Papers of the American Anthropological Association 16(1):157-169.
- Lightfoot, Kent G. 1995. Culture Contact Studies: Redefining the Relationship Between Prehistoric and Historical Archaeology. *American Antiquity* 60(2):199-217.

- —. 2005. Indians, Missionaries, and Merchants: The Legacy of Colonial Encounters on the California Frontier. University of California Press, Berkeley.
- Lightfoot, Kent G., and Antoinette Martinez. 1995. Frontiers and Boundaries in Archaeological Perspective. *Annual Review of Anthropology* 24:471-492.
- Loendorf, Lawrence L., and Nancy Medaris Stone. 2006. *Mountain Spirit: The Sheep Eater Indians of Yellowstone*. University of Utah Press, Salt Lake City.
- Love, J.D., and A.C. Christiansen. 1985. Geological Map of Wyoming. U.S. Geological Survey.
- Lyons, Claire L., and John K. Papadopoulos (editors). 2002. *The Archaeology* of *Colonialism*. The Getty Research Institute, Los Angeles.
- Lyons, William H., Scott P. Thomas, and Craig E. Skinner. 2001. Changing Obsidian Sources at the Lost Dune and McCoy Creek Sites, Blitzen Valley, Southeast Oregon. *Journal of California and Great Basin Anthropology* 23(2):273-296.
- Marceau, T.E. 1982. Steatite, Intermountain Pottery and the Shoshone: Some Preliminary Considerations. *The Wyoming Archaeologist* 25(1-2):11-32.
- Mills, Barbara J. 2002. Acts of Resistance: Zuni Ceramics, Social Identity, and the Pueblo Revolt. In Archaeologies of the Pueblo Revolt: Identity, Meaning, and Renewal in the Pueblo World, edited by Robert W. Preucel, pp. 85-98. The University of New Mexico Press, Albuquerque.
- Miracle, Preston T., and Lynn E. Fisher. 1991. Introduction: Hunter-Gatherers and their Ethnography. In Foragers in Context: Long-Term, Regional and Historical Perspectives in Hunter-Gatherer Studies edited by Preston T. Miracle, Lynn E. Fisher and Jody Brown, pp. 1-8. Michigan Discussions in Anthropology, Volume 10, Ann Arbor.
- Mitchell, Mark D., and Laura L. Scheiber. 2010. Crossing Divides: Archaeology as Long-Term History. In Across a Great Divide: Change and Continuity in Native North America, 1400-1900, edited by Laura L. Scheiber and Mark D. Mitchell, pp. 1-22. University of Arizona Press, Tucson.
- Murray, Tim (editor). 2004. The Archaeology of Contact in Settler Societies. Cambridge University Press, New York.
- Nabokov, Peter, and Lawrence L. Loendorf. 2004. *Restoring a Presence: American Indians and Yellowstone National Park.* University of Oklahoma Press, Norman.
- Nagel, Joane. 1998. Constructing Ethnicity: Creating and Recreating Ethnic Identity and Culture. In *New Tribalism: The Resurgence of Race and Ethnicity*, edited by Michael Hughey, pp. 237-272. New York University Press, New York.
- Nicholson, Christopher, Laura L. Scheiber, Judson Byrd Finley, and Maureen P. Boyle. 2008. Developing a Predictive GIS Model of Bighorn Sheep Traps in Northwest Wyoming. Paper presented at the 2008 ESRI Southwest Users Group (SWUG) Conference, Laramie, Wyoming, October.
- Norris, P.W.. 1881. Report Upon the Yellowstone National Park, to the Secretary of the Interior, for the year 1880. Government Printing Office.

- Paterson, Alistair G.. 2008. The Lost Legions: Culture Contact in Colonial Australia. AltaMira Press, Lanham, Maryland.
- Paynter, Robert, and Randall H. McGuire. 1991. Archaeology of Inequality: Material Culture, Domination, and Resistance. In Archaeology of Inequality, edited by Randall H. McGuire and Robert Paynter, pp. 1-27. Basil, Oxford.
- Prince, Paul. 2002. Cultural Coherency and Resistance in Historic-Period Northwest Coast Mortuary Practices at Kimsquit. *Historical* Archaeology 36(4):50-65.
- Reiger, John F. 2001. *American Sportsmen and the Origins of Conservation*. 3rd ed. Oregon State University Press, Corvallia.
- Rice, Prudence M. 1998. Context of Contact and Change: Peripheries, Frontiers, and Boundaries. In *Studies in Culture Contact: Interaction, Culture Change, and Archaeology*, edited by James G. Cusick, pp. 44-66. Occasional Paper No. 25, Center for Archaeological Investigations, Southern Illinois University at Carbondale, Carbondale.
- Rodríguez-Alegría, Enrique. 2008. Narratives of Conquest, Colonialism, and Cutting-Edge Technology. *American Anthropologist* 110(1):33-43.
- Russell, Osborne. 1955 [1914]. *Journal of a Trapper*. University of Nebraska Press, Lincoln.
- Sahlins, Marshall. 1972. Stone Age Economics. Aldine, Piscataway, New Jersey.
- Sassaman, Kenneth E. 2001. Hunter-Gatherers and Traditions of Resistance. In *The Archaeology of Traditions: Agency and History Before and After Columbus*, edited by Timothy R. Pauketat, pp. 218-236. University of Florida Press, New York.
- Scham, Sandra Arnold. 2001. The Archaeology of the Disenfranchised. Journal of Archaeological Method and Theory 8(2):183-213.
- Scheiber, Laura L., and Judson Byrd Finley. 2010a. Mountain Shoshone Technological Transitions across the Great Divide. In Across a Great Divide: Change and Continuity in Native North America, 1400-1900, edited by Laura L. Scheiber and Mark D. Mitchell, pp. 128-148. University of Arizona Press, Tucson.
  - 2010b. Obsidian Source Use in the Greater Yellowstone Area, Wyoming Basin, and Central Rocky Mountains. *American Antiquity* In review.
- Scheiber, Laura L., and Mark D. Mitchell (editors)/ 2010. Across a Great Divide: Change and Continuity in Native North America, 1400-1900. University of Arizona Press, Tucson.
- Schrire, Carmel. 1995. *Digging through Darkness: Chronicles of an Archaeologist*. University Press of Virginia, Charlottesville.
- Secoy, Frank Raymond. 1953. Changing Military Patterns on the Great Plains (17th Century through Early 19th Century). Monographs of the American Ethnological Society No. 21. University of Washington Press, Seattle.
- Shennan, Stephen. 2003. Genes, Memes and Human History: Darwinian Archaeology and Cultural Evolution. Thames and Hudson, New York.
- Sheridan, P.H. 1882. *Report of an Exploration of Parks of Wyoming, Idaho, and Montana in August and September, 1882.* Government Printing Office, Washington D.C.
- Shimkin, D.B. 1947. Wind River Shoshone Ethnogeography. *Anthropological Records of the University of California* 5(4):245-288.

- Shimkin, Demitri B. 1986. Eastern Shoshone. In *The Great Basin*, edited by William C. Sturtevant and Warren L. D'Azevedo, pp. 308-335. Handbook of North American Indians, Vol. 11, William C. Sturtevant, general editor, Smithsonian Institution, Washington D.C.
- Silliman, Stephen. 2003. Using a Rock in a Hard Place: Native-American Lithic Practices in Colonial California. In *Stone Tool Traditions in the Contact Era*, edited by Charles R. Cobb, pp. 127-150. University of Alabama Press, Tuscaloosa.
- ——. 2005. Obsidian Studies and the Archaeology of 19th-Century California. *Journal of Field Archaeology* 30(1):75-94.
- 2009. Change and Continuity, Practice and Memory: Native American Persistence in Colonial New England. *American Antiquity* 74(2):211-230.
- Spielmann, Katherine A., and James F. Eder. 1994. Hunters and Farmers: Then and Now. *Annual Review of Anthropology* 23(1):303-323.
- Stamm, Henry E. IV. 1999. *People of the Wind River: The Eastern Shoshones* 1825-1900. University of Oklahoma Press, Norman.
- Staski, Edward. 2004. Change and Inertia on the Frontier: Archaeology at the Paraje de San Diego, Camino Real, in Southern New Mexico. *International Journal of Historical Archaeology* 2(1):21-44.
- Stein, Gil (editor). 2005. *The Archaeology of Colonial Encounters: Comparative Perspectives*. School of American Research Press, Santa Fe.
- Steward, Julian H. 1938. Basin-Plateau Aboriginal Sociopolitical Groups. Bulletin No. 20, Bureau of American Ethnology, Smithsonian Institution, Washington D.C.
- Swanson, Earl H., Jr., and Alan Lyle Bryan. 1964. Birch Creek Papers No. 1: An Archaeological Reconnaissance in the Birch Creek Valley of Eastern Idaho. Occasional Papers of the Idaho State University Museum No, 13. Idaho State University, Pocatello.
- Trenholm, Virginia Cole, and Maurine Carley. 1964. *The Shoshonis: Sentinels of the Rockies*. University of Oklahoma Press, Norman.
- Turner, Frederick J. 1962 [1920]. *The Frontier in American History*. Holt, Rinehart, and Winston, New York.
- Usman, Aribidesi A. 2004. On the Frontier of Empire: Understanding the Enclosed Walls in Northern Yoruba, Nigeria. *Journal of Anthropological Archaeology* 23(1):119-132
- Wilmsen, Edwin N. 1989. Land Filled with Flies: A Political Economy of the Kalahari. University of Chicago Press, Chicago.
- Wood, W. Raymond, and Thomas D. Thiessen. 1985. Early Fur Trade on the Northern Plains: Canadian Traders Among the Mandan and Hidatsa Indians, 1738-1818. University of Oklahoma Press, Norman.
- Wright, Gary A. 1978. The Shoshonean Migration Problem. *Plains* Anthropologist 23(80):113-137.
- Wylie, Alison. 1993. Invented Lands/Discovered Pasts: The Westward Expansion of Myth and History. *Historical Archaeology* 27(4):1-19.
- Zvelebil, Marek. 1998. What's in a Name: the Mesolithic, the Neolithic, and Social Change at the Mesolithic-Neolithic Transition. In *Understanding the Neolithic of North-Western Europe*, edited by Mark Edmonds and Colin Richards, pp. 1-36. Cruithne Press, Glasgow.

# HUNTER-GATHERER **ARCHAEOLOGY AS HISTORICAL** PROCESS

EDITED BY KENNETH E. SASSAMAN AND DONALD H. HOLLY JR.

THE UNIVERSITY OF ARIZONA PRESS TUCSON

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Library of Congress Cataloging-in-Publication Data [to come]

Publication of this book is made possible in part by a grant from the Amerind Foundation.

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Manufactured in the United States of America on acid-free, archival-quality paper containing a minimum of 30 percent post-consumer waste and processed chlorine free.

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