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GREATER DENVER AS A REGION OF
FRONTIERS AND BOUNDARIES

Space—like history—is a product of human imagination and more often than not serves as an arena of social competition and conflict.

—Mark P. Leone and Neil Asher Silberman, *Invisible America*

This book is written for readers interested in archaeology and in Denver's past, but the sources are *unwritten* history. Archaeological evidence and the evidence of material culture do not merely provide all we can know of the prehistoric inhabitants of the area; they enhance the written record of the historic period as well. The unwritten history of Denver is a story of the relationship of people to their environment on the edge between the High Plains and the Rocky Mountains, a story of frontiers and boundaries. Even in the geologic past the region was characterized by boundaries—sharp transitions—between mountains and plains, the wet and the dry. As a crossroads of cultures for millennia, the Greater Denver area is also an area of frontiers—areas of interpenetration of cultures or environments. It provides a backdrop for understanding the nature of cultural interactions and the processes of integration as well as maintenance of distinct expressions of unique cultural identities. Here many different groups of people have succeeded each other or coexisted.

Denver, nestled up against the foothills of the Rocky Mountains, occupies a place of contrasts in altitude, geology, and climate. These contrasts have contributed to the juxtaposition of different ways of life. So the archaeology of Greater Denver tells a story of many frontiers—and many kinds of frontiers.

The urban core of Denver, the place where the city began, is centered on the confluence of two rivers, the Platte River and Cherry Creek. Since the 1850s this town site has been a confluence of cultures as well (Fig. 1.1), a meeting ground for a variety of economic and social interests, and at times the scene of struggles for dominance and an urge toward expansion. But although the second half of the nineteenth century was a period of particularly great change for Denver, various groups met at the Platte River and Cherry Creek for many centuries and perhaps millennia prior to that. The fact that Denver has been a frontier reflects its natural setting, in which the High Plains meet the mountains, creating a dynamic and unique environment that merges some elements and separates others. Its unique flavor was created by the blending and distinctiveness of the different people who have called it home.



Figure 1.1. Indian tipis and settlers' houses at the confluence of Cherry Creek and the South Platte River. Courtesy of the Colorado Historical Society.

A frontier is often thought of as the interaction of civilized and uncivilized, developed and undeveloped. No such implicit value judgment is intended here. Our concept of frontier includes earlier peoples with varied technologies and adaptations to the different ecological zones that abut in Greater Denver. Our sense of the frontier, then, is that it is a zone of interaction rather than a boundary line. In order to survive in the difficult “frontier” environment, the technologically advanced minority, in spite of their technology, had to borrow from the knowhow of the locally adapted majority and streamline its social order simply to cope with the new surroundings, difficult because unfamiliar. On the American frontier, this simpler mode of life—and all its perceptions of virtue—was short-lived for the Euro-American settlers. Learning from

the less technologically advanced Native American populations (and exploiting their lands and resources) rapidly changed into self-sufficiency in Greater Denver.

Patricia Limerick shows that the American west was a meeting ground of cultures. “Happily or not,” Limerick points out, “minorities and majorities occupied a common ground” (Limerick 1987:27). This is particularly true of Denver, which was settled later than Salt Lake City and other towns farther west and was thus surrounded by established Euro-American outposts. Land developers in Greater Denver regarded Arapaho and Cheyenne ownership of the land as little more than a bothersome “technicality” (Clark et al.1993). Treaties negotiated with tribes and other interaction with them was largely carried out under the ethnocentric assumption that the Native American should and would succumb to the Euro-American methods of farming, education, commerce, and religion.

This is not to say that the various tribes failed to fight or negotiate for their independence. The purpose of this work, however, is not to document the maintenance of cultural identity and traditions, but to describe the general characteristics of cultural interaction in early Denver. The nature of the contact and conflicts between the two cultures created a particular climate for the developing city. The result was that Denver flourished as a city, but it did so ultimately at the cost of the local tribes. For example, Virginia Cole Trenholm (1970:160) writes, “We find casual mention of ‘shameful outrages’ to which the Arapaho in the Denver area were subjected. Upon more than one occasion in the winter of 1859–60, one authority tells us, their camps were invaded by brutal, half-drunk white ruffians who overpowered the braves and subjected the women to nameless indignities.” It is this type of conflict that created a “frontier” environment (in the worst sense) in the city of Denver and the area around it. The conflicts, however, did not abate with the removal and subjugation of the Native Americans. Other marginalized peoples would replace the Indians in the urban environment.

How can the frontier character of Denver be explored archaeologically? Central to this examination is the concept that a landscape can be considered material culture. Not only can archaeological investigations within a city be concerned with urban issues or frontier typologies, but the city *as a whole* can also be viewed as an artifact. Also guiding this study is the search for social process in addition to pattern. It is the openness of cultures that is of interest here—the interrelated, connected processes of cultures through which patterns either persevere or change.

THE GREATER DENVER AREA

Denver as a city hasn’t been around long, even on the relatively short time scale of American cities. It was founded in 1858 and mushroomed into local importance. Prior to the establishment of the “Queen City of the Plains,” as Denver has been called, other groups of people inhabited the plains, mountains, forests, and riversides of the area. These people—Native Americans of various nations, tribes, and bands—did not mark their boundaries on maps, although they must have known the limits of their territories and their habitual trails intimately. These territories were probably both irregular and widespread, fluctuating with the ebb and flow of economic resources and political

GREATER DENVER STUDY AREA

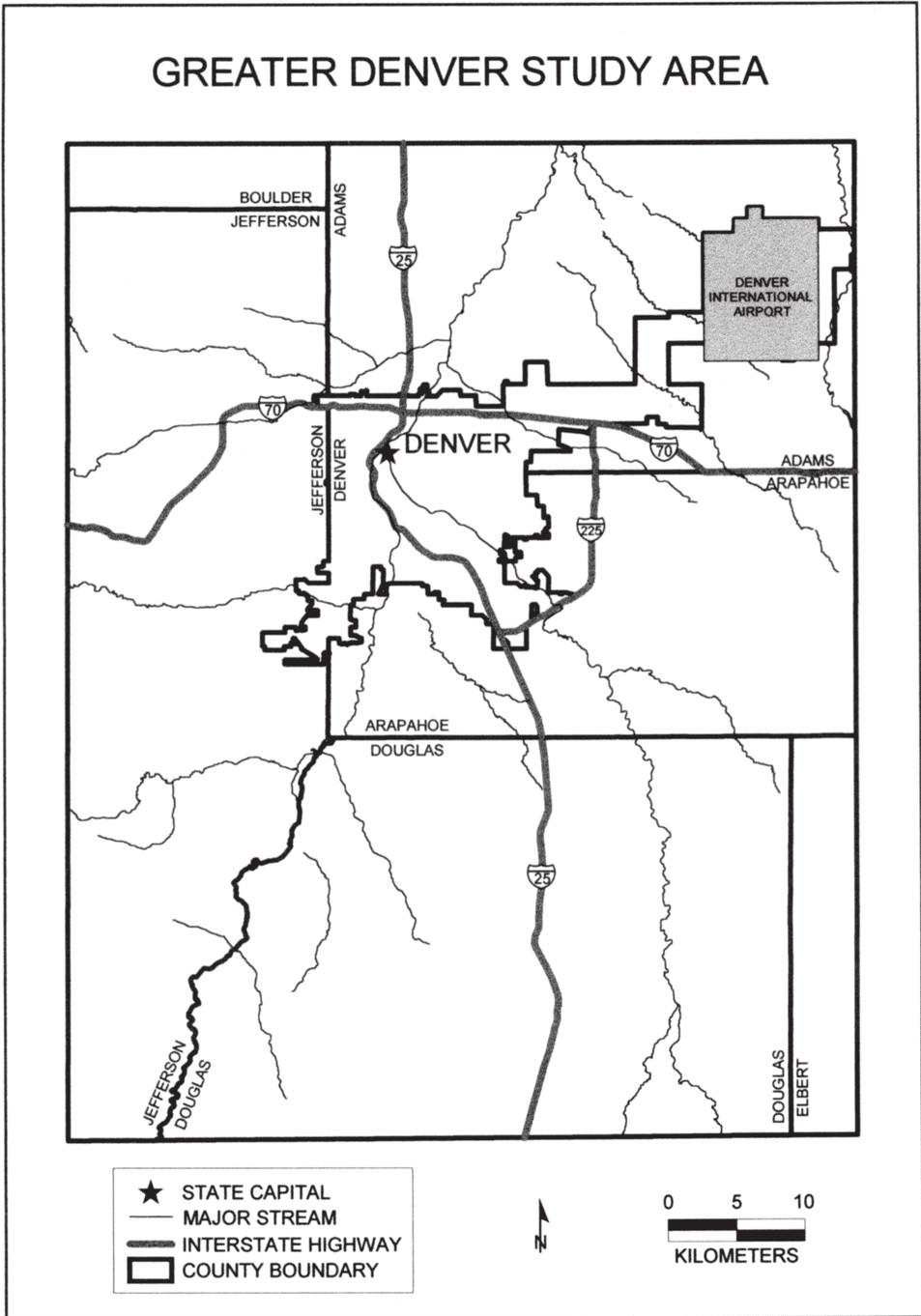


Figure 1.2. The Greater Denver study area, showing county boundaries. Francine Patterson.

alliances, and perhaps overlapping with other groups. But even after the imposition of divisions and borders, networks of interaction stretched beyond the small geographic area that Greater Denver occupies today. The area's inhabitants since the beginning have been involved in broader patterns of settlement, as well as trade and cultural interaction with surrounding areas. However, our project required a defined area. Some boundaries for this book had to be drawn in the interest of maintaining a manageable set of data, and to focus on the central elements of what makes the Denver area unique. A rectangular map proved to be convenient for searching the files of the Office of Archaeology and Historic Preservation (OAHP) and subsequently it was useful for mapping the region (Fig. 1.2). Counties seemed to be unnatural divisions, especially in view of prehistoric sites. At present, suburban Denver stretches about as far as the rectangle we chose. But this rectangle does not cover homogeneous land, so we divided it into four physiographic regions: Hogback, Black Forest, Streams, and Plains. These ecosystems were used differently by prehistoric and historic peoples, but we believe they were significant to all inhabitants. Those differences make intricate patterns on the weave of the urban center. Maps in this book thus reflect these regional differences.

In selecting our study area, the physiographic features of the Denver area provided a logical starting point. The mountains form an inexact but natural boundary to the west, while the foothills are closely related to Denver. Thus the western border of the study area was drawn to include the Hogback area. In the south, Denver's present suburbs stretch past Franktown, so this region needed to be included. The Palmer Divide separates the watershed of the South Platte from that of the Arkansas River. It also separates Greater Denver from Greater Colorado Springs. The higher elevations of the Black Forest catch more rainfall and therefore have different vegetation from downtown Denver, making for alternative uses through time. The riverine environments of the South Platte River and Cherry Creek affect archaeological sites in particular ways, thus we separated this area from the less watered plains. The Plains region to the east has helped to feed Denver with farms in historic times, but prehistoric people moved between the plains and the foothills for their own provisioning. But where in the north and east does Greater Denver end? Since the city of Denver now stretches to the northeast to include Denver International Airport, this new landmark provided a northeast corner for the study.

The Database

Once the project region was identified, our next step was to compile a total list of sites. The set of site data which we obtained from OAHP included more than 5,000 recorded archaeological sites or areas. Careful examination showed that there were some sites that were inappropriate for our purpose, because they represented isolated artifacts or sites that had no obvious archaeological component. Eliminating these left 1,401 sites, which by the time we added new data gathered during the period of writing grew to 1,517 sites (Fig. 1.3). This database gave us our first view of the range, scope, and density of archaeological resources in the Greater Denver study area. Sites are located throughout and represent a wide range of time periods and site types, from small prehistoric

ALL ARCHAEOLOGICAL SITES GREATER DENVER

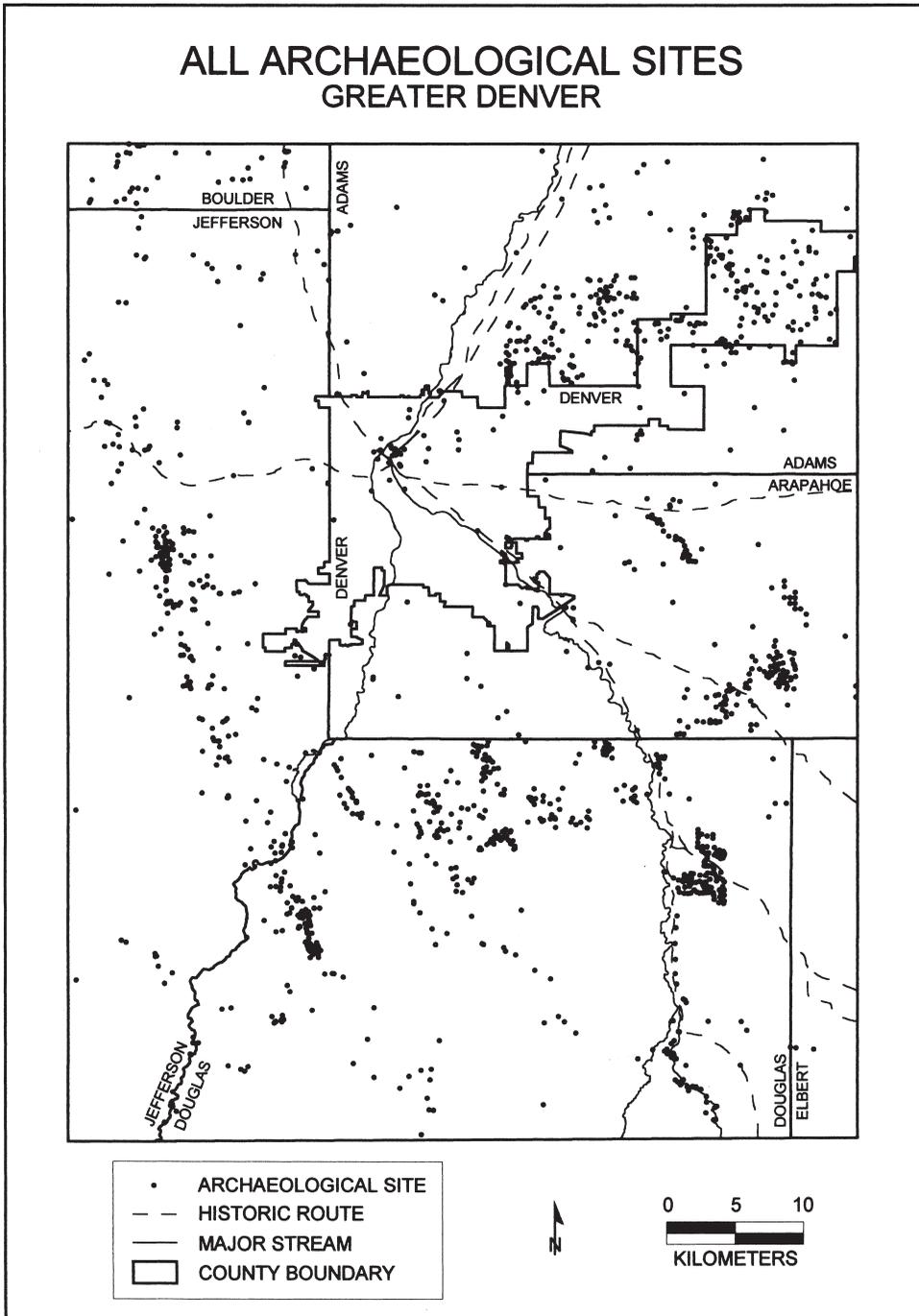


Figure 1.3. Archaeological sites in the study area. Francine Patterson.

scatters of chipped stone, to rock shelters, to historic homes and mines. The database even includes the burial site of a local alleged cannibal, Alferd Packer.

The data as they came from OAHP had to be modified for our project. First, in an effort to group data into meaningful categories, we amalgamated some of the cultural affiliations for dated sites. Sites classified in a number of ways might mean roughly the same thing in the original database. We created larger categories; for example, “Early Ceramic,” “Early Woodland,” and “Late Woodland” were collapsed into “Early Ceramic.”

We used the modified database to run a Geographic Information Systems (GIS) mapping program. By using a GIS system, we were able to map the sites electronically and manipulate them to give information about patterning by time period and site type. The maps located throughout this book are the fruits of that labor.

GIS mapping depends on grid coordinates. The locations of sites in the Greater Denver study area were mapped using the worldwide metric grid system known as Universal Transverse Mercator (UTM). The system works very well with the right types of data, but when we began the project 273 of our sites did not have UTM designations. Locational data, some of which were recorded long ago, needed to be refined as well. In particular, some sites have been located only by township, range, section, and quarter-section, which is not easily used for computer mapping. After analyzing the collections at the University of Denver (the repository for many early Denver area studies) and synthesizing data on sites from numerous sources, we were able to pinpoint locational data on all but 88 sites. These last sites lacked specific locations and could not be mapped.

Another 81 sites that are linear features were not mapped. Linear features presented a mapping problem for two reasons. First, the number of UTM coordinates taken in the field may be inadequate to represent the course of the linear site accurately. Field personnel might record only enough points to roughly delineate the site, not to capture every turn and twist. Second, many of these sites have been recorded a number of times as projects intersect them, but the recorded segments are not readily identifiable as a continuous linear feature. The Highline Canal with site numbers 5AH388, 5AM261, 5DA600, and 5DV840 is a pertinent example, since it runs through four counties with a different number in each. We decided that mapping these features using UTMs was inappropriate and mapping by hand was beyond the scope and intent of the project. The most critical of the linear features, however, such as trails, were hand-mapped and appear on our historic period maps. These sites are the cornerstones of the archaeology of Greater Denver.

In order to have a flow to our narrative, we have put much of the technical information in boxes, which can be skipped, read later, or turned to immediately.

Box 1A. WHAT IS ARCHAEOLOGY?

Archaeology is a method for learning about the past. While the public perception of archaeological work is often one of glamour, adventure, or romance, the truth is more prosaic. The practice of archaeology requires careful survey or digging and recording the details of the way artifacts are found in the earth and their relation-

ship to each other and to the soil. The analytical parts of archaeology involve many specialists, from those who study soils to those who analyze plants, pollen, bones, and other materials. From these data, inferences about the lives of earlier inhabitants can be made.

It is customary to divide the work of archaeologists into prehistory and history, depending on whether written records are present. For prehistoric times archaeology is the only direct source of knowledge; written materials provide fuller interpretations of the historic past. Social sciences such as history, sociology, and even cultural anthropology can use methods such as archival research, informant interviews, and direct observation, but archaeology has the advantage of the long view and is in the position to explore topics frequently overlooked by other fields. Archaeology can also focus on the day-to-day lives of ordinary people, allowing a broader as well as a longer perspective.

THE HISTORY OF ARCHAEOLOGY IN GREATER DENVER

The first professional archaeologist in Denver was not educated as an archaeologist, but came to Colorado to teach French. He made up in diligence and reading what he lacked in training. Dr. Etienne B. Renaud was the founder of the University of Denver's Anthropology Department, in 1922. He and his students scoured Colorado and neighboring states, looking for sites and recording them. They examined the artifacts of collectors and talked to ranchers and farmers about what indications of the past were on their land. Renaud published a series of survey reports (Renaud 1931, 1932, 1933, 1935), of which one specifically pertains to Greater Denver. Some of these sites were reinvestigated over the years, and others have been added to the collections, but the foundations of Greater Denver archaeology were laid by the pioneering work of Renaud and his students. Many of the University of Denver sites were never properly published, so one goal of this book is to make available to the public and the archaeological profession the results of three-quarters of a century of site investigation in Greater Denver. Other sources, especially work done under contract (known as "gray literature"), are also extensively used. Other syntheses of the archaeology of Colorado have been published (Cassells 1983, Stone 1999), but they are of broader scope, including the entire state and beyond. We examine a smaller region in greater detail.

Some of Renaud's students—for example Marie Wormington—were bright lights in local and national archaeology. Others also became well-known archaeologists, such as John Cotter, who had a distinguished career in the National Park Service. When Arnold Withers came to the University of Denver, he inherited Renaud's site cards and site collections. Some of his students became prominent in the profession as well, David Breternitz, Alexander Lindsay, and Alan Olson among them. They worked on various local sites, including Franktown Cave, the only site in the entire area with perishable artifacts remaining. Students from the University of Colorado at Boulder also excavated in Greater Denver, including the Hazeltine Heights burial site. Amateur archaeologists have contributed a great deal through the years, and the responsible archaeological practices of the Colorado Archaeological Society, Denver Chapter, are a model for all paraprofessionals. The definitive work in Greater Denver was done by

Cynthia Irwin-Williams and Henry Irwin, offspring of a dedicated amateur who themselves both became professional archaeologists. Working at both Magic Mountain and LoDaisKa, the Irwins created a stratigraphic record that in its larger outlines still stands. More recently, contract work by Cultural Resource Management (CRM) has added important new details to our understanding of the region.

Changing Archaeological Practices

The expansion of suburban Denver has had both a positive and a negative effect on archaeology. On the negative side is the disappearance of sites under buildings and parking lots. On the positive side many more sites have been recorded than previously were known, due to federal and state laws requiring archaeological surveys as well as increased local awareness and responsibility. A glance at the distribution map of all sites reveals how few prehistoric sites are recorded in the urban center relative to the total number reported in surveyed areas on the periphery. This does not mean that prehistoric peoples avoided the confluence of the Platte River and Cherry Creek. Rather, the city was built up before an interest in archaeology began, and the relatively rare excavations in the center of the city have concentrated on the historic period.

The map (Fig. 1.3) locating prehistoric sites also makes it clear that surveys have recorded significant numbers of new sites. The heavily dotted areas on the map reflect the locations of those surveys. This map demonstrates the extraordinary density of sites in Greater Denver in areas that have been surveyed, and hint at what may be missing in other areas.

Not only have archaeological surveys and excavations considerably broadened our knowledge of site types and locations, they have increased our understanding and appreciation of local prehistoric people in several ways. Excavations in the most promising of these sites have revealed much that was previously unknown: pit houses and other structures, maize pollen and remnants of wild plants, and sources of lithic tool material to name a few recent strides, all of which add incomparable richness to the database. Both seasonal camps and longer occupations have been found, suggesting that we need a more nuanced approach to Greater Denver archaeology than the simple division into projectile point types that stand for time divisions. Increasing sophistication is evident in recent site reports.

The early work by Renaud and his students was crude archaeology by today's standards, but some of their conclusions have withstood the tests of continued archaeological work. For example, Dale King (1931) wrote his thesis about the eastern Colorado plains, an area that includes Greater Denver. He found campsites the most common type of site, and noted that Black Forest sites tended to be associated with the acquisition of stone for raw material, especially petrified wood. Perhaps more important than the continuing usefulness of generalizations, though, is the fact that some of Renaud's surveys are the only record of sites long since vanished under the expansion of Greater Denver (Downing 1981).

But much has changed in the understanding of Greater Denver prehistory since the early days. One reason for the changes is that most of the area is private property,

which can only be surveyed or excavated with the permission of the landowner. Although many sites were known to local collectors, and some were reported to professional archaeologists, vast tracts were unknown, and are only now being surveyed as Denver's suburbs expand. These areas, in changing hands or changing use, require archaeological surveys. It is notable that the attractive places for houses and ranches, where new settlers homesteaded, are also areas where earlier inhabitants found pleasant places to reside, with water nearby, slopes catching sunshine but out of the wind, and often with views of the mountains.

An example of the changing interest in the prehistoric inhabitants, as well as changing archaeological practices, can be gleaned from an area of Arapahoe County along Sampson Gulch and Piney Creek (Fig. 1.4). Comparing early site cards with more recent records reveals that this strip in the Plains subregion had almost continuous sites, especially Early Ceramic villages. The full picture of prehistoric land usage is only beginning to emerge.

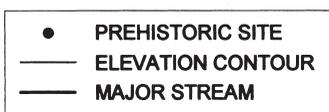
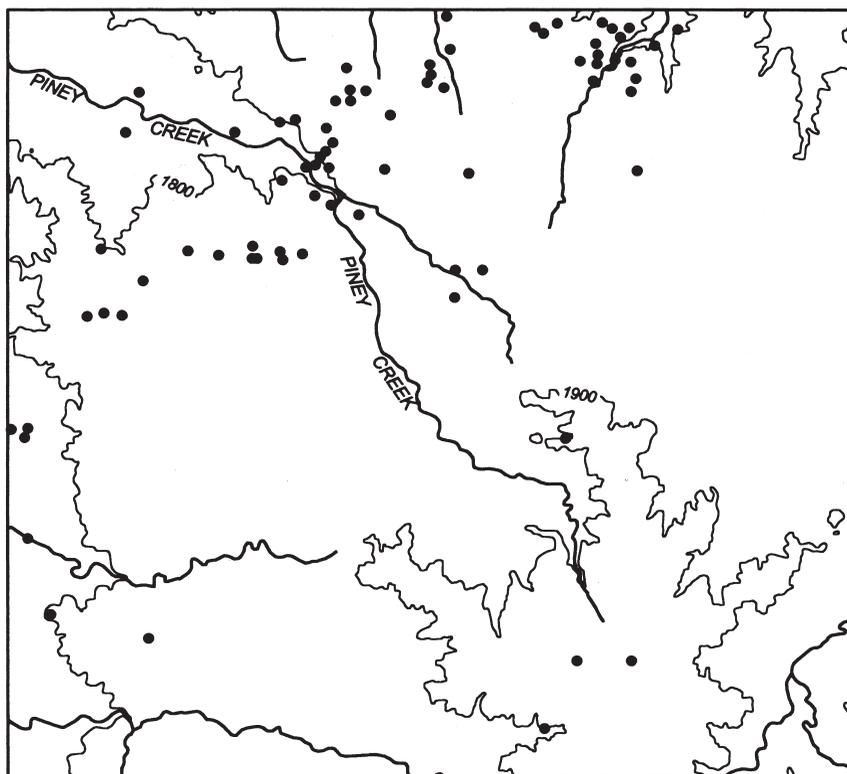
Several sites near Smoky Hill road, which was an Indian trail before it was used by settlers from the east, have been recorded at various times. They make an interesting study in changing patterns of archaeology within the region and allow us to obtain a broader perspective on prehistoric land use. Sites on the Davidson, Esser, and Evernut ranches were reported to the University of Denver in 1950 and 1951 by Ernest Kemper, an amateur archaeologist who lived in Denver. His collecting activity was already substantial. He knew the area so well that he located the sites precisely on U.S. Geological Survey quads, noting them as D-1 to D-4 for those on the Davidson Ranch and E-1 to E-2 for the Esser Ranch. A gap in his data between the Esser and Evernut Ranches may indicate an unwilling landowner, but this is only speculation.

The Davidson sites were recorded by the University of Denver during a field trip in the 1970s, but even at that time perceptions of site boundaries differed from Kemper's maps. Whether the apparent boundaries were altered by weather or farming activities, or whether criteria differed, is unknown. For example, on the University of Denver site cards one site appears to encompass both D-1 and D-2, while Kemper's D-1 was perceived as two sites in the later survey. Some of the sites were large enough to be recorded as a "camp or village." The sites appear to be Early Ceramic with cord-marked potsherds, corner-notched points, grinding stones, and stone flakes.

By 1977 this ranch had been developed into suburban homesites. With permission of the new landowner, one site was revisited and surface-collected by a small University of Denver crew, who excavated a shallow test pit. Cord-marked pottery could still be found on the surface, as well as petrified wood, chalcedony, and quartzite flakes. Nothing was found in the one-meter-square pit but mano fragments smaller than 3 cm and a few tiny flakes. Plowing had ground this shallow site literally to bits.

The Davidson Ranch sites were again recorded in the Arapahoe Meadows Survey (Newberry and Tate 1994), when part of the area that had been Davidson Ranch was scheduled to be developed into a golf course. Their work shows that this was an area of intensive prehistoric settlement. Two-thirds of the shovel tests produced cultural materials, including cord-marked pottery, ground stone, and chipped stone. Concentrations of artifacts could still be found, but the artifacts were very near the surface. The differ-

PINEY CREEK AREA PREHISTORIC SITES GREATER DENVER



CONTOUR INTERVAL 100 METERS



Figure 1.4. Southeastern section of the study area. Francine Patterson.

ence in depth of overburden after forty years may represent soil erosion and the effects of plowing on areas with marginal rainfall.

East of these sites, the Pine Ridge Ranch survey (Mutaw and Tate 1990) revealed additional areas of lithic scatter, covering altogether about 175 acres. This enormous spread of archaeological material lies between the Davidson and Esser sites, and was not recorded on Kemper's map, but part of the area designated as having multiple sites by Mutaw and Tate had been previously noted in the E-470 survey (Joyner 1988). The later crew described one of the sites as much larger than the earlier crew had perceived it.

Moving farther southeast, the Esser sites were given University of Denver numbers, again with disagreements about what constitutes site boundaries. Where Kemper perceived two large sites, both on the northeast of Sampson Gulch, the University of Denver recorders noted five sites, three of them on the southwest side of the gulch. Woodland sherds, bones, flakes and scrapers, manos, and metates were listed as having been observed.

Still trending southeast, farther up the gulch, four large sites at the Evernut Ranch are recorded on the Kemper map, but as they were not recorded by the University of Denver, there is no further knowledge of their content. We do know that the entire strip had intermittent debris from prehistoric peoples, largely from the Early Ceramic period.

What are we to think of such an extensive occupation? Does it represent many years of living along this intermittent stream, repeated occupations at different locations along the strip, or many people at once? There is some indication that Early Ceramic times were cooler and wetter than the present (Gilmore 1991); perhaps the region was better suited to unirrigated crops than it was in the 1890s when settlers from the eastern United States homesteaded the plains. As will be seen in Chapter 2, precipitation in the Denver Basin is erratic, with years of drought and years of floods. Did the Early Ceramic people enjoy good years and then have their own "dust bowl" and abandon the area? This is the kind of question that can only be asked, let alone answered, with a perspective that embraces an entire region.

Some of these sites have been known to archaeologists for more than half a century, and presumably were noted even earlier by the first homesteaders, whose plows turned up the thinly buried artifacts. But the real extent of prehistoric occupation in the area is just beginning to be appreciated. Furthermore, it should be clear that setting site boundaries is more an art than a science. The extent of surface scatter, for instance, may appear to change depending on a number of factors, including intervening surface pickup, recent rains, snow, and winds, ground cover, and various other kinds of surface disturbances. Thus perceptions of what makes a site, and where its edges are, are in the eyes of the beholder.

THEORETICAL BACKGROUND

Our goal in this book is to create a volume that is useful both to the general reader and to the professional archaeologist, and to avoid a mere recitation of archaeological discoveries. Throughout, we will be looking at open, flexible systems of individuals and

societies and how they change over time. These systems are tied together by countless networks of interaction, which themselves come into being, are modified, and change into other systems.

Essential to developing an open model of human society is the obvious notion that local events do not occur in a vacuum; that is, they are not produced by local conditions alone, but are also influenced by broader, external factors. This is true of prehistoric cultures as well as ethnographic or sociological ones. Urban archaeologists Pamela J. Cressey and J. J. Stephens argue that a single area or group within a city should not be studied independently; they propose to view the individual unit of study within a broader framework—“as dependent upon changes within the city as a whole” (1982:44). This logic can be taken a step further, to include the patterns of change within still larger frames such as the region or nation. Eric Wolf begins his book *Europe and the People Without History* by reminding the reader that nations and cultures must be viewed as “bundles of relationships,” not individual entities. The only way to understand the forces that guide societies is to understand that “human populations construct their cultures in interaction with one another, and not in isolation” (Wolf 1982:ix).

Often the openness of systems, or the interaction between cultures, is most visible on the “frontiers.” At the edges and boundaries of societies, differences become apparent. A clash of ideologies may take place. On the other hand, a mingling of traditions may occur. We might think of the frontier as a cultural ecotone—a transitional zone where two groups meet. In the zone, there are representatives of each separate group and also a third group, one that may be unique to the transitional zone. These interactions and the space they occupy often become *visible*, especially at the boundaries. The next task is to recognize visible parts in the archaeological record, the material culture.

Box 1B. THE CORE-PERIPHERY MODEL

The core-periphery model of spatial and social organization is a useful analytical tool for discussing the interactions that occur on the frontiers of societies. The model is not only about networks of satellite-metropolis *entities* and places, but also about the human relationships between central figures of power and domination and the marginalized individuals who remain at the edges of society. The model opens the discussion for a number of useful questions. Within the city itself, “core” sections of space and population can dominate other zones and people on the margins. If the city is the center of market and social activities, then what roles are played by the people who occupy the peripheral spaces? Land use, transportation, and communication systems link the core to the periphery, but there are structural relationships between the city-center and the edges that allow the core to dominate the peripheral areas (Cressey and Stephens 1982).

The model is especially appropriate for a city like Denver, which was in a sense on the frontier of the nation. It was a satellite of such metropolitan centers as Chicago and New York, from which many goods and services bound for the frontier originated. At the local level, Denver served as the core for such peripheral entities as mining camps, military forts, smaller towns, and eventually the suburbs.

Material Culture

Material culture is a term used by folklorists, sociologists, anthropologists, artists, pop culturists and others, usually to mean sets of objects people have created. These objects in most cases hold meanings for people, meanings that can be obvious and expressed, implicit, or explicit and implicit at once. Treasured souvenirs of a childhood vacation, a wedding ring, a collection of vinyl records are material culture, as are stone tools, powder for paints, and fruit canning jars. These objects can be studied with archaeological data to explore the ways people organize their understanding of the world, how cultures attempt to keep their separate characters, and the control of economic resources.

Objects have meaning. Each object may be able to reveal something about ideology, politics, social relations, and many other aspects of culture that go beyond function and form. Working with the concept that material items “are simply tools, passive by-products, with little ideological or symbolic component,” many people (even archaeologists!) have ignored the potential of artifacts to serve as active agents of cultural reality (Hodder 1982a:196). Recently scholars of several disciplines have come to recognize the role material culture can play in revealing other interpretations of the social fabric.

Studying humans within their built environment can stretch the boundaries of traditional material culture definitions and, in so doing, shed new light on the subject. James Deetz says that material culture is “that sector of our physical environment that we modify through culturally determined behavior” (1977:24). Thus material culture encompasses not just objects but a city streetscape (Deetz 1967) and even noise or air pollution (Upton 1992). These are things that humans create, not in the deliberate way one might sculpt a statue or place Little League trophies in a prominent display case, but in ways that nonetheless reflect and affect the values and habits of the members of the society.

