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CONNECTING THE WILDERNESS: COMMUNICATION TECHNOLOGY AND EXPERIENCING WILD LANDS IN THE NATIONAL PARKS, 1871-1932

by

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STATEMENT OF THESIS APPROVAL

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ABSTRACT

During the early history of the National Parks, park managers throughout the United States developed communication networks within perceived spaces of wilderness in order to manage and tame the wildness of the landscape. Communication technologies connected remote locations within the National Parks to towns and cities hundreds of miles away, and made the solitude found in places of wilderness far less dangerous. With the development of advanced methods of communication like the telegraph and telephone, along with the help of trails, railroads, and paved roads, communication technologies allowed nineteenth and twentieth century tourists to experience sublime nature without disconnecting themselves from the safety and comfort of direct communication with the "outside world." By eliminating the necessity to travel through nature in order to communicate over long distances, the telegraph and telephone directly impacted the way people experienced and thought about nature during the nineteenth and twentieth century, and contributed to a more tame and controlled wilderness experience.

My research explores the development of communication technologies in several National Parks throughout the American West in the late nineteenth and early twentieth centuries. The correspondence of early park superintendents, along with the experiences of early visitors to the parks provides an invaluable look into the impact of communication technologies on the perception of wilderness in the early history of the

National Parks, and the role they played in managing the landscape. This brief exploration is the first in what deserves to be an extensive examination of the historical impact of communication technologies on the human experience in nature, the search for the Romantic sublime, and the role that communication has had in the perceived dualism between wilderness and civilization in the history of the United States.

CONTENTS

ABSTRACT……………………………………………………………………………iii

INTRODUCTION………………………………………………………………………… 1

TOURISM AND THE DEVELOPMENT OF COMMUNICATION…………………22

USING COMMUNICATION TECHNOLOGIES TO TAME AND CONTROL WILDERNESS……………………………………………………………………………46

CONCLUSION…………………………………………………………………………62

BIBLIOGRAPHY………………………………………………………………………67

INTRODUCTION

As Dr. Carl von Savigny, a German citizen visiting the Yellowstone National Park during the 1893 season, sat in his hotel room preparing to embark on a month long hunting trip to the southern end of the park he made sure to inform the telegraph agent in Mammoth about his expected route, the members of his party, and how long they would be gone. The doctor must have been a busy traveler and a fairly popular individual, as he expected several telegrams to arrive addressed to him within the timeframe of his trip. Von Savigny asked the telegraph agent to deliver his messages to the officer in charge at Mammoth where he would pick them up after he returned. Like most travelers on an extended vacation, the doctor did not wish to be bothered with routine business from home. However, most travelers do prefer to be contacted with matters of unusual importance while enjoying some mental or physical relaxation, and the doctor was no exception. Von Savigny requested that any issues relating to his mother or his country be relayed to him via the soldiers at Mammoth Hot Springs as quickly as possible. If any messages arrived concerning his mobilization for the German army, or in the unthinkable case that his mother had become terminally ill or deceased, the doctor requested that a rider intercept his party and interrupt his foray into Yellowstone's natural wonders. [1]

The ability to obtain information while on a hunting trip one hundred miles away

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[1] Dr. Carl von Savigny to Telegraph Agent, 30 August 1893, No. 425, Documents 415-485, Pre-National Park Service (pre-1916) collection, Yellowstone Archives, Gardiner, Montana.

from the nearest telegraph station in northern Wyoming was certainly a recent development in the history of the Yellowstone region. For someone like von Savigny, who was educated, had substantial financial resources, and likely lived in a well populated region, the ability to communicate with his community while on vacation was an expected convenience of any renowned tourist destination. Access to direct communication with a town or city, places often described as "the outside world," while in the heart of a seemingly disconnected wilderness played an important role in von Savigny's experience in Yellowstone National Park during the summer of 1893.

With the development of advanced communication technologies like the telegraph and telephone, along with the help of older modes of communication like trails, roads, and railroads, the park's superintendents intentionally created networks of connected wilderness that provided controlled sublimity in a region that had previously been disconnected from Euro-American society. By the 1890s park superintendