Historic Inscriptions of the Northern Plains: Identity and Influence in the Residual Communication Record

Timothy Rostov Urbaniak

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HISTORIC INSCRIPTIONS OF THE NORTHERN PLAINS

IDENTITY AND INFLUENCE IN THE
RESIDUAL COMMUNICATION RECORD

By

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Dissertation

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Abstract:

During the 19th and 20th centuries, emigrants on the Northern American Plains engaged in a communication behavior that left messages carved, incised, and painted onto the physical landscape. Often mingling with indigenous pictographs and petroglyphs known as "rock art," the emigrants' messages are called "historic inscriptions" and exist in the form of names, dates, text, and ideographs. This information referred to here as "residual communication" represents archaeological evidence of individuals and groups who influenced and transformed environments and histories in the American West.

The goal of this dissertation is to examine historic inscriptions on the Northern Plains to explore how these communication elements convey individual identities, group identities, and cultural values during a period of sudden and drastic transitions in the region. This dissertation research asserts that historic inscriptions are an unexplored cultural resource that can provide information about topics such as cultural identity, the importance of self, and are literal signatures of colonialism via superimposition atop Northern Plains rock art. While many publications have examined the intricacies of rock art, this dissertation is the first of its kind to systematically examine the data potential of historic inscriptions on the Northern Plains as a cultural resource.
ACKNOWLEDGEMENTS

The trail leading to this dissertation has been long and winding, but many have helped along the way. As always, my acknowledgements begin with my wife Cindy, who runs my life so that I can do what I do, our daughters Alexis and Adriane, and sons-in-law Dennis Elliott and Kevin Nielsen, who have assisted with fieldwork and have always offered words of encouragement to “keep going.”

For many years, students and volunteer members of the MSU Billings Archaeology Field Team have contributed to inscription research, but I would especially like to thank Orrin Koenig, John Elliott, Robin Mutchler, James Busse, and Harley Burch for their adventuresome support. Without you cronies the world would be a darker place.

This research would not have begun without the support of the rock art research community, particularly Dr. Lawrence Loendorf, Dr. James Keyser, Dr. Linea Sundstrom, Dr. John Greer, and Dr. Mavis Greer. I particularly want to thank John and Mavis for their encouragement over the years that this research is worthwhile, that I should keep going, and the occasional reminder that this work will never truly be done. Of course, gratitude is extended to supporting state SHPO offices, particularly the Montana crew. Many of these cultural resources are located on public lands, and support from the Bureau of Land Management, National Forests, and Montana State Parks have been both conceptual and monetary. A particular debt of gratitude is owed to Halcyon LaPoint and Mike Bergstrom of the Custer National Forest, two of the finest forest archaeologists around, and to Dr. Sara Scott of Montana State Parks.

Lastly, but certainly not least, thank you Dr. Kelly Dixon, members of my committee, and Bethany Hauer of the University of Montana. Go Griz!
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Readers of this dissertation need to be informed that many of the images included have been digitally enhanced for clarity, especially in cases of faint incising. In no instance have any of the images been pixel-manipulated. Images have been reduced significantly from the original data files for inclusion in this document. The original image files range from one to eighteen megapixels and all images were obtained with digital cameras. Unless noted otherwise, all images were personally obtained by the author, Timothy R. Urbaniak.

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It’s a warm summer evening a decade or so ago in Ekalaka, Montana and Dr. Linea Sundstrom, noted rock art researcher, is presenting a program on regional rock art sites to locals gathered at the museum there. Linea is working her way through a series of PowerPoint images of rock art from the nearby North Cave Hills of South Dakota and is becoming somewhat distracted by the whispering conversation by a pair of elderly couples near the front that are becoming more interested in the historical graffiti coexisting with the rock art.

“Bill Nielson” the woman whispers, “Isn’t that Emma’s great-grandfather?”

“I think so” the elderly man whispers back. “They homesteaded east of here.”

“Didn’t he marry that Norwegian girl from Bismarck?”

“Yah. She was a Swenson.”

Linea pauses, casts a glance at the offending seniors and continues her presentation, but I am lost in a revelation. The dichotomy is conspicuous. To many, if not most rock art researchers, these historic inscriptions are vandalism. They are despised, disdained, and have long gone under-documented as a cultural resource. In some cases, government entities have paid to have this component of the historic record obliterated forever; but I was coming to believe that these inscriptions have historical and cultural value. They were clearly significant to the seniors at Ekalaka, as they represent part of the story of them. I believe that through this first-of-its-kind examination of historic inscriptions as a cultural resource, it can be shown that they are part of the story of all of us.
CHAPTER 1: INTRODUCTION

Everyone has to scratch on walls somewhere or they go crazy.

(Ondaatje 1997:70)

1.1 Dissertation Research Goals

On the Northern American Plains, great effort has been spent to record and document Native American pictographs and petroglyphs, commonly referred to as “rock art.” Inscriptions dating from the early 19th century to the present often coexist with these figures. These inscriptions represent a continuum of inscribed writing and images that date from 3300 BCE, the earliest known time of written, textual communication (Moran 2010:82). This chapter will introduce the project's research goals, define historic inscriptions, examine current recording practices and perceptions regarding these cultural resources, and outline how inscriptions can be examined in order to explore questions of identity and the influence of colonizing groups on the Northern Plains.

This goal of this project is to establish a foundation for documenting and studying historic inscriptions on the Northern North American Plains. Due to the fact that historic inscription research in this region is in its infancy, this dissertation will describe, categorize, and analyze these cultural resources. Although inscriptions date throughout the 20th and into the 21st century, the scope of this dissertation will span the 19th century up to the year 1940, to encompass the era of an intense influx of explorers and immigrants onto the Northern Plains, the homesteading era, and the eve of World War II. These inscriptions included evidence of written communication, as well as cases where images accompany text; many are superimposed over previously existing communication from indigenous cultures, commonly referred to as rock art. This historic inscription research is intended to set a baseline for treating these inscriptions as a
cultural resource that represent an offshoot of the field of rock art research. As will be demonstrated herein, historic inscription studies will be relevant to regional and transnational archaeology (Fyfe 2010), as well as to heritage and cultural resource managers, stakeholders, local, and tribal communities.

Unless noted otherwise, photographs of the inscriptions referenced in this dissertation are from the personal data library of the investigator. This digital collection documents hundreds of rock art and historic inscription sites on the Northern Plains and contains in excess of one hundred thousand digital images. Components of the archive are stored as part of the Montana State University Billings, Library Special Collection. The files represent almost twenty years of documenting rock art and historic inscriptions in the region, and is arguably the largest reference resource in existence that focuses on historic inscriptions of the Northern Plains.

During the course of the past decade of research involved in backing this dissertation, my crews and I have documented many thousands of historic inscriptions. It quickly became apparent that these cultural resources included textual and ideographic evidence of the region's transformative activities, such as fur trading, mining, and the transcontinental railroads. These activities are documented across the Northern Plains via historic inscriptions, representing a form of communication that has long been a part of the human career. Human communication has transformed over its history through change and evolution that have affected how we obtain, store and convey information (Moran 2010:2). Our earliest ancestors communicated in the form of proto-writing that was etched on materials including ivory, bones, stones, and stone walls. These earliest forms of communication were distributed over previously uninhabited environments as humans moving into unfamiliar territory learned to cope with their environment (Moran 2010:77).
1.2 Introduction to Historic Inscriptions

Archaeological and anthropological researchers have long pursued the documentation and interpretation of petroglyphs and pictographs, commonly referred to as rock art. Often coexisting, or in some cases superimposed over these figures (Figure 1.1), are more recently created historic inscriptions. In the broadest sense, a historic inscription is a carved, scratched, or painted, figure or textual assemblage that was created by European explorers and immigrants. On the North American Plains, these would include inscriptions of the time period that include and then post-date the "Wm Clark 1806" inscription found at Pompey’s Pillar in Montana. In the American Southwest and Central America, historic inscriptions date to periods of primary European cultural contact, including early Spanish exploration and colonization. These more contemporary inscriptions represent a continuous chronology of the people, groups, and events who shaped the region during times of colonialization and transition. While the inscription tradition continues seamlessly through the end of the research period, World War II and the events that followed transitioned societies to a more global way of thinking.
Archaeologists and anthropologists who research rock art commonly refer to their subject matter as pictographs, which are painted; and petroglyphs, which are scratched, incised or pecked. A more expansive list of descriptors to describe cultural graffiti includes ideograms, ideographs, pictograms, dipinti, epigraphs, and symbols, which are all descriptors for forms of residual communication. Epigraphy, the study of ancient inscriptions or epigraphs, as well as symbolism and languages, emerged during the 19th century (http://www.merriam-webster.com/dictionary/epigrapher 2009). Egyptian hieroglyphs, Greek, Roman, and other forms of ancient writing were studied, which led to a deeper understanding of these past cultures and eventual successful translation of previously unreadable text. The study of historic inscriptions is thereby related to the field of epigraphy, and arguably, a relatively new subfield of epigraphy.
Historic inscriptions are here defined as forms of "residual communication" incised into the cliffs, buttes, and spires of the geologically dominant sandstone formations of the North American Plains and which are represented by names, dates, text, and images. The term "residual communication" is introduced in this research to refer to a form of indirect communication that has been unofficially created and left behind, with no opportunity for interaction between the sender and the receiver (Leach 1976:10). Dates accompanying these historic inscriptions document the droves of explorers, trappers, and military groups, railroad workers, miners, homesteaders, and other immigrants who moved into and migrated across the American West. It is said by some rock art researchers that historic inscriptions differ from pictographs and petroglyphs in that rock art is part of ceremonial tradition (Kaiser and Klassen 2001; Loendorf et al. 2006), but without a structured review of historic inscriptions, this may be an incorrect assumption or one made prior to defining what was considered "ceremonial" for the region's 19th and 20th century settler communities. For example, this dissertation presents evidence of multiple examples of Masonic inscriptions, including one at Independence Rock (Figure 2.9) along the Oregon Trail where a dedication ceremony was held in 1862. Anthropological studies of ritual or ceremonial behavior is not limited to religious functions, but encompasses "any fixed or stereotyped practice, behavioral pattern, or embellishment that has no evident instrumental purpose beyond communication or symbolization" (Winzeler 2012:130). Evidence of revisitation are present at multiple historic inscription sites and is can be shown through the presence of inscriptions with multiple dates commemorating the return(s). The presence of multiple inscriptions spanning a chronological time period at any site is an indicator of a behavioral pattern documented through this form of residual communication.

Some inscriptions were created by noted historical figures, such as the signature of
William Clark of the Lewis and Clark expedition on the sandstone butte known as Pompey’s Pillar east of Billings, Montana. This is considered to have triggered a tradition of leaving evidence of one's presence (Olson 2002:9) in the form of historic inscriptions. These historic remnants are often superimposed over older prehistoric pictographs and petroglyphs, and while it should be noted that historic inscriptions represent a change in culture through content, it is more broadly significant that the inscribers are employing a universal residual communication methodology that includes focusing inscriptions in concentrated areas that contribute to defining functions of the landscape (Chippindale and Tacon 1998:22) and that superimposition occurs even when other clean palettes are nearby (Lewis-Williams 1983:40).

Collectively, the historic inscriptions contribute to the archaeological documentation of general settlement patterns and changes that occurred in the region. Individually, historic inscriptions represent personal signatures of identity through names, dates, other text, and images, and place those people and groups at specific locations and times. The people who left these marks participated in significant events that changed the character of the West, such as troop movements during the Plains Indian Wars (Urbaniak and Rust 2009) and cavalry battles, including the Battle of the Rosebud (Loendorf and White 2010) and the Battle of the Little Big Horn (Urbaniak and Elliott 2012). Inscriptions exist from people who participated in land surveying, who took part in the United States Geological Survey, and who served in the Civilian Conservation Corps (Urbaniak 2009). These inscriptions also relay communication from various cultural groups and include inscriptions in Chinese, Japanese, German, Spanish, and other languages.

Beyond the names and dates, the artistry of the 19th and early 20th centuries is also represented by the carved motifs, including dancing women, birds, buildings, ranch brands,
horses, cattle, and stylized text, expressed in styles that represent varied levels of artistic training, such as *bas relief* or two-dimensional projection. These etchings illustrate episodes in peoples' daily lives and document the ways in which settlers and early travelers made distinct efforts to somehow preserve their movement and passage for others to see, and as a record of their own efforts and presence.

Even though historic inscriptions are valued by individuals and communities alike (Urbaniak and Rust 2009), the recording of historic inscriptions have customarily been underdocumented when compared to the treatment of Native American rock art (Urbaniak 2010). Nevertheless, these relatively unexplored and under-researched cultural resources have the potential to contribute to our understanding of recent, transnational colonization events in the American West as fully as the study of pictographs and petroglyphs have contributed to the understanding of indigenous peoples' use of this region (Keyser and Klassen 2001); (Loendorf et al. 2006).

Historic inscriptions are often referred to as graffiti or vandalism by rock art researchers, who have long had a general distaste for these cultural resources. This may be due to the interests of those documenting such sites, but this perspective may be an interest-based response as proposed by Richard A. Rogers, who discussed this topic in a paper entitled "Overcoming the Preservation Paradigm: Toward a Dialogic Approach to Rock Art and Culture" (Rogers 2007). By ignoring or demeaning the presence of more recent communication, and thereby devaluing it, the importance of examining this unique resource that documents the relationships between cultures over time is diminished. Just as individual rock art figures and panel assemblages contain information about prehistoric culture and communicate information about it, more recent contributions to the residual communication record, whether they date from the 1700s, 1800s, or
1900s, also contribute to that record. The latter are natural and normal continuations of forms of residual communication placed directly on the landscape and should be examined and treated as cultural resources in their own right. Moreover, the legal timeline for considering something “historic” currently extends from the past several centuries of colonization up to fifty years before the present. The specific definition when determining eligibility for the National Register of Historic Places (NRHP) states that the property is “old enough to be considered historic (generally at least 50 years old)”

(http://www.nps.gov/history/nr/national_register_fundamentals.htm).

Under the National Register Guidelines, consideration may also be given for evaluating more recent properties. A description of these guidelines is included in the National Register Bulletin “Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Past Fifty Years” (Sherfy and Luce 1979). Among other criteria, under these guidelines consideration is given for "Historical Context, Scholarly Evaluation, and Fragile or Short-Lived Resources" (Sherfy and Luce 1979:5). Indeed, there are examples of significant inscriptions that date from the past fifty years.

Consider the possibility that a soldier carved their name on a trip home from service in Vietnam (Figure 1.2), listing their military affiliation, or an inscription of a Lunar Lander (Figure 2.3). As an illustration of the moving lens of what constitutes a "historic" inscription, note that the date of the Vietnam inscription literally passed into the fifty year time period during the writing of this dissertation (2014). Now, that set of inscriptions is at this time potentially eligible
Figure 1.2. Historic inscription of "Sgt. Valley, 1942 - 201, 1963, 7th Advisory Team Bac Lieu, Vietnam" inscribed at SS052 in Medicine Rocks State Park.

Figure 1.3. Inscription of a Lunar Lander at the Carbone site near Decker, Montana.
for the NRHP under National Register Criterion A, which considers properties associated with important historic events as eligible (Sherfy and Luce 1979:11).

The primary point is that while acknowledging the standard guideline of fifty years in the past, more recent inscriptions may represent patterns and cultural significance that qualify under guidelines meant to preserve "fragile" resources or material that represents other qualifying articles. Further, consider that fifty years before the present (2014) is 1964, with the 1970s on the immediate horizon. Even under the strict interpretation of the fifty-year standard, inscriptions that were made of peace symbols, flowers, and other cultural icons of that era are soon to be eligible for the NRHP as representative of a period significant in American History.

1.3 Rock Art Research in North America and Historical Inscriptions

To gain an understanding of professional archaeologists opinions of historical inscriptions, I initiated conversations with leading regional rock art researchers to obtain their impressions of the perceived value – or lack of value – of this residual communication. These conversations, along with a survey of relevant literature, are summarized below. In addition to contextualizing the history of archaeology of historic inscriptions, this compilation of opinions, along with the information presented in this dissertation, are intended to provide a foundation for documenting these resources in accordance with NRHP guidelines.

Dr. Lawrence Loendorf has long documented historical inscriptions while recording rock art sites, as evidenced by inclusions in the oft referenced *Archaeological Sites in Weatherman Draw* (Loendorf 1991). Throughout the document Dr. Loendorf noted historic inscriptions that were coexistent with pictographs and petroglyphs (Loendorf 1991:7). Given that the historic and prehistoric material often appear together, one entry seems to indicate that survey members may have been using historic inscriptions as a potential initial locator for
guiding them to prehistoric material: “Given the frequent association between historic graffiti and native rock drawings, it would not be unusual to find some fine incised line figures at this site“ (Loendorf 1991:27).

Dr. Loendorf also made detailed descriptions of many historic inscriptions that were documented along with comments placing them in interpretive context.

The most descriptive script reads Chris Weathermon (Panel A), in cursive style. Beneath it, E. C. Weathermon, and beneath it, DEC the 7 1905. This vertical pair of names are underscored by a curving line that has numbers under it, arranged as through someone were completing an addition or subtraction problem. There are three of these problems, and all contain the number 318. One can only speculate as to the meaning of the numbers, but someone may have been adding up wages, counting sheep, or simply practicing arithmetic (Loendorf 1991:31).

Additional historic inscriptions included in the report include the text “L. L. 1914” located above a drawing of a pistol, a detailed incising of a ship labeled as either “Marr.Mack” or “MaryMack,” and many late 19th and early 20th century names and associated dates. Included with the references are comments that, “other drawings at the site are also important” and that, “additional recording should be completed at this site” (Loendorf 1991:33-36).

Dr. Loendorf currently continues to record all inscriptions during the documentation process at cultural sites. He believes that this information is important for providing a baseline for “law enforcement reasons,” and also realized the value of historical inscription content (Dr. Lawrence L. Loendorf 2009, elec. comm.). In his correspondence, Dr. Loendorf also cautions that some inscriptions may not be genuine and that one motivation to create these fraudulent
Dr. Loendorf believed that “historic names and obviously important historic petroglyphs need to be treated differently than recent names and dates.” While this statement acknowledges the data potential of historical inscriptions, Loendorf also noted that determining specific boundaries for perceiving particular values may be difficult. He proposes that one methodology may be to establish a baseline that is associated with the date that a particular site became a National Monument, such as at El Morro National Monument in New Mexico – or when a site is placed on the National Register, such as at Legend Rock in Wyoming. He further proposed that anything found on the surface beyond those dates “be removed or in-filled” (Dr. Lawrence L. Loendorf 2009, elec. comm.).

**Dr. Linea Sundstrom** is an archaeological and anthropological researcher with an extensive background in Plains rock art. Her leadership of detailed rock art recording projects in western South Dakota has immersed her in the divergence generated by the coexistence of prehistoric and historic inscriptions. Dr. Sundstrom believed that historical inscriptions should be recorded with the same diligence as the Native American material. To that end, her recording methodologies for the historic and prehistoric inscriptions are functionally identical (Dr. Linea Sundstrom 2009, elec. comm.). Her diligence in recording was useful in the prosecution of a recent “vandal” of a rock art site in the Cave Hills of South Dakota.

In September of 2006, Walter Digmann, a South Dakota man, pleaded guilty to a misdemeanor charge of violating the Archaeological Resources Protection Act (Sundstrom 2006:7). Mr. Digmann had carved his name near panels that were listed on the National Register of Historic Places. It was possible to date the violation due to photographic evidence on file that was obtained during rock art survey activities. He was convicted even though the inscription did
not directly impact any prehistoric material. Dr. Sundstrom testified for the prosecution regarding the significance of the site, and the problems that can occur “when graffiti goes unrepaired” (Sundstrom 2006:7).

During the trial, Mr. Digman testified that he was “leaving a piece of history.” After the trial, Cheyenne River Sioux Tribe historic preservation officer Albert LeBeau III commented that, “It will show the public that these areas are important, not only to the Native American people, but to the people of the state of South Dakota. It’s not just an ‘Indian thing,’ per se. It’s everybody’s history, and we have to respect that.” Unfortunately for Mr. Digman he missed being ‘history’ by about 50 years.

While initially Dr. Sundstrom believed that the historical inscriptions were nothing more than cultural representations of “Kilroy Was Here,” she came to recognize the cultural values embedded in these resources. Her current and future projects include the documentation of inscriptions created by Civilian Conservation Corps (CCC) workers, members of the Black Hills Expedition of 1874, shepherds, and cowboys. In addition, she has observed inscriptions representing the Ku Klux Klan (KKK) activities near Sturgis, South Dakota. While she does remain skeptical regarding the value of historic rock art, there is acknowledgment that “you do get some cultural patterns” (Dr. Linea Sundstrom 2009, elec. comm.).

Mike Bergstrom, archaeologist on the Custer National Forest (CNF), is familiar with a broad gamut of sites that include varying combinations of prehistoric and historic rock art. His response to questions about the potential value of inscriptions is that “Historic rock art has a value in that it documents a continuum of a landscapes’ inhabitants and how/what they want to document during a specific moment in time, with the subtle realization that their rock art may be viewed by other people in the future” (Mike Bergstrom 2009, elec. comm.).
In 2005 the CNF joined Montana State University Billings as a founding partner in an initiative to document historical inscriptions. Nine years after its inception, the project is still active as sites continue to be documented and added to the available data. The willingness of the CNF archaeologists to participate in the project indicated an awareness of all issues relevant to historical inscriptions and their role within the documented record. The CNF encourages the documentation of historic inscriptions within their boundaries and is fully aware of the potential of these cultural resources and the balancing act required to responsibly manage all of the heritage resources under their jurisdiction.

As an example of the conundrums faced, there are locations within the Forest boundaries where families that use National Forest Service land for grazing have been carving their names at sites since the 1880s. This genealogical chronology is important to the families and represents their heritage and culture, but presents problems for resource management. Should more recent contributors to the family historic record be prosecuted for vandalism, thereby straining relations between ranchers and the Forest Service? Should “preservation” efforts remove more recent additions to the record, thereby devaluing their existence? What is the most appropriate way to convey to these land steward partners that a reduction or elimination of this cultural tradition is desirable? Or should accommodations be made for the families that have engaged in this practice for over a century and the site therefore be managed as a traditional cultural property (TCP)? Certainly, to these historic occupants of the land there is no problem to be solved, so when we extend the discussion of the potential value of inscriptions beyond archaeologists and historians to the additional publics, it becomes apparent that not everyone views the issue from the same perspective. Mr. Bergstrom realizes that establishing a balance in the stewardship of cultural resources while responsibly managing tax dollars requires continual vigilance.
Concerns regarding the time and budgetary considerations necessary to perform detailed recording of historical inscriptions is echoed by archaeologist Dr. Johannes Loubser. Dr Loubser argued that that extensive recording is dependant “on the quantity and issues to be addressed (i.e., if overwhelming in numbers and with a limited budget it becomes impracticable and impossible to record all historical markings in detail)” (Dr. Johannes Loubser 2009, elec. comm.).

Embedded in the text from field notes by Linda A. Olson during her recording of Pictograph Cave in August of 1993 is the phrase “I hate the time graffiti takes” (Olson 1993). While this statement may have reflected her opinion during a tedious point during preservation work involving the removal of graffiti at the cave, Linda believed that “All inscriptions have value” (Linda Olson 2009, elec. comm.). Pictograph Cave was a well known and commonly visited site by inhabitants of early Billings, Montana. Field notes remaining from Linda’s restoration work at the site contain the only known documentation of historical inscriptions that once existed there, including the now removed "11-16-12, Aris and Ester"(Olson 1993).

Linda’s disdain for documenting historical inscriptions is nowhere evident in the Baseline Rock Art Documentation of Pompey's Pillar report that she completed in 2002 (Olson 2002). Standing as an exemplary case of documentation methodology for historical inscription sites, the survey recorded thousands of cultural remnants spanning the prehistoric period to contemporary times. The report not only detailed the inscriptions found, but placed many of them in historical context. Remarks included in the report emphasize the long-term value of inscriptions documented, as the pillar:

Provides an excellent opportunity for researching the provenance of the butte’s signatures. Researching and developing a local history aspect could enhance the record for posterity. Local oral histories could be gathered. County histories could be examined. Cemeteries could be visited. Several of the surnames on the butte can be
found on tombstones in the Ballantine cemetery. There must be local connections for finding the history of those and other names (Olson 2002:30).

**Dr. John Greer** and **Dr. Mavis Greer** have been leaders in rock art research since the early 1990s, and they have both migrated toward a deeper appreciation of the historical material intermingled with the prehistoric pictograph and petroglyph remnants on the Northern Plains. Their interest in the documentation and preservation of these Native American cultural resources extends far beyond their cultural resource management (CRM) projects.

Dr. John Greer is concerned about the lack of consistency being applied to graffiti removal by the National Park Service, United States Forest Service, and Bureau of Land Management, noting that they are “allowing nonqualified people, clubs, and groups to go into caves and other sites and indiscriminately remove all names, dates, and other presumed graffiti with no controls and no study” (Dr. John Greer 2009, elec. comm.). In some cases prehistoric art has been impacted or obliterated due to these well meaning, but uneducated efforts. In one documented case involving the sanctioned destruction of contemporary cultural material located in a cave in central Montana, unique material representing polychrome psychedelic art from the early-1960s complex style was removed. The Forest Service removed the panel and this emblematic component “representative of a period of social change in American history” is forever lost (Greer and Greer 2004:8).

The Greer's recording efforts have recently been modified to include everything present, but Dr. Greer admitted that he is more interested in the older material, but questions if his personal bias is obscuring potential anthropological insight (Dr. John Greer 2009, elec. comm.). Dr. Mavis Greer notes that some sites containing only contemporary graffiti from the 1970s and profanities have not been recorded. In addition, Mavis Greer noted that some variance does occur within their site recording depending on if it is a CRM project or personal research. Examples of
objects recorded that do not fall within the fifty year historic timeline “include a marijuana leaf and a sex scene that is clearly representation of modern culture” (Dr. Mavis Greer 2009, elec. comm.). Another site that is located in south-central Wyoming is referred to as “Jason’s Wall.” The site contains “many messages to Jason, who was apparently born about 1978. His father, other relatives, and friends wrote messages to him on it from that time to the present” (Dr. Mavis Greer 2009, elec. comm.).

**Dr. Julie Francis** is an archaeologist with the Wyoming Department of Transportation and an adjunct Professor at the University of Wyoming where she teaches “The Anthropology of Rock Art.” Dr. Francis was a proponent of recording everything present at a site to accurately document the overall condition of a panel at the time of documentation. This information is used primarily to “monitor changes in site condition, vandalism, etc.,” but comments that “Historic inscriptions can have value and meaning (for example – along the emigrant trail), as well as providing some information about historic use of the site and the general area, as well as different cultural contexts in which people place things on rocks” (Dr. Julie Francis 2009, elec. comm.).

While some rock art researchers struggle with the challenge of balancing the value of prehistoric and historic resources, at places like Legend Rock in Wyoming, “Plans are underway to include some interpretation of the historic inscriptions (pre – 1988), so that site visitors gain an appreciation of historic use of the area and appropriate behavior now” (Dr. Julie Francis 2009, elec. comm.). This education regarding “appropriate behavior” may need to extend across targeted cultural groups, as “There is a case where [a] tribal member from the Wind River Reservation went on a vision quest to Legend Rock and made a new image. The tribal authorities were not pleased” (Gary Hein 2009, elec. comm.).
Rock art researchers beyond the region of the Northern Plains are engaging historical inscriptions as well. **Gary Hein** is a rock art researcher in the American Southwest who is involved in rock art recording projects. Hein takes exception to the term "graffiti" being defined as "writing or drawings scribbled, scratched, or sprayed illicitly on a wall or other surface in a public place." He believed that

It is judgmental and implies that we have the special power to determine what is and isn’t ‘forbidden by law, rules, or custom.’ The exception is a clear case of today’s marks which are more appropriately labeled vandalism. I suggest ‘historical’ is a better term and ‘superimposed’ rather than defaced. The name ‘Sam’ was superimposed on the shield figure. This is a fact. "The shield figure was defaced with modern graffiti is a judgment."

"Vandalism" may in itself be a cultural custom related to cultural conflict, as demonstrated by sites in the southwest, where priests encouraged the converts to negate the power of the rock art by placing crosses on it. There are the desecrated panels on the San Juan that were obliterated by a Navajo medicine man. We find images that appear to have been reworked to ‘give it new life’. I would guess that the locals at el Morro were not happy that Coronado wrote on the rocks near their images and would have considered the act illicit (Gary Hein 2009, elec. comm.).

As a prominent rock art researcher, **Dr. James Keyser** focuses primarily on the recording of prehistoric components and believed that “the great bulk of inscription graffiti is nothing more than vandalism” and that they “have no value anthropologically or historically” (Dr. James Keyser 2009, elec. comm.). This initial response is confirmed by his reticence to record historical inscriptions, and is evident in his statement included in a comprehensive review of rock art from the area surrounding Ashland, Montana: “We did not record as rock art any of the thousands of
historic inscriptions or drawings that date to the period from about AD 1890 to 2005” (Keyser 2005:3).

But Dr. Keyser viewed the possibilities with an open mind for the future by commenting that, “I’m willing to be convinced otherwise (e.g., that graffiti does explain parts of culture that we can’t get much easier by just reading a book or talking to the artists). What it would take for me to be convinced is a well thought out argument, reviewed and published in an anthropological journal, that showed the sorts of things that rock art studies routinely show” (Keyser 2005:3). This is an excellent point and highlights not only the lack of research that has been done regarding these cultural components, but reinforces the need for comprehensive surveys to occur in order for those studies to be conducted.

Dr. Keyser’s seemingly negative approach to his perception of the lack of value to be found in historical inscriptions must be considered alongside the positive contributions that he has, in fact made to their research and documentation, including an examination of a 1924 inscription with two automobiles with passengers at Writing-On-Stone in Canada. In addition, Keyser has examined the relevance of intermingled cultural remnants at Names Hill along the Oregon Trail in western Wyoming, and expressed an interest in conducting a survey of pre-1880 names in the Yellowstone Valley (Dr. James Keyser 2009, elec. comm.).

The above referenced historic inscription of the “two automobiles with passengers; carved in 1924 by the Piegan elder Bird Rattle. It commemorates a trip to Writing-on-Stone” (Keyser and Klassen 2001:238) and is representative of the biographic tradition being continued today. Further evidence of a ‘historic inscription’ that is in fact a continuance of protohistoric tradition can be found in “the combination of historic inscription with Indian art like that of the two Crow Doughboys and Joliet” (Dr. James Keyser 2009, elec. comm.). These two sites are
evidence that the tradition of communicating biographic information through inscriptions did not cease when the indigenous people were influenced by immigrants on the Northern Plains, the content merely changed to reflect new ideas and experiences.

Obviously, opinions regarding the value or potential value of historic inscriptions were varied. From the baseline of documenting “graffiti” for the purpose of providing evidence for potential prosecution, to acknowledging that these cultural materials may have research value, the perceived value of historic inscriptions was debatable among this group of notable rock art researchers who have extensively studied the interpretation and cultural role represented by pictographs and petroglyphs. Perhaps some additional perspective can be gained by this group if they consider that rock art research endured a lack of respect for historic inscriptions in earlier times.

The limited amount of attention that rock art research initially received is well understood by Dr. David S. Whitley, author of one of the first dissertations on North American rock art (Whitley 2001:41). While summarizing the history of rock art research, he elaborated that some early American archaeologists felt “Rock art as a whole failed the test of scientific worth. It could be ignored because it could not contribute to our understanding of the past. The only value of the archaeological record lies in the scientific information we can extract from it, and none could be gotten from rock art” (Whitley 2001:15).

This sentiment was further echoed by other early proponents of the value of rock art. “One of the most commonly expressed laments of rock art researchers in the United States in recent years is the fact that a majority of professional anthropologists either neglect or ignore the subject when dealing with the anthropology of any given culture area” (Clelow 1981:78). Perhaps the studies of rock art and historical inscriptions have more in common than merely a
shared proximity on the sandstone palettes of the North American Plains. It is also possible that
the study of historic inscriptions may help bridge the "textual" value of inscriptions studied in
fields that include Egyptology and classical archaeology by examining the anthropology of
inscriptions as a whole, rather than only focusing on a specific period.

Rock art and historic inscriptions share a sense of urgency in terms of the importance of
documentation. Created primarily on exposed sandstone formations, historic inscriptions are
under a constant threat of destruction by forces of erosion, vandalism, theft, and land
development. Rock art and historic inscriptions do not, however, receive equal treatment as
documented cultural resources. When post-contact inscriptions are referred to as “vandalism” or
“graffiti,” a value-based judgment is being made (Rogers 2007:53). When these terms are
applied by rock art researchers, they are imposing their values on the intermingled cultural
representations often found at these sites while ignoring potential questions about a broader
scope of human behavior. Therefore, this project has a potential to not only contribute to a
deeper understanding regarding the issues of identity and influence of the inscribers, but can
potentially lead to a broader examination of the behaviors that lead to the intermingling of these
forms of cultural heritage around the world.

1.4 Historic Inscriptions as Communication

While the recent pre and post contact transition over the past few centuries has been well
studied through the examination and interpretation of petroglyphs and pictographs in books such
as Storied Stone by Linea Sundstrom (Sundstrom 2004), Plains Indian Rock Art by James D.
Keyser and Michael A. Klassen (Keyser and Klassen 2001), and Thunder and Herds: Rock Art of
the High Plains by Lawrence Loendorf; historic inscriptions in the American West have received
little, if any, scholarly attention. James H. Knipmeyer's (Knipmeyer 2002) Butch Cassidy Was
Here: Historic Inscriptions of the Colorado Plateau, inventories and locates inscriptions, but
does little to place the inscriptions in anthropological context, which is typical of previous
historic inscriptions research (Hileman 2001).

The term "residual communication" is herein used to refer to communication that has
been informally created and left behind, with no intention to explain it further by its creator.
Residual communication implies a broader range of potential purposes and forms than the term
"graffiti," which is currently defined as being generated by distinct subcultures of American
society (Bartolomeo 2001), such as these provocative messages in public urban spaces with
specific intent (Paynter 2005). Residual communication is viewed similarly in Europe, where the
practice dates back millennia, graffiti is predominantly associated with "counter cultural
movements" (Brunn et al. 2012 :233). While graffiti is indeed a form of residual communication,
the term is not appropriate as a generalization for the historic inscription record as they were not
created out of malice, are not dominantly placed in public locations, and are not associated with
counter cultural movements. In the view of some researchers, graffiti transitions into becoming
public art of street when it is not seen as "polluting" (David and Wilson 2002:43). Graffiti and
historic inscriptions do share communication commonalities in that they both incorporate text
and images to communicate a message, identity is generally a key component, and group
associations often occur, generalized by many to be gang associated (Kendall 2012:186).

While the dominant form of historic inscriptions are text-based, ideographs or ideograms
(graphic symbols that represent ideas or concepts) also are plentiful and also represent values.
These artistic articles are therefore relevant to cognitive communication and represent implanted
cultural perspectives, such as the role of brands within western society. As humans
communicate, we participate either as senders or receivers of messages. These messages may be
conveyed through a variety of methods that include written, spoken, or gestured conveyances (Beck et al. 2005:3). Within each of these general categories, sub-methods of communication delivery exist; for instance, while language may be spoken, many distinct languages and dialects exist. In the case of written inscriptions, the language used may be an indicator of the dialect of the writer, as in the case of a Chinese inscription written in "traditional Chinese characters - as opposed to post-1949 simplified Chinese used in mainland China" (Urbaniak and Dixon n.d.:3). Written Chinese developed from pictographs through ideograms into its current form over a span of thousands of years (Fazzioli 2005), but while all written language(s) originated as drawings or pictures, current scholars of the Chinese language no longer accept the "ideographic myth" that it is solely ideographic (Dong 2014:181, 182).

While written language has its origins in pictographs, ideas continue to be communicated through graphical representation. Preliminary research related to historic inscription symbology on the Northern Plains reveals a collection of both aesthetic (art) and semiotic (sign) representations. Examples of these graphical representations include hearts, religious symbolism, livestock brands, Masonic symbols, liquor representations, firearms, people, and buildings to name a few (Urbaniak 2009). Humans commonly communicate basic ideas through pictures (Rossides 2003:3). Images are intended to result in visual perception, which is the meaning concluded after the image is interpreted by the brain (Lester 2006:51).

Historic inscription research is in its infancy, and therefore, is at the cultural history phase of theoretical maturity. Establishing descriptive typologies typical of cultural history research are necessary before one can begin to apply more anthropological theories. Nevertheless, theories of communication clearly have relevance to the interpretation of these cultural resources. The commonly used communication theory of *Constructivism* holds that the interpretation of a
communication message that is delivered or received is dependent on the individual characteristics and qualities inherent to the communicators (Whaley and Samter 2006:117). This is especially important when recognizing or interpreting abstract symbolism or representations that must be culturally learned, such as brands or the iconic heart shape, and as a result, a constructivist framework can potentially be applied to future research objectives. In addition to their intended message, historic inscriptions contribute to an understanding of cultural landscapes when examined in their individual locational contexts, and have the potential to develop a better understanding of the nuances and repercussions of colonization.

1.5 Chapter Summaries

This first chapter has introduced the topic of historic inscriptions, reviewed the perception of them by leading rock art archaeologists over the past decades, examined dialog about their evolving treatment of the cultural resource, and introduced the role of historic inscriptions as a communication methodology. The second chapter outlines the research methods used in the examination of this cultural resource and establishes the geographical boundaries of the study, the types of sites examined, and the technological and qualitative methods used to document the sites and individual historic inscription components. The third chapter establishes that cultural interaction through superimposition between diverse cultures is not unique to the North American Plains and that behavior regarding the placement and creation of historical inscriptions is also globally universal. The chapter further engages literature examining historic inscriptions as a cultural resource, as well as scholarly researchers relevant to this type of communication in other geographical locations, times, and cultures.

The fourth chapter begins the examination of regional historical inscriptions as a potential means of graphical communication that is left as evidence of one's presence, thus the term
"residual communication." The inspection treats historic inscriptions as a sociocultural behavior and examines the communication types being utilized, along with potential messages that were being conveyed by individuals and those representing social groups. The fifth chapter examines historical inscriptions as communicators of individual and group identities and how explorer and settler groups on the Northern Plains exerted their influence in redefining the cultural and physical landscape of the region. Chapter six presents the conclusions of the study and sets the stage for future research and cultural resource decision-making germane to historic inscriptions.
CHAPTER 2: RESEARCH METHODS

...And I believe, these are the days of lasers in the jungle, lasers in the jungle somewhere, staccato signals of constant information...

(Simon, Paul and Motloheloa, Forere "Boy in the Bubble" 1986)

2.1 Chapter Overview

The recording of historic inscriptions, in particular the designation of a separate reference for them within the State Historic Preservation Office tracking system, is quite new, which means it is necessary to present a review of various documentation techniques in this dissertation, with the explanation that this document can establish protocol for systematic inventories of this "site type." This chapter describes how historic inscription sites on the Northern Plains were located, and documented and explores the origins of focused historic inscription research in the region, including the role of professional and avocational researchers. The chapter closes with an examination of a research project at the Medicine Rocks State Park in Montana, where all current methodologies and technologies were integrated to demonstrate how to complete a detailed documentation of thousands of historic inscriptions incised onto 161 identified geological sandstone formations in a 330 acre park area.

2.2 Research Area and Site Types

The primary study area is a part of the North American Plains, encompassing what is now known as southeastern Montana, Wyoming, and western South Dakota. Here geological
Figure 2.1. Map showing the research area site distribution.
formations of sedimentary sandstone are distributed outward along the eastern Rocky Mountain Front and these provide a natural canvas for this type of easily incised communication. For this research, 63 sites were reviewed in the area encompassing southeastern Montana, eastern Wyoming and the Oregon Trail corridor, and western South Dakota. Within the research area concentrated inscription sites occur along primary travel corridors and at destination sites that were used from the late 18th century up to the present (Figure 2.1). These travel routes include the Oregon Trail, along Yellowstone River, the route of the Yellowstone Expedition of 1873, and along early railroad construction routes. Destination sites defined as public gathering places include Elephant Rock near Roundup, Montana (Figure 2.2), where local homesteaders would go to picnic (Barnard et al. 1978:250), and Medicine Rocks State Park in eastern Montana that was both in a travel corridor and a destination site for picnicking (Figure 2.3). Historic inscriptions were mingled among petroglyphs at Hanging Rock along the north side of the Yellowstone River where travelers passed through the valley since precontact times (Figure 2.4), and at the Roadside site near Fort Howes, Montana (Figure 2.5), where locals, travelers and those attending early dude ranches would pause to carve their name. Multiple sites were examined in the Ashland, Beartooth, Ekalaka, Long Pines, and North Cave Hills Districts of the Custer National Forest.

While the majority of the geographical region explored contains exposed sandstone, where the majority of historic inscriptions were found, outcrops of limestone, granite, silt stone, and lignite also exist (Peregrine and Ember 2001:433), providing additional but more challenging palettes for inscribing this type of quickly facilitated communication. On the western boundary of the research area at an elevation of approximately 10,000 feet near Cooke City, Montana, granite formations hold inscriptions (Figure 2.6) that provide evidence of prospectors
who were behaving inappropriately within the early boundaries of the Crow Reservation. In the granite mountains the density is significantly less - to the point of practically nonexistent - since the task of inscribing is significantly more difficult on the harder stone.

Pencils were primarily used to inscribe signatures inside of Coveralls Cave, a limestone cave in an area active during 19th century mining exploration, on the northern face of the Beartooth Mountains (Figure 2.7). The northern boundary of the study area extends across central Montana and the southern boundary is the southern Wyoming region that encompasses the Oregon Trail. The sites of Register Cliff, Independence Rock, and Names Hill contain concentrations of inscriptions that in some cases predate the peak travel years along the trail, and that indicate the inscription tradition is continuing today (Figure 2.8). Register Cliff is currently a Wyoming State Park and some inscriptions that are now protected as historic have been fenced to protect them from further modern inscribing, but at other areas in the park, the inscription tradition continues. Independence Rock in central Wyoming is a granite protrusion that has many inscriptions from the peak of Oregon Trail travel, but the granite composition is sufficiently hard to test the will of the inscriber (Figure 2.9). On the western side of Wyoming, Names Hill (Figure 2.10) provides easy access for visitation as it parallels the highway and the Green River. Being comprised of sandstone and having easy access, inscriptions from the early 19th century to contemporary times cover the cliff, in many cases superimposed over contact-era petroglyphs representative of the biographical style. Of the three sites along the Oregon Trail that were examined, Names Hill has the most obvious presence of historic inscription superimposition over indigenous material. It is possible that petroglyph remnants are still present at Inscriptio Cliff, however the site is so heavily superimposed that remnants are difficult to identify. No pictographs or petroglyphs were observed at Independence Rock.
Many of the sites researched were found through visitation to known rock art sites and while many superimpositions do occur, it does appear that in some locations, effort was made to place inscriptions separate from rock art components, such as at the Rancher site in the Ashland District of the Custer National Forest. At that location, a rock art panel on fragile sandstone is within close proximity, but the historic inscribers chose to move further down the cliff to create a new panel (Figure 2.11). Considering that adding a category to State Historic Preservation Office records for historic inscriptions has only occurred over the past few years, rock art records played an important role in locating inscriptions as many of them mention the (undocumented) presence of certain inscriptions of interest, particularly if they were made in the 19th century or contained a recognizable or notorious name.

Figure 2.2. Elephant Rock in the Bull Mountains of Montana. The landform is along an old travel corridor and picnic spot.
Figure 2.3. Photo courtesy of the Ekalaka County Museum showing visitors to what is now Medicine Rocks State Park circa 1905.

Figure 2.4. Cliff line of the Hanging Rock site that is next to a travel corridor dating back to precontact times.
Figure 2.5. Roadside site in the Ashland District of the Custer National Forest.

Figure 2.6. Goose Lake in the Absarokee Beartooth Wilderness Area of the Custer National Forest.
Figure 2.7. Limestone formation at the location of Coveralls Cave in the Absarokee Beartooth Wilderness Area of the Custer National Forest.

Figure 2.8. Register Cliff in eastern Wyoming along the Oregon Trail.
Figure 2.9. Independence Rock in central Wyoming along the Oregon Trail.

Figure 2.10. Names Hill in western Wyoming along the Oregon Trail.
Like rock art, no two historic inscription sites are alike. Examples of variance include overall site physical sizes, the type of site contents, and general site uses. In some instances, historic inscription site types may echo site classifications of biographic, narrative, ceremonial, or iconic (Keyser 2005:137). Such classifications are also used in the study of rock art. Site inscription densities range from intense superimposition, including the overwriting of precontact rock art such as can be observed at Ludlow Cave in South Dakota, to isolated singularities, such as the inscription of "W. Grunou, 1896" at Porcupine Butte north of Forsyth, Montana (Figure 5.70). Singular inscriptions especially beg the question about whether or not the inscriber was travelling alone, particularly during periods of the 19th century. With detailed historic inscription documentation lagging far behind the study of rock art, the identification of sites suitable for study began by examining the rock art site record and engaging with known sites.
Prior to this study, many sites containing historic inscriptions were familiar to the researcher having been encountered through rock art research on the Northern Plains, including Weatherman Draw in south-central Montana, the Pryor Mountains, the Ekalaka region of southeastern Montana, the Ashland, Cave Hills and Long Pine Districts of the Custer National Forest. These sites served as a foundation for a 2006 Save America's Treasures grant focusing on the documentation of the cultural resource of historic inscriptions in those areas. This grant also provided support to expand the ongoing research to include a larger geographical range, which led to investigating inscriptions at Register Cliff, Independence Rock, and Names Hill in Wyoming along the Oregon Trail. Through publicity surrounding the grant, multiple individuals came forward to point out additional sites that contained undocumented inscriptions. It was not common for informants to lament the lack of attention given to the documentation of the cultural resource of historic inscriptions, and to often offer detailed information about past inscribers.

Sites are generally defined by inscribed material that range from faintly defined elements (Figure 5.40) to deeply carved messages (Figure 5.42). Some inscriptions obviously took a great deal of time and effort to create (Figures 5.87 and Figure 5.124), while others appear to be the result of a quick effort (Figure 5.60). Pigment use is rarely seen among historic inscriptions, but is occasionally present at concentrations like Names Hill, Wyoming, where immigrants have written their messages with material they were carrying, including axel grease and paint. Pigment is also found at isolated locations, as near Bridger, Montana (Figure 4.34). Pigment based messages to this point have all been documented as monochromatic. Limited uses of charcoal are also occasionally present, such as near Billings, Montana (Figure 5.60), and in Coveralls Cave (Figure 5.131) in the Absaroka Beartooth Wilderness Area of the Custer National Forest in Montana.
Regarding overall site distribution and function, the composition and utility of sites are as diverse as the inscribed individual elements themselves, which vary in inscription quality, media, and motivation for their creation. This further mirrors elements of the relationship between historic inscriptions and their communication companion, rock art in that that residual communication created by cultures in both generalized categories were created for a assortment of reasons and contain communication messages that range from obvious to codified. While no definable boundaries exist that begin or terminate this type of communication, the study area includes primary migration and settlement routes of people in the western United States during the 19th and 20th centuries. Certainly many additional sites exist and are yet to be surveyed and documented.

2.3 Previous Regional Historic Inscription Research

Following a period of avocational interest by a local Billings group of faculty, students, and volunteers, an internal grant was proposed in 1997 in response to a call for Research and Creative Endeavors proposals at Montana State University Billings (MSUB). The focus of the grant was to use the newly emerging technology of digital photography to document regional rock art sites. Through that project, the MSUB Archaeology Field Team was created. Since then, the Archaeology Field Team, whose primary mission continues to be "to assist archaeologists and historians in their research through applications of technology," have worked on many regional projects to apply the technologies of 3D modeling, digital photography, photogrammetry, aerial drone photography, small and medium scale 3D LIDAR scanning, 3D printing, desktop virtual reality, multimedia, web page development, total station surveying, Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Early projects focusing on rock art included fieldwork in the Ashland, Long Pines, Cave Hills, Pryor, and
Beartooth Districts of the Custer National Forest, and Weatherman Draw in south central Montana. During these surveys, historic inscriptions were generally ignored as anything but a curiosity, it was this early research that placed members of the field team in direct contact with historic inscriptions and stimulated interest in them as a cultural resource.

In 1999, the Archaeology Field Team began a partnership with the Custer National Forest under the direction of archaeologist Halcyon LaPoint to conduct field schools focusing on the potential discovery of new rock art sites in the Ashland District. While the relationship remains active today, the period between 1999 and 2004 was most active for field schools and focused surveys of the area (Urbaniak and Elliott 2004). During that time, discussions ensued about the potential documentation of historic inscriptions that were present and it was decided to record this material in addition to the petroglyphs found. Through the same time period, Dr. Linea Sundstrom was conducting rock art surveys in the Cave Hills District of the Custer National Forest in South Dakota. While the survey work was directed toward rock art, it was during this period that many discussions arose among field researchers regarding the potential value of historic inscriptions and whether or not they should be recorded. As a result, Dr. Sundstrom incorporated a listing of historic inscriptions into the historical record and taught members of Passport In Time (PIT) projects to do the same.

During 2003, 2004, and 2005 the MSUB Archaeology Field Team conducted rock art surveys in the Ekalaka and Long Pines Districts of the Custer National Forest. Through those surveys, Dr. John Greer and Dr. Mavis Greer entered the discussion regarding the potential value of historic inscriptions and noted that they had begun the practice of recording them in their work.

In 2006 a project was initiated through a Save America's Treasures grant noted above to
begin the process of systematically documenting historic inscriptions on the North American plains. The goal of the project was to locate, digitally document, archive, and organize historic signatures, dates, and artwork spanning the time period from the early 19th century to the present. The project area was generally the same geographical coverage as researched for this dissertation. Many of the initial field surveyors were familiar with the process of documenting rock art sites, but it soon became apparent that a site form was needed that was specific to the task of recording historic inscriptions as well as rock art pictographs and petroglyphs. This inventory form was based on traditional rock art recording practices, as in the early days of inscription research rock art was the focus of the group. Since rock art and historic inscriptions are often coexistent, recording forms and techniques have evolved over time, to the point where digital technologies are the preferred norm, which meant we initiated filling out site forms and processing images with enhancement software including DStretch on tablet computers in the field.

Outside of the work performed by the MSUB Archaeology Field Team, few projects have focused specifically on documenting historic inscriptions on the Northern Plains. Three projects that have taken place include a complete survey of all rock art and historic inscriptions on Pompey's Pillar in Montana that was conducted by a team from Minot State University in North Dakota (Olsen 2002). For that study, panel drawings and photography were used extensively to document the features. The second project that engaged the recording of historic inscriptions was a systematic survey and documentation of rock art in the North Cave Hills Unit of the Custer National Forest led by Dr. Linea Sundstrom and Halcyon LaPoint, Custer National Forest Archaeologist, often in concert with Passport in Time volunteers. For several years between the late 1990s into the mid 2000s, a survey was conducted that initially focused on the rock art of the
region. Early in the project, Dr. Sundstrom recognized the significance of the often accompanying inscriptions and therefore included an inventory of those in her documentation (Sundstrom 2004). The third survey in 2012 that focused on historic inscriptions was sponsored by the Grasslands Unit of the Medicine Bow National Forest under the direction of archaeologist Orrin Koenig, and conducted by Mark Mitchell of the PaleoCultural Research Group, Tim Urbaniak of MSU Billings, and students from the University of Colorado. The Grasslands project sparked the use of integrating large scale and small scale 3D scanning technologies into the field documentation of inscriptions and rock art (Urbaniak 2012).

At the inception of formal historic inscription research in 2006, no specific site type existed for historic inscription existed in the Montana State Historic Preservation Office database, let alone a system to categorize historic inscriptions signs and symbols by typology per Leach (1976). In 2011 the Montana SHPO added a site type for "Historic Inscription/Signage" to the Cultural Resources Information System (CRIS) list. To date 53 sites in Montana can be referenced through this search term, a number that includes historic signage painted on the rocks, commonly referred to as "ghost signs." In contrast, 961 rock art sites that include pictographs and petroglyphs can be referenced via the Montana SHPO's site type for "rock art" (Murdo 2013, elec. comm.). In the immediate future it is anticipated that the number of historic inscription sites will increase significantly, as through this research a number of sites are now known to exist that have no site form on file, and many forms detailing pictographs and petroglyphs need to be amended to include historical inscriptions.

2.4 Recording Methods

The recording of historic inscriptions is critical to their preservation and protection, just as to the recording of rock art. If historical resources are not documented appropriately, a full
value of a particular site may not be known, understood, or legally protected and evaluated for
NRHP eligibility. Rock art and historical inscriptions often share physical location, as well as
documentation methods. Regardless of any specific form used for archival records, the site
location, site description, and documentation of content are the basic types of information
recorded. Beyond these, more specific descriptions vary, depending on the recorder's position per
the diverse history of historic inscriptions treatment.

As an example of variances in existing rock art site documentation, consider the process
of recording an incised horse. The horse may potentially be described by a textual explanation;
and/or it may appear in the report as a sketched figure; and/or photographs may be included as
typical of the era of chemical photography; and/or images representing a more voluminous
library of digital photos may be archived with a sample included in the report. Other attempts to
record the incised horse in the past may have included rubbings of petroglyphs or molds obtained
through casting, both methods that today would be considered a form of vandalism. Recording
done today may include electronic files obtained through three-dimensional scanning. This
selection of documentation possibilities shows that variance already exists among methods for
documenting rock art, even before examining a potential variance between the recording of rock
art and historical inscriptions.

If historic inscriptions are to be appropriately documented, then what standards and
protocols should be used? To address this question, it is essential to follow fundamental methods
used by rock art researchers. Interestingly, not all rock art researchers or even the leading rock
art research organization, American Rock Art Research Association (ARARA), agree on a
standardized method of recording. The Basic Guide for Rock Art Recording distributed by
ARARA states that “Rock art forms differ from state to state in format more than in substance”
While this may be true, it also becomes obvious while reviewing rock art recording forms that they are heavily skewed toward documenting prehistoric pictographs and petroglyphs and generally only include provision for recording historic inscriptions under a section for recording “Cultural Deterioration,” such as vandalism or graffiti (ARARA 2007:32). The ARARA Guide does partially acknowledge the significance of "non-rock art," noting that the documentation of these should be done primarily for monitoring purposes (ARARA 2007:25). As minor consolation, the guide also states that “Some historic inscriptions have important significance to historians and archaeologists, so do not simply disregard them” (ARARA 2007:25).

Originally, site forms created in the formative years of rock art recording required legal locations, using section, township, and range information (STR), with accuracy to the nearest ¼, ¼ of the section. As Global Positioning Systems (GPS) became common, some recorders began to include longitude and latitude information (LL). This created variance in recording, since a variety of formats exists for special reference, such as North American Datum (NAD) 83 and NAD27. This discussion was further compounded as people more frequently used the Universal Transverse Mercator (UTM) coordinate system. Since agreement is not universal among researchers, many site forms now redundantly include Section, Township, and Range reference, Longitude-Latitude, and UTM information. Searching for sites through the Section, Township, and Range reference continues to be the primary method for the access of Montana, South Dakota, and Wyoming SHPO records.

Digital photography is commonly used to record pictographs, petroglyphs, and historic inscription sites, but some archiving and publication standards do not allow the full utilization of this type of data. Nominations for inclusion in the National Register of Historic Places still focus
on a preference for black and white photography using environmentally unfriendly chemical compositions (National Park Service 2012). The Montana State Historic Preservation Office (SHPO) is more progressive, allowing that either black and white or color digital images can be included in Historic Property Record Form nomination documents (SHPO 2009). It should be noted that any reference to digital imaging standards are destined to become obsolete as digital image technologies continue to advance.

Some past methods of rock art recording such as rubbings and field casting of petroglyphs are now discouraged due to their destructive nature. In the past some successful castings were made using plaster and polymer techniques, but more often than not, petroglyphs were damaged and in some cases ruined. These destructive recording technologies were not attempted for this research. Three-dimensional scanning is an emerging technology that is being applied to the recording of petroglyphs and historical inscriptions. Current technologies provide for an extracted surface resolution of 0.3 millimeters and stored data may be printed to physical models using desktop prototyping techniques (Urbaniak and Rust 2009:54). As technological possibilities continue to evolve, any responsible entity must ensure data migration practices while beginning new initiatives that incorporate additional digital data into archive systems. The continuing advancement of digital recording techniques also presents new challenges regarding the access and control of digital data.

Since the recording of historical inscriptions involves text in addition to visual elements, the text must be recorded in a way that will later be useful to researchers. As with rock art components, inscriptions degrade for a variety of shared reasons including being overwritten with more contemporary elements and natural weathering of the stone surface. In many instances, written inscriptions involve more than one line of text. During documentation these
separate instances must be associated for future reference. Some continual ‘strings’ of text may contain letters or elements that are no longer capable of being interpreted. Early in the development of historic inscription documentation methods for the project, it was decided that ALL inscriptions would be documented, including profanity, since its use is a reflection on current and past culture. It was further decided that text-based inscriptions containing more than one line of information would be associated during recording and that text ‘strings’ with indecipherable characters would be recorded using underlines for the missing element(s).

Searching standard sources for documented historical inscriptions sites poses a problem since terms such as "historic inscription," "signature," or "incised artwork" are not searchable fields in the Montana SHPO's current system. As an example, the Montana SHPO considered the category "petroglyphs" as the site type for inscriptions in the past; however, the searchable data did include a category for time period, which can be used to differentiate between historic and prehistoric petroglyphs (Damon Murdo 2009, elec. comm.). Current systems may be modified in the future to include "historical inscription" relevant search terms if and when archaeologists and historians determine there to be a need, such as a potential separate site category that Dr. Linea Sundstrom successfully lobbied for in South Dakota (Dr. Linea Sundstrom 2009, elec. comm.), but accessing public records at the current time in an attempt to locate a specific historical or genealogical reference inscription is functionally impossible.

2.5 A Methodological Case Study - Medicine Rocks State Park

A project that documented thousands of inscriptions that are placed upon 161 GIS/GPS referenced sandstone landforms at the 330 acre Medicine Rocks State Park in eastern Montana (Figure 2.12) stands as an example of how historic inscriptions are being recorded today on the Northern Plains. These methods and protocols were applied to most of the historic inscription
sites noted herein and reflect current recording practice. The project took place from 2011 to 2013, but was not the first archaeological work to be performed at the park. A Montana State University team surveyed the park in 1979, assigning a single site number (24CT22) to the site and noting pre and post-contact cultural material. In 1994 Aaberg Cultural Resource Consulting Service (ACRCS) was contracted to survey the park prior to a road relocation project. ACRCS continued their work in the park with a further cultural survey in 2010 (Aaberg 2010). Due to the high concentration of historic inscriptions accompanying the precontact petroglyphs, it was proposed in the 2010 ACRCS Survey Report that a more detailed study of all inscriptions in the park be conducted. This led to a discussion between Sara Scott, Montana State Parks Archaeologist, and Tim Urbaniak, Anthropology Ph.D. student at the University of Montana and a member of the faculty at what was then the College of Technology, now the City College of Montana State University Billings, as to how to proceed. Already engaged in research regarding historic inscriptions on the Northern Plains, Urbaniak agreed to lead the project to apply technological methods to document and inventory petroglyphs and historic inscriptions in the park.

The intent of the project was to conduct a detailed field survey focusing on the documentation and recording of the thousands of historic inscriptions located in the park, in addition to further inspection for previously undocumented rock art. Documentation of the inscriptions was done to facilitate the organization of data for ease of digital access combined with mapping technologies so that physical locations could be easily accessed through GIS by those wanting to visit particular inscriptions or to track additional inscribing in the park.
Figure 2.12. Map of Medicine Rocks State Park showing formation references.
This documentation contributes to the park's nomination to the National Register of Historic Places. The survey was primarily conducted during the summers of 2011 and 2012 through MSU Billings Field Schools, with additional trips to the site that focused on record completion (Urbaniak 2013).

At the beginning of the survey, a methodology was established that echoed rock art recording, but engaged specific techniques intended to focus on a data-centered approach for this type of historic inscription recording. The process differed from the recording of figure-based rock art in that the field focus intended to gather as much information digitally as possible for lab review and information extraction, rather than employ field labor intensive hand-drawn and hand-written documentation techniques. This digital image recording technique was necessary due to the density level of the thousands of historic inscriptions present, the impracticality of attempting to record in detail each inscription element. Digitally recording historic inscriptions en masse for later textual extraction is a perspective that differs from rock art recording in that the communication message being recorded is more critical than the physical dimensions of the text-based inscriptions. Simply put, in historic inscription research the size of the text is less important than the message content. This approach to the recording of historic inscriptions is cautionary, however, since many images and symbols exist among the names, dates, and written messages. For many of the more distinct iconic figures, it is more appropriate to integrate a recording of their physical scale.

The survey process began in the northeast corner of the park with the identification of a specific landform for recording. The team positioned on the north side of the landform where a GPS point was stored to reference the location of the landform, then the slate was photographed
in front of the landform (Figure 2.13). To ensure that all points were obtained and to check accuracy between units of varying quality, the landform points were redundantly stored on three different GPS units. From the north side of the landform position the team circled the landform by traveling to the west, south, east, and eventually returning to the original position, therefore the images associated with the landform are sequenced as such. Beginning in the northeast section of the park, the first landform documented was designated NS001. This nomenclature indicates that the landform was on the north side of the road that bisects the park, and that it was the first landform marked. Consequently, all landforms on the south side of the road were designated with a GPS locational designation akin to SS073, which would represent the location of the seventy-third landform surveyed on that side of the road. During this process, high resolution digital images were obtained to document overall views of the landform from the north, west, south and east. During the encirclement of the geological body, individual inscriptions, panels, figures and other features of interest were photographed using an image saturation methodology. The intent of this photographic saturation has multiple purposes: to document the current condition of the features, to provide a redundant record of the current condition, and to serve as a resource for the creation of an inscription database for each landform.

After returning to the lab, the images were reviewed and separated into folders representing each landform (Figure 2.14). The images were then reviewed for inscription text
Figure 2.13. Student Alexis Urbaniak stationing the GPS on the north side of a landform at Medicine Rocks State Park in Montana. The inset shows the direction of travel for photographic saturation.

Figure 2.14. Image capture showing folder structure and landform image files.
and figures, which were entered into individual Excel spreadsheets. The process of inputting data began with an individual database for each specific site with appropriate data fields that could be inspected, sorted, and later merged into an overall database. In many instances, written inscriptions involve more than one line of text or type of information being conveyed. During documentation, these separate instances were noted as associated, but recorded as independent data. Additional complications arose from the fact that some continual "strings" of text contained letters or elements that are no longer capable of being interpreted; since graphical representations need to be referenced within the database with descriptions that would be suitable for later searching, such as "brand," "heart," or "horse," the inscriptions with missing or deteriorated information were then later reviewed to determine if they could at least be categorized as iconic, indexical, or symbolic. While every effort was be made to create database fields covering every possibility for the content being recorded, it is highly probably that some new data types will emerge, requiring an expansion of potential entry fields.

The primary data fields consist of:

1. Date as written (Text Field Examples: August 1, 1877, 8-1-1877, Aug. 1, 1877)
2. Reference Year (Numeric Field Example: 1877)
3. Name, Initials or Associated Name (Text Field)
4. Additional Text (Text Field)
5. Type of Figure (Text Field)
6. Description of Figure (Text Field)
7. Iconic, Indexical, or Symbolic (Text Field)
8. Figure estimated era (Text Field)
9. Reference Image (Image Hyperlink)

As the data fields were completed through this stochastic process, each inscription was hyperlinked to images from where the textual information was extracted. This facilitated the cross-checking of inscription content. It was anticipated that placing the data in this
organizational format that can be queried for specific information would not only facilitate a comprehensive analysis of historic inscriptions in the region, but would support future research regarding additional questions about this historical resource.

The individual spreadsheets were then combined into one Excel spreadsheet file with worksheets representing each landform (Figure 2.15). This proved to be valuable for searching for any specific keyword, such as "brand," "horse," "1888," or a specific name, such as "Koenig." By searching the entire workbook file that contains a spreadsheet for each landform, the Excel search directly navigates to an individual spreadsheet i.e. landform, and presents its record for review, along with a list of other "landforms" that may also contain the search term. Therefore, a result of a search for "brand" directly positions to a spreadsheet containing the term, but also further lists additional landforms that contain brand symbology. The GPS points were imported into the ESRI ArcMap software to geologically reference each landform (Figure 2.11).

![Figure 2.15. Excerpt from the total database showing inscriptions on one landform. Note the tabs for all landforms contained in one .XLS file across the bottom.](image)

To document these cultural resources, 3D scanning technologies of 0.3 mm and 1 mm accuracy were integrated into the recording process, along with the technique of creating 3D
models through photogrammetry. Light Detection and Ranging (LIDAR) scanning was performed with a tripod-mounted Leica ScanStation 2 attached to a Panasonic Toughbook laptop, with the power supplied by a small Honda generator (Figure 2.16). The ScanStation 2’s potential detection range is 300 meters @ 90% reflectivity, and is capable of scanning 50,000 points per second (Leica 2013). The scanner is capable of engaging a full 720 degrees of view, with the only non-viewable position being the immediate area including the radius of the mounting tripod.

Select inscriptions were scanned with a Polhemus Scorpion to achieve short range scans. The Scorpion laser scans a surface to a potential accuracy of .3 mm and can function within a 1 meter range of the transmitter (Figure 2.17). This device also requires generated power (Polhemus 2013) and is generally used in conjunction with the generator. Once obtained, the 3D scans can be post-processed for a variety of 3D viewing technologies, or the scans can be used to create physical models using 3D printing, or "additive manufacturing" devices.

Photogrammetry is the "science of making measurements from photographs" (Walford 2007). In this case, close-range photogrammetry was applied to produce measurable three-dimensional geometric constructs through the use of digital images. Images suitable for photogrammetric 3D constructions were processed and resulting models archived. The image data was collected with two digital SLR cameras, a Canon T3i (18 megapixel) and a Canon EOS T1i (15 megapixel). The images were obtained in an uncompressed JPG format not only for the purposes of general site documentation, but for the purpose of being processed through the AutoDesk 123D Catch (AutoDesk 2013) software (Figure 2.19) and the Agisoft PhotoScan Standard Edition photogrammetry software (Agisoft 2013) to create 3D models (Figure 2.20).

The survey resulted in a dataset covering 161 individually documented landforms.
(NS001-NS060 and SS001-SS101), a GPS location for each landform, over 12,000 images, three large scale park 3D scans, three small scale scans, and 30 photogrammetry sets for Medicine Rocks State Park alone. Additional data was also created in the form of 3D surface data models of photogrammetry results, from which tactile models may be created by using 3D printing techniques. Researchers associated with the MSUB Archaeology Field Team are currently engaged in compiling a product that links all data through a GIS map with hyperlinks for the park. When selected, the hyperlink for the landform will open a spreadsheet listing the inscriptions. From each inscription, a hyperlink can be selected from an image reference category which will then open the specific image from the landform, showing the photograph from where the data was extracted.

Figure 2.16. LIDAR scan of a rock shelter at SS094.
Figure 2.17. Operating the Polhemus Scorpion in the field in the Cave Hills of South Dakota.

Figure 2.18. Processing of a 3D scan obtained with the Polhemus Scorpion.
Figure 2.19. Photogrammetry arrangement using 123D Catch.

Figure 2.20. Lady of the Rocks alcove in Medicine Rocks State Park processed with the AgiSoft Photoscan software.
2.6 Methodology Summary

The data used for this dissertation was gathered using the techniques noted above. By using primarily digital recording and archiving methods, records were able to be accessed far more quickly than by searching hard copy sources. The database for Medicine Rocks State Park stands as an example of an easily accessible resource for searching out specific dates, surnames, and symbology. This supported the research by making records quickly accessible for comparative analysis and will facilitate further examination of the historic inscription record for the purpose of exploring potential typology(ies).

While historic inscription recording was borne from rock art techniques, the type of information being recorded has caused a slight shift in methodology. Specifically, since the bulk of information being recorded is text-based, multiple digital images record the site for future extraction in a laboratory setting. The techniques being applied are all non-contact and result in absolutely no negative effect to the cultural resource. The procedures, particularly those for general photography and images sets for photogrammetry, are expedient, easy to instruct and use, and result in navigable three-dimensional data models that can be constructed to a scale ranging from an individual inscription to an entire landform. Currently, no other technology provides more site context, and the use of a searchable data platform facilitates future inspection by potential researchers. Through the engagement of the technologies being applied via the methods outlined here, the documentation of both historic inscriptions and rock art has progressed. These methods are stable and their integration into traditional archaeological methodology is fast establishing new standards.
CHAPTER 3: LITERATURE REVIEW: INSCRIPTIONS IN OTHER CULTURES

I sit squarely in the center of a continuum of making that is countless generations old, moving forward with my work to embrace the contradictions, illuminate the injustices, and celebrate the intricacies of a living culture.

(Spang, Bently 2014)

3.1 Chapter Overview

In this chapter inscriptions from other cultures are explored to demonstrate that this communication style is a relatively ubiquitous component of the human condition and to present historic inscriptions on the Northern Plains as a continuum of this behavior. This chapter will show that a cross cultural examination of this type of communication exposes a universal human reflex to leave informal, often unsanctioned communication if the "right canvas" is available; indeed, similarities exist across cultures and over time regarding the types of content being conveyed, beginning with statements of personal identity. Around the world, a convenience of medium is a factor in the creation of informal inscriptions. As for the right canvas, the North American Plains include the sandstone cliff faces and panels noted above. Elsewhere, geological formations of spires, ridges, cliff lines, and detached boulders offer convenient palettes, which while exhibiting varying levels of stone hardness, exhibit an overall malleability.

Every human who creates an inscription does so out of a set of primary communication reflexes and as they create them, they are potentially representing their humanity in a way that spans time and space, with patterns throughout the world that can be explained by Claude Levi-Strauss's structural theory, that "seeks the underlying common denominators, the structures, that link all human being regardless of the differences among the surface phenomena of the cultures.
to which they belong" (Tyson 2006:215). I therefore propose that this form of expression is inevitable and predictable behavior, and will present evidence for a broad distribution of such behavior, what I have referred to as "residual communication." The following examples illustrate that rock art/historic inscriptions represent a continuum that often includes the practice of superimposition.

3.2 Cross-Cultural Examples of Inscriptions and Their Interpretation

The earliest known communication in the form of representational "rock art" are two inscribed stones of ochreaous shale with similar cross-hatched patterns. The stones were found at Blombos Cave in South Africa and are approximately 70,000 years old (Mithen 2006:251). The practice of creating rock art in Australia began between 30,000 and 50,000 years ago and has the distinction of being the "the oldest continuous art tradition in the world" (Sayers 2001:13). Paleolithic Ice Age hunters in Western Europe also created residual communication representing human artistic achievements documenting various aspects of social and religious life" (Schaafsma 1995:5). People in upper Paleolithic Europe painted and inscribed abstract and animal forms and hands between 10,000 and 30,000 years ago (Chakravarty et al. 1997:210). Studies of these art forms date back to the 17th century, but by the First World War an expanding body of literature demonstrated the value of rock art as material evidence (Harley and Woodward 1987:63) that, like iconic gravestone studies (Deetz 1996:31) can connect abstract (structural) human ideas and thoughts with material records. Despite the potential structural anthropological inquiry, rock art research in the Western Hemisphere lagged behind other forms of anthropological studies until recently (Schaafsma 1995:5).

The origins of phonetic writing began around 8000 BC (Fischer 1999:89) in Mesopotamia, sparking an evolution of the types of residual communication left behind by
cultures. Earliest writing include the forms of *logographic* script, which is when a glyph represents a single morpheme or syllable; *syllabic* script, which is comprised of glyphs that have only syllabo-phonetic value; and *alphabetic* script whereas glyphs or characters (letters) represent individual vowels and consonants (Fischer 1999:86-87). The transition from icon-based to text-based messaging in the Americas as rock art began with written syllabic script developed in Mesoamerica by the Maya, Mixtec, Aztec, and Inca and came to be replaced by text messages following the arrival of European colonialists (Boone and Mignolo 1996:188). Historic inscriptions on the Northern Plains are among the latter type; these represent colonists from all over the world, as well as a continuum of the region's indigenous people writing their own inscriptions, as demonstrated by a World War I soldier incised at an indigenous rock art panel near Joliet, Montana by a warrior from the Crow Nation (Viola 2008:74). To contextualize the graphic and textual evidence, inscriptions from across the planet are examined below.

Although there is a distinction between sanctioned and unsanctioned inscriptions, the cases of residual communication presented here include what is commonly referred to as graffiti, not formally created commemorative works generally intended for public display.

### 3.2.1 Egyptian and African Inscriptions

Egyptians immortalized their daily lives, battle scenes, spiritual beliefs, and more by inscribing references on structure (e.g. temple and tomb) walls and geological palettes (Ranke 1884:16). Their symbolic language not only embodied primary textual messaging, but represented more complex structures such as poetry (Ranke 1884:17). Graffiti began to flourish in ancient Egypt during the 3rd millennium, potentially linked to "decentralization and general cultural decline" (Peden 2001:289). During the dynasties that followed, temple schools educated more scribes and graffiti became more complex, transitioning beyond royal names and titles to
include information about the climate and military campaigns (Peden 2001:289). Germane to this dissertation, many Egyptian inscriptions are associated with graffiti of cultures that followed them, such as Byzantine Greek and Coptic "graffito" on the walls of tombs in the Valley of the Kings. This is a result of new cultures and ideas moving to Egypt and has similarities to Native American figures being overwritten by historical inscriptions. During archaeological investigations in the early 20th century, these newer inscriptions were incorporated into the recording of the Egyptian epigraphy, thereby providing information for researchers "interested in the physical context of the inscriptions and not only their content" (Gabrat and Hany 2010:261).

Traveling Egyptians in the military left a record of their presence in foreign lands through inscriptions, including one example that, “One official’s rock inscription records that he had been campaigning in Nubia for twenty years on behalf of pharaoh” (Alcock, D’Altroy, Morrison and Sinopoli 2001:232). This is comparable to members of the military inscribing their names on the Northern American Plains during the late 19th century.

In the rock quarries of the Eastern Desert of Egypt, over two thousand years ago workers left inscriptions intermingled with older artwork that documents an environment that teemed with life in this area during prehistory that includes "gazelles, antelopes, rams, goats, crocodiles, giraffes, and even ostriches" (Hillier 2013). Many of the "younger" historic inscriptions attest to the glory of the quarry workers' labor, their service to the rulers, and the workers' deeds.

I came to the desert to obtain stone for His Majesty the King of Upper and Lower Egypt, Kherperkare' in the year 38, the fourth month of the flood, on the fourth day. I departed in peace during the fourth month of the flood, on the sixth day, with 80 blocks of stone drawn by 1500 and by 1000 men. I reached the Nile pier in the fourth month of the flood on the 20th day (inscription found at the quarry from around 1930 BC) (Hillier 2013).

Ancient graffiti is present at many locations in Egypt and has recently received research attention as a "form of communication invariably free of social restraints," as noted by Alexander J. Peden
in his book *The Graffiti of Pharaonic Egypt: Scope and Roles of Informal Writings (c. 3100-332 BC)* (Peden 2001:366). As the time period transitioned to the Egyptian New Kingdom, *Besucherinschriften*, or visitors' graffiti, began to appear. The tendencies of visitors to superimpose their inscriptions over those that are older continue in Egypt even today (The Independent 2014). Leaving a new inscription in Egypt is illegal and can carry a fine as high as US $20,000, in addition to up to 12 months in prison (Potts 2014:1).

In 1908 the Reverend Thomas Lewis presented a paper on an inscription from a 1482 exploration at the Congo River in what is today Central West Africa by Portuguese explorers (Lewis 1908:589). This hard rock inscription shows the Portuguese arms and states “Here arrived the ships of King Dom Joao II of Portugal” (Figure 3.1) and also contains the names of Diogo Cao and several that accompanied him (Lewis 1908:590). It is notable that this historic inscription remained “lost” and undocumented for four hundred years until photographed by a missionary (Lewis 1908:588). The paper by Lewis drew great interest at the Royal Geographical gathering in 1908 and drew a comment that, “The amount that we know from history of these Portuguese voyages is so scanty, that the information that we have received from this inscription is of distinct value” (Lewis 1908:614).
3.2.2 Greek Inscriptions

Historic inscriptions were documented as tangible evidence during the 19th century genesis of systematic archaeological research, including the “celebrated historic inscriptions called the Arundelian slab” (Ward 1889:373). An assortment of these Greek marble slabs were collected by Thomas Howard, Earl of Arundel during the 17th century from Italy, Greece, and Asia Minor (Kellogg et al. 1903:671). These marble slabs document ancient Greek chronology from BC to 264 (http://www.websters-dictionary-online.com/Ar/Arundelian+Marbles.html). Throughout his work, Ward incorporates documentation obtained through the inspection of historic inscriptions to inspect slave-owner relationships, guild participation, and the relationships of the guilds with the state (Ward 1889:380). An important contribution of many historic inscriptions is that they are commonly date-referenced and therefore easy to place into
event sequences and context. Like later controversy that would follow regarding the authenticity of North American historic inscriptions, some archaeologists doubted the authenticity of the Arundelian Marbles. (Robertson 1788:v). This reflects that concern for authenticity has always coexisted in modern archaeological research concerning historic inscriptions and their reference use.

The Greeks not only created graffiti during their fluorescence in world history, but some of the messages are similar in content to those that dominate historical inscriptions in the American West. Historical inscriptions are dominated by names and dates, with notable examples found in Greek graffiti left on Egyptian tombs in translations such as “I come. Year 37,” “Seuthes son of Kotys came here,” and “Aulutrales I have been here” (de Garis Davies et al. 1905:34-35). It is notable that many of these Greek inscriptions have been inscribed over the top of Egyptian inscriptions (de Garis Davies et al. 1905:3), similar to the practice of placing historical inscriptions over the top of Native American rock art figures. Examples of this method of superimposition can be found at the temple at El Kanais, which was established by nineteenth dynasty pharaoh Seti I. Stretching over a period of 3000 years, a diverse collection of graffiti left by those including Greek travelers can be found, as studied by Rachel Mairs in her paper "Egyptian 'Inscriptions' and Greek 'Graffiti' at El Kanais in the Egyptian Eastern Desert" (Baird and Taylor 2011). In her discussion of the site, Mairs examines potential distinctions between 'inscriptions' and 'graffiti' as being related of the formality of the message contained in the communication element. Given that the temple at El Kanais represents a broad chronological distribution of formal and informal communication, including communication by the Greeks as they colonized Egypt, this site helps place historic inscriptions on the North American Plains in a broader context. In the "Old world," Greeks left this form of communication as literal evidence
of their influence, distributed over areas that they visited and/or colonized.

John Bodel’s *Epigraphic Evidence: Ancient History from Inscriptions*, offers a rich
description of inscription examples from Greek and Roman cultures, along with guidelines for
study and interpretation. Bodel advises that while documentation techniques such as
photography, rubbings, tracing and drafting assist in the preservation of inscriptions, onsite
autopsy is often the best method. He further states that dating may be accomplished through an
inspection of “linguistic formulae and onomastic conventions” (Bodel 2001:51). Bodel also
grouped inscriptions into categories of social association such as names and identities (Bodel
2001:73), family and society (Bodel 2001:1061), social status (Bodel 2001:107), civic and
religious affiliations (Bodel 2001:132), and economics and trade distribution (Bodel 2001:142).

### 3.2.3 Roman Inscriptions

The Romans continued the practice of leaving graffiti over the top of Egyptian
monuments (de Garis Davies et al. 1905:37). For example, in AD 130 when the emperor Hadrian
visited the Colossi of Memnon (Figure 3.2) in Luxor, (Thebes), Egypt, he had his name inscribed
on one of the Colossi and a poetess inscribed accompanying commemorative verses praising the
emperor (Fagan 2004:23). Many Roman tourists visited Egyptian sites and it was common for
them to leave graffiti as a record of their presence (Fagan 2004:20).
Romans were prolific distributors of inscriptions, both of the formal type sanctioned by the government at monuments, tombs, buildings, and temples and of the informal type, such as communication via graffiti. On the walls and alleyways of their towns, ancient Romans left a broad variety of messages including a diverse selection of literary quotes, names, advertisements, arithmetic calculations, loves, obscenities, and dates (Keepie 1991:116). Corresponding examples of matching communication messages can be found in many places on the Northern Plains, and like the European settlers there during the 19th century, Roman citizens were broadly distributed during their time of cultural expansion. For example, someone in a military garrison wintering at Trencin, Czechoslovakia left a Roman inscription on a rock face that presents a dedication to Victoria Augustorum (The Victory of the Emperors) that dates to AD 179-80. Other Roman military inscriptions commemorate those killed on duty and in accidents are now held at a museum in what is now Cologne, Germany (Keepie 1991:89).
The Roman practice of leaving inscriptions carried into Britain during the occupation spanning the period between 55 BC and AD 410 AD. Many of the inscriptions are on portable elements, such as writing tablets, altars or relatively small stones, as opposed to the immovable sandstone cliffs of the North American Plains. Over 3,000 inscriptions have been documented, recording buildings, events, people, and places in the book, *The Roman Inscriptions of Britain, Volumes I: Inscriptions on Stone* (Collingwood and Wright 1965). A searchable website based on the book can be found at [http://www.roman-britain.org/epigraphy/rib_index.htm](http://www.roman-britain.org/epigraphy/rib_index.htm) that divides the inscriptions into the regions of South England, Wales, North England, Northern Borders, Hadrian's Wall, Scotland and Antonine Wall, and Milestones. These communication remnants are valued today as providing insight into the uncensored minds of the occupiers, originally created as the Roman army imported a practice of "setting up inscribed stones as religious dedications and tombstones, as records of building work, and as milestones" (English Heritage 2014). As noted in the Heritage Protection Form for eight Roman inscriptions at a quarry site at the base of a cliff near Hadrian's Wall, the inscriptions are primarily names with some additional text (English Heritage 2014).

Rex E. Wallace documented formal and informal wall inscriptions known as *programmata antiquissima* from Pompeii and Herculaneum dating from approximately 30 BC to AD 50 (Wallace 2005:xii). Wallace separated the inscriptions into categories of dipinti (electoral announcements of advertisements) and graffiti (Wallace 2005:2,42). It is probable that many historic inscriptions on the Northern Plains fall into categories as defined by Wallace thereby setting the stage for a cross-cultural communication comparison.

### 3.2.4 Asian Inscriptions

In China, the Great Wall has long been inscribed by visitors, starting with the wives of
soldiers who constructed the wall. The bricks have images of figures that include lotus blossoms, clouds, and "symbols of peace and love" (China Heritage Newsletter 2005). The presence of the soldier's families, permitted by a lenient commander, supposedly led to a more relaxed work environment that contributed to the creation of the peaceful iconography. Inscriptions leading into the contemporary age are currently viewed as a problem at the Great Wall, as the continued practice of leaving messages by carving them into the bricks has resulted in significant aesthetic damage. Leaving graffiti at the Great Wall currently carries heavy penalties by the government of China, similar to policies implemented for the protection of heritage resources in other countries. In China, the fines for individuals can be as high as 50,000 yuan (approximately US $6,410), and as high as 500,000 yuan (approximately US $64,100) for individuals that engage in "spraying graffiti or writing on the Great Wall" (Xinhau News Agency 2006).

Although the practice of leaving inscriptions began during the Paleolithic and Mesolithic Ages in what is today known as India, communication changed over time from the more ancient image-based art to epigraphic inscriptions that were socially sanctioned to be carved, being commissioned for religious and governmental messages, such as royal initiatives. As an example, two inscriptions were carved into a granite rock at Junagadh in Gujarat province; both inscriptions relate to the construction and maintenance of a water reservoir called Sudarshana Lake. With the first inscription being carved in the 4th century BC, and the second inscribed in the 5th century, the inscriptions document a water project that has been in use for about 1,000 years (Singh 2008:48). Singh further comments that inscriptions in India and elsewhere can serve as an important source of history, not only through their durability, but through their conveyance of messages both formal and informal:

Compared to literary sources, which tend to give a theoretical perspective, inscriptions often reflect what people were actually doing at various geographic locations and include
"labels, graffiti left by pilgrims and travelers, religious formulae, and writing on seals (Singh 2008:49).

Using the region's rock formations for expression continued into the years AD 494 to 1127 with the flourishing of Chinese Buddhism (Liu 2010:58). During that period, inscribed shrines containing figures of many sizes and intermittent accompanying text were carved directly onto limestone cliffs at the Mogao Grottoes in north central China (Agnew 2010:39). The most spectacular of the Asian Buddhist shrines were those of the Bamiyan Valley in Afghanistan (Figure 3.3), which were destroyed by the Taliban in 2001 (Figure 3.3) as being offensive to Islam (Englar 2003:21). The incident serves as an example of the perceived power of inscriptions, their potential to propagate ideals, and how governments can utilize selective removal of cultural remnants to attempt to contour history.

In the book Historical Researches on the Origin and Principles of the Bauddha and Jaina Religions (Bird 1847), inscriptions from the caves of western India are searched for information regarding the development of Buddhism. These inscriptions date from the fourth century before Christ (Bird 1847:1) and contributed to a cultural shift from allegiance to sovereigns to introspection of self (Bird 1847:1). Evidence of cultural intrusions into western India is indicated by the presence of inscriptions acknowledging the presence of the Greeks and Romans (Bird 1847:3, 11). In some cases, wisdom was conveyed to the populace through the presence of inscriptions such as the quotation “May the cause of creation, existence and destruction, which is itself without cause, the destroyer of Manmadan (desire,) be propitious to the desires of the world” (Bird 1847:25).
Figure 3.2. Buddha shrines of the Bamiyan Valley in Afghanistan as drawn by Alexander Burnes during a visit in 1832 (Petzet 2009:20).
Figure 3.3. Buddha shrine of the Bamiyan Valley in Afghanistan after being dynamited by the Taliban in 2001 (Petzet 2009:50).
Inscriptions continue to provide fodder for studies linking cultural heritage and politics. For example, Alcock et al.'s (2001) book *Empires: Perspectives from Archaeology and History* (Alcock et al. 2001) demonstrates how inscriptions can be used to examine the rise and fall of empires. Among the cases examined royal inscriptions of the Persians of the Achaemenid period, where a site is described that is “carved high on the rock face dominating the main road leading from the Mesopotamian plain to Ecbatana.” Written in "Old Persian," the inscription was created as a "royal inscription," intended to convey "the unchanging majesty of Persian imperial power" through the style of text used (Alcock et al. 2001:98).

Inscriptions also carry communication messages from the Satavahana dynasty culture of southern and central India. Early royalty used inscriptions for documentation of their reign (Alcock et al. 2001:168). The earliest of these representations can be found in Nasik Cave XIX, which was excavated by Mahamatra Saman of Nasika (Alcock et al. 2001:168). One inscription dates to the second Satavahana ruler of the early first century BCE (Alcock et al. 2001:168). Additional non-royal inscriptions found in the same region include those of names, family lineage, occupations, guild membership, places of residence, donor information, and property boundary references (Alcock et al. 2001:170).

3.2.5 Australian Rock Art and Colonial Inscriptions

Parallel to behavior on the North American Plains, Australian Aboriginal peoples expressed themselves and their culture through the creation of imagery commonly referred to as rock art. Australian rock art embraces a myriad of styles, serves a variety of purposes, and has been superimposed by colonialists that later arrived on the continent at a later date. Jane Fyfe, Ph.D. Candidate in Archaeology at the University of Western Australia has been examining historical inscriptions and graffiti that are on surfaces near or superimposed over rock art. The
inscriptions are primarily composed of names and dates, but also include images of symbols, people, and ships. These historic inscriptions "communicate information about the creators, their affinities, attitudes and behaviors in the Australian rock art landscape" and provide a point of reference for considering the potential for historical inscriptions there and elsewhere, as expressions of power by Europeans over indigenous people, whether or not the placement of historical inscriptions reveal information about "cross cultural interaction in terms of power and/or respect" (Fyfe 2010:1).

As a method of examining the "rules" for the creation of historic inscriptions, Fyfe created a grammatical framework to examine the inscriptions' content, style, placement, superimposition, and technique. Within the framework (Figure 3.5) Fyfe identifies "rules" that represent the foundations for a typology of inscriptions, such as, Rule 1 "Keep close to other historical inscriptions" (Fyfe 2010:1). Fyfe's research recognizes that historic inscriptions are communication that is being conveyed through written and graphical forms (Fyfe 2010:34). Since the historic inscription sites researched by Fyfe contained both rock art and historic inscriptions, the classification system stratifies both (Figure 3.6).

Clearly, there are many parallels to be explored in the interaction between rock art and historic inscriptions, particularly regarding patterns of similarity between those on the Northern American Plains and in Australia. Applying Fyfe's classification system to a broader selection of historic inscription sites on the Northern American Plains will provide a foundational organization for the documentation of these resources.
Figure 3.5. Fyfe's Grammatical Framework for Historic Inscriptions (Fyfe 2010).

Figure 3.6. Fyfe's Classification System (Fyfe 2010:41).
Around the world, new attention is being focused on the research of historic inscriptions and scholars such as Jane Fyfe are revealing new information about this communication medium and about the messages being communicated. In her paper "What Were They Thinking, and Why Did They Do It?: An Archaeological Examination of the Social Behaviours of Europeans Expressed Through Historical Inscriptions at Two Northern Australian Rock Art Sites" (Fyfe 2010), doctoral candidate Fyfe's work currently underway in Australia is engaging the same questions regarding recording methodologies, classification, the social behaviors, and intent of the inscribers. Ostensibly, opportunities exist for the further study of pre and post-contact residual communication created by indigenous people before, during, and after their interaction with colonialists.

3.2.6 Central and South American Inscriptions

Informal graffiti was placed over formal inscriptions across Mesoamerica at places such as Tikal, built by the Maya during the period of AD 250 to 800 (Hutson 2011:403). While examinations of the formal and informal inscriptions found there have been conducted for over 150 years, the graffiti has been dismissed as "poorly executed folk art," and has largely remained unstudied, along with colonial-era graffiti (Hutson 2011:403). An example of the tremendous research potential of these forms of residual communication has recently been demonstrated by Hutson's research at Tikal, encompassing cross-cultural comparisons of figures, while theorizing that some of the inscriptions were created by children. These inquiries are relevant to exploring embedded behaviors, and connections between inscribers and the landscape (Hutson 2011:423). Other 19th-century archaeologists interested in the “methods of record and communication” also studied inscriptions found in Mexico, Central America and South America, and included Leon De Rosny, who is known for his work studying Mayan inscription writing between 1864 and
1871 (Winsor 1889:201).

Arguably the oldest known documented rock art in South America has been contextually dated from 10,000 to 15,000 BC and has been located in Brazil and Argentina (Slifer 2007:135). Additional later sites have been documented in Chile, Paraguay, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, French Guyana, and Suriname (Chakravarty et al. 1997:215). When missionaries and travelers encountered regional rock art in the 16th, 17th, and 18th centuries, it was often interpreted as the work of St. Thomas or the devil. As a response, crosses were often superimposed over the images to negate any potential demonic influence (Bahn 2010:6). This practice extended into southwestern North America, where rock art was superimposed by religious symbols and other inscriptions at sites such as El Morro (Figure 3.2). At site JG-52 in the Orinoco Basin of southwestern Venezuela, painted figures placed among the pictographs represent early Spanish missions which in turn brought cultural change (Greer 1985:106). The church figures were found in the Orinoco Basin amidst others from 1700-1850 that represent the lives of the immigrants. Iconography representing the arrival of the Catholic church can be found over a broad distribution area in the Americas, emblematic of the extent of cultural influence of Missionaries. The distinction between "rock art" and "historic inscriptions" may be more difficult in South America where the iconography being created continues to be placed by the same cultural groups who made them in antiquity (Hostnig 2007).

3.2.7 North American Inscriptions

In North America, Native Americans embraced the practice of creating pictographs and petroglyphs as a form of communication as in other locations around the world, and, as in other parts of the world, it is common to find indigenous or aboriginal artwork overwritten by inscriptions of invaders. The practice of superimposing communication began in North America
with the presence of the Spanish at El Morro and continued as other ethnic groups were
introduced in the Americas (Knipmeyer 2002:12). While the practice of recent settlers placing
more inscriptions over the top of Native American inscriptions is generally considered
vandalism, it should be noted that it is not uncommon to find Native American inscriptions over
the top of (or defacing) previously created material (Hendry 1983:188). On the southern extreme
of the North American Plains, left historic inscriptions at El Morro, a rare water source in
highlands of what is now New Mexico. Here, inscriptions dating to the 16th century are placed
alongside and over those of the Pueblo Indians who lived there in the 13th and 14th centuries.
The earliest inscription documenting the presence of the Spanish there is by Juan de Onate in
1605 (Figure 3.7), superimposed over earlier figures. Similarly, on the Northern Plains, historic
inscriptions are often superimposed over earlier Native American art and communication. These
superimpositions are universally distributed, whether along travel corridors such as Names Hill
along the Oregon Trail in western Wyoming, or at more isolated locations throughout this
dissertation's study area (Figure 2.1), often leaving the observing rock art researcher to wonder
as to how the site was discovered by the intrepid immigrants in the first place.
The practice of placing a name physically onto the land was neither illegal nor considered inappropriate until the 20th century. Although the facts are debatable, one sunny morning in July, George Washington inscribed his name onto Natural Bridge in Virginia:

The Natural Bridge spans a mountain stream. Since its earliest discovery it has been rated one of the great natural wonders of the world. Since 1773 distinguished scientists and travels from all parts of the world have journeyed thither and marveled at the great structure. The earliest mention of this bridge is in 1759. George Washington, when a surveyor for Lord Fairfax, visited it and carved his name, where it still may be found. The original Bridge tract was granted by King George the Third to Thomas Jefferson in 1774. After Jefferson became president he visited the place and surveyed and made maps and measurements. The next year he returned, bringing two slaves, and built for them a log cabin with two rooms, and directed that one room should be kept for the entertainment of strangers. A book of record, which he placed there, and in which he requested that visitors should inscribe their sentiments, was accidently destroyed in 1845, and only a few extracts can be found (*Anaconda Standard* 1894:10).

A review of the National Register of Historic Places registration form for the Natural Bridge notes multiple occurrences of the initials GW, and a single occurrence of a 1750 date (National Park Service 1997:6). The nomination further questions the validity of Washington
having surveyed there, stating that "George Washington is said to have surveyed the bridge about 1750 while he was working in western Virginia for Lord Fairfax, but this is unlikely as Lord Fairfax did not own property this far south" (National Park Service 1997:12). As to the nomination's Relation to Significant Persons section: "Natural Bridge gains additional significance because of its importance to Thomas Jefferson. To a lesser degree there also are links to George Washington, which are unlikely to be true but which have persisted as legend" (National Park Service 1997:24).

Regardless of the level of accuracy surrounding the inscription, past and continued attention to it, whether accurate or legendary, demonstrates the colonial practice of marking the landscape. The presence of Jefferson’s ‘guestbook’ poses an interesting question. Did Jefferson recognize a potential inclination for future visitors to inscribe their names near that of Washington and thereby mitigate the practice by providing an alternative communication medium for visitors? Of course, by the 18th century, the practice of communicating through messages placed directly on the landscape was already millennia old.

Inscriptions along the Oregon Trail are the topic of interest in Hileman's (2001) book entitled, *In Tar and Paint and Stone*, which represents the definitive source about the inscriptions at Independence Rock and Devil’s Gate in southern Wyoming written. The book also contextualizes these resources by providing a general historical backdrop associated with the era of 19th century overland migration (Hileman 2001:17). Of particular note is a reference in Appendix B describing the work of Robert Spurrier Ellison who is recognized as originating a preservation record of the sites during the 1920s (Hileman 2001:325). Apparently compelled to interact with the landscape, Robert S. Ellison “left his inscription on Independence Rock in 1930 where it can still be seen today” (Hileman 2001:328).
In addition to utilizing built and geological resources for the placement of historic inscriptions, people also left messages carved on Aspen trees, particularly in California and Nevada, but also distributed in other states including Idaho and Oregon. Known as arborglyphs, these communication remnants were primarily carved by Basque sheepherders flocks in mountain meadows beginning in the mid-1800s, and associated with immigration related to the gold rushes in those regions of the American West (Mallea-Olaetxe 2000:9). The arborglyphs contain information regarding the identity of the carvers, the dates they were there, and depict elements missing from their lives, such as women (Mallea-Olaetxe 2000:125). The image elements display a varying range of artistic ability and carry cultural information by the very language used for text-based messages. In a landscape devoid of easily carved rock, Aspen trees serve as a parallel medium for historic inscriptions.

3.3 Literature Review Summary and Discussion

What is the chronological history of research on historic inscriptions throughout the world? The practice of documenting the world's rock art began in China over 1,500 years ago with the book *Shui Jing Zhu* by Li Daoyuan (Bahn 1998:3). While the primary focus of the work was on geography, descriptions of existing rock art were included. In Sweden "rock art researchers have tried to document and interpret rock carving ever since the 17th century" (Laaksonen 2011). While rock art and inscriptions were known to occur, and continued to be created around the world, the research of them was largely left unexplored.

By the late 19th century, many scholars recognized the value of historic inscriptions, including students of languages and archaeologists. In *Universal History*, Leopold von Ranke studied language origins and their relationship with culture as derived from Greek and Egyptian influences. von Ranke proposed that all cultures have roots of commonality, including the
development of religion (von Ranke 1884:viii, 3). As he discusses the representation of religion through language, reference is made to an inscription left by the builder of a sarcophagus, at a tomb with no other inscriptions (von Ranke 1884:5). This could be a reference to pride of workmanship or advertising in the hope of future work. Egyptians also immortalized their battle scenes by inscribing references on their walls (von Ranke 1884:8). von Ranke also notes that references to soldiers and battle scenes were inscribed on their walls (von Ranke 1884:16). This indicates acknowledgement of military service, and may be comparable to historic inscriptions left by western American soldiers in the late 19th century.

As part of an increase in global archaeological efforts, American archaeologists gained an international reputation during the early 20th century due to their cataloging of Chaldean, Babylonian, and Assyrian cuneiform inscriptions from 6000 years ago (Morgan et al. 1908:13). Due to these early cataloging efforts, these resources have been preserved for further study of residual communication that dates to the period of the earth's earliest known forms of writing, unfortunately many cultural resources continue to be threatened by continual social upheaval in the Middle East, making the early 20th century documentation of these inscriptions all the more significant. Inscriptions from these documented written remains include the deluge legend, mythological texts, incantations, omens, geographic descriptions, political figures, personal communication, and grave markers (Morgan et al. 1908:11-37). It is only through the choice of a natural non-decomposing clay mineral medium (Morgan et al. 1908:14), that these inscriptions continue to exist today. As opposed to rock formations, these earliest inscriptions were also placed on portable objects including personal jewelry and objects believed to be a door socket or a bowl fragment (Morgan et al. 1908:33).

Early American archaeologists sometimes mistook Native American inscriptions for
remnants of European culture from prehistoric times as they searched for earliest links to the new world. One example of such is the Dighton Rock located at the Taunton River near Berkeley, Massachusetts (Winsor 1889:104). This site was originally misinterpreted as representative of Scandinavian culture by researchers Dewitt Clinton and Samuel L. Mitchell. Clinton and Mitchell also researched other inscriptions from Nova Scotia allegedly dating to AD 1007 (Winsor 1889:102). In 1788 the writing on Dighton Rock was interpreted as Phoenician or Punic by rock art and historic inscription pioneer Ezra Stiles, who believed them to be around 3,000 years old (Lenik 2009:10). In 1886 an alleged Phoenician inscription was found in Brazil, but was later discredited (Winsor 1889:41). An object known as the Cincinnati Tablet was discovered in a mound chamber at Grave Creek in the Ohio Valley; the object was said to have “inscrutable characters” (Winsor 1889:403).

Some of these early documented inscriptions that were discredited in the 20th century as being created by European travelers may be worth reviewing again as research has since verified an early Viking presence at L'Anse aux Meadows on the eastern coast of Northern America settlements in the Americas (Brown 2007:17). One such inscription site would be the east shore of Baffin’s bay in North America, said to be dated 1135 and discovered in 1824 (Winsor 1889:67). During the 20th century, over one hundred runic inscriptions were documented in Greenland that demonstrated that as a culture, Viking travelers were prone to leaving inscriptive evidence of their occupation (Winsor 1889:67); see also (Landsverk 1974:223).

Inscriptions are fundamental to the origins and influence of the construction of language to a time when “all records were merely the pictures of the things or ideas expressed” (Mason 1920:3). Indeed, Mason's case studies underscore the point and Native American inscriptions such as Inscription Rock on Lake Superior; the Rosetta Stone from Egypt containing
hieroglyphic, demotic and Greek writing; Babylonian, Persian, and Assyrian cuneiform writing; Hebrew inscriptions from the 7th century BC in Israel; a bronze trilingual inscription in Latin, Greek, and Phoenician at the base of a bronze statue at Santuacci in Sardinia; and an Ionian Greek soldier’s inscription about his travels and presence (Mason 1920:359).

The growing store of knowledge related to historic inscriptions that was being observed and documented during the late 19th and early 20th centuries cultivated the foundation for anthropological research, with grave marker inscriptions sparking demographic inquiry that documented significant personalities while “adding to our history the names of heroes, statesmen and divines” (Ridgely 1908:viii, 54; see also, Farber 2003:6 for a discussion of scholars). In chapter four of James Deetz’s classic In Small Things Forgotten, James Deetz comments on the evolution of the art of headstones as representative of quantifiable seriation, that “over time a graph of the popularity of any cultural trait will have a single peak” (Deetz 1996:95). It may be possible to apply this technique to a variety of cultural icons carved upon the Northern Plains, such as representations of love including hearts, hearts with names or initials inside, and hearts with arrows. Additional anthropological researchers involved in the study of historic tombstone inscriptions include Edwin Dethlefsen, Allan Ludwig, Peter Benes, Sue Kelly and Anne Williams (Yentsch and Beaudry 1992).

Yet undiscovered evidence in historic inscriptions may reveal universal patterns in the human condition, provide insight into the evolution of communication, and document a stratified line of archaeological evidence relevant to etymological, onomatological, toponomastical or anthroponomastical research. The practice of communicating by placing inscriptions, petroglyphs, and pictographs directly onto the landscape is a tradition extending into ancient times and cultures. Throughout time across the earth dominant and imperial groups have
superimposed their residual communication over the preexisting inscriptions, documenting the occupied and colonized ties to the landscape. Although there is substantial literature dedicated to Assyrian, Egyptian, Greco-Roman and other text-based cultural heritage studies, publications are rare when it comes to historic inscriptions in Northern America. Selective sites have been documented (Urbaniak and Rust 2009; see also Urbaniak and Elliott 2012; Urbaniak 2012; and Urbaniak and Dixon 2014), but the work is in the early stages of exploring research topics that will integrate more theoretically rich inquiries, are expected to span genealogy, will explore the role of individual inscribers in their community, and demonstrate how these archaeological forms of textual and graphic evidence will theoretically situate historic inscription research in a necessary formative cultural history framework.
4.1 An Archaeology of Communication

Thousands of historic inscriptions are inscribed upon the sandstone cliff faces and outcrops across the Northern Plains. While predominantly comprised of text messages, these forms of communication also include incised and painted images. These ideographic representations present the graphic historical record that are much more than idle scribbling or mere expressions of vandalism; these inscriptions convey messages and can be categorized as communication. Ideographic representations convey ideas, cognitive communication, and embedded cultural perspectives (i.e. the images are often comprised of objects or are representative of ideas and values that are common to the inscriber) (Haviland et al. 2013:394) (Novitz 1977:149).

As humans communicate, we participate either as senders or receivers of messages. These messages may be conveyed through a variety of methods that include written, spoken, or gestured conveyances (Beck et al. 2005:3). Within each of these general categories, sub-methods of communication delivery exist; for instance, while language may be spoken, many distinct languages and dialects exist. Likewise, written communication is expressed in a variety of languages and is conveyed on a broad variety of mediums. Written language media include common paper-based personal writing (letters and notes), mass distributed media (books, magazines and newspapers), and public sanctioned permanent media inscriptions (monuments and grave headstones). Over the course of time, humans also have continued to express written
communication through more impromptu means, such as graffiti (Gotlieb 2008:5). Graffiti was originally defined as inscriptions scratched on walls in ancient Italy (Blume 1985:137-139). Here I further expand this definition to encompass a broader form of residual communication that may be expressed on the walls of jail cells, sides of rail cars, bridge underpasses, or the sandstone outcrops that exist on the North American Plains. These forms of written communication are residual in that they remain present to express a message after the primary communicator, or inscriber, has departed. The practice of residual communication, whether graffiti or more formal forms, appears to be something humans universally engage across time and around the world. This chapter presents an overview of historic inscriptions on the Northern Plains drawing attention to this region as yet another stop on the human timeline's universal practice of leaving messages, and showing relationships between inscriptions created before, during, and after cultural contact between indigenous people and the settlers in the American West. First I will present a theoretical framework to guide future research.

Ideographic and textual inscriptions presented in this chapter are separated into the three image communication categories: iconic, indexical, and symbolic. Accompanying figures provide graphic evidence of various typologies of inscriptions (Table 4.1) that often crosscut these categories and that include self depictions, such as detailed self-portraits and less detailed anthropomorphic figures that represent statements of personal individuality and the embedded importance of self, that statements of identity may be conveyed through graphical representations in addition to textual statements. Inscriptions also carry statements of value sets and cultural practices through association and group affiliation, represented by inscriptions that include Christian crosses and Masonic symbols. Their association with text-based inscriptions superimposed over rock art, not only reveals the identities of dominant and subverted individuals
or social groups, but also provides provocative metaphoric evidence of the recent colonial "conquest" of the Northern Plains. Whether these inscriptions were created as conscious, overt acts of dominance remains unknown, but they do replicate a behavior associated with other colonial pioneers as outlined in the preceding chapter. These representations may also provide data that could contribute to further understanding past and present global human residual communication patterns which, in turn, have potential for contributing to the creation of predictive modeling relevant to archaeologies of communication. This dissertation's main goal is to serve as a foundational framework for the organization of historic inscription data.

Table 4.1 shows the various historic inscription typologies observed across indexical, iconic, and symbolic categories. Images from the Montana State University Billings, Library Special Collections, Historic Inscription Collection were used to populate Table 4.1. This collection currently includes over 10,000 images from over 200 sites in Montana, Wyoming, North and South Dakota and is a subcomponent of a personal digital image archive containing in excess of 100,000 images that are relevant to historic inscription research (Urbaniak 2009).
### Historic Inscription Typologies Observed on the Northern Plains

<table>
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<th>Archaeological Sites and Trinomials</th>
<th>Rock Art</th>
<th>Historic Inscriptions</th>
<th>Statement(s) of Individual Identity</th>
<th>Statement(s) of Group Identity</th>
<th>Indicators of Ethnic Identity</th>
<th>Inscriptions as Images or Symbols</th>
<th>Inscriptions over Rock Art</th>
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Table 4.1. Historic inscription typologies observed.
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Table 4.1. Historic inscription typologies observed (Continued).
Due to the fact that documentation and evaluation of historic inscriptions on the Northern Plains is in its infancy, no quantifiable data are available, and so the dissertation research compiled herein is intended to serve as the first comprehensive survey of these cultural resources in the region reviewed. Overall I observed that historic inscription symbology on the Northern Plains reveals a collection of both aesthetic (art) and semiotic (sign) representations. These graphical representations include hearts, religious symbolism, livestock brands, Masonic symbolism, liquor representations, firearms, people, buildings and more (see also Urbaniak 2009).

Archaeologists have applied many terms have to describe historic inscriptions, including applying the rock art terms of pictographs or petroglyphs, vandalism, and graffiti. Taking note of the subjectivity of using terms like vandalism or graffiti, I recommend that the cultural resource "type" should be "historic inscription" and that by adhering to The National Historic Preservation Act of 1966, these examples of residual communication, conveying messages from the past long after the original communicators left their messages, may be preserved. Here I propose that historic inscriptions are behaviorally related to practices of bathroom graffiti, artwork applied to railroad cars, jail cell doodling, and other past and current practices of people leaving communication messages as evidence of their presence and/or existence. While the inscriber, artist, doodler, or vandal has left the scene, the inscription, whether in the form of text or figures, remains as a residue verifying their past presence, therefore, the term "residual communication" is offered, unless direct vandalistic intent can be demonstrated to have been performed by some 19th century hooligan or ruffian; but, technically that, too, would qualify as residual communication.

In addition to text-based inscriptions, this study fundamentally contributes to the
historical record through the inspection of ideographic representations associated with historic inscriptions and assorted cultural graffiti on the North American Plains. Ideographic representations convey communication messaging through a picture. The picture may be a recognizable object (e.g., drawings of animals), a representative figure (e.g., viewing a heart as being representative of the emotion of love or as how a person driving a car interprets an upcoming highway sign displaying a bent arrow as conveying that a turn is ahead) (Hanna and Hodges 1971:8). Ideographic representations were also part of ancient writing styles (e.g., Chinese, Egyptian) where pictograms of objects convey their meaning (Embree and Gluck 1997:247).

While the majority of historic inscriptions are text-based, ideographs or ideograms, as graphic symbols that represent ideas and values, are relevant to cognitive communication. As humans communicate, we participate either as senders or receivers of messages. These messages may be conveyed through a variety of methods that include written, spoken, or gestured conveyances (Beck et al. 2005:3). Within each of these general categories, sub-methods of communication delivery exist; for instance, while language may be spoken, many distinct languages and dialects exist. Humans commonly communicate basic ideas through pictures (Rossides 2003:3). Images are intended to result in visual perception, which is the meaning concluded after the image is interpreted by the brain (Lester 2003:51). A notable difference between communication delivered by written language and that delivered through graphical representation is that the latter can generally be understood by the illiterate.

Humans commonly communicate basic ideas through pictures (Rossides 2003:3). Images are intended to result in visual perception, which is the meaning concluded after the image is interpreted by the brain (Lester 2003:51). One notable difference between communication
delivered by written language and that delivered through graphical representation is that the latter can generally be understood without the need for literate communication. An indicator of the effectiveness of communication through pictures can be further verified through the universal understanding of international signage in the modern world.

In the Gestalt Theory of Visual Communication, perception is considered to be the "result of a combination of sensations and not of individual sensual elements" (Lester 2003:51). While often considered an outdated communication theory, the Gestalt approach opened new doors to understanding how the mind interprets images and how locational context can play a role in understanding symbology (Sless 1981:52). This may still have value when considering that in addition to their intended message, by their location, historic inscriptions contribute to an understanding of the scale and meaning of cultural landscapes. In this study, the relationship between the landscape and inscriptions will begin with the physical placement of inscriptions at sites known be used for specific purposes. As examples, historic inscriptions along railroads are relevant to construction and maintenance functions, those at sites along the Oregon Trail in Wyoming are dominantly associated with travelers of the route, and many of those found at Medicine Rocks State Park in Montana are associated with social activities there.

Historic inscription sites should be examined by considering the cultural and geographical settings of these resources. Moreover, a landscape-centered framework is well-suited to the study of historic inscriptions.

Because landscapes are worlds of cultural product and represent the record of dynamic processes of human interaction with their environments, they warrant further consideration. A landscape approach provides a framework for assessing sources of behavioral variability in the archaeological record and allow observations in a context beyond the limits of the physical locations and boundaries of sites (Anschuetz et al. 2001:191).

It is possible that by applying landscape archaeology theory, predictive modeling could
be applied to discover new sites. Future investigations of historic inscription sites may reveal that particular categories of communication were being employed at certain locations, depending on the activities that were associated with it. Constructivism is a commonly used communication theory that states that the interpretation of a communication message that is delivered or received is dependent on the individual characteristics and qualities inherent to the communicators (Whaley and Samter 2006:117). This is especially important when recognizing or interpreting abstract symbolism or representations that must be culturally learned. Landscape archaeology theory, Gestalt, and constructivism communication theories are interlinked in that through their use it is possible to understand how an inscription artifact alone does not encompass the full narrative, but that our understanding of the inscription signs and symbols becomes more extensive when an inscription is documented, interpreted, and considered amid its broader cultural and environmental context(s).

*Semiotics* or *semiology* is the study or science of signs (Lester 2003:55). Within the study of semiotics are considered three types of signs which are iconic, indexical, and symbolic. The iconic signs are considered the easiest to interpret because they resemble the subject that they represent (e.g., drawing of a horse represents a horse) (Lester 2003:57). *Indexical* representations have a connection to the thing that they represent such as a footprint representing a person, a track representing an animal, or a leaf representing a plant. *Symbolic* representations are those that have no representational logic for the objects that they represent (e.g., heart symbols represent love); these symbols have to be taught and therefore may represent cultural influences the most (Lester 2003:58).

### 4.2 Examples of Iconic Representation on the Northern Plains

Aesthetic representations are included in the iconic category of semiotics since they
represent recognizable figures, such as buildings, people, and animals, including a drawing of a house from 24RB302 (Figure 4.1). The drawing is done in an artistic style that neglects applied perspective technique and focuses on an axonometric interpretation of the object. This potentially establishes a typological subcategory of planar representation within semiotics, which could be further stratified with bas relief and perspective infused representation. The architectural style is further represented in a similar building from a site in the southwestern Bull Mountains of Central Montana (Figure 4.2). The structures are plain, as was the standard for common homestead houses, and are within the proximity of textual inscriptions that date to the homesteader period. While the house is an iconic representative of the buildings themselves, they are further representative of the concepts of home, security, and place. When the inscription panel containing the second house is viewed in its entirety, it can be noted that the homestead era house has been superimposed on a rock art panel showing a horse with rider, other figures, and additional markings that include teepee shapes (Figure 4.3). The proximity of the inscribed house to the teepee figures provide a direct side-by-side comparison of the contemporaneous architecture of the indigenous people and the homesteaders, and it is possible that the homestead building was consciously placed as a response to the presence of the teepees.

At other sites, inscriptions document other architectural forms that are representative of buildings of the homestead era. A flat two-dimensional style is used to represent a church building inscribed in Medicine Rocks State Park 24CT0022 (Figure 4.4). Another example of the flat frontal style being used as an alternative to the more graphically complex axonometric style can be found in the image of a building at the Roadside site 24PR00204 near Ashland, Montana (Figure 4.5).

Portraits are clearly depictions of individuals. Occasionally the names are included, such
as the cases of P. E. Davis from 1879, from a site near Colstrip, Montana (Figure 4.6) and David Douglas from a site near Ashland, Montana which includes a date of 1955 (Figure 4.7). Whomever David Douglas was (or is), his hat represents some sort of period style while his smoking represents the use of tobacco and its presence in the culture of 1955. Smoking during the homestead period can also be viewed in a profile incised near historic inscriptions from the homesteader period located at Medicine Rocks State Park, landform NS051 (Figure 4.8). A portrait of a straight-mustached man wearing a straight-collar jacket, typical of late 19th century style, can be seen at Medicine Rocks State Park, landform SS055 (Figure 4.9) near another figure wearing a wide-brimmed hat (Figure 4.10). Wide brimmed hats are iconic symbols of the quintessential American West, not only for their distinctive style, but for the utilitarian functions that they serve. Another figure with a wide-brimmed hat can be found at Names Hill, Wyoming (Figure 4.11). Although many incised images may not contain a specific date, they can be associated with historic inscriptions that are present in the immediate vicinity, and may also be generally dated if they convey period-based style such as unique clothing or hair, such as these inscriptions of women from Medicine Rocks State Park landform SS055 (Figure 4.12), and the Cave Hills of South Dakota (4.13). The female figure shown in Figure 4.12 is associated with the local lore of southeastern Montana as having been incised by Irish immigrant herder Herbert Dalton, jilted by the potential bride left behind, who refused to move west as promised (CCGS 1978).

Each historic inscription within the archaeological record represents aspects of the relationship between the land and the people that inscribed their communication onto the sandstone of the Northern Plains. During his examination of historic inscriptions at Medicine Rocks State Park in Montana, noted archaeologist Steven Aaberg examined the background of
the character that had incised the detailed bust (Figure 4.12):

One of the most unique instances of historic rock art is also present at Locality E. It consists of a relief sculpture of a woman’s bust (i.e. cameo) and an adjacent bird holding a flower (Figure 29). These relief sculptures have been well-known to area residents for some time. These sculptures are attributed to Herbert Dalton, an Irish sheepherder who worked for the Anderson Ranches in the Medicine Rocks area (CCGS 1978). An undated photograph of these sculptures appears in Shifting Scenes: A History of Carter County Montana (CCGS 1978). The historic photograph is signed as “Carved by the Dalton Bros.” Apparently Herbert Dalton had a brother who immigrated to America at an earlier time (CCGS 1978). Considering the phrase on the historic photograph it is likely that the brother of Herbert Dalton carved or assisted in carving some of the sculptures. The historic photograph shows that the sculptures have been seriously degraded since the photograph was taken. Originally the sculptures were completely finished and smoothed and exhibited far more detail than they do now. A date of 1904-5-6 is clearly evident at the base of the women’s cameo on the historic photograph and that date is only partially visible now. A date of Sept. 1908 is also clearly visible to the left of the bird in the historic photo. That 1908 date is not visible now. In the historic photo there is also what appears to be an ornate D circumscribed by a circle and it is presumed that the D is associated with the Dalton name. That D image is faintly visible today to the left of the woman’s bust. It appears that these relief sculptures have been, at least in part, intentionally defaced with some bullet poking evident. Natural erosion and spalling are also evident.

An interesting account of the Dalton sculptures was told by Sandy Repplinger, an early homesteader whose family came to the Medicine Rocks area in 1917 (Speiser and Gilman 1975:pg 31). Repplinger could not remember the name of Dalton when he told the story about a sheepherder who had lived in a cave at Medicine Rocks for a spring and summer during the years from 1904 through 1906 (Speiser and Gilman 1975). Repplinger went on say that this sheepherder had made a sculpture of a woman’s head during his herding tenure between 1904 and 1906 (Speiser and Gilman 1975). (Aaberg 2010:66)

An hourglass shaped figure representing the body of a woman can be seen at Register Cliff in eastern Wyoming at a site along the Oregon Trail (Figure 4.14). The figure is drawn to have a pleated pattern to the long dress. Figures are sometimes drawn in caricature form, such as a rounded man with a cowboy hat located at the Rancher site east of Ashland, Montana (Figure 4.15). Historic inscriptions of humans may also contain depictions of genitalia, such as that attached to a side profile of a cowboy figure on a historic panel (Figure 4.16). Humans are
artistically represented in historic inscriptions from imperfect scratches to formal bas relief carvings. The dominant form of inscribing people is to show the person in profile, with the figures facing either left or right, but a minority of inscriptions has been found where faces are shown looking forward (Figures 4.17 and 4.18). Stylized depictions of Native Americans have been found among historic inscriptions associated with names and dates from the early 20th century at sites including Stag Rock near Ashland, Montana (Figure 4.19) and near the second Crow Agency site south of Absarokee, Montana (Figure 4.20). It is unknown whether tribal or non-tribal people made these.

Horses and livestock were an important part of life for the Plains Indians and European in the region, and representations of them are diverse, beginning with broadly distributed contact era inscriptions, at such places as Names Hill in Wyoming (Figure 4.21). Historic inscriptions of horses may include the full figure complete with riding tack, such as found at landform SS088 at Medicine Rocks State Park (Figure 4.22), or they may be represented as a partial figure, as found at landform SS053 there. At a site in Central Montana near Hysham, there is a cave along the Yellowstone River Travel Corridor, herein referred to as Homesteader's Cave, that was used for shelter and has inscriptions dating to 1880. Someone carved a donkey, approximately two meters long, with accompanying text that reads "O my Ass, O my Donkey," on the ceiling (Figures 4.24 and 4.25). As with all examples of iconography within the historic inscription record, the scale of the representations can vary widely. In contrast to the two-meter long cave donkey, an inscription of a horse at a site near Custer, Montana is quite small, as shown by the quarter used for scale (Figure 4.26). A horse inscription at Poker Jim Butte near Ashland, Montana (Figure 4.27) includes ancillary text and incorporation of an American Flag, representing many levels of iconic depiction given the diverse ways of viewing the colonial history of the North American
Some historic inscription panels combine multiple graphical communication types. As an example, the iconic and symbolic semiotic communication categories may be combined, such as in a historic drawing of a cow with a brand from the 24RB302 site in eastern Montana (Figure 4.28). This assemblage represents both an artistic interpretation of an iconic figure, in this case a cow, and a symbolic representation in the form of a brand. Blending communication elements is further demonstrated in an inscription panel near Ashland, Montana that shows the iconic figures of livestock and a cowboy, symbolic representations in the form of brands, and textual messages in the form of dates (Figure 4.29). At a site along Fifteen Mile Road east of Ashland, Montana a transportation scene is depicted. Inscribed on the rock is a spoke-wheeled wagon being pulled by an animal and seated on the wagon is a figure wearing a wide-brimmed hat. This scene (Figure 4.30) conveys more than the individual elements of the person, the draft animal, and the wagon; this scene depicts their interaction and chronicles their travel.

Several inscriptions of birds, some presumably doves, have been found that are associated with dates relevant to the movement of cattle from Texas to the Montana Territories in the late 19th century, as well as with homesteader activities from the same era. For example, at Names Hill in western Wyoming, the body of the dove figure is used as a container for text (Figure 4.31) and is situated near inscriptions from the late 19th century. At Alcatraz Rock near Ekalaka in eastern Montana, the dove figure is near the inscription "J. H. Treadwell, Ft. Griffin, Texas, Aug 18, 1885" (Figure 4.32), which is within the cattle drive era. J. H. Treadwell may be the individual of the same name that was in Company I of Hood's Texas Brigade (Polley 1910:299). Hood's Brigade from Texas participated in the War Between the States on the side of the Confederacy (Polley 1910:15). Additional dove figures can be found associated near
homestead-era inscriptions near Colstrip, Montana (Figure 4.33) and at formation SS051 at Medicine Rocks State Park (Figure 4.34). With multiple examples of birds found within the historic record of the research period, it is possible that some communication message is conveyed through their presence beyond their iconic nature; however, this message (or these messages) are unknown at this time.

While birds may be common items found to be depicted among historic inscriptions, boats are not, especially when located distances far away from their normal context. Certainly boats were used within the research area and timeframe, as William Clark and his detachment travelled the Yellowstone River downstream from near current day Park City, their horses having been taken by the Crow. A contact-era inscription called the Explorer Petroglyph that is located on the southwestern limits of the Bull Mountains several miles north of the Yellowstone River, is considered to possibly commemorate the occurrence. The inscription (Figure 4.35) shows figures standing in a dugout vessel while a tall figure on the right overlooks the scene with a figure of a horse on the left. While the dugout canoe is not out of place on the Yellowstone River, a tall sailing ship drawn by Henry Jensen in 1928 is somewhat out of place in the prairie of eastern Montana, having been drawn upon landform NS059 in Medicine Rocks State Park (Figure 4.36). Equally out of place is a tall sailing steamship with the name Marr Mack, next to the name A. E. Rhodes, located in the Weatherman Draw of Cottonwood Canyon of south-central Montana (Figure 4.37). While there is no date present at the Marr Mack, there is another inscription that reads "Emory Rhodes, Dec. 21st, 1901" in northern Wyoming within 20 miles of the ship (Figure 4.38) that is quite possibly the artist noted as A. E. Rhodes at the Marr Mack.

4.3 Examples of Indexical Representation on the Northern Plains

Indexical images are those that represent a connection to other objects or concepts. A
horseshoe is such an object (Figure 4.39), being representative of a horse, or a cultural representation of luck (Daniels and Stevans 2003:1290-1291). The element of a horseshoe carries communication messaging and cultural implications far beyond the initial response if we consider that the horse is a primary element in the historical development of western culture that includes contact with the Spanish in the Americas, which facilitated a major transition of customs as the horse became integrated into the way of life for indigenous people (Hamalainen 2003:836; McEntee 2005:8-10). The transportation role of horses as the nation migrated westward and the importance of horses to the development of the cattle industry in the American West further contribute to the case that in an indexical sense, a horse is not merely a horse, but embodies travel, security, and other representational concepts. The inscribed liquor bottle shown in Figure 4.39 is yet another example of documented indexical images (Figure 4.39). The bottle shape itself potentially conveys stylistic information that might indicate a manufacturer or date of manufacture; the contents remain unknown, but could be alcohol. A bottle shape can also be seen on an inscription at Independence Rock in present day Wyoming (Figure 4.40).

The presence of an incised game of tic-tac-toe is adjacent to a 1918 inscription on Sheridan Butte in Eastern Montana and represents the ability of this deceptively simple activity to transcend cultures (Figure 4.53). Games are learned cultural activities that represent competition and abstract thinking. The game of tic-tac-toe originated in ancient Egypt (Achenbach 1996:263) and is a precursor to more complex positioning games such as "Nine Men's Morris," which became popular during the height of the Roman Empire (Saban 2013:50).

"Skull and crossbones" inscriptions represent another indexical image observed on the Northern Plains, including one at pass in the North Cave Hills of South Dakota (Figure 4.54) and one at Devil's Kitchen near Park City, Montana (Figure 4.55). This symbol represents a
warning against poisons, explosives, or other dangers, and its use on product labels originated around the mid 19th century (Partick and Thompson 2009:109). Inscriptions of names and dates that are physically near and visually similar in inscription "age" to these two locations are from the 1930s. While this temporal proximity suggests that these may represent a connection to poison or other dangers, the intent and meaning of the skull and crossbones inscriptions at these two sites remains unknown.

Religious symbolism is among other indexical images observed in the region that are loaded with complex communication meaning. At a site near Roundup, Montana there are multiple versions of Christian crosses inscribed with the phrase: In hoc signo vinces, which means “By this sign thou shalt conquer” (Figures 4.41 and 4.42). While associated with inscriptions dating from the late 1800s and early 1900s, the phrase originated during the 4th century during the Roman reign of Galerius. During his sovereignty, persecution of Christians was so intense that symbolism relating to the religion was all but eliminated. In honor of this event, throughout the Roman Empire, columns were erected that declared: Dileto nomine Christiano which translates as “The very name of the Christians having been wiped out” (AD 303-313). These declarations were premature as Constantine marched on Rome in 324 AD with a glowing cross said to have appeared in the sky with the words “By this sign thou shalt conquer.” Maxentius and his troops were routed and the worship of Pagan gods was driven from the City (DeVos 1899:54).

The Christian cross is an indexical religious symbol representing a connection to Christ through the crucifixion, a central event in the Christianity belief system. This belief system was transported onto the Northern Plains through immigrants and missionaries and became the dominant religion in the region during the 19th century. Located on the north side of Pompey's
Pillar in Montana, a figure kneels beneath Christian symbolism (Figure 4.43). The presence of these symbols on the North American Plains evokes the rapid spread of this belief system, and the power associated with its social influence. The phrase *In hoc signo vinces* written over the crosses is also associated with the Masons, an organization that migrated westward with the immigrants. The motto is directly used in the coat of arms representing Scottish Masonry (Mackey et al. 1912:495).

More direct evidence of Masonic symbolism has been documented at Medicine Rocks State Park in Montana (Figures 4.44 and 4.45), Names Hill in western Wyoming (Figure 4.46), Independence Rock in central Wyoming (Figure 4.47), and Register Cliff in eastern Wyoming (Figure 4.48). The sites at Register Cliff, Independence Rock, and Names Hill are all directly on the Oregon Trail. The presence of these symbols on the Trail suggests that members of the organization transported their beliefs, values, and symbols into a region that was new to them but lest there be any doubt, there is a commemorative plaque present at Independence Rock (Figure 4.49) that proclaims:

> The First Lodge of Masons in what is now the State of Wyoming, was convened on Independence Rock on July 4th, 1862, by a body of Master Masons who were traveling west on the Old Oregon Trail.

> To commemorate this event, Casper Lodge No. 15, A. F. & A. M. of Casper, Wyoming, Held memorial services here on July 4th 1920 (Metal Plaque on Independence Rock).

Additional evidence of Christianity being the dominant religion of immigrants using the Oregon Trail can be found at Names Hill in western Wyoming on the west bank of the Green River, where someone incised three crosses high on the cliff (Figure 4.50). An inscription that shows a cross with the initials K K K casts a sinister connotation over the associated use at a site near Roundup, Montana (Figure 4.51). These three initials also appear together at Medicine
Rocks State Park, but with no associated cross it could simply be the unfortunate initials of someone (Figure 4.52). Whatever the case, amid the context of the relatively sudden and drastic changes wrought by the people creating those crosses, such imagery is reflective of a sign that is suggestive of "thou shalt conquer."

4.4 Examples of Symbolic Representation on the Northern Plains

Livestock brands are commonly found as a component of historic inscriptions and while each represents a specific owner (Figure 4.56), they can be often found grouped together on panels (Figure 4.57). They represent the symbolic category of communication since their connotation represents a concept through learned symbolism. In the case of brands, these were placed on livestock such as cattle, horses, and sheep. These often abstract combinations of text characters, numbers, and symbolism were used to mark livestock and property as representative of ownership, which is the primary message intended to be conveyed. By incising brands on cliff faces and outcrops, many of the early ranching outfits literally left their mark on the landscape as well as burning them on to the animals they tended.

Brands can be “read” by those who know the language, not unlike other forms of epigraphy. The words that describe brand shapes include cross, bar, tee, circle, half-circle, heart, diamond and lazy (Mason 1897:234). When the brand is “read” these terms are combined to be spoken as the “Three Circle” (Figure 4.58), “Circle Bar” (Howes 1927:31), “XIT” (Russell 1981:55) (Figure 4.59) or “Diamond S” (Figure 4.60). These brands are significant as they represent more than the obvious ownership of cattle; they represent control of the land, control of employees, and involvement in the development of communities that developed during the late 19th century. To many people these brands represented a way of life that was brought to the Northern Plains during the past two centuries and that is still practiced today. To these people
that continue to live a rural lifestyle - and to others that are familiar with it - the brands represent the tenacity of individuals to immigrate into a relatively unfamiliar landscape and begin to modify that landscape and stake ownership claims in the region. To the region's indigenous people, the brands symbolized overwhelming waves of immigrants. The introduction of cattle onto the Northern Plains contributed to vast cultural and biological changes affecting buffalo populations and altering the traditional economy of indigenous people on the Northern Plains (Jimenez 2010:151-152).

An example of an influential leader of a ranch was Granville Stuart, a notable Montana character during the latter part of the 19th century. Born in Clarksburg, Virginia in 1834 of Scotch descent, he participated in the California Gold Rush, the discovery of gold in Montana, the settlement of the Deer Lodge Valley, and eventually became an early cattle baron in the central part of the state. His DHS brand, inscribed on a sandstone cliff face near Roundup, Montana (Figure 4.61) was a well known symbol in Central Montana during the expansion of the cattle in the late 19th century (Stuart and Phillips 2004).

The XIT Cattle Company became the largest operation in eastern Montana beginning in the late 1880s (Stout 1921:1340). The XIT Cattle Company was started in Texas where it had an enormous land holding approximately 200 miles long with an average width of 27 miles (Duke and Frantz 1961:8). At its peak, the XIT maintained around 150,000 head of cattle at the ranch in Texas, while running around 10,000 head annually in Montana (Duke and Frantz 1961:6) that displayed the XIT brand (Figure 4.59). The first 10,000 cattle headed for Montana in the spring of 1890, and the XIT company continued the practice of trailing the cattle north into 1896. While the XIT was late arriving for the heyday of the cattle boom, it remained a major influence in eastern Montana until shutting down its holdings around 1909 (Hyatt 2009:247).
In the Ashland area of eastern Montana, the Three Circle Ranch was created by former Confederate soldier Captain Joseph Brown. In 1884, he made the cattle drive to Montana, and based the ranch along the Tongue River (Montana Preservation Alliance 2007:23). The ranch brand is the circumscribed numeral "3" (Figure 4.58). As one of the significant early ranches of the region, the brand is broadly distributed across the region's cliff faces, inscriptions presumably made by the loyal ranch hands. In those days, there was an expression that the 'hands' or 'peelers' (i.e. ranch workers), as the workers were referred to, "rode for the brand" (Hyatt 2009:249). This expression represented that the loyalty of the worker was associated with the brand, a symbolic form that bound workers of each ranch together. The brand not only represented ownership then; it also symbolized loyalty, camaraderie, and a way of life. The placement of various brands on rock outcrops and cliff faces throughout the Northern Plains is emblematic of such identity and/or solidarity and/or territoriality as the geographical distribution of these types of historic inscriptions generally outlines the range of the ranch. As ranch hands may have created many of the incised brands, they could also have been following work orders. Moreover, the physical placement of the brands inscribed on sandstone outcrops can be associated with social and functional ranch activities. Social activities that were a common component of life in the American West would have included roundups, harvest events, picnics, and courtship rituals. These activities would have involved a diverse selection of the population, which would have contributed to the use of a broad representation of communication types. Some of the images created cross lines of being iconic, indexical, or symbolic, such as a brand that incorporates the use of the heart symbol.

Anecdotally, the most commonly appearing image incised and painted on the sandstone of the Northern Plains is the heart. The heart sometimes appears with names or initials, often
expressed with a “+” symbol indicating a relationship between the annotated actors. In the context of 19th and 20th century representation, this may indicate either a mutual attraction or a desired potential relationship. These symbols are sometimes modified to reflect a change in relationship status, as is the case in this redacted heart figure at the Roadside site 24PR00204 near Ashland, Montana (Figure 4.62). The heart figure is sometimes incised as being penetrated by an arrow (Figure 4.63); arrow styles vary, but the one shown in this rock art inscription of a bear being penetrated by an arrow is similar in style/design to the arrows utilized by the occupants of the Northern Plains prior to the seventeenth and eighteenth centuries (Figure 4.64) at the Two Bears site 24RB01510 near Ashland, Montana. In the two culturally different representations of the heart, both of the depictions use representations of the heart and the arrow, but with different meanings. In the case of the historic inscription, the heart connotes the concept of modern love with the arrow representative of the assistance of Cupid, whereas at the Two Bears site the arrow and the heart are literal, representative of hunting and the life essence of the bear.

While the use of the heart symbol represents an expression of love, courage, sorrow and joy (Keister 2004:109), some believe that the origin of the figure goes back to the seventh century BC when the city-state of Cyrene in northern Africa engaged in the trade of silphium. The plant was so important that coins were minted that included an image of the fruit (seed pod) of silphium, which is shaped as the heart symbol that we know today (Royal Numismatic Society 1899:286). Across time and geography, the symbol was used by a variety of cultures that include the Aztecs, Buddhists, Celts, Christians, Hebrews, Hindus, Muslims and Taoists (Barratt 2008:1). The Catholic Church adopted the use of the symbol as a representation of the heart throughout the 17th and 18th centuries using the “Sacred Heart” as "a symbol of the Lord’s
redeeming love” (Tresidder 2005:226). Since the heart symbol of the historic inscription period does not represent the shape or appearance of an actual human heart, interpretation of it as such is representative of a symbolic depiction within the study of semiotics (Neville 1996:100-101), especially as indexical or symbolic communication. The heart symbol that is common today became popular during 17th century England and North America, where they were used on Valentine's Day cards (Watts 2007:346). Because the shape has enjoyed continuous usage for many years, it is sometimes difficult to precisely date individual inscriptions or other images since they often appear among historic and contemporary graffiti and are typically not dated; nevertheless, it is worthy of noting that the heart symbol is ubiquitous among historic inscriptions on the Northern Plains throughout the 19th and 20th centuries.

Whether the primary emotion of love is expressed through textual-based inscriptions such as 'Johnny loves Suzzy' or via more symbolic iconic representations (e.g. heart), the act of sex or mating has cross-cultural and relatively timeless similarities when it comes to graphic representations. Images from an inscription site east of Roundup, Montana near a mining town that was abandoned in the 1930s include examples of such an act that dates from pre-European contact and another that dates from the "post-contact" historical period adjacent to each other (Figures 4.65 and 4.66). How did these two representations of the same act come to coexist within feet of each other? Did the stylistically adolescent historic scribe recognize the Native American inscription and create his/her own version? Would it be a correct assumption to believe that the historic inscription was created by a male or female adolescent, and if so, what does that say about male and female roles during that historic period and the likewise potential roles of the inscriber of the petroglyph and their love interest?

4.5 Conclusions
As demonstrated, image-based communication is a component of historic inscriptions, conveying messages that are capable of being directly understood, as in the case of iconic symbology or embedded with messages legible for only those able to interpret them. Graphical images can convey ownership, love, loyalty, pride, respect, and more, encompassing the full range of human emotion. These represent communication patterns and concepts that document patterns of behavior that represent a critical and universal component of being human. For example, all cultures have created depictions of animals, humans, and cultural objects. As with Native American "rock art" figures, these elements can be divided into iconic, indexical, and symbolic categories of communication with meanings that are immediately understandable, associative, or abstract. After examining additional patterns among the historic inscriptions on the Northern Plains, it became clear that inscribed symbols convey messages of individual and group identity, and were often superimposed over pictographs and petroglyphs, literally and figuratively demonstrating the deeper symbolism of the North American West's colonial history.

The use of drawings to convey messages is neither new nor culturally unique. Beyond the behavior of creating residual communication, practices continue today that utilize symbology in a formal way (e.g. building construction and fabrication documents). The practice of communicating through drawings is an inherent part of being human and will continue in various forms into the future, but historical inscriptions contain information that is specific to their time and place. From an anthropological perspective, a deeper inspection of them yields a broader understanding of the communication role of symbology within any culture. The archaeological evidence of residual communication from the Northern plains during the 18th and 19th centuries demonstrates relevance of historic inscription research to investigations of identity and influence, among numerous other topics including demographic research and risk and vulnerability studies.
As historic inscriptions are more fully understood within the context of residual communication, their further study may be useful for assembling predictive modeling regarding potential future expressions of residual cultural communication, perhaps even as humans extend their presence beyond Earth. Social identity, landscape archaeology, Gestalt, and constructivism communication theories are intertwined and through their consideration it can be revealed that even the simplest inscription exists as part of a more complex construct. These theories need to be integrated to create theoretical framework(s) to interpret the cultural resources presented herein as historic inscription research builds and expands on the existing cultural historical foundation of this inquiry.
5.1 Chapter Overview

Names and dates are the dominant form of information conveyed through the many thousands of historic inscriptions that are present on the Northern Plains. The names and dates are often accompanied by additional text that provides evidence about the inscribers that are suggestive of individual and group identity and influence. In all cultures, the identity of an individual begins with their name. Whether written or spoken, our name identifies us to others and to ourselves. To state that "I exist, I was here, I matter" is a quintessential example of a human being engaging their landscape. When William Clark chose to incise his name on the soft sandstone rock of Pompey's Pillar in what is today eastern Montana (Figure 5.5), his communication reflex was to firstly identify himself and then to note the specific time that he was there. Part of the Lewis and Clark Corps of Discovery, William Clark's name represents an individual and symbolizes a larger group and event in American History. Many examples of individuals representing an association with a larger group indicate that they viewed themselves as part of a larger entity, and that they were engaging in a group behavior as part of that entity. William Clark's association with the Corps of Discovery connects his individual signature with a broader entity. "A group exists psychologically when two or more people define and evaluate themselves in terms of the defining and often prescriptive properties of a common self-inclusive category" (Hogg and Cooper 2007:336-338).
This chapter will show that as people navigated the Northern Plains during the late 19th and 20th centuries, they also inscribed communication that identified multiple specific groups, thereby associating themselves as part of a larger faction, in addition to their individual identities. Group identification behavior continued into contemporary times as groups including the Masons, members of the military, those involved in ranching, homesteaders, and travelers inscribed names, dates, and events across the region. By the early 20th, people continued to acknowledge group involvement, with members of the Civilian Conservation Corps and the United States Geological Survey among those leaving inscriptions. Historic inscriptions are generally in text form with pictograms commonly intermingled. Sites that have been systematically recorded, such as Medicine Rocks State Park in southeastern Montana, indicate that the priority of inscribing is quantifiably represented as:

1.) Name and/or initials of inscriber
2.) Date they were there
3.) Where they are from
4.) Other information

The importance of identity emerges as the most frequent pattern observed on historic inscriptions dating from the first half of the 19th century, as explorers, fur traders, and missionaries began to leave names, dates, their place of origin, and images throughout the region. These expressions of identity are embedded in historic inscriptions, to firstly define one's self as being present, to secondarily exclaim specifically when one was there, and thirdly, to potentially associate oneself with a larger group, which in most cases observed on the Northern Plains, was someone's town or country of origin.

Information secondary to the name among the historic inscriptions on the Northern Plains
is the date of when the incising occurred. There are instances where the date associated with the individual is their birthday, a commemorative date, the date of their death, or the date of their high school graduation. Further study needs to be undertaken to ascertain the frequency of dates associated with the birthday, commemoration, and deaths to explore if other examples exist beyond known isolates. The practice of incising the date of a high school graduation, often represented in quotes, such as "83" projects from the contemporary time, but there are cases that extend into the historic period (Figure 6.1).

Thousands of immigrants moved westward in North America during the 19th and 20th centuries (Boyer and Dubofsky 2001:359, 361-362). At the time, many natural stone surfaces already displayed communication created by indigenous people on the Northern Plains, a resource now commonly referred to as "rock art." Rock art was created for a variety of cultural reasons, including the display of clan symbols, those created for spiritual meaning, to create hunting magic, for astronomy, for puberty and fertility rites, to record important biographical events, and for reasons that remain unknown (Grant 1983:12-14). Since the early 19th century, many of these palettes or panels representing the continuous chronology of the people and groups living on the Northern Plains, became superimposed beneath the carvings and words, (primarily names and dates), of the recent settlers in the region. This chapter will first present a selection of inscriptions in a chronological format, from the beginning of the 19th century through 1940. As these inscriptions are presented, they will be accompanied by contextual narrative that will place individuals and groups in historical and geographical context, and that will reflect upon the influence of these cultural actors.

5.2 Individual and Group Identity and Influence
Although identity can be conveyed through inscriptions of graphical objects such as a Masonic symbols or brands, names are the most definitive representation of an individual or group. Dates often accompany the names or initials to indicate when the inscriber was there. Even though most of the inscriptions described here represent the entire 19th and early 20th centuries, there are some outliers with earlier dates. These are, however problematic in that they do not contain enough information to support further research, or that they are more modern inscriptions, as demonstrated by weathering patterns, which makes the dates technically invalid. For example, a relatively "freshly" inscribed date of "1776" is positioned near the name "Clay," along with images of a pistol and a bison skull at the Hanging Rock site north of Custer, Montana (Figure 5.1); a "1776" is inscribed on a boulder with the initials "G. W.," which was removed from a hillside in the 1950s from an area a few miles west of Columbus, Montana and now resides at the Yellowstone County Museum (Figure 5.2); the date "1776" has also been documented in an alcove at Medicine Rocks State Park (Figure 5.3). Considering the iconic meaning of the year 1776 in United States history, this date may have more research potential as an iconic symbol of communication rather than a chronological tool for historic inscriptions on the Northern Plains.

While it may be easy to cavalierly discard historic inscriptions prior to the arrival of William Clark at Pompey's Pillar, explorers were in the research area before 1800. These explorers included an expedition led by Pierre Gaultier de Varennes, sieur de La Verendrye, who in 1731 departed Montreal with fifty men, returning in 1739 (Neill 1875:5). Verendrye was not the journalist that Lewis and Clark were, so while details of the expedition are vague, he purportedly deposited a lead plaque bearing an inscription that translates:

(front) "In the twenty-sixth year of the reign of Louis XV, the most illustrious Lord, the Lord Marquis of Beauharnios, 1741, Pierre Gaultier De La Verendrye placed this."
The plaque was found in 1913 by children playing on a hill overlooking Fort Pierre in South Dakota and is now in the possession of the South Dakota Historical Society (National Park Service 2014). It provides physical evidence that explorers were in the area of eastern Montana prior to 1800, it demonstrates a tradition of explorers leaving their mark in new territories, and it lends credence to a line of discussion that inscriptions predating 1800 may not simply be dismissed without further inspection.

5.2.1 1800-1850: Explorers, Fur Trade, and Missionaries

In 1803 the United States purchased a large body of land on its western border from France. This purchase, The Louisiana Purchase, was adamantly supported by President Thomas Jefferson, who foresaw great promise for the largely unexplored and undocumented land mass (Kennedy 2003). An inscription at Medicine Rocks State Park in eastern Montana bears not one, but two instances of the date 1803 (Figure 5.4). This inscription is well defined and is accompanied by a directional arrow, perhaps to indicate the direction of travel of the inscriber. Three years later during their return trip to the east, William Clark paused to carve his name (Figure 5.5) on a sandstone panel already bearing pictographs on a formation along the Yellowstone River, which he named Pompey's Pillar. This was not the first inscribed evidence of the expedition, as the journals note fifteen occurrences of the expedition leaving their mark (Saindon 2003:493). Further downstream the eastbound expedition met up with Manuel Lisa, who was traveling up the Missouri to build a fort to support the growing fur trade. Lewis and Clark Expedition member John Colter requested and received discharge from the troop and returned upstream with Lisa. Colter guided Lisa's fur trade group upstream on the Yellowstone
River to where it is entered by the Bighorn River. There Lisa's expedition constructed what would become known as Fort Raymond. In the fall of 1810, the trappers and traders were driven out of the region by hostilities with the Blackfeet (Parry 2001:252).

While efforts to relocate the specific placement of Fort Raymond have proven thus far unsuccessful, there is a boulder on the southwest side of the confluence at the base of the river breaks that contains historic inscriptions; two of particular note read "M. Lisa 1807" (Figure 5.6) and "Colter 1810" (Figure 5.7). No known journal entries mention their placement, but oral tradition of homesteader families in the area specify that the inscriptions were there when they arrived and historical photographs verify their existence in the early 1900s (John Sjostrom 2007, pers. comm.). While these particular inscriptions have provoked a great deal of regional interest emphasizing their preservation, uncertainty about their authenticity has been a topic of discussion for regional historians (John Keck 2007, elec. comm.). It is notable that while these two inscriptions may be of questionable veracity, no such questions have ever been raised regarding the hundreds of other inscriptions, dating from "precontact" to modern times that are situated within five miles of this site. This highlights a pitfall, and perhaps a major growing pain of historic inscription research, that scrutiny and critiques are primarily reserved for inscriptions allegedly made by notable historical figures.

Other inscriptions during this era include those on a stone that is part of a stacked cairn along the route that eventually became the Bozeman Trail. The cairn is on a plateau on the south side of the Yellowstone River; along a natural travel corridor and provides an excellent view of the surrounding landscape. There is a wooden cross representing Christian beliefs present that protrudes from the top of the cairn (Figure 5.8). No name is found on the stone, but an inscription of "Aug. 19, 1817" is present (Figure 5.9). It is conceivable that the cross was added
to a trail marker that was created by the region's indigenous people, by trappers, or by a priest travelling along what would become the Bozeman Trail. Whatever the case may have been, the inscription and the cross underscore the ways in which the settlers continued to use travel corridors that had served indigenous people on the Northern Plains for centuries, if not millennia (Scott 2015).

Further east in Montana a distinct date of 1823 along with the accompanying initials of "JCW" (Figure 5.10) is located in a shelter cave in the Long Pines Unit of the Custer National Forest. At Medicine Rocks State Park, the date 1824 is deeply incised in a sheltered alcove (Figure 5.11) and placed upon a panel accompanying a profile of a face, an undecipherable name, and a bow and arrow. Near Fort Howes in the Ashland District of the Custer National Forest, the initials "G.O.A." are placed with the year 1824 (Figure 5.12). Further south along what would become the Oregon Trail, someone incised a date of 1825 (Figure 5.13) at Register Cliff in eastern Wyoming. The text of "John Banks, 1827" can be found at Names Hill in western Wyoming (Figure 5.14), along with the inscriptions of "J. Norby, 1842" (Figure 5.15), and the disputed notation of "James Bridger, 1844, Trapper" (Figure 5.16). While Bridger was known to have been in the area and later served as a guide on the Oregon Trail, the Bridger inscription is controversial in part due to the assertion that he was illiterate (Jenson 1888:59). Nevertheless, someone else traveling with Bridger could have created the inscription. It is notable that the inscription bears the word "Trapper"; whether this is an indicator of how Bridger viewed himself or as how he was viewed by others, but it is worthy of noting that he functioned as an explorer, trapper, hunter, and guide (Jenson 1888:59).

During the 1840s, Jesuit missionary Father Pierre-Jean DeSmet traveled through the American West, including parts of what is now Montana. During his travels DeSmet passed by
Pompey's Pillar (Chittenden and Richardson 1969:63). He traveled westward along the north bank of the Yellowstone River following a route that would later transition into the "Yellowstone Trail" (Bradshaw 2008:179-180), where he probably crossed the river using a well known ford (Olson 2002:12). On the north face of Pompey's Pillar is a carving of a kneeling figure holding a lance and positioned below a cross symbol (Figure 4.43). Text marked near the figure spells "FR GREENGO" (Olson 2002:7), and the cross is in the style of Catholic symbolism. While no evidence exists that DeSmet carved the figures or was present when they were incised, it has been speculated that it is commemorative of his visit (Olsen 2002:13). During this time period, missionaries influenced the belief system of the indigenous people in the American West (Holmes 2008:94-96).

Heavy use of the Oregon Trail began in the 1840s as an overland route to Fort Astoria located in what is now known as Oregon. The route was actually scouted in 1812 by Robert Stuart, who traveled east from Fort Astoria to New York to deliver messages to John Jacob Astor (Dary 2007:34). Use of the trail accelerated in 1843 with the "Great Migration" and continued into 1847 when Mormon leader Brigham Young was chosen to lead a group of followers west (Olson 2003:10-11). Inscriptions from this time period include that of "C. G. Hayes, 1847" at Names Hill, Wyoming (Figure 5.17), and "Swartwout, July 4, 49" (Figure 5.18) at Independence Rock, Wyoming. Many additional inscriptions occur along the Oregon Trail from this time period. Certainly people traveling along the Oregon Trail, or any of its many offshoots, carried with them not only their portable belongings but the cultural norms of their past lives.

5.2.2 1850-1870: Gold Rushes and Immigration

In 1848 gold was discovered at Sutter's Mill in California and its discovery set off a rush of immigrants who migrated westward to seek their fortune, with many of them settling
permanently in what would become California, as well as other areas with gold rushes (Willoughby 2003:3). People traveling along the Overland Emigrant Trail believed that in order to reach California by the fall snows that would block the passes in Sierra Nevada Mountains, they would need to reach the landmark known as Independence Rock in what is today Wyoming by the 4th of July (Bagley 2012:124). This might be considered a contributor to the behavior of inscribing the date in addition to the name in order to annotate where they were on the trail at specific times; however the practice and density of this combination of name and date exists at all other known sites, including the signature of William Clark at Pompey's Pillar.

While many names, dates, and pictograms are present along the emigrant trail, providing a unique form of textual and artistic archaeology, signatures expressing identity reveal a continual practice of inscribing and contribute to confirming the actual trail route. At Independence Rock these names include "L. P. Clark of LaPorte, In. [Indiana], June 9th /50 (1850)," whose inscription reflects great care and style in its creation (Figure 5.19). Toward the eastern end of the trail at Register Cliff in eastern Wyoming, an inscription reads "S. H. Patrick, June 6, 1850" (Figure 5.20). At Names Hill in western Wyoming, "I. W. Fouts, June 22, 1851, of Ohio" (Figure 5.21) is incised, noting his association to a home state. Back at Register Cliff, "June 19, 1852, Adams Co. Ills., W. Richardson" (Figure 5.22), "J. Foreman, July The 17, 1853" (Figure 5.23), "J. Carson, July the 17, 1854" (Figure 5.24), "G. O. Willard, Boston, 1855" (Figure 5.25), "J. Hill, June 5, 1856" (Figure 5.26), "J. W. Robb, 1857 U. S. Post" (Figure 5.27), and "W. Martin, A.J. Hill, 1858, July" (Figure 5.28) are still visible. Within that sequential grouping continues evidence of identity through association with a person's place of origin, while the inscription of J. W. Robb from 1857 reflects his identity of being with the "U. S. Post," prior to the start of the Pony Express in 1860.
While names continue to be placed along the Oregon Trail including "J. C. Newman, 1859" (Figure 5.29) at Names Hill and "W. Pierce, W. Ward, W. R. Thomason, S. O. Ward, 1861" (Figure 5.30) at Independence Rock, inscriptions containing dates begin to appear further north as gold rushes, supporting ranching, and other industries migrated north. In the Ashland District of the Custer National Forest in southeastern Montana, a region associated with ranching history that began during the 19th century, the date of 1862 is deeply incised on a sandstone panel, along with a less deeply incised date of 1929, a drawing of a longhorn cow, a cowboy, and brands (Figure 5.31).

Toward the end of the 19th century California Gold Rush, prospectors headed for the gold fields of Montana. The first recorded discovery of gold in Montana came in the spring of 1858 when Granville Stewart, his brother James, and Reece Anderson found deposits at Gold Creek near present day Drummond (Malone 1991:64). While inscriptions of the Granville Stewart name have not been discovered, this influential regional figure is represented in later inscriptions of his brand. Some of the people headed for the gold fields of Montana began along the Oregon Trail, perhaps including "W. W. Erwin, 1864" (Figure 5.32) found at Register Cliff. Many miners used the Bridger Trail, which branched off to head north passing by a petroglyph site in Wyoming where the inscription "K Z 1864" (Figure 5.33) is located. Perhaps this was a potential gold miner, headed for the digs at Virginia City in what would become Montana.

5.2.3 1870-1900: Military, Railroad, and Ranching

Tensions ran high in the 1870s between the indigenous people of the Northern Plains and the waves of immigrants migrating into the West. Military campaigns, conflicts, battles, and massacres ensued, and historic inscriptions associated with these events underscore the influences and identities of this tumultuous era. Although not associated with any military
presence, an inscription of 1871 (Figure 5.34), documented in a sheltered overhang at Medicine Rocks State Park in eastern Montana, is evidence that even during a period of cultural conflict, immigrants were traveling through what is now southeastern Montana, and were pausing to inscribe communication. Soon after, inscriptions documenting a military presence began to appear on the Northern Plains.

Through social identity theory, people in a group environment are known to alter their behavior from that of an individual (Hornsey 2007:205-209). As a behavior, the practice of identifying oneself within a larger group by inscribed or painted residual communication appears to date from time immemorial as shown above. A singular example includes a comparison of the similarity of inscriptions left by Roman soldiers that denote their military unit and inscriptions made by members of the military in the late 19th century.

The name of George Armstrong Custer stirs many opinions and emotions in American history (Kensey 2004:11-12). It is an understatement to proclaim that he exerted his influence over the Northern Plains and that his identity is intertwined with military campaigns that represented drastic cultural and environmental changes to the region (Utley 2003). During the summer of 1873, troops under the command of Colonel David S. Stanley, Lieutenant Colonel G. A. Custer, 7th Cavalry Detachment, Lieutenant Colonel Luther P. Bradley, 8th and 9th Infantry Battalion, Major Robert E. A. Crofton, 6th and 17th Infantry Battalion, and Charles J. Dickey, 22nd Infantry Battalion, accompanied surveyors of the Northern Pacific Railroad under the leadership of Thomas L. Rosser, Engineer in Chief in an expedition to examine the Northern Plains landscape along the Yellowstone and Musselshell Rivers in the Montana Territory for the purpose of potential railway routing (Eckroth 2013:13). Toward the close of that Expedition,
Lieutenant Colonel Custer remained with the surveyors as they left the Musselshell River and navigated east to rendezvous with Colonel Stanley, who had taken another route.

During 2011 and 2012, a project was undertaken by David Eckroth and his research team to investigate the routes, campsites, and conflict sites of the expedition (Urbaniak and Elliott 2012). To support the project, historical maps were georeferenced into the ArcMap 9.3.1 software environment. During this process it became apparent that an inscription reading "George A. Custer 1873" (Figure 5.35) was adjacent to the plotted route. Although the GPS location of the inscription is several miles to the north of the route mapped by the railroad surveyors, it is well within the viewshed of the thousands of people and associated traveling wagons, horses, and livestock that accompanied the expedition. The inscription certainly is not in an area that would lend itself to "being carved to promote tourism," and if the intent was to attract attention, it may have been more neatly inscribed. It is interesting that the inscription does not include a group association with a military unit, a common communication behavior shown to occur elsewhere. Other faint lines on the sandstone surface may indicate that it was superimposed over a petroglyph figure. In addition to the proximity to the mapped trail of the 1873 Yellowstone Expedition, anecdotal support from the sparsely populated locals maintain that the inscription has been known to have been there since first viewed by early immigrants (Jim Meyers 2012, elec. comm.). The military inscription is one of many known to exist in the research area, including one of "JT, July 11, 1874" (Figure 5.36), located to the north across the draw from Ludlow Cave in the North Cave Hills of South Dakota. Several members of the 1874 expedition had the initials "J T" (Sundstrom 2004:187). While his name is not found there, Custer was present in the 1874 Expedition (Jackson 1966:58).

At Castle Butte, north of Pompey's Pillar, an inscription of "Geo. Town, Dec 11, 1874"
Figure 5.37) also provides evidence of non-tribal people travelling without military escorts, relaying an archaeological signature of the stream of newcomers flooding into the region as murmurs of another gold rush became verified. While tensions were rising in the Black Hills of what is now South Dakota over the influx of miners, on the southern edge of what was the Crow Reservation prospectors left evidence of their encroachment on a granite outcrop at 10,000 feet near Goose Lake, to the north of present day Cooke City, Montana (Figure 5.38). Beginning with the Fort Laramie Treaty, the original Crow Reservation was generally recognized as being a major part of what would become southeastern Montana and northern Wyoming, but over time the size was reduced, partly due to the known presence of precious minerals (Bryan 1996:78). White settlers continued to emigrate into the Northern Plains, as supported by the presence of an inscription of "Gerry Turner, 1876" (Figure 5.39), located near Fort Howes in southeastern Montana.

Meanwhile, at Rosebud Creek on June 17, 1876, a group of men under the command of General George Crook clashed with Northern Cheyenne, Sioux, Lakota, Arapahoe, and others under the leadership of Crazy Horse and Sitting Bull. Lieutenant Colonel George Armstrong Custer's fateful command pursued these individuals and their villages a week later at the Battle of the Little Bighorn. At the Rosebud Battlefield there is a long sandstone cliff line that was once used as a buffalo jump and that has provided a canvas for communication for millennia. Petroglyphs dating to precontact times, primarily in the form of shield figures, are incised along the surface of the sandstone cliff. The surface also contains historic inscriptions including one of "G. Crook 1876" (Figure 5.40); since the incising is shallow, it has been traced for clarity (Figure 5.41). Due to the fact that it takes time to create an inscription, even such a shallow one, and due to the fact that the Rosebud Battle began in the morning and just a few hours after Crook and his
men arrived at Rosebud Creek, there was not likely a lot of time for a pre-battle incising, and there is no mention of the act in Crook's autobiography (Crook 1986:194). It is possible that someone else carved it as a commemoration; or Crook created he inscription when he returned to the site in the 1890s; although if that was the case he did not spend much in the effort.

On June 21, 1876 soldiers stationed at a supply depot at the mouth of the Powder Rover along the Yellowstone were working to stack brush on the top of Sheridan Butte in eastern Montana. The effort was in anticipation of a bonfire that would help in the commemoration of the upcoming 4th of July holiday. On June 27th, the wounded were sent downstream on the riverboats *Far West* and the *Josephine*. Hearing of the results of the Battle at Little Big Horn, the bonfire was postponed, but the inscription "J Bailey, Co C, 6th INF, June 21, 1876" remains (Figure 5.42). Although the Battles at The Rosebud and the Little Big Horn are significant events in the era of Indian Wars, conflict continued on the Northern Plains until coming to a close following the Battle of Wounded Knee in 1890 (Tucker et al. 2011:xlv). All the while, the inscription record documents the continued mass migration of settlers into this part of Indian Country."

Approximately five hundred miles to the southwest of the Powder River in Montana, at Names Hill in Wyoming, the inscription tradition continued, as evidenced by the inscriptions of "J. J. Hansen, Cowboy, 1876" (Figure 5.43) and "S P. French, 1877" (Figure 5.45). The stereotypical identity of the cowboy soon became a dominant figure on the Northern Plains, but the introduction of cattle into the area came under the protection of the United States Military, whose presence is documented by an inscription of "James B. Clark, F (Company F), 22 (22nd Infantry)" at the Deer Medicine Rocks site in what is now south-central Montana. It was probably carved during a bivouac there in May, 1877, almost a year after the Battle of Little Big
Horn (National Park Service 2010:6). In 1879 at the Hanging Rock site, north of the Yellowstone River near the modern day town of Custer, Montana along the "Old Government Road," an inscription of "J O Moore 1879, Co. H. 2 U.S. Cav." was superimposed over contact-era petroglyphs. It is noteworthy with these examples that members of the military identified themselves not only as individuals, as through their name, but further identified themselves as part of a larger group (i.e. their military association).

After the Indian Wars of the 1860s and 1870s, most of the native peoples on the Northern Plains moved onto reservations, and settlers continued to arrive in droves. The historic inscription record documents this next wave of colonization in their region, where an example from Homesteader's Cave near Custer, Montana, provides a name and date: "Orson Simpson 1880" (Figure 5.47). Along the more traveled area of the Oregon Trail at Names Hill in western Wyoming, historic inscriptions were created in paint stating "E. B. Davis, U. S. Survey" and "P.P. McLick, Chainman, U. S. Survey, 1880" (Figure 5.48). This inscription not only indicates that they were engaged in the process of surveying the landscape to track and therefore control it, but "P. P. McLick" establishes his identity by indicating his role as "Chainman." The United States Geological Survey was an essential part of the region's homesteader history, and it is not insignificant that the people working on that survey left their mark along with the newly arriving homesteaders.

In the early 1880s, people began to bring cattle onto the Northern Plains, and traffic patterns increased in a north-south direction where previously the dominant flow was east-west. Many cattle were brought into the area by being herded up from Texas to take advantage of large tracts of open range (Malone 1991:156). During this time, historic inscriptions in northeastern Wyoming and southeastern Montana begin a dramatic increase in density and distribution, and
begin to incorporate more ancillary graphics that include brands, animals, and depictions of people. Multiple inscriptions begin to occur at locations like the Roadside site near Fort Howes, where "W H Gilbert 1881" (Figure 5.49) left his name, and "C W M 1881" (Figure 5.50) did the same at Castle Butte, northwest of present day Forsyth. At Names Hill "May. The. 7. 1882, J. A. Peterson" (Figure 5.51) and other associated names are incised near a brand, indicative of a new form of symbology being introduced to the Northern Plains (see Chapter 4).

Cities and towns were continuing to appear on the Northern Plains, including Billings, Montana, founded in 1877 (Wishart 2004:159). The town supplanted nearby Coulson when the railroad came through the surrounding valley in 1881. On a sandstone rim rock overlooking the valley are the inscriptions of "June 22, 1883, E. B. Covely, Miss Mollie Westbrook, and J. T. Westbrook" (Figure 5.52). As discovered by Billings Gazette reporter Marry Pickett, E. B. Covely may have been in the presence of his future wife at the time (Pickett 2007), with his future brother-in-law "J. T. Westbrook" along on the outing as a chaperone. His obituary reads:

E.B. Covely the well known groceryman came to his store in the morning in apparent good health and spirits. Returning from the post-office a few minutes before nine o'clock he was seen to stagger and fall in the rear of this store. Several people ran to his assistance and carried him inside where he expired in a few moments without speaking."

Covely came to Montana in 1863 from Pennsylvania to Virginia City, where "he followed mining for many years (Billings Gazette 1887)."

As an active member of their community, E. B. Covely and his wife Mollie contributed to the establishment of the city of Billings and thereby influenced change in the region. Meanwhile, rancher R. T. Tate and his Bar R T outfit (Figure 5.53) exerted control over the landscape near Otter Creek in 1883, by using the land for grazing and by superimposing his inscribed material over petroglyphs. North of Ekalaka, Montana "J. H. Teadwell" of "Ft. Griffin, Texas, Aug 18, 1885" (Figure 5.54) stands as physical evidence of the Texas to Montana cattle route. At Needle
Rock near Fort Howes east of Ashland, Montana, inscribed evidence of early ranchers exist, including "J. M. Armstrong 1876 March 17th," "A. S. Mathers, C. C. Jones Aug 28, 1886," and "C. L. Rice, March 17" (Figure 5.55). The process of inscriptions becoming concentrated at a particular location or on a panel exists in many places in the research area. In some locations the panel contributes to telling the story of who moved into a region through the layers of inscribed material there, including a panel east of Ashland, Montana that begins in 1886 and contains dates through 1904, 1916, 1927, and 1943 (Figure 5.56).

At Names Hill in western Wyoming, "Billings, 1887, Neb."(Figure 5.57) shows that the pattern of name, date, and origin still remains dominant as an inscription template. It is not used, however by "Robert Howes, July 19, 1888" near Fort Howes in what is now the Ashland District of the Custer National Forest. Robert Howes is the son of Calvin and Sarah Howes who immigrated into the area in 1880 along with Calvin's brother Levi Howes (Howes 1927:14). Calvin and Levi Howes were sailing ship captains (Howes 1927:3) on the East Coast when they left the sea for good during the winter of 1879-1880 (Howes 1927:13), coming by train to Bismarck, taking the steamer Bachelor up the Yellowstone in early April to get to Fort Keogh in 1880, and then south to the valley where the name is inscribed near other period ranchers on Needle Rock. The inscriptions continue with "C. T. Davis, July 1888" (Figure 5.59) at Names Hill, "Chas Hoe 1889" (Figure 5.60) inscribed in charcoal in a sandstone cave directly east of Billings at the base of the sandstone rims, an inscription that includes a proclamation of their position "Tex Serpa, The Oregon Wagon Train, 1889, Wagonmaster" (Figure 5.61) at Register Cliff, and "G. Cook, Middlefield NY 1889" (Figure 5.62) on cliffs above Park City, Montana.

By the late 1880s, the region's transcontinental Northern Pacific Railroad pushed up the Yellowstone Valley, making it even easier for people to travel westward. Although this era on
the Northern Plains is represented by inscriptions indicative of the railroad workers and ranchers, there is one that draws attention back to the fact that people indigenous to the region continued to be resistant to the drastic changes to their traditional economies and lands. The inscription of "Jan. 1891, E. R. D. Co B. 22 INF. Ft Keogh M" (Figure 5.63) was carved by Sergeant Earnest Durst, an infantryman who was present and participated in the massacre at Wounded Knee in South Dakota (Urbaniak and Rust 2009). The inscription was carved during a rest on the march back to Fort Keogh near present day Miles City, Montana. Gathered by locals in 1999 after the inscription had fallen from a landform known as Capitol Rock, components of the inscription are stored at the Carter County Museum in Ekalaka, Montana.

In 1893, along the new railroad being laid into Montana from the east, a railroad worker left evidence of his presence through the inscription of “E. Otto. Nelson, 6/2.90 (1890).” At a cliffside location sandwiched between tall hills and cliffs to the south, and the Yellowstone River to the north "R. S. Eide 11/1, 1893" continued the tradition of railroad workers inscribing there. Inscriptions originally thought to be Chinese but being identified as Japanese Kanji, are also found on the cliff (Figure 5.65). The layout of the inscription, particularly with the information included, is in the style of a Japanese tombstone. The inscription contains the name "Yamato," which is also a word referring to the dominant ethnic group in Japan, and includes information of "elder brother" and "Prefecture Hiroshima" as well as place names of smaller municipalities (e.g., town and village) within that prefecture (Urbaniak and Dixon n.d.:4). Approximately sixty miles to the northwest near Roundup, Montana, a Chinese inscription there does not carry a specific year date, but is written in "traditional Chinese," which was used in the "late 1800s or early 1900s" (Yanya Yang 2012, elec. comm.), is placed near other inscriptions of the same period. The Chinese inscription of "Sun, Ziqian was here August 29th" (Figure 5.66) can be
found on a panel near others that participated in early coal mining near Roundup, Montana (see also Urbaniak and Dixon n.d.).

At Names Hill in western Wyoming, local ranchers continued to participate in the cultural tradition of inscribing at that site, including an undecipherable name from 1892 (Figure 5.67). During that time there are new threats coming to the cattle ranches across the Northern Plains in the form of rustlers. As part of an effort to control rustling, Wyoming ranchers from around Cheyenne hired Tom Horn as an enforcer. In 1894 he was brought in as a detective by the Swan Land & Cattle Company of Cheyenne (Krakel 1988:3). Reputed as a cold-blooded killer that liked to shoot from afar, the placement of an inscription reading "Tom Horn, 1894" (Figure 5.68) is placed high along sandstone rimrocks. An interesting note about the inscription site is that it is placed on a cliff at the top of a valley between Billings and Hardin, Montana, with an excellent vantage spot of the travel corridor, and a place in a break in the sandstone cliffs large enough to contain a horse and bedroll.

Others continued to use known travel corridors, such as along the north side of the Yellowstone River to the northeast of present day Custer, Montana. At the mouth of a sandstone cave (Homesteader's Cave) along the "Old Government Road," an inscription of "Kelley 1895" (Figure 5.69) graces the entrance. While absent of pictographs and petroglyphs, the cave has an abundance of historic inscriptions, including more by "Kelley." Porcupine Butte, several miles north of Forsyth, Montana, looks out to the north over the Porcupine Creek Basin. On Porcupine Butte itself there are multiple historic inscriptions mingled over and within the petroglyphs found there. On a lesser sandstone formation immediately to the west is the inscription, "Wm. Grunou, 1896" (Figure 5.70). From the inscription location, the view to the north seems to go on forever;
this was an important location because of its visual advantages, clearly attracting and representing a continuum of people engaging the same behavior of leaving a mark there.

At sandstone landforms north of the new town of Ekalaka, Montana, stopping at the formations to inscribe a record of one's visit appears to have become popular, as an inscription of "M. Tescher, JTC, 1897" (Figure 5.71) is present. Where in earlier years a singular example of any inscription of a specific year may occur, the inscription record database of Medicine Rocks State Park shows that the numerical density of inscriptions accelerates during the late 1890s, thereby reflecting a growing number of visitors to the site. As ranching grew in the eastern part of Montana, the railroad was constructed along the Yellowstone River, providing a quicker mode of transportation for those heading west. At a location between today's towns of Hysham and Bighorn, work was on the railroad grade was paused long enough for "J. V. Johnson, July 16, 1899" (Figure 5.72) to be inscribed. Other instances support that historic inscriptions were also used for advertising, such as at the alcove known as "Devils Kitchen" near Park City, Montana, where inscribed in large letters is a message of "Buy Our Trees From Home Nurssry (sic), H. G. MClain, Carlton, Mont., Agent, Movt. 4/17, 99 (1899)" (Figure 5.73). Elsewhere in that sandstone alcove is an inscription of "Arthur Ben??i, CT. OR. A.R.B., Park City, Montana, Apr 17th. 1899" (Figure 5.74), which is near an inscription of "Francis & Mayme Unger, Laurel A.R.B. 4/30/1900 A. R. B." (Figure 5.75). Apparently the A.R.B. affiliation is so important that it is incised twice. All of the several inscriptions from 1899 and 1900 located in the alcove contain the abbreviation of "A.R.B." Although this may represent some group association, research has yet to reveal the function of the group or the meaning of the initials "A.R.B." The ornate style of the engravings of the group is also notable as they reveal a level of formality for the communication.
5.2.4 1900-1920: Homesteading and Expansion

By the early 20th century, the tradition of creating historic inscriptions was commonplace on the Northern Plains, with people leaving residual communication where they traveled, picnicked, and worked. Ranchers continued the practice of carving their brands into the sandstone, including one that was placed on "Aug. 15, 1901" (Figure 5.76) east of Ashland, Montana. While inscriptions of "outlaws" have been documented further south into Wyoming (Knipmeyer 2002), evidence of them roaming eastern Montana is scarcer, with the exception of the inscription "Kid Curry 1901" (Figure 5.77), located on a lone sandstone outcrop north of Ingomar, Montana. Kid Curry, a.k.a. Harvey Logan, rode with Butch Cassidy and the Sundance Kid. Harvey Logan entered Montana with his brother in 1884, and they worked as cowhands in eastern Montana for a number of years before turning to crime (Smokov 2012:5). During his seventeen-year crime career, he was wanted for train robbery, several murders, and a variety of other crimes (Wilson 2007:1). It has been speculated that the inscribing is connected with a trip to rob the Great Northern train near Wagner, Montana, which he did on July 3, 1901 (Rennie et al. 2008).

It was the end of a wild era and homesteaders arrived on the Northern Plains in great numbers. Homesteading on the Northern Plains began as early as 1862 when the Homestead Act gave free land to entice people to move to the American West, but the process was accelerated in 1909 when Congress passed the Enlarged Homestead Act. This brought a new wave of settlers into the region (Newby 2004:423). By this time, just over three decades after the great Indian Wars, battles like Rosebud and Little Bighorn had taken place, and immigrant populations and settler communities dominated the Northern Plains. Not all of the newcomers were
homesteaders; many sought work in the numerous towns, mining operations, and ranching enterprises that were rapidly established throughout the region.

New techniques, tools, and attitudes brought thousands into Montana where they changed the face of Montana politics since the days of the Copper Kings (Malone 1991:232). Homesteaders were accustomed to traveling and they explored the landscape at great lengths, incising their messages as they went. Through this period, figures continue to occur in conjunction with the text. Brands, people, horses, cowboys, houses, churches, and other pictograms mingle among the textual chronology that includes "1902 M.S. Owens & A. R. Benedict, Age 76 & Age 20 yrs. Cousins" (Figure 5.78) near Park City, Montana; an inscription of "1903" is positioned close to one of "Harry Snow May 31. 1906" (Figure 5.79) at Homestead Cave in the Ashland District of the Custer National Forest; nearby in the Ashland District of the Custer National Forest at the Coyote House site, "A. J. Jackson, Nov. 12, 1905" (Figure 5.80) is placed on the butte; and "F. Kirohjr., Feb 24, 1905" is located at Steamboat Butte in the Bull Mountains of Montana.

Inscriptions superimposed over a contact-era petroglyph at the Manual Lisa site along the Bighorn River east of Custer, Montana include "G. W. Sinclair, 6-7-1905," "Harry Brazil, 1905, 6, 7" showing his revisitation to the site, and "F. E. Brandt, 11-24-13 XSURXBM" (Figure 5.82). The "XSURXBM" indicates a surveying benchmark and it is quite possibly the profession of F. E. Brandt. During this time the increasing density of historic inscriptions makes it seem like there were deliberate intents to carve up the landscape, and in some way the new residents were doing just that; but in the case of F. E. Brandt he was doing it through surveying.

At a site in a narrow sandstone pass in the Cave Hills of South Dakota, an inscription of "W. V. Anderson H. M. A., Aug. 25, 1908" (Figure 5.84) joins others superimposed over more
ancient petroglyphs. In the southwest corner of the Bull Mountains an ornately framed inscription of "Thos. E. Arrestad, 1909" (Figure 5.85), reflects detailed workmanship. At a panel on the south side of Castle Butte, located northwest of Forsyth, Montana, a panel shows multiple inscriptions that continue the cultural practice of "leaving your mark," including those showing years of 1909, 1916, 1917, and 1930 (Figure 5.86). South of Roundup, Montana in an area bearing inscriptions of early coal miners there, a flowing cursive script reads "Jun 09, John Leuhlmann, Germany, Bayern, Lehipherder" (Figure 5.87). Germany may be a long way from Montana, but the identity of the inscriber is still clearly tied to his origins. Near Ashland, Montana, ranch hands of the Three Circle broadly distribute the recognizable brand across the landscape, including this one on a panel with the date "1910" (Figure 5.88). As with other brands, there are multiple known occurrences of the Three Circle in a variety of styles in the region suggests that the ranch employees were identifying themselves as a group, as the inscriptions are stylistically unique and represent the work of many individual inscribers

Tourists, homesteaders, and railroad workers all continued the practice of inscribing residual communication onto landscapes across the Northern Plains during the early 20th century. Near Devil's Tower in Wyoming, an inscription panel has "H. Partlow, July 11, 1910" and "H. K. Ohnstad, Markville, Minn., July 29, 1928" (Figure 5.89). While the dates are years apart, they both occur in July, lending credence to the thought that they could be representative of early tourism, or newcomers to the area that are expending recreational time exploring the landscape. Back at Rosebud Battlefield, location of the pre-Little Bighorn Battle in 1876, an inscription of "Slim K 1911" (Figure 5.90) is present, believed to be that of Slim Kobold, a rancher who owned the land at the time. Kobold came to Montana to homestead from Oklahoma in 1911 (Magnum 2004:21). In the same year, a railroad section crew incised "CHAS MACNE
RUNN (sic) SECTION HERE IN 1911" (Figure 5.91) along with those of earlier workers including the Japanese at the Railroad site between Hysham and Bighorn; this is on the same panel as the Japanese Kanji inscription noted above, and, due to the fact that the associated cliff face is along the railroad right-of-way, suggests Japanese railroad workers were among the crew.

At Lonesome Rock Pass southeast of Ashland, Montana, the place name "Lonesome Rock Pass" (Figure 5.92) is inscribed among the letters in the name "Fern Andrus" and dates of 1911 and 1913. The 4th of July is commemorated in the inscription "J. Johnson, July 4, 1912" (Figure 5.93), located at Steamboat Butte in Montana. At the Hanging Rock site north of the Yellowstone River, an inscription of "J. L. M. 47 6-9 1913" (Figure 5.94) is located next to a key, a known Masonic symbol and an indecipherable three letter script. An inscribed label of "Poker Jim" (Figure 5.95) is located on the landform of the same name south of Ashland, Montana near dates of 1877, 1914, 1922, and 1926. Groupings of this nature directly indicate some locations as being destination sites, such as at the Roadside site near Fort Howes on Otter Creek in Montana where someone communicated their identity by inscribing their initials and associated brand into the cliff face when they were there in 1914 (Figure 5.96).

At a pictograph site in the Cave Hills of South Dakota, the name and date "C. C. McCurdy 8-4-14 (1914)" (Figure 5.97) is inscribed near a v-neck figure, which is an anthropomorphic style common in rock art where the shoulders of the figure are represented by a "V" (Keyser and Klassen 2001:208). Immigrants on the Northern Plains had a curiosity about the region's indigenous people, which often manifested in the collection of their cultural objects. In Ghost Cave at what is now Pictograph Cave State Park, inscriptions still survive from early visitors to this site, including the name and date of "Harry Bartove 1914" (Figure 5.98). It was common for people from Billings to go to the caves and search for artifacts; subsequently, these
individuals created many historic inscriptions and superimposed those atop the existing rock art at these sites. Due to the fact that these inscriptions were seen as vandalism versus a cultural albeit colonial resource indicative of behavior that has been part of the human condition for millennia, there have been focused efforts over the years dedicated to their removal. It is only that the highest domed ceiling in Ghost Cave is unreachable that some survive. Over twenty years after Harry Bartove left his mark in 1914, workers of the Works Progress Administration (WPA) conducted archaeological excavations at Pictograph and Ghost Caves in 1936.

At the Roadside site (24PR0204) in the Ashland District of the Custer National Forest, Iva Crocker was "Still Going Strong" (Figure 5.99) when she inscribed her name and a possible reference to the year of her birth along with the year of her visitation, although local anecdotes say that she left the name and first year in 1915, and then returned years later to add the 1971, the additional text, and the border. During the early 20th century, a broader diversity of the way dates are written begin to appear, including the format of month/day/year as shown by the inscription "T. C. H. 6/10/16" (Figure 5.100) at the Roadside site in the Ashland District of the Custer National Forest. While some inscriptions are now occurring where a year of "16" refers to 2016, dates that commemorate a future high school graduation do not contain a month and day projection; and the practice of annotating the year with only two digits was used in the 19th century as well as the 20th. The more traditional method of representing the date was used for the inscription "J. J. Crae, Aug 19, 1917" (Figure 5.101) in the alcove near Park City, but an abbreviated version is used for "W H 5.4 1917" (Figure 5.102) at Names Hill.

Horizontal dashes are utilized as separators for the text "7-20-18 B F Drake, Billings, Mont" (Figure 5.103); the inscriber notes his nearby town of origin at the Hanging Rock site. Further from their associated hometown, "Long, May 12, 1918, Kenosha, Wis." (Figure 5.104)
can be found at the Three Layers site near the town of Musselshell, Montana. While there are many styles, fonts, and varieties, of the most prevalent (name and date) type of historic inscription, the Homestead Period is brought to a close with a simple "J N 1919" from the Hanging Rock site, the initials and dates seeming to be a fundamental form of the continuum of inscribed identity as presented in this dissertation.

5.2.5 1920-1940: Drought and Depression

Given the American West's current drought and recent economic depression, we have much to learn from the adaptive souls who lived through troubled times. Historic inscriptions can be read and interpreted and provide a rare record, along with rock art, of human activities, as well as human vulnerabilities, adaptation, and identity. Although the 1930s is soberingly similar to today's drought and depression-affected Northern Plains region, the decade leading us to the crash of 1929 presented an era when ranching was often accompanied by hardship, and dude ranches became popular. The region became a destination for tourists, who, along with ranchers, left written (primarily inscribed), records of their visits and work sites.

During this time period, the practice of leaving residual communication in the form of historic inscriptions continued unfettered. In addition to the immigrants who continued to move into the West, dude ranch clients came to the region to experience natural and cultural resources. In turn, dude ranching contributed to the regional economy, the culture, and self-image of the west (Clayton 2013:55). People were moving across the land and continuing to leave evidence of their presence. Returning to the same site periodically to update his inscription, "Joe Cook, 24, 25, 26, 27 (1927)" (Figure 5.119), someone repeatedly came to the Poker Jim site south of Ashland, Montana. This site was a common visitation location for local dude ranch visitors, and many dates from the period have been placed on the sandstone spire, including many annotations.
of their hometowns.

At Hanging Rock, immediately adjacent to the Yellowstone Trail, where automobiles replaced horses and wagons, "C. Miller, July 1920, Eden, S. D." (Figure 5.106) is superimposed over a petroglyph panel. At Homestead Cave east of Ashland, Montana an inscription of "C Dowdell 1920" (Figure 5.107) is placed. Several miles away, inscriptions of "1920 Byes" and "Mike Carney, Selway, Mont., June 10, 1921" (Figure 5.108) are added to the Rancher site. At Ludlow Cave in South Dakota the practice of superimposition over indigenous material has continued at such a rate that underlying petroglyphs are almost totally obscured. In fact, historic inscriptions themselves have become obscured by newer inscriptions (Figure 5.109). Continuing the practice of adding historic inscriptions to indigenous rock art panels, an inscription of "TCC 1921 Died Here" (Figure 5.110) at the Capra site west of Otter Creek; circumstances of the death remain in need of research. Other superimposed inscriptions include "A H Wright 1922" (Figure 5.111) and "H Cramer 7-8 1922" (Figure 5.112), both from Hanging Rock. The sites observed here indicate that the practice of superimposition did not stop in the immediate aftermath of the Indian Wars, but continued well into the 20th century.

Profanity accompanies some historic inscriptions as demonstrated at Needle Rock where under the notation of "Harry C. Cross, May 20, 1923" someone has added "You Dirty Bastard" (Figure 5.113). Brands continue to be incorporated into information being conveyed as shown by the three horizontal ovals sandwiched into the lines of "F. L. & T., 1923, J. W. Livingstone" (Figure 5.114) at Medicine Rocks State Park. The style used to represent the year incorporates the use of an apostrophe for "Chas Lasher, July 23, '24 (1924)" (Figure 5.115), but the full year is shown in the inscriptions of "J. C. Hallock, 1925" (Figure 5.116) at the Hanging Rock site and
"Tilda Knutson 1925" (Figure 5.117) at a rockshelter containing petroglyphs in the North Cave Hills of South Dakota.

Historic inscriptions incorporate names that are no longer popular, in addition to some names that directly indicate ethnicity. At a historic inscription site in the Grasslands of Wyoming, inscriptions from "Alfonso Rodriguez from Moses, New Mx," "11/14/25 (1925) Joney Espinoza, Lavaley, Colo," and "Sep 15 1926, Alofonso Maesta from Capulin, Colo" are superimposed over horses on a panel. The inscribing of the horses appear to be historic; however it is unlikely that the men leaving their messages would have carved and then superimposed them.

It appears that more historic inscriptions were carved on the 4th of July than any other day of the year. Along the Oregon Trail in what is now southern Wyoming, the sites of Inscription Cliff, Independence Rock, and Names Hill all have inscriptions with the date. An inscription database review of the Medicine Rocks State Park of Montana also reveals a concentration of inscriptions from the Fourth of July. The concentrations may exist for two different reasons. Independence Rock was a landmark that travelers on the Oregon Trail needed to reach by the Fourth of July, so leaving your mark on that date as to your location would have been significant to the travelers. At the Carter County Museum in Ekalaka, Montana, pictures of picnickers at Medicine Rocks State Park during the turn of the century, line the walls and are evidence that the heavily inscribed park was used as a leisure destination (Figure 2.3). The Fourth of July on the Oregon Trail would be significant because the date is associated with when travelers should reach Independence Rock. At Medicine Rocks State Park site near Ekalaka, Montana, the date was significant and representative of the respect shown by settlers for this momentous date in American history, expressed through celebration and rare leisure time
commemorated through inscribing. At a site near the Poker Jim Butte south of Ashland, Montana, a panel contains a crude representation of the Three Circle brand, a front view of a longhorn, and a heart with the inscription "Pearl Davidson, July 4, 1926" (Figure 5.120). By this year, the Three Circle was taking in dude ranching visitors to supplement the income of the outfit (Montana Preservation Alliance 2007:33). It is possible that this inscription was left by such a visitor to the region, which would then establish dude ranchers as a second potential group as potential distributors of some historic brand inscriptions in addition to ranch workers.

At the Two Bears site several miles to the southeast but on the same day, two lines of local brands appear above the inscription "John B. Keeline Jr., July 4 1926" (Figure 5.121). The Fourth of July date is present in historic inscriptions from the mid 1800s to beyond the end of the research period. The temporal concentration of 4th of July inscriptions potentially bridge landscape, Gestalt, and communication theories since they reflect on how people were using the land, how they saw themselves within that landscape and how they were expressing their presence.

At the Hanging Rock site directly adjacent to the Yellowstone Trail road, "Joe Thedens, Oct. 3,1927, Reinbeck, Iowa" (Figure 5.122), "7-12-28 C. C. Barnack, Evansville, Minn."(Figure 5.123), "Eva, Billie, Paul Rudin 1928, St. Coud Minn." (Figure 5.124), and "Rudes.M. Ohnstad, Markville, Minn. July, 29 - 1928, June 20/50 (1950)" (Figure 5.125) all show the importance of their place of origin reflected in their inscriptions. Note that "Rudes M. Ohnstad" was at the site in 1928 and then updated his inscription in 1950. It is also possible that July 29, 1928 is the date of his birth and that he left the inscription in 1950.

In 1929 the stock market crash began a lasting economic depression that not only affected the historic inscription research area, but the entire United States (Holmes 2008:356). The price
of copper, commodities, and beef fell, but the ranchers and other newcomers to the region continued the inscription tradition. At the Homestead site east of Ashland, Montana there are two examples of the year 1929 in addition to local brands (Figure 5.126). At Ludlow Cave in the Cave Hills of South Dakota, inscriptions showing a date of 1930 were added to the busy panel of rock art and previously inscribed material (Figure 5.127). At the Bear Gulch pictograph site, located east of Lewistown in central Montana, "Mrs. Frank Smith 6/26/30 (Wherley Outfit) Spokane, Wash." wrote her name in pencil on the hard limestone formation. As a significant example of identity expressed through historic inscriptions, she returns as "Gertrude Smith 3-28-80, 50 Years Later" (Figure 5.128). It is notable that in 1930 she saw herself as "Mrs. Frank Smith" but in 1980 she identifies herself as "Gertrude Smith." This is possibly associated with changes in social norms associated with the evolving liberation of women that took place over the 19th and 20th centuries, or that she got divorced, or that her husband died and it was too hard to hear his name. Whatever the reason for the change in personal identity, this inscription represents an additional example of site revisitation, as shown above.

The Great Depression did not impede the stream of visitors to Medicine Rocks north of Ekalaka, Montana, as "C L R, Milford, Ill., 1931" (Figure 5.129) paused to inscribe their name, hometown, and date. During the Great Depression, the price of gold increased (National Bureau of Mines 2014) while unemployment was high, possibly motivating prospectors to travel to the Beartooth Mountains of Montana where "Koski, June 19, 1932" and "Howard Oja, Art Salpacka of Eveleth, Minnesota, Aug. 23, 1933, Prospecting" (Figure 5.131) explain their reason for being in Coveralls Cave of a limestone formation.

Superimposition of rock art continued during the Great Depression with the placement of "Ian Budd, Big Piney, Wyo, in 1933" (Figure 5.132) atop rock art at Names Hill in Wyoming. A
group that hailed from distant Montana towns inscribed a panel in the hills southeast of Ashland with "Hans Jesperson, Malta, Mont. Oct. 28, 1934, Earl Goulet, Flaxville, Montana, Oct. 28, 1934, and Mile Tuma, 1934, Malta, Mont." (Figure 5.133). Near the names, hometowns, and dates is an inscription of "Co. 1969, Ashland, Montana" that may be indicative of their involvement with the Civilian Conservation Corps (CCC) that was created in 1933 (Otis 2009:17) and was active on the Custer National Forest during that time. At the Roadside site further south in the Ashland District of the Custer National Forest is the inscription "Kid Bozo 1-14-34 (1934)" (Figure 5.134), which might be associated with Civilian Conservation Corps workers that were engaged in road construction there at the time. The first reflex of many who view the inscription is to consider it a reference to "Bozo the Clown," a children's entertainment figure, but the character was not created until 1956 (Dorman 2009:127). Additional inscriptions where identity is expressed by attachment to the Civilian Conservation Corps exist near Ashland, Montana with "c35 (circa 1935) Raymond Noftsker, CCC Co. 1961" (Figure 5.135), and with "C. C. C., Andolshek, 1935" (Figure 5.136) at Medicine Rocks in eastern Montana. While the Medicine Rocks location was not a Montana State Park at that time, the CCC was active in nearby units of the Custer National Forest.

At Names Hill in Wyoming, the year of 1936 is part of an inscription of "Beadle 1852 1936" (Figure 5.137) whose message is unclear. Certainly the message would not have been incised in 1852, projecting into the future year of 1936, but the bracketing of a time period of 84 years would be associated with few events, one being a person's lifespan. If that is the case, the inscription could have been placed by someone other than "Beadle," and if it was commemorative of a person's birth and death, it would be expected that the first name would be included in the tribute. If the dates mark they year of birth and the year of the inscribing, it was
done by someone 84 years old, participating in the residual communication methodology of inscribing messages directly onto the landscape. Further down the cliff at Names Hill "Beatrice Cheney, April 11, 1936" (Figure 5.138) presents a less confusing message from a member of a family whose last name (Cheney) rose to a level of national familiarity through the election of Dick Cheney of Wyoming as Vice President under George W. Bush beginning in 2001 (Purcell 2010:446).

A heavily incised alcove at Medicine Rocks State Park includes "Fred McIntosh, 1937" (Figure 5.139), and elsewhere in the park at landform SS056 "Mr. K. F. Livengood, Marian Good, 1938" (Figure 5.140) is incised. At the Kobold site in the Rosebud Battlefield State Park "2/6/39 HJ" (Figure 5.141) shows that people continued to visit there. Due to the fact that inscriptions post-dating 1940 are beyond the scope of this dissertation, I have chosen to end this section with the inscription of "K. M. 1940" (Figure 5.142), superimposed over a deer or antelope petroglyph in a cave near Ashland, Montana. The names and date superimposed over a more ancient message and/or work of art is a pattern observed at every temporal period examined on the Northern Plains, as well as throughout the world as discussed in Chapter 3.

5.3 Conclusions

This chapter has demonstrated that regardless of ongoing social change in North America, actors on the Northern Plains created a continuous chronology of historic inscriptions that contain a plethora of information about the inscribers and how they viewed themselves in their landscape. The inscriptions represent the major events and activities associated with the history of the recent American West and were carved, incised, or written by explorers, trappers, miners, ranchers, homesteaders, railroaders, tourists and more. This dissertation reveals for the first time that historic inscriptions are not merely idle vandalism, but are contributors to
knowledge about the human condition during that time. By including descriptions such as
cowboy, chainman, prospector, and wagonmaster, the individuals who left these inscriptions also
left evidence of their occupational identities. Through association with cities, towns, countries,
the military, ranches, inscribers, such as members of the Civilian Conservation Corps provide
additional information about their identity and role in the region's landscape transformation.
Primarily through surnames, demographic information, including nationality or ethnicity, is
embedded in each inscribed name. In addition to individual identities, many inscribers identified
themselves as part of a larger group, providing examples of group identity. Collectively, the
historic inscriptions observed on the Northern Plains underscore a tendency among humans to
inscribe identity and to leave residual communication representing the presence of self.

The examples presented here represent a continuum of residual communication. The
historic inscriptions on the Northern Plains are primarily the result of colonization, with the
colonizers clearly leaving their marks on the land, often superimposing over indigenous art and
communication. Even though the metaphor for colonization is disturbing, it is a part of the record
and in need of reporting. From the notorious to the mundane, historic inscriptions convey
messages and connect individuals, groups, and the landscape.
CHAPTER 6: CONCLUSIONS AND FUTURE DIRECTIONS

To the north of there (Castle Butte), some six or seven miles, a clumsy looking sentinel stands. This is still known as the "Elephant Rock". The poor thing, through the years, has felt the many cruel digs of sharp, as well as crude, instruments in the hands of the well-meaning, yet, I think, sometimes a bit pernicious individuals who are desirous of leaving their mark behind for all mankind to see in the form of their initials. It looks now much as it did when I was a little girl many years ago. Perhaps it may have a few more battle scars through the years to add to its aging visage. Often on my way home from school I would stop to see whose, if any, were the new initials carved there. And many times when our family has gone back "out home" to visit the scenes of our early life we stop at the "Elephant Rock" for a little reminiscence (Ida Phelps Sherrodd, in Barnard et al. 1978:250).

6.1 Chapter Overview

This chapter summarizes the findings of this study of historic inscriptions on the Northern Plains, and closes with a discussion of the potential for future research drawing from this multifaceted cultural resource "type" that contains a continuous chronology of specific individuals and groups who influenced cultural landscape transformations across the Northern Plains during the early 19th and 20th centuries. These inscriptions convey multiple levels of communication that include images and text messages. The placement of these messages atop existing communication commonly referred to as rock art created by Northern Plains indigenous people, is part of a worldwide phenomenon. Due to the fact that this dissertation represents the first comprehensive study of historic inscriptions in the region, the overarching goal of this project was to establish a foundation for documenting and investigating by describing, categorizing and analyzing these resources. It soon became clear that these remnants of residual communication contain information about individual and group identity.
6.2 Inscriptions as Statements of Personal, Group, and Ethnic Identity

As shown in Chapter 5, the primary form of historic inscription is the incising of one's name, often accompanying a date, and this pattern has held true for the research period spanning the early 19th century through 1940, the arbitrary end date for this dissertation project. Leaving one's name at various places is a behavior that appears to date as far back as the earliest forms of writing, and that places historic inscriptions on the Northern Plains on a continuum of a human tendency to leave statements of personal identity. Given that this research is grounded in communication and landscape theory, one way of explaining this behavior is that there is inherent motivation to make a statement of one's personal identity and self, to say that "I exist, I was here." This is done to a lesser extent by inscribing initials in place of a formal name.

In addition to providing a store of data relevant to the identities of individuals, textual and graphical inscriptions underscore the ways in which group identity was also part of the inscriptions deemed important to the inscribers. If we define identity by "what we care about" (Archer 2001:10), it is noteworthy that the majority of historic inscriptions observed identities in a dataset of thousands of images/files are of individuals, as opposed to those identifying larger social groups. Through this research it was found that a statistical subset of historic inscriptions carry statements of broader association and group affiliation as a means of identity, and that social groups known to have traversed the travel corridors during the nineteenth century are represented through historic inscriptions, including employees of ranching outfits, who showed their affiliation through the carving of brands; religious groups who left textual messages and carved religious iconography (Knipmeyer 2002:18); fraternal organizations like the Masons; military expeditions (Urbaniak and Rust 2009); members of Civilian Conservation Corps at sites in eastern Montana; and the still undiscovered group represented by "A.R.B." in 1899 and 1900.
that is incised with several sets of names near Park City, Montana at Devils Kitchen. As emigrants traveled westward, they also retained and projected group identity by referencing previous home locations, such as countries, states, and towns. During this qualitative analysis of the inscription record, additional evidences of group identity emerged, including representations of cultural and ethnic identity.

A basic inspection of the inscription record reviewed in Chapter 5 confirms through a review of last names inscribed, that many are recognizable as being associated with specific ethnic and cultural groups, as conveyed through names including Swenson, Rodriguez, or O'Malley. Cultural roots are further projected through inscriptions noting inscribers came from Sweden, Mexico, Ireland, and Germany, with two cases from Japan and one from China.

6.3 Graphical Inscriptions as Communication

In addition to historic inscriptions containing written archaeological evidence of identity, they also provide a graphic record of communication via figures and images, as demonstrated in Chapter 4's examination of inscriptions as ideographic communication. As humans communicate, we participate either as senders or receivers of messages. The graphic "messages" include recognizable objects, representative figures, and abstract symbols. In the field of communication studies, images are intended to result in visual perception, which is the meaning concluded after the image is interpreted by the brain (Lester 2003:51). This research confirms that immigrants to the Northern Plains commonly communicated basic ideas through pictures (Rossides 2003:3), and more frequently than not, information about identity and values were also conveyed.

While textual identification of self (i.e. our name) is the dominant form of identification represented in inscriptions on the Northern Plains, associated pictograms further reveal how
immigrants on the Northern Plains saw themselves. As examples, cowboys who inscribed the brand of their outfit near their name likely saw themselves as a part of a greater whole, of a belonging, whereas an immigrant who inscribed a sailing ship or sailing steamship likely self-identified with shipping culture; or they were documenting feats of navigation or travel. Inscribers of Masonic symbolism projected their identity through the placement of symbols that contain symbolic value sets, the meaning of which were known only to their members. People who inscribed Christian crosses documented their identification with a specific religion and its associated beliefs and value sets; on the other hand, the cross symbol inscribed with the initials "KKK" evokes socially negative influences and racialized history of the United States.

Any future framework established for the examination of historic inscriptions through a communication theory needs to consider graphical and textual historic inscriptions within constructivism or landscape archaeology not merely as individual artifacts, but as a components of a larger, more complex, natural system. Through the visual communication theory of Gestalt, a model can be constructed that examines the components of proximity, similarity, continuation, and closure. Through semiotics, the science of signs and symbols, a model can be created that categorizes iconic, symbolic, and indexical figures.

Overall geographic patterns are similar to the distribution of historic inscriptions; however, the density of pictograms varies from site to site. For example, inscriptions at travel corridor sites tend to be dominated by textual inscriptions, while the inscription record at individual or destination sites tend to have a greater number of images. There are many unknown and yet undiscovered reasons for this variance, including the amount of time spent at the site by the inscriber, the reason they were at any given site, or what their mindset was at the time they created the inscription.
6.4 Superimposition

Given the historical context of colonization, when historic inscriptions are superimposed, or placed atop Northern Plains rock art, statements of identity noted above appear to represent vestiges of colonialism. Did these represent a conscious tactic to express dominance the region's indigenous people? While the answer(s) to this question are likely only to be found in the minds of those who made the inscriptions, the fact that so many historic inscriptions are superimposed is, at the least, symbolic of the way recent settlers transformed the region's environment, creating homesteader and ranching landscapes, controlling water sources, and constructing transcontinental railroads that connected the Northern Plains with the nation and world.

Rock art researchers have advocated the removal of inscriptions, including those within the historic range, under the premise that 'graffiti begets graffiti'. This narrow view of historic inscriptions may more accurately be described as 'communication begets communication.' While many historic inscriptions have indeed been placed over pictographs and petroglyphs, many of those sites include examples of superimposition indigenous rock art over older rock art (Welsh and Welsh 2013:58-59). The tendency continues into the contemporary period with newer inscriptions being placed over the historic inscriptions. Conflict between indigenous people and recent settlers on the Northern Plains is clearly undeniable, but the practice of superimposition may be more communication or convenience driven than intent to directly subvert. If the intent to subvert was a dominant thought, examples should exist where rock art panels have been destroyed in their entirety to eliminate cultural material from an area. Yet the closest that can be found are examples where rock art was removed because of its potential monetary value or the desire to possess as an artifact, such as at Castle Gardens of Wyoming, where a shield component was removed to become part of a local rancher's collection (Figure 6.1), only to be
forced by incensed local ranchers to turn it into the Wyoming State Historical Museum lest the indigenous local population be offended (Urbaniak and Loendorf 2000). Due to the fact that not all historic inscriptions are associated with rock art sites, there are numerous "pristine" sites that lack evidence of historic inscription superimposition.

Figure 6.1. The hole in the cliff at Castle Gardens of Wyoming where the Turtle Shield rock art figure was physically removed by a local collector before being turned in to the Wyoming State Historical Museum.

6.5 Identity and Influence

Identity is the dominant information communicated through historic inscriptions on the Northern Plains. The identity of those who created historic inscriptions, both graphical and textual, are apparent through the "residual communication" they left behind. Historic inscriptions further illuminate the mindset of emigrants by examining how and where this communication was expressed during a time of great social and environmental change on the Northern Plains.
Beginning in the earliest days of European colonization in this region, inscribing directly onto the landscape became part of a worldwide phenomenon and was ubiquitous across the North American Continent. These include the inscription of Governor Don Juan de Ornate in 1605 at El Morrow in what is now New Mexico, the inscription at Plymouth Rock of 1620, the Verendrye inscription lead plate left in what is now South Dakota in 1743, the purported initials of George Washington at the site currently called the Virginia Natural Bridge said to be carved in 1750, the signature of Simon Fraser from 1806 (Figure 6.2) near what today is called Stuart Lake in British Columbia, Canada (Francis and Porter 2010:96), and the 1806 signature of William Clark at what is now today known as Pompey's Pillar in Montana.

![Figure 6.2](image.png)

**Figure 6.2.** A digitally enhanced image of the Simon Fraser, 1806 signature located at Stuart Lake, British Columbia (Francis and Porter 2010:96).

From these few but notable examples that bridge the history of North American colonialism and the worldwide examples presented in Chapter 3, it is clear that the practice of
inscribing or marking directly on the landscape was neither considered inappropriate nor unusual for colonialists traveling across the continent, or traveling across other continents. In fact, it is apparent that significant cultural value is embedded in these communication remnants, at least through the level of preservation attention given to the above noted sites, even if traditionally the documentation and preservation of these historic inscriptions has languished behind the recording of rock art on the Northern Plains. The disdain rock art researchers have tended to have for historic inscriptions is understandable due to the real or perceived destruction of the objects of their study. Nevertheless, superimposition is a worldwide phenomenon, transcending time and space.

Given the relatively universal practice of creating inscriptions and superimposing those atop older forms of residual communication, historic inscriptions must be documented and investigated as being much more than casual graffiti or impromptu vandalism. The early 19th and 20th-century historic inscriptions on the Northern Plains examined herein highlight the continuum of communicated messages about identity, origin, ethnicity, hopes, dreams, alliances, and allegiances, amid an era of drastic transformations. New settlers in the region who created most of the historic inscriptions examined left signatures of their identity amid of waves of influences that ranged from creating new names for landforms to using inscriptions to denote boundaries and ownership directly on the face of the landscape. Images in the inscription record include the exhibition of period style, behaviors, everyday items, items of importance, games, maps, people (Figure 6.3), and animals. Text, symbols, and images represent engagement of a broad spectrum of communication types used to leave and convey messages and drove the organization of historic inscription types presented herein.
6.6 Future Research Potential

How do the patterns observed among the examples presented here compare with residual communication at inscription sites throughout the world and how have other cultures used graphical symbolism to represent ideas? Have certain symbols transcended cultural and temporal boundaries? What are the comparative densities of certain symbol types? What messages were (and are) being conveyed? Can studying the patterns of symbolic representations lead to predictive modeling of human communication for the future?

As noted above, the field of historic inscription research is in its infancy. Regardless of the technologies used, systematic documentation that focuses on surveying, site documentation, and data entry and processing should be primary priorities. Many of the research sites studied are recorded as rock art sites which require revisitation for the purpose of updating cultural resource records to ensure the inclusion of historic inscriptions. During such re-recording projects, the
relationship between historic inscriptions and the process of superimposition should be further explored, potentially making future research involving historic inscriptions more engaging for those who have long seen it as vandalism. This research database and/or archive that contain records of the resources examined in this dissertation will be available for public access to historic inscription information, so that the information can be utilized by historians, genealogy researchers, and the general public. An example of this type of outreach can be accessed through the Montana State University Billings Library Special Collections web page at http://www.msubillings.edu/library/Speccoll/historicinscriptions/index.htm. By providing digital access to these records, cultural value in historic inscriptions is conveyed to the public, thereby assisting in their discovery, documentation, and preservation. Current rock art researchers should continue the migration toward full recording of all communication found at sites, regardless of pictograph, petroglyph, or historic inscription. Selective recording by those interested in any segment of culturally placed material should be discouraged, as it would be in any case of an examination of depositional strata. To disregard historic inscriptions on the Northern Plains as a cultural resource ignores the anthropological significance of this form of communication and its role as a universal part of being human.

Researchers need to remain aware that the fifty-year lens that constitutes what is "historic" continues to move, and that many names, dates, text, and images are distributed across the Northern Plains that contain cultural information about who we were, and who we are. Interesting names, dates, text, and figures that have not yet passed into the period of being considered historic are already in place on the Northern Plains and they certainly carry information about our culture during that time, including an inscribed Lunar Lander (Figure 1.3), modern vehicles, and new cultural iconography such as peace signs (Figure 6.4).
Methodological technologies continue to evolve rapidly for the related disciplines of rock art and historic inscription research. The most technologically current archaeological methods have been used for this research including high resolution digital photography, large and small scale three-dimensional scanning, photogrammetry, database creation, GPS, and GIS applications. These technologies also represent the highest standards possible for rock art documentation. One area of overlapping interest is in the area of absolute dating techniques for inscriptions and petroglyphs. Research in thermoluminescence dating, the study of crystalline radiation accumulation, hold promise for both, but practical tools have yet to be perfected (Richter et al. 2000:71-89). In addition to quantifying the specific time a petroglyph was created, this research tool could apply to historic inscription research by being able to verify inscription dates and answer questions concerning problematic issues such as systematically confirming or
discrediting inscribed dates. Lichenography has been applied to the dating of rock art with limited success (Rainey 2001:84) and may be useful in the future for determining the age of some historic inscriptions.

6.7 The Coming Day: New Communication Methods

While the origins of the practice of inscribing directly onto the landscape began over 30,000 years ago, we view the past and the future from a moving position. While this type of communication is sure to continue, cultural resource managers on the Northern Plains may be relieved to know that the current rate of culturally depositing inscriptions appears to be slowing in the region, and digital communication may be to blame. Texting is replacing a variety of "physical" forms of residual communication, and the trend does not appear to be slowing. As an indicator of a change in such communication behavior, consider the practice of leaving bathroom graffiti. Through informal interviews with several secondary school and university custodians, it is apparent that the practice has practically stopped (Risa 2010, elec. comm.).

The potential change in behavior has to do with the presence of the cell phone, used to convey text messages while in the bathroom, rather than engaging a compulsion to communicate by writing directly onto the bathroom walls. Perhaps a way to protect remote rock art sites would be to make sure cell service is available, rather than threaten fine and punishment. In the future it may be interesting to note that at the time of this dissertation writing, cursive writing is being phased out of the curriculum of American public schools in order to have students spend more time with a keyboard and other forms of computer interaction (Washington Post 2013). This renders historic inscriptions even more important in that they may represent an increasingly rare documentary resource.
For historic inscriptions, the clock of what constitutes being historic moves every day. The practice of acknowledging cultural resources over 50 years old means that the veil of eligibility is ever moving forward (National Park Service 2014). Now that it is 2014, inscriptions from 1964 are becoming historic. As the timeline moves through the 1960s, many inscriptions will become protected that represent cultural and social change, including peace signs, acknowledgment of the Vietnam War, and the race into space.

Historic inscriptions are a cultural resource that will contribute to a deeper understanding of landscape archaeology by examining how settlers on the Northern Plains shaped and interacted with the land that was new to them. Visual communication theories such as Gestalt, constructivism, and the study of semiotics are approaches that can be utilized to more fully understand the behavior of creating historic inscriptions as a form of residual communication. Clearly, many research possibilities exist for this largely unexplored cultural resource and, unlike rock art, opportunities exist to interview the "artists" to more fully understand the meaning and motivation to create some inscriptions.

Historic inscriptions in the form of names, dates, and images represent the continuous waves of people moving across and into the Northern Plains who left "residual" forms of communication on the land, as has been done by humans throughout the world since time immemorial. These messages from the past place specific people on the landscape at specific times, and carry information about demographics, identity, group association, graphical communication styles, social change, emotion, and they are the story of who was here. These represent the "scenes of [our] early life," where people continually visit "...for a little reminiscing" (Ida Phelps Sherrodd, in Barnard et al. 1978:250). Whether by individuals or by groups, those documented in this dissertation carved evidence of their presence upon the very
land that they imported their cultural traditions and beliefs onto, representing a time of colonial transition that transformed cultural and natural landscapes on the Northern Plains (Figure 6.5).

Figure 6.5. Inscription of "ALFRED SORENSEN LIAN, FIRST WHITE SETLER (sic) AT THE AGE OF 17 YEARS PAID $150 IN GOLD FOR SQUATER (sic) RIGHT ON SEC 32-5N 28E" in Montana east of Billings.
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Appendix A: Regional Historic Inscription Site List for All Chapters
(Organized by Smithsonian Trinomial)

Carbone (24BH0404)
Ownership: Spring Creek Mine
Location: The Carbone site is located near Decker, Montana.
Description: The Carbone site is located on the property of the Spring Creek Mine near Decker, Montana. The site contains inscriptions superimposed over precontact-era petroglyphs, and panels of historic inscriptions concentrated on the west side of the site.

Kobold (24BH406)
Ownership: State of Montana
Location: The Kobold site is located at the Rosebud Battlefield in southeastern Montana.
Description: The Kobold site is a sandstone cliff line that contains petroglyphs dating to the precontact era intermingled with historic inscriptions, notably including previous landowner Slim Kobold, 1911 and G. Crook, 1876. Discussions about the authenticity of the G. Crook inscription speculate whether or not there would have been time before or during the battle for such a distraction, or whether it could have been done as a commemoration years later.

Merrimack (24CB1106)
Ownership: Bureau of Land Management
Location: The site is south of Bridger, Montana and on the east side of Cottonwood Canyon.
Description: Weatherman (Weathermon) Draw is home to a broad distribution of pictograph, petroglyph, and historic inscription sites. The Marr Mack inscription is on the west face of a sandstone Boulder on the west side of a sandstone cliff line. It is often referred to as the "Merrimack" site, although the inscription reads "Marr Mack.

Medicine Rocks State Park (24CT0022)
Ownership: State of Montana
Location: Medicine Rocks State Park is located in eastern Montana north of Ekalaka.
Description: At approximately 330 acres, the general land type of the Medicine Rocks State Park landscape is comprised of low rolling grassland prairie hills punctuated by sandstone spires and outcrops that in some cases have associated cliffs reaching approximately one hundred vertical feet. These sandstone landforms are highly eroded and are interspersed with horizontal tube tunnels, overhang areas and arches. The vegetation is primarily native grasses and forbs interspersed with pines.
Capitol Rock (24CT0565)
Ownership: Custer National Forest

Location: Capitol Rock is in the Long Pines unit of the Custer National, located in eastern Montana east of Ekalaka.

Description: Capitol Rock is a National Natural Landmark that once contained historic inscriptions on its north face. The face crumbled and components containing the most clear inscription were relocated to the museum in Ekalaka in 1999.

Alcatraz Rock (24FA0294)
Ownership: Mehling Family

Location: The site is located on the north side of the county road that runs east-west on the north side of Medicine Rocks State Park north of Ekalaka, Montana.

Description: The site is an isolated sandstone butte that contains petroglyphs and historic inscriptions dating to the late 1800's.

Bear Gulch (24FR0003)
Ownership: Macie Ahlgren

Location: Bear Gulch is located east of Lewistown, Montana.

Description: Bear Gulch is an extensive pictograph and petroglyph site that is largely populated by shield figures. The site also contains historic inscriptions, which were not documented during a recent focused inventory.

Explorer Petroglyph (24ML0402)
Ownership: Unpublished

Location: The site is located on the southeast corner of the Bull Mountains approximately midway between Billings and Roundup, Montana, to the east of Highway.

Description: The site is a south-facing panel on a sandstone cliff that runs east to west. While the primary panel dates to the contact era, the only historic inscriptions to be found are from the rancher's family.

Three Layers (24ML0508)
Ownership: Unpublished

Location: The site is located on the north side of the Bull Mountains north of the highway and east of Roundup, Montana.
Description: The site is a south facing sandstone cliff line that has panels facing south and east. The site is primarily petroglyphs and pictographs, but some historic inscriptions are present and superimposed. In one location, three levels of cultural inscribing occur.

Signal Mountain (24ML0563)
Ownership: Unpublished
Location: The site is located on the Old Divide Road south of Roundup, Montana.
Description: The site of a sandstone cliff line that has historic inscriptions dating to the late 19th century that have been superimposed over pictographs and petroglyphs. This is one of two known historic inscriptions site housing Chinese writing.

DHS (24ML1048)
Ownership: Unpublished
Location: The site is located east of Musselshell, Montana, south of Highway 12.
Description: The site is a sandstone outcrop that has historic inscriptions dating back to the late 19th century superimposed over petroglyphs.

Sheridan Butte (24PE0024)
Ownership: Bureau of Land Management
Location: The site is north of the Yellowstone River where the Powder River enters from the south in Montana.
Description: Sheridan Butte rises from the Yellowstone River Valley and provides an excellent vantage point from which to view the surrounding area. Historic inscriptions are found on the sandstone cliffs that ring the top of the butte, including those that date back to 1876. No rock art has been identified at this site.

King Mountain (24PR0165)
Ownership: Custer National Forest
Location: The site is to the west of Otter Creek in the Ashland District of the Custer National Forest in Montana.
Description: The site contains faint petroglyph remnants, near which several historic inscriptions have been incised on a sandstone cliff line.

Roadside (24PR0204)
Ownership: Custer National Forest
**Location:** The site is located near Fort Howes in the Ashland District of the Custer National Forest in Montana.

**Description:** The site contains faint petroglyph remnants over which a large concentration of historic inscriptions have been incised on a cliff line and sandstone spires immediately adjacent to Taylor Creek Road.

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**Needle Rock (24PR0603)**  
**Ownership:** Custer National Forest

**Location:** The site is located near Fort Howes in the Ashland District of the Custer National Forest in Montana.

**Description:** The site number references a sandstone spire on the east side of Otter Creek that has a horizontal tube containing petroglyphs. Multiple historic inscriptions dating to the earliest days of cattle ranching can be found on the south side of the spire. Current site forms do not address a number of historic inscriptions along the adjacent sandstone cliff and a draw to the south.

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**Rancher Panel (24PR0622)**  
**Ownership:** Custer National Forest

**Location:** The site is located near Fort Howes in the Ashland District of the Custer National Forest in Montana.

**Description:** The site consists of a south-facing sandstone cliff line with multiple historic inscriptions that date to the late 19th century. While there is no rock art present on the panel, a fragile pictograph panel is located within 50 meters to the east, completely untouched by historic inscriptions.

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**Graffiti Cave (24PR1203)**  
**Ownership:** Custer National Forest

**Location:** The site is located north of Ten Mile Road in the Ashland District of the Custer National Forest in Montana.

**Description:** The site consists of a small sandstone cave and adjacent cliff containing petroglyphs with historic inscriptions superimposed.

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**Lonesome Rock Pass (24PR2008)**  
**Ownership:** Custer National Forest

**Location:** The site is located west of Otter Creek in the Ashland District of the Custer National Forest in Montana.
Description: The site consists of sandstone outcrops and adjacent cliff lines containing historic inscriptions.

**Homestead Panel (24PR2073)**
*Ownership: Custer National Forest*

*Location: The site is located directly north of the Fifteen Mile Road in the Ashland District of the Custer National Forest in Montana.*

*Description: The site consists of a sandstone cliff line containing historic inscriptions and petroglyphs.*

**Capra (24PR2317)**
*Ownership: Arch Coal*

*Location: The site is located west of Otter Creek in the Ashland District of the Custer National Forest in Montana.*

*Description: The site consists of a east-facing reddish sandstone cliff containing a precontact-era panel with historic inscriptions superimposed.*

**Stag Rock (24PR2381)**
*Ownership: Custer National Forest*

*Location: The site is located directly to the west of the Otter Creek Road in the Ashland District of the Custer National Forest in Montana.*

*Description: The site consists of a large sandstone outcrop and adjacent cliff lines containing historic inscriptions.*

**Castle Butte, north of Forsyth (24RB0032)**
*Ownership: Barbara Rolston*

*Location: The site is located on private land north of Highway 12E, several miles north of Forsyth, Montana.*

*Description: The sandstone butte and adjacent outcrops at its base show no evidence of petroglyphs, but many historic inscriptions show a local tradition of visitation and incising. The site form details tipi rings at the base of the butte, but no mention of the inscriptions.*

**Poker Jim Pillar (24RB0272)**
*Ownership: Custer National Forest*
Location: The site is located east of the Tongue River in the Ashland District of the Custer National Forest in Montana.

Description: The site consists of an isolated sandstone spire that has been heavily carved with historic inscriptions, including regional livestock brands.

**Lovelace Memorial (24RB0301)**
Ownership: Western Energy Company - Rosebud Mine

Location: The site is located west of Colstrip, Montana

Description: The site contains petroglyphs extending into the precontact era along with superimposed historic inscriptions. The landform is a sandstone monolith.

**Petro City (24RB0302)**
Ownership: Western Energy Company - Rosebud Mine

Location: The site is located west of Colstrip, Montana

Description: The site contains petroglyphs extending into the precontact era along with superimposed historic inscriptions. The landform is a sandstone monolith.

**Deer Medicine Rocks (24RB0401)**
Ownership: Unpublished

Location: The site is located on private land north of Ingomar, Montana.

Description: Located south of Colstrip, Montana, the site is comprised of a sandstone monolith that contains petroglyphs, including one scene that is associated with the battle of Little Big Horn.

**Porcupine Butte (24RB0563)**
Ownership: Al Lee

Location: The site is located approximately fifteen miles north of Forsyth, Montana.

Description: The Porcupine Butte is a sandstone island overlooking a vast expanse of Porcupine Creek to the north. The site contains petroglyphs and historic inscriptions.

**Homestead Cave (24RB1076)**
Ownership: Custer National Forest

Location: The site is located several miles southwest of Fort Howes in the Ashland District of the Custer National Forest in Montana.
Description: The site consists of a sandstone cliffs punctuated by a small sandstone cave, which is elevated four meters above the valley floor. Only historic inscriptions are present at the site.

**Two Bears (24RB1510)**  
**Ownership:** Custer National Forest  
**Location:** The site is located in the Ashland District of the Custer National Forest in Montana.  
**Description:** The site consists of a south-facing sandstone cliff line with a cave. The site is primarily a petroglyph site dating to precontact times, but there are historic inscriptions present, including ranching brands.

**Kid Curry (24RB2245)**  
**Ownership:** State of Montana  
**Location:** The site is located north of Ingomar, Montana.  
**Description:** The site is comprised of a sandstone monolith that contains historic inscriptions.

**Northern Pacific Railroad (24TE0128)**  
**Ownership:** Burlington Northern Railroad  
**Location:** The site extends from the eastern border to the western border of Treasure County.  
**Description:** The site is comprised of the railroad bed and associated features. None of the site forms include descriptions or mention of historic inscriptions that are placed on the sandstone cliffs that line the railway.

**Ghost Cave (24YL0002)**  
**Ownership:** State of Montana  
**Location:** Ghost Cave is located adjacent to Pictograph Cave, southwest from Billings, Montana.  
**Description:** Excavated by the WPA in the 1930's, Ghost Cave is significant in regional archaeology. Although many have been removed, many historic inscriptions dating back to 1914 show that the cave continued to be visited during periods of immigration.

**Manual Lisa (24YL0082)**  
**Ownership:** State of Montana  
**Location:** The site is approximately 1/8 mile south of the Manual Lisa fishing access.  
**Description:** The site is a sandstone cliff that has historic inscriptions superimposed over contact-era petroglyphs.
**Pompey's Pillar (24YL0176)**
Ownership: Bureau of Land Management

**Location:** The site is located approximately five miles northwest of Pompey's Pillar, Montana, directly south of the Yellowstone River.

**Description:** Considered the keystone of historic inscription tradition on the Northern Plains due to the presence of the Wm. Clark signature, Pompey's Pillar is a sandstone "island" that rises approximately 120 feet above the flood plain. The site contains multiple panels of pictographs, petroglyphs, and historic inscriptions.

**Castle Butte, north of Pompey's Pillar (24YL0418)**
Ownership: Bureau of Land Management

**Location:** The site is located approximately 10 miles north of Pompey's Pillar on the Castle Butte road on the southern edge of the Bull Mountains in Montana.

**Description:** Castle Butte is a multi-panel petroglyph site located on a mile-long sandstone formation. Some historic inscriptions are present on the butte dating back to the late 19th century.

**Four Dances (24YL0559)**
Ownership: Bureau of Land Management

**Location:** The site is located immediately east of Billings, Montana.

**Description:** The site number 24YL0559 refers to a petroglyph panel located on the top sandstone cliff tier in the Four Dances Recreational Area. Although the site form does not include descriptions of historic inscriptions, several occur in the park. The Chas Hoe inscription is located in a sandstone cave that was formed when a large slab calved from the main cliff. It is adjacent to the north side of a large cave at the base of a valley north of the access road. The inscription panel with Miss Mollie Westbrook is approximately 200 yards north of the Four Dances panel, along the same cliff line.

**Steamboat Butte (24YL0576)**
Ownership: Bureau of Land Management

**Location:** The site is located on the southeastern side of the Bull Mountains in Montana.

**Description:** Steamboat Butte is a sandstone formation containing pictographs, petroglyphs, and historic inscriptions.
Hanging Rock (24YL0600)
Ownership: Primarily the Swanson Family, extending into Bureau of Land Management to the west.

Location: The site is located northeast of Custer, Montana, on the north side of the Yellowstone River.

Description: Multiple rock art panels in the area have been given individual site numbers, but while many of the forms mention a need for the documentation of the many historic inscriptions that line the continuous sandstone cliff line, none of them did so. The exception is the inscription of J O Moore of the US Cavalry.

Sorensen (24YL0658)
Ownership: Unpublished

Location: The Sorensen site is located east of Billings, Montana and north of the Yellowstone River.

Description: This site literally describes its location through the historic inscription there that reads "ALFRED SORENSEN LIAN, FIRST WHITE SETLER (sic) AT THE AGE OF 17 YEARS PAID $150 IN GOLD FOR SQUATER RIGHT ON SEC 32 - 5N 28E."

Lisa - Colter (24YL0681)
Ownership: John Sjostrom

Location: The Lisa - Colter site is located east of Custer, Montana on the southwestern side of the junction of the Yellowstone and Bighorn Rivers.

Description: The site contains historic inscriptions including those of M Lisa 1807 and Colter 1810. Located in the general area of an early fur trading fort, these inscriptions have long generated discussion regarding their authenticity, but have an oral history of their presence that extends to the earliest days of homesteading.

Buddha (39HN0160)
Ownership: Custer National Forest

Location: The site is located in the North Cave Hills District of the Custer National Forest in South Dakota.

Description: The site consists of a sandstone cliff line that contains petroglyphs that have been superimposed by historic inscriptions.

Vulva Cave (39HN0150)
Ownership: Custer National Forest
Location: The site is located in the North Cave Hills District of the Custer National Forest in South Dakota.

Description: The site consists of a sandstone cave and contains petroglyphs that have been superimposed by historic inscriptions.

**Craig Pass (39HN0030)**
**Ownership:** Custer National Forest

Location: The site is located in the North Cave Hills District of the Custer National Forest in South Dakota.

Description: The site consists of a narrow gap approximately five meters wide, through which the old wagon road used to pass. The adjacent cliffs have petroglyphs that have been superimposed by historic inscriptions.

**Cave Hills - Ludlow Cave (39HN0001)**
**Ownership:** Custer National Forest

Location: The site is located in the North Cave Hills District of the Custer National Forest in South Dakota.

Description: The site consists of a sandstone cave and adjacent cliffs that contain petroglyphs that have been superimposed by historic inscriptions.

**Medicine Lodge (48BH0499)**
**Ownership:** State of Wyoming

Location: The site is located on the western slope of the Big Horn Mountains in northern Wyoming near the town of Tensleep.

Description: The Medicine Lodge State Archaeological Site is a petroglyph/pictograph site that has historic inscriptions superimposed. The formation is red sandstone and the site extends for approximately 60 yards along the base of the cliff.