Material culture can be seen as reciprocally affecting and being affected by society. Communication between maker and object exists, but it is not necessarily spoken in unambiguous, clear language. The relationship, or communication, can be interpreted on many levels. To take a common example, a sports car is a means of transportation. Yet it can also be a display of wealth and status. It can also mean youth and vitality to the owner and driver. But there is nothing inherent in the sports car that establishes its meaning—it is strictly cultural. The ambiguities and subtleties of the dialogue between material culture and society do not diminish the importance of material culture, but make it strong and powerful (Hodder 1982a). Material culture has the ability to create values as well as reflect them.

The three examples that follow illustrate some dimensions of the relationship between society and material culture as it creates ideology, establishes power, or maintains cultural identity. They illustrate the utility of archaeological studies in addressing social or political questions.

Prehistoric Hide Working: An Underappreciated Skill

Evidence left by prehistoric people is plentiful, but it tends to be limited to hard materials such as stone, pottery, and bone. These objects more frequently become part of the archaeological record than less durable items such as hides or baskets. Thus archaeologists have tended to emphasize technologies such as knapping projectile points and hunting animals, often glossed as male activities. Less attention is paid to “women’s work,” such as making clothing and tents.

The tools of prehistoric people reveal their technology, both the ways of manufacturing the tools and how the tools are used. For example, traces left on tools may suggest the type of material on which they were used. Thus it can be inferred that certain stone tools were used for producing food, clothing, shelter, ornaments, or other tools. An example of an inference often made by archaeologists is that the presence of scrapers implies the preparation of hides. “Scrapers” (the very name we have given these objects implies a function) were presumably used to remove tissue and fleshy remains from the skins of recent animal kills. Studies of wear on their working edges corroborate this use (Semenov 1964). A second level inference, then, is that these prepared pelts were used to make clothing, bags, shoes, shelters, and ceremonial objects. By analogy with historic Native American objects, this inference is strong. Furthermore, archaeologists believe that most ancestors of Native Americans came to the Americas from Siberia, and we know that Paleolithic peoples in Siberia made tailored clothing, because of carvings depicting people in fur trousers and parkas (Okladnikov 1964, Abramova 1967). We also assume that such clothing was necessary for survival in the frozen North. A small piece of tanned leather was found in the lowest level at Magic Mountain (Irwin-Williams and Irwin 1966). Scraps from hide preparation are found at Franktown Cave (see Chapter 3), along with scrapers, thus helping to confirm this string of inferences. In this manner, a picture of the daily lives of prehistoric inhabitants can be built.

We don’t know who in the society made the clothing, although ethnographic comparison suggests that women were the tailors. Nor do we know whether their clothes were decorated, although this seems likely. But archaeology can help us begin to appreciate the labor that went into the process, the skills that were needed, and the steps of manufacture. Hides had to be scraped, rubbed with a tanning agent, and staked out to dry. Then the leather was cut to the appropriate pattern using a sharp stone flake. The clothing may have been laced with leather thongs or sewn with thread made from yucca fiber (both are present at Franktown Cave). Needles were found at Lindenmeier in northern Colorado, so fine sewing and decoration were certainly possible. Decorative touches such as fringes, painted designs, or patterns made of shell or teeth were probably added. It is reasonable to suppose that the tailor of the clothing was appreciated by a culture occupying a region of cold and snowy winters. The meanings of stone tools can thus be appropriately extended by inference and analogy.

Ute Beadwork: Reflections of Cultural Change

The Colorado Historical Society has an extensive collection of beadwork from the Northern and Southern Ute tribes. The beadwork was produced and collected during a tumultuous period in Ute history: one of increased contact with Euro-American settlers. As material culture evidence, how can we understand this beadwork? By the mid-nineteenth century, Ute territory was drastically diminishing due to the encroachment of Euro-American settlers who could back up their “manifest destiny” with help from U.S. soldiers. The Uintah and Ouray Reservation of Utah held the Northern Ute, while the Southern Ute were confined to the Southern Ute Reservation of southwestern Colorado. The objects in the Colorado Historical Society collection reflect the changes as well as the constancy of Ute cultural traditions during this period (1860–1915).

Cultures are not static; they change in many ways. New artifacts might be received through trade or other contact channels. They might be new types made from local materials, whose form was essentially copied from introduced models. They might be made or decorated locally, partly from native materials and partly from imported materials. They could be manufactured through the use of an introduced technique or a native technique similar to the introduced one. Older types of artifacts might still be made, but an imported material was substituted for the local material traditionally used. The artisans may have perceived that the old material was inferior in physical properties, or perhaps it lacked prestige. Perhaps the previously used material became scarce through overuse. Or the only change about the artifact was that new subject matter was introduced. Many of the scenarios described above can be seen in definable patterns, or categories, which can help interpret the dynamics of culture change in Ute beadwork (Satersmoen 1990).

Many examples of cultural change are represented by trade goods received from the new settlers. This should not be surprising, given that vast trade networks existed among tribes long before Euro-American contact and continued even under adverse circumstances. It follows, then, that new materials and new ideas from outside could be, and were, incorporated into a culture’s traditions. Not only was this the case among prehistoric and historic period tribes, but also between the tribes and the Euro-American settlers. The continued use of old types of artifacts modified by the substitution of imported materials was widespread (Satersmoen 1990).

A good example of this trend is documented in the presence of glass trade beads among historic tribes. Indeed, when found in an archaeological context, glass beads are often used as a diagnostic tool for the relative dating of sites, that is, glass beads identify post-contact sites. By the mid-1800s glass beads were widely used by many tribes, including the Ute. Styles of beadwork varied, influenced by previous styles of ornamentation, their interactions with the settlers, and the beadwork of other tribes. Plains (Arapaho and Cheyenne) influences on Ute culture are well documented (see Smith 1974, Stewart 1966), and beadwork was no exception.

Artifacts in the Colorado Historical Society collection employing materials of Euro-American origin include beaded moccasins with metal jingles (which can be



Figure 1.5. Beaded moccasins with a design suggesting the flag of the United States. From Carol Sattersmoon, “Cultural Change Among the Northern and Southern Utes as Represented by the Beadwork Collections of the Colorado Historical Society,” Master’s thesis, University of Denver, 1990.

made from snuff cans, for example); pouches with metal buttons, metal coins, or tokens attached as decoration; and leggings of woolen trade cloth instead of more traditional materials such as buckskin. Designs as well as materials could be borrowed. On one pair of buckskin moccasins the beadwork motif appears to include elements of the U.S. flag (Fig. 1.5). Other traditionally non-Ute symbols, such as a cross, also appear in the beadwork. Some variations on traditional pieces (such as nonfunctional weapons or miniature moccasins) were probably created specifically to sell to a growing number of tourists. Objects unknown to Utes prior to European contact include watch fobs, vests, and knife sheaths, all of which incorporate both native and introduced materials. In all, approximately 46 percent of the 275 beaded items in the collection “manifested some type of acculturation” (Sattersmoen 1990:25); by far the most common category of change was that which included traditional artifacts modified by the substitution of imported materials for local materials.

It may be difficult to draw conclusions about cultural change (or constancy) from the above information alone, but that difficulty may point directly to the inadequacies of material culture studies when the emphasis lies more on the “material” than on the “culture.” Whether the collectors of this beadwork also collected the histories of its makers (and their reasons for making it) is unknown. It is likely that no one bothered to ask, “Which is more important to you: that you maintained the traditional use of moccasins or that you found a material easier to work with than buckskin?”

To the extent that most artifacts collected were traditional in function and design yet incorporated new materials, it seems likely that the Utes’ own perception of cultural identity was not compromised by the introduction of nonnative components. And why

should it be? Things change. If a new material is easier to obtain, or deemed superior in quality, and using it doesn't radically alter the way you think of yourself, then using it makes sense. If it alters the way you view your world but you are not uncomfortable with that change, then using it still makes sense. Or perhaps a new object enters your world and you have grown accustomed to its utility. Carrying a watch doesn't make you any less Ute, but wearing it on that beautifully beaded Ute watch fob is a nice touch.

The City as Material Culture

According to Dell Upton (1992), most material culture studies focus on a triad of "artifact-intention-person"; these studies assume that there is an unambiguous relationship between maker and object that is defined by intent or purpose in the creation of that object. To see the city as artifact, he suggests, would require a new look at the relationship individuals have with their built environment.

It is necessary to move beyond both that assumption and a definition of material culture that only includes the products of "culturally determined behavior." What about things that are created unintentionally or incidentally? People might intentionally alter their environment by dumping garbage in the alleys behind their houses, with a smell as an unintentional byproduct. Upton writes, "Rather than examine the simple relationships between mental intention and physical creation, between a mind and an artifact, the study of the city as material culture ought to investigate the reciprocal relationships among selves and human alterations of the environment; it must take into account both intention and reaction, action and interpretation" (1992:54).

Along these lines, we must remember that people react to and interpret our environment through five senses, not just vision. The noise of police sirens, the smell of a neighbor's yard when she hasn't picked up after her four German shepherds, the taste of serrano peppers, and the texture of the gravel path under your feet as you walk through the garden are ways to perceive our surroundings. Thus the city as an organic whole can become a category of material culture. It is an interrelated montage of the intentional and unintentional, action and reaction.

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The book is organized chronologically. Chapter 2 presents the natural environment of the Greater Denver area, including the natural landforms and subregions that provide the more discrete areas of study. The region is both boundary and frontier because of its geology. This background is important for identifying archaeological resources (which may be more likely to occur in some natural settings than in others) and also for understanding more about people's daily lives. What resources were available? Were those resources scarce or abundant, and could conflict have arisen over access to them? What materials were most popular for making tools? Were they easy or difficult to acquire?

Chapter 3 describes some of the most significant prehistoric sites in the area and what is known or can be surmised about the customs and material lifeways of these

early inhabitants. The prehistoric record stretches for roughly 10,000 years—by far the greater part of the time that people have lived in Greater Denver. These people found the juxtaposition of the high plains and foothills, upturned hogbacks and mesas with rockshelters inviting. They create lifestyles through the centuries that also made a frontier of Greater Denver.

Chapter 4 moves to the ethnohistory of the area, or the “contact” period. Much of what happened in Denver is known from historic accounts, not from the perspective of the people who were affected by the Euro-Americans’ arrival, though contemporary histories and drawings demonstrate their important presence (which of course continues today). But there has not been a consistent effort to uncover the ways these cultures adapted, modified, or preserved their customs and values. Archaeologists may be frustrated by the paucity of data from this period, but there are a number of interesting areas to consider, especially the potential for corroborating archaeological analyses with documentary evidence. Greater Denver was sometimes a frontier between Native American groups and certainly a location for clashes of cultures.

Relatively little historical archaeology has been done in Greater Denver, so our account in Chapter 5 is restricted, but some interesting inferences about ethnicity and gender can be drawn. We know that Denver maintained a large, diverse population with distinct neighborhoods, business districts, and cultural institutions. The Tremont House, for instance, was a popular gathering spot; investigations at this site have produced some surprising information on the habits of its visitors over several decades. The survey of the Rocky Mountain Arsenal site reveals the work of women in truck farms and “butter and eggs” production. Various frontiers and boundaries appear—urban and rural, urban and suburban—along with the wish to preserve the landscape while using it in various ways.

The final chapter sums up what we know about Denver from archaeological explorations and looks toward what might be learned in the future. Greater Denver has been the scene of much human activity and will continue to provide archaeological sites as it continues to grow.