**Devils Tower (48CK106)**
**Ownership:** National Park Service

Location: The site is located in northeastern Wyoming.

Description: Sandstone outcrops immediately adjacent to the southwest of the primary geological formation were observed to have historic inscriptions dating to the early 1900's.
**Wyoming Grasslands (48CO3368)**
Ownership: Medicine Bow National Forest

Location: The site is located in the Thunder Basin National Grassland, south of Gillette, Wyoming.

Description: The site is composed of a sandstone cliff that faces south. Some historic inscriptions are present, dating to 1925.

**Castle Gardens (48FR108)**
Ownership: Bureau of Land Management

Location: The site is located in central Wyoming approximately 45 miles east of Riverton.

Description: The site is composed of pictographs and petroglyphs, extending into the precontact period. Some historic inscriptions are present, and it is the original site of the Turtle Shield rock art component.

**Names Hill (48NL0039)**
Ownership: State of Wyoming

Location: The site is directly adjacent to Wyoming State Highway 189, 42 miles north of Kemmerer, Wyoming.

Description: Situated on the west bank of the Green River, a sandstone cliff line was a common stopping spot for trappers and immigrants along the Oregon Trail. The site contains many inscribed and painted historic inscriptions dating back to the early 1800's, in many cases superimposed over petroglyphs dating to the precontact era.

**Independence Rock (48NA0262)**
Ownership: State of Wyoming

Location: The site is directly adjacent to Wyoming State Highway 220, 23 miles south of Alcova, Wyoming.

Description: Rising up from the prairie, a granite outcrop was a common stopping spot for trappers and immigrants along the Oregon Trail. The site contains many inscribed and painted historic inscriptions dating back to the early 1800's.

**Register Cliff (48PL0070)**
Ownership: State of Wyoming

Location: The site is located on private land directly adjacent to the county road on the west side of the Pease Bottom in Treasure County, Montana.
Description: The site is a cliff line comprised of soft, chalky, limestone that rises approximately 100 feet above the valley floor of the North Platte River. A popular stopping point along the Oregon Trail, the cliff line is covered with inscriptions dating back to 1829 (Wyoming SHPO Web Page 2014). If rock art was present at the site, it has become totally superimposed by the layers of inscriptions.

**Face with Headdress (Unregistered)**  
**Ownership:** Ben Piersol  
**Location:** The site is located approximately five miles south of Absarokee, Montana against the base of a hill that is to the east of East Rosebud Creek.  
**Description:** The site consists of a sandstone boulder with a face profile wearing a native headdress, with another inscriptions - possibly of a canid - on the opposite side.

**Bert Flemming (Unregistered)**  
**Ownership:** Unpublished  
**Location:** The site is located on the sandstone cliffs southwest of Bridger, Montana.  
**Description:** Located at the base of a continuous cliff, the site is comprised of painted and inscribed historic material.

**Coveralls Cave (Unregistered)**  
**Ownership:** Custer National Forest  
**Location:** The site is located west of Red Lodge Creek one mile into the Beartooth District of the Custer National Forest.  
**Description:** The site is a limestone cave containing historic inscriptions dating to the late 19th century. No rock art appears in the cave, but red ochre smears are in a rockshelter adjacent to the entrance.

**Custer Inscription (Unregistered)**  
**Ownership:** Unpublished  
**Location:** The site is located on private land north of Miles City, Montana.  
**Description:** The site consists of a sheltered depression ringed by sandstone cliffs. The site is adjacent to the Yellowstone Expedition route of 1773. There are minimal additional inscriptions at the site and no definitive evidence of rock art.
Emory Rhodes (Unknown)
Ownership: Bureau of Land Management
Location: The site is located in the several miles south of the Montana state line, in the North Bighorn Basin, north of Powell, Wyoming.
Description: The site is composed of short sandstone cliffs and boulders. Some historic inscriptions are present, no rock art is present.

Goose Lake Inscriptions (Unregistered)
Ownership: Custer National Forest
Location: The site is located on the south end of Goose Lake in the Absarokee Beartooth Wilderness Area of the Custer National Forest.
Description: The site consists of inscriptions from early prospectors that are chiseled into granite at the outlet of the lake.

Homesteader's Cave (Unregistered)
Ownership: Unpublished
Location: The site is located on private land directly adjacent to the county road on the west side of the Pease Bottom in Treasure County, Montana.
Description: The site consists of a shelter cave that was utilized by early settlers as evidenced by the historic inscriptions found there that date to 1880. No rock art is present.

Horse House (Unknown)
Ownership: Unknown
Location: This site is located on the southwestern edge of the Bull Mountains in Montana.
Description: The site is on a south-facing patinated sandstone panel that contains historic inscriptions dating to the homestead era superimposed over contact-era petroglyphs. The site includes a rendering of a homesteader's house.

NC (Unregistered)
Ownership: Custer National Forest
Location: The site is located east of Otter Creek in the Ashland District of the Custer National Forest in Montana.
Description: The site consists of a sandstone outcrop that has lightly inscribed historic material.

Devil's Kitchen (Unregistered)
Ownership: Unpublished
Location: The site is located on private land directly north of Park City, Montana.

Description: The site is composed of a large slab of sandstone that has pulled away from the main cliff to form a narrow corridor approximately two meters by 20 meters long. The site contains multiple inscriptions from the late 1800's into the present, but there is no evidence of rock art.

Cross Cairn (Unregistered)
Ownership: Unpublished

Location: The site is located on Cow Face Hill Road between Absarokee and Reed Point, Montana.

Description: The site consists of a stacked, slab stone marker cairn that includes a south-facing stone that has Aug. 19, 1817 incised. There is a wooden cross that has been placed in the top of cairn. The cairn is in the route of what would later become the Bozeman Trail.

Tom Horn (Unregistered)
Ownership: Unpublished

Location: The site is located on private land south of Billings, Montana approximately twelve miles on private land.

Description: The site is a single inscription located on a south-facing cliff. Directly adjacent to the inscription, an alcove large enough for a man and a horse is formed where a component of the sandstone has pulled away.
Appendix B: Figures for Chapters 4 and 5

CHAPTER 4 IMAGES: INSCRIPTIONS AS GRAPHICAL COMMUNICATION

FIGURE 4.1. Drawing of a house from 24RB302 (Petro City).

FIGURE 4.2. Drawing of a house from the Horse House site in the Bull Mountains.
FIGURE 4.3. Drawing of a house from the Horse House site in the Bull Mountains in a larger view showing the superimposition of the homestead era house over the petroglyphs.

FIGURE 4.4. A drawing of a church from Medicine Rocks State Park landform NS047 shown as a two-dimensional front view.
FIGURE 4.5. A two-dimensional view of a building at the Roadside site 24PR00204 near Ashland, Montana.

FIGURE 4.6. Portrait of "P. E. Davis, Aug. 1879" at the Lovelace Memorial site 24RB301 near Colstrip, Montana.
FIGURE 4.7. An inscription of David Douglas from the NC site near Ashland, Montana.

FIGURE 4.8. An inscription of a man smoking a pipe at Medicine Rocks State Park.
FIGURE 4.9. An inscription showing the style of a high collar.

FIGURE 4.10. An inscription of a man at landform SS051 at Medicine Rocks State Park with a wide brimmed hat.
FIGURE 4.11. An inscribed figure at Names Hill, Wyoming.

FIGURE 4.12. A bas relief carved woman with a homesteader-era hair style at landform SS051 at Medicine Rocks State Park.
FIGURE 4.13. A profile of a woman from a site in the Cave Hills of South Dakota. Note the style represented by the hair and the high collar.

FIGURE 4.15. A caricature of a fat cowboy at the Rancher site east of Ashland.

FIGURE 4.16. Not all cowboy figures are modest, as this inscription adjacent to homestead era names and dates shows.
FIGURES 4.17 and 4.18. Additional figures shown in frontal view from Medicine Rocks State Park.

FIGURE 4.19. Stylized Native American face at Stag Rock near Ashland, Montana.
FIGURE 4.20. Stylized Native American face near the site of the second Crow Agency south of Absarokee, Montana.

FIGURE 4.21. Contact era horses on a superimposed panel at Names Hill, Wyoming.
FIGURE 4.22. Horse with cavalry style riding tack at Medicine Rocks State Park, Montana.

FIGURE 4.23. Horses shown as partial figures at Medicine Rocks State Park, Montana.
FIGURE 4.24. Inscription of a donkey with accompanying text that reads "O my Ass, O my donkey" located in Homesteader's Cave.

FIGURE 4.25. Detail photo of the head of the donkey inscription, shown in negative.
FIGURE 4.26. Small inscription of a horse or donkey with accompanying biped.

FIGURE 4.27. Inscription panel incorporating a horse, text, a brand, and a flag.
FIGURE 4.28. Inscription panel incorporating livestock and a brand from the Petro City site 24RB302.

FIGURE 4.29. Inscription panel incorporating livestock, human figure, brands and dates.
FIGURE 4.30. Inscription panel on Fifteen Mile Road east of Ashland, Montana depicting a transportation scene.

FIGURE 4.31. Inscription of a bird at Names Hill in Wyoming. Names Hill has a continuous chronology of inscriptions spanning the transition between precontact and contact periods, and then through the dominant years of the Oregon Trail, followed by the expansion of ranching in the area and into the contemporary period.
FIGURE 4.32. Inscription of a bird, possibly a dove, and accompanying text from the Cattle Drive Era at Alcatraz Rock near Ekalaka, in eastern Montana.

FIGURE 4.33. Inscription of a bird and a flower next to the homestead era house at 24RB302.
FIGURE 4.34. Inscription of a bird at landform SS051 at Medicine Rocks State Park.

FIGURE 4.35. Explorer petroglyph inscription showing men in a dugout boat with a tall figure watching on the right and a horse figure on the left.
FIGURE 4.36. The tall ship of Henry Jensen, incised in 1928 on landform NS059 at Medicine Rocks State Park.

FIGURE 4.37. The Marr Mack, a sailing steamship inscription located in Weathermon Draw.
FIGURE 4.38. Inscription of Emory Rhodes, Dec. 21st, 1901, considered to be the artist of the sailing steamship Marr Mack.

FIGURE 4.39. Bert Fleming left his name and indexical communication components consisting of a horseshoe and liquor bottle in this case painted along an old roadway near the current town of Bridger, Montana. The lower image was enhanced using DStretch.
FIGURE 4.40. Inscription incorporating a liquor bottle at Independence Rock.

FIGURE 4.41. A religious inscription located near Roundup, Montana that reads “In hoc signo vinces.”
FIGURE 4.42. Another version of the a religious inscription located near Roundup, Montana that reads “In hoc signo vinces.”

FIGURE 4.43. Inscription at Pompeys Pillar of a figure kneeling beneath a cross.
FIGURE 4.44. Inscription panel at landform NS048 at Medicine Rocks State Park showing a Masonic symbol, including a weathered G in the center.

FIGURE 4.45. Inscription panel at landform NS024 at Medicine Rocks State Park showing a Masonic symbol.
FIGURE 4.46. Panel at Names Hill in Wyoming with an incised Masonic symbol.

FIGURE 4.47. Inscription at Independence Rock incorporating a Masonic symbol.
FIGURE 4.48. Panel at Register Cliff in Wyoming with a faded painting from 1869 showing a Masonic symbol. On the right is the original image, the image on the left has been processed with the DStretch software. The Masonic sign is at the top.

FIGURE 4.49. Plaques at Independence Rock in Wyoming, including one acknowledging the Masons.
FIGURE 4.50. Panel at Names Hill in Wyoming with three crosses inscribed high on the cliff.

FIGURE 4.51. A cross with the letters K K K inscribed near Roundup, Montana.
FIGURE 4.52. The letters K K K inscribed at Medicine Rocks State Park in Montana.

FIGURE 4.53. This depiction of the deceptively simple game of tic-tac-toe represents a rather one-sided contest. Note the associated 1918 in the upper left.
FIGURE 4.54. Skull and crossbones from Craig Pass in the Cave Hills of South Dakota.

FIGURE 4.55. Skull and crossbones from Devil's Kitchen near Park City, Montana.
FIGURE 4.56. A brand inscription from the Needle Rock site 24PR00603 in the Custer National Forest near Ashland, Montana.

FIGURE 4.57. Historic inscription site 24PR0622 in the Ashland District of the Custer National Forest.
FIGURE 4.58. Common in the Ashland area, this Three Circle brand is inscribed in *bas relief*.

FIGURE 4.59. Inscription of the brand for the XIT ranch from Texas located on landform NS025 at Medicine Rocks State Park.
FIGURE 4.60. The Diamond S brand with an associated date of 1893 at Poker Jim Butte near Ashland, Montana.

FIGURE 4.61. The Granville Stuart DHS brand from a landform east of Roundup, Montana.
FIGURE 4.62. A redacted heart showing a change in relationship status.

FIGURE 4.63. A heart symbol penetrated by an arrow.
FIGURE 4.64. A petroglyph of a bear penetrated by an arrow. Note that it penetrates the heart at the end of the heart line.

FIGURES 4.65 and 4.66. The historic inscription on the left shows the act of copulation from a potentially adolescent perspective while the directly adjacent native inscription on the right shows a more graceful entanglement of a couple.
FIGURE 5.1. Probable commemorative "fake" at the Hanging Rock site.

FIGURE 5.2. Inscription of “G. W. 1776” on a boulder currently located at the Yellowstone County Museum.
FIGURE 5.3. Inscription alcove containing a 1776 inscription at Medicine Rocks State Park.

FIGURE 5.4. An inscription showing an inscription of H. H. with a pair of 1803 dates from Medicine Rocks State Park.
FIGURE 5.5. The inscription of "Wm. Clark, July 25th, 1806" at Pompeys Pillar.

FIGURE 5.6. An inscription of "M Lisa 1807" inscribed on a boulder near where the Bighorn River enters the Yellowstone River.
FIGURE 5.7. An inscription of "Colter 1810" inscribed on a boulder near where the Bighorn River enters the Yellowstone River.

FIGURE 5.8. A stacked cairn with a cross on a plateau along the Yellowstone River travel corridor with an inscribed stone of 1817.
FIGURE 5.9. A stone in the stacked cairn that reads “Aug. 19, 1817” on a plateau along the Yellowstone River travel corridor.

FIGURE 5.10. Inscription of "JCW 1823" in a cave in the Long Pines unit of the Custer National Forest.
FIGURE 5.11. An inscription with a face in profile (left), a bow and arrow (right), an indecipherable name and a date of 1824 at Medicine Rocks State Park.

FIGURE 5.12. An inscription near Fort Howes, Montana of the initials G.O.A. with a date of 1824.
FIGURE 5.13. A well inscribed panel at Register Cliff in eastern Wyoming that contains a boxed-in date of 1825 (left).

FIGURE 5.15. An inscription of "J. Norby, 1842" at Names Hill in Wyoming.

FIGURE 5.16. A National Register plaque at Names Hill in Wyoming near an inscription of "James Bridger, 1944, Trapper."
FIGURE 5.17. Painted text at Names Hill in western Wyoming including one of "C. G. Hayes, 7. 24. 1847."

FIGURE 5.18. An inscription at Independence Rock in central Wyoming that reads “SWARTWOUT July 4, 49" (1849).

FIGURE 5.20. An inscription at Register Cliff in eastern Wyoming that reads “S. H. Patrick, June 6, 1850.”
FIGURE 5.21. An inscription at Names Hill in western Wyoming along the Oregon Trail that reads “I. W. Fouts, June 22, 1851, of Ohio.”

FIGURE 5.22. An inscription at Register Cliff in eastern Wyoming that reads “June 19, 1852, Adams Co. Ills., W. Richadson.”
FIGURE 5.23. Nestled in a busy panel at Register Cliff in eastern Wyoming is an inscription that reads “J. Foreman, July The 17, 1853”

FIGURE 5.24. An inscription at Register Cliff in eastern Wyoming that reads “J. Carson, July the 17, 1854.”
FIGURE 5.25. An inscription panel at Register Cliff in eastern Wyoming with an inscription of “G. O. Willard, Boston 1855.”

FIGURE 5.26. An inscription at Register Cliff in eastern Wyoming that reads “J. Hill, June 5, 1856.”
FIGURE 5.27. An inscription panel at Register Cliff in eastern Wyoming with an inscription of “J. W. Robb, 1857 U. S. Post.”

FIGURE 5.28. An inscription at Register Cliff in eastern Wyoming that reads “W. Martin, A. J. Hill, 1858, July.”
FIGURE 5.29. An inscription at Names Hill in western Wyoming that reads “J. C. Newman 1859.”

FIGURE 5.31. An inscription panel in the Ashland District of the Custer National Forest that includes an 1862 date amidst other material.

FIGURE 5.32. An inscription panel at Register Cliff in eastern Wyoming with an inscription of “W. W. Erwin, 1864.”
FIGURE 5.33. An inscription of KZ 1864 at a rock art site in Wyoming.

FIGURE 5.34. An inscription panel at landform SS051 containing an 1871 inscription at Medicine Rocks State Park.
FIGURE 5.35. An inscription north of present day Miles City, Montana at a site along the route of the 1873 Yellowstone Expedition.

FIGURE 5.36. Inscriptions near Ludlow Cave in South Dakota at Panel 39HN17 that read "JT July 11, 1874" and "Jack and Madge 1938" superimposed on a rock art panel.
FIGURE 5.37. An inscription at Castle Butte, Montana of “Geo. Town, Dec 11, 1874.”

FIGURE 5.38. Rare inscriptions on granite at an approximate elevation of 10,000 feet near Goose Lake that read "O. Budd Hart, Mch 16, 1875" and "T B Brown, July 17, 1891."
FIGURE 5.39. An inscription near Fort Howes, Montana of an indecipherable name (Gerry Turner?) with a date of 1876.

FIGURE 5.40. A faint inscription at the Rosebud Battlefield in Montana that reads "G Crook 1876."
FIGURE 5.41. The inscription traced at the Rosebud Battlefield in Montana that reads "G Crook 1876."

FIGURE 5.42. An inscription at Sheridan Butte in eastern Montana that reads "J Bailey, Co C, 6th INF, June 21, 1876."
FIGURE 5.43. Inscription "J. J. Hansen, Cowboy, 1876" at Names Hill in western Wyoming.

FIGURE 5.44. An inscription from James B. Clark a soldier of Company F, 22nd Infantry at the Deer Medicine Rocks site probably from a bivouac there in May, 1877.
FIGURE 5.45. Inscription "S P French, 1877" at Names Hill in western Wyoming.

FIGURE 5.46. Inscription "J O Moore 1879, Co. H. 2 U.S. Cav." at the Hanging Rock site.
FIGURE 5.47. Inscription "Orson Simpson 1880" at Homesteader's Cave near Custer, Montana.

FIGURE 5.49. Inscription "W H Gilbert 1881" at the Roadside site near Fort Howes, Montana.

FIGURE 5.50. Inscription "C W M 1881 at Castle Butte north of Forsyth, Montana.
FIGURE 5.51. Inscription of "May. The.7. 1882, J. A. Peterson." at Names Hill.

FIGURE 5.52. Inscription panel above Billings, Montana with the text "June 22, 1883, E. B. Covely, Miss Mollie Westbrook, and J.T. Westbrook."
FIGURE 5.53. Inscription panel with historic material over indigenous rock art in the Otter Creek Valley east of Ashland, Montana with the name and brands of "R. T. Tate, 1883."

FIGURE 5.54. Inscription of "J. H. Treadwell, Ft. Griffin, Tex, Aug 18, 1885" at Alcatraz Rock near Ekalaka, Montana.
FIGURE 5.55. Inscriptions at Needle Rock near Fort Howes, Montana that include "A.S. Mathers; C.C. Jones, Aug 28, 1886; C.L. Rice, March 17; J.M. Armstom 1876 March 17th; and M.L. Beam 4/12/ 1914."

FIGURE 5.56. In 1886 (left central), local ranch families began inscribing their names and brands at the Rancher site in the Ashland District of the Custer National. This image of the panel includes dates from 1904, 1916, 1927, and 1943.
FIGURE 5.57. Inscription "Billings, 1887, Neb" at Names Hill along the Oregon Trail in western Wyoming.

FIGURE 5.58. Inscription "Robert Howes, July 19, 1888" at Needle Rock near Fort Howes, Montana.

FIGURE 5.59. Inscription "C. T. Davis July 1888" at Names Hill along the Oregon Trail in western Wyoming.
FIGURE 5.60. Inscription of "Chas Hoe, 1889" in a sandstone cave across the river to the east of present day Billings, Montana.

Figure 5.61. Inscription of "Tex Serpa, The Oregon Wagon Train, 1889, Wagonmaster" at Register Cliff in eastern Wyoming.
Figure 5.62. Inscription of "G. Cook, Middlefield NY 1889" near Park City, Montana.

Figure 5.63. Inscription of “Jan. 1891, E.R.D. Co B. 22 INF. Ft Keogh M.” that was formerly located on Capitol Rock in southeastern Montana. Photo courtesy of the Custer National Forest.
Figure 5.64. Inscription panel along the first railroad grade into eastern Montana. The oldest reads "E. Otto. Nelson. 6/2.90" (1890) with another of "R. S. Eide 11/1. 1893."
Figure 5.65. Inscription panel along the first railroad grade into eastern Montana containing Japanese inscriptions by three different writers.
Figure 5.66. Inscription panel near Roundup, Montana with a Chinese inscription that reads "Sun, Ziqian was here. August 29th." The panel on the left is shown as a negative image for detail. On the right a figure is enlarged from the panel.
Figure 5.67. Indecipherable name and a date of 1892 at Names Hill in Wyoming.

Figure 5.68. Inscription of "Tom Horn 1894" in south-central Montana.
Figure 5.69. Inscription of "Kelley 1895" near Custer, Montana.

FIGURE 5.70. Inscription “Wm. Grunou (Grunov?) 1896” at Porcupine Butte north of Forsyth, Montana.
FIGURE 5.71. Inscription of "M. Tescher, JTC, 1897" at landform NS025 in Medicine Rocks State Park.

FIGURE 5.72. Inscription of "J. V. Johnson, July 16, 1899" inside a sandstone alcove along the railroad grade in eastern Montana.
FIGURE 5.73. Inscription of "Buy Our Trees From Home Nurssry (sic), H.G. MClain, Carlton, Mont., Agent, Movt. 4/17, 99" (1899) near Park City, Montana.

FIGURE 5.74. Inscription "Arthur Ben??i, CT. OR. A.R.B., Park City, Mont. Apr 17th. 1899" near Park City, Montana.
FIGURE 5.75. Inscription "Francis & Mayme Unger, Laurel A.R.B. 4/30/ 1900 A.R.B." near Park City, Montana.

FIGURE 5.76. Inscription of a brand with the date "Aug. 15, 1901" at the Rancher site in the Ashland District of the Custer National Forest.
FIGURE 5.77. Inscription panel with "Kid Curry 1901" near Ingomar, Montana at 24RB2245.

FIGURE 5.78. Inscription "1902 M.S. Owens & A. R. Benedict, Age 76 & Age 20 yrs. Cousins" near Park City, Montana.
FIGURE 5.79. Inscription panel with a 1903 date and multiple 1906 dates, one May 31 with the name "Harry Snow" at Homestead Cave near Ashland, Montana.

FIGURE 5.80. Inscription A. J. Jackson, Nov. 12, 1905 at Coyote House in the Ashland District of the Custer National Forest in Montana.
FIGURE 5.81. Inscription "F. Kiroh jr., Feb 24, 1905" near Steamboat Butte in the Bull Mountains of Montana.

FIGURE 5.82. Inscription panel containing "G. W. Sinclair, 6-7-1905," Harry Brazill, 1905, 6, 7," and "F. E. Brandt, 11-24-13, XSURXBM," which indicates a surveying benchmark. The inscriptions are superimposed over contact-era rock art.
FIGURE 5.83. Inscription “A. Kelly 1906” with other names and initials at the Hanging Rock site.

FIGURE 5.84. Inscription panel at a pass in the Cave Hills of South Dakota with the inscription "W.V. Anderson H.M.A. Aug. 25 1908."
FIGURE 5.85. Inscription Thos. E. Arrestad 1909 with a small inscription of 1st Feb. on the left side at a private ranch in the southwest Bull Mountains of Montana.

FIGURE 5.86. Inscription panel at Castle Butte north of Forsyth, Montana that includes inscriptions from 1909, 1916, 1917, and 1930.
FIGURE 5.87. Ornate inscription panel from near Roundup, Montana from 1909 that reads "Jun 09, John Lehuhmann, Germany, Bayern, Lehipherder."

FIGURE 5.88. Inscription panel that includes the Three Circle brand and an associated date of 1910 at Poker Jim Butte near Ashland, Montana.
FIGURE 5.89. Inscriptions of "H Partlow, July 11, 1910" (upper left) and "H. K. Ohnstad, Markville, Minn., July 29, 1928."

FIGURE 5.90. Inscription of "Slim K 1911" at the Rosebud Battlefield State Park in eastern Montana. The inscription is believed to be Slim Kobold, a rancher who owned the land at that time.
FIGURE 5.91. Inscription along the railroad grade in eastern Montana that reads "CHAS MACNE RUNN (sic) SECTION HERE IN 1911."

FIGURE 5.92. Inscription panel at Lonesome Rock Pass in the Custer National Forest near Ashland, Montana with the name Fern Andrus and dates of 1911 and 1913.
FIGURE 5.93. Inscription of "J. Johnson July 4 1912" located near Steamboat Butte in central Montana.

FIGURE 5.94. Inscription "J.L.M. 47 6-9 1913" with a possible Masonic key symbol at the Hanging Rock site.
FIGURE 5.95. Inscription panel with the words “Poker Jim” located on Poker Jim Butte in the Ashland District of the Custer National Forest in Montana. The panel includes inscriptions 1877, 1914, 1922, and 1926.

FIGURE 5.96. Inscription of the initials WNW with the date 1914 and a brand at the Roadside site in the Ashland District of the Custer National Forest.
FIGURE 5.97. Inscription of “C.C. McCurdy 8-4-14” (1914) near a v-neck figure at a pass in the Cave Hills of South Dakota.

FIGURE 5.98. Inscription panel at Ghost Cave near Billings, Montana that includes "Harry Bartove 1914."
FIGURE 5.99. Inscription of "Iva Crocker 1915-1971 Still Going Strong" at the Roadside site near Fort Howes along Otter Creek. The locals tell a story about her returning in 1971 to add that date, the additional text and the box.

FIGURE 5.100. Inscription panel that includes initials and a date from 1916 with the initials T.C.H. at the Roadside site in the Ashland District of the Custer National Forest.
FIGURE 5.101. Inscription of "J. J. Crae Aug 19, 1917" near Park City, Montana.

FIGURE 5.102. Inscription of "W H 8.4 1917" at Names Hill in western Wyoming.
FIGURE 5.103. Inscription of "7-20-18 B F Drake, Billings, Mont" (1918) at the Hanging Rock site near Custer, Montana.

FIGURE 5.104. Inscription of "Long, May 12, 1918, Kenosha Wis." at a site along the Musselshell River in Montana.
FIGURE 5.105. Inscription of the initials J N with the year 1919 at the Hanging Rock site.

FIGURE 5.106. Inscriptions containing “C. Miller, July 1920, Eden, S.D.” superimposed over an inscribed rock art panel at the Hanging Rock site.
FIGURE 5.107. Inscription of "C Dowdell 1920" at Homestead Cave in the Ashland District of the Custer National Forest in Montana.

FIGURE 5.108. Inscription panel at site 24PR0622 in the Ashland District of the Custer National Forest in Montana showing a history of revisitation by area ranch families and containing brands and the inscriptions"1920 Byes" and "Mike Carney, Selway, Mont., June 10, 1921."
FIGURE 5.109. Inscription panel at Ludlow Cave in South Dakota that demonstrates a tradition of superimposition. There is a date of 1921 in the left-central area.

FIGURE 5.110. Inscribed over a rock art panel near Fort Howes, Montana is an inscription that reads "TCC 1921 Died Here."
FIGURE 5.111. Inscription of “A H Wright 1922” at the Hanging Rock site.

FIGURE 5.112. Inscription of “H Cramer 7-8 1922” at the Hanging Rock site.

FIGURE 5.113. Inscription panel on Needle Rock near Fort Howes, Montana with a date of "May 20, 1923" and the name "Harry C. Cross," under which someone has inscribed "You Dirty Bastard."

FIGURE 5.115. Inscription of "Chas Lasher, July 23, '24" (1924) at the Hanging Rock site.
FIGURE 5.116. Inscription of "J. G. Hallock 1925" at the Hanging Rock site.

FIGURE 5.117. Inscription of "Tilda Knutson 1925" at rockshelter 39HN150 in the Cave Hills of South Dakota.
FIGURE 5.118. Inscriptions of "Alfonso Rodriguez from Moses, New Mx," "11/14/25 Joney Espinoza, Lavaley, Colo" (1925), and "Sep 15 1926, Alfonso Maesta from Capulin, Colo" in the National Grasslands of eastern Wyoming. Note the horses in the lower right.

FIGURE 5.119. Inscription of "Joe Cook," who revisited his inscription at Poker Jim Butte near Ashland, Montana in 1924, 1925, 1926, and 1927.
FIGURE 5.120. Inscription panel near the Poker Jim Butte south of Ashland, Montana with a crude Three Circle brand on the left, the initials EDB, a heart with "Pearl Davidson, July 4, 1926," and a front view of a longhorn.

FIGURE 5.121. Inscription panel at the Two Bears site south of Ashland, Montana with an assortment of brands and the name "John B. Keeline Jr., July 4, 1926."
FIGURE 5.122. Inscription of "Joe Thedens, Oct. 3, 1927, Reinbeck, Iowa" at the Hanging Rock site.

FIGURE 5.123. Inscription of "7-12-28 C.C. Barnack, Evansville, Minn." at the Hanging Rock site.
FIGURE 5.124. Inscription of “Eva, Billie, Paul Rudin 1928 St. Cloud Minn” at the Hanging Rock site.

FIGURE 5.125. Inscription of “Rudes. M. Ohnstad, Markville, Minn., July, 29 - 1928, June 20 / 50 (1950)” that shows a potential revisitation to the Hanging Rock site.
FIGURE 5.126. Inscriptions of brands dating to 1929 near Ashland, Montana at the Homestead site.

FIGURE 5.127. Historic inscriptions superimposed over rock art at Ludlow Cave in South Dakota to the point of almost obscuring a large rock art elk figure. The dates in this image include 1930, 1940, and 1958.
FIGURE 5.128. Inscriptions of "Mrs. Frank Smith 6/26/30 (Wherley Outfit) Spokane, Wash." and her change of identity to "Gertrude Smith 3-28-80, 50 Years Later" at Bear Gulch in central Montana east of Lewistown.

FIGURE 5.130. Inscriptions including "Koski, June 19, 1932" in Coveralls Cave of the Custer National Forest.

FIGURE 5.131. Inscriptions located in Coveralls Cave of the Custer National Forest that shows names, the date, and their intent.
FIGURE 5.132. Inscription of "Ian Budd, Big Piney Wyo, in 1933" (right) at Names Hill superimposed over a contact-era petroglyph.

FIGURE 5.134. Inscription of “Kid Bozo 1-14-34” (1934) at the Roadside site in the Ashland District of the Custer National Forest.

FIGURE 5.135. Inscription of "c35 (1935) Raymond Noftsker, CCC Co. 1961" near Ashland, Montana at the Homestead site.
FIGURE 5.136. Inscription in an alcove at landform NS051 at Medicine Rocks State Park that includes an inscription of "C. C. C., Andolshek, 1935."

FIGURE 5.137. Inscription of "Beadle, 1852 - 1936" at Names Hill in Wyoming.
FIGURE 5.138. Inscription of "Beatrice Cheney, April 11, 1936" at Names Hill in Wyoming.

FIGURE 5.139. Inscription alcove at landform NS048 at Medicine Rocks State Park that includes an inscription of "Fred McIntosh, 1937."
FIGURE 5.140. Inscription panel at landform SS056 at Medicine Rocks State Park that includes an inscription of "Mr. K. F. Livengood, Marian Good, 1938."

FIGURE 5.141. Inscription of "2/6/39 HJ" (1939) at the Rosebud Battlefield in Montana.
FIGURE 5.142. Inscription of "K. M. 1940" near Ashland, Montana at the Homestead site, superimposed over an indigenous figure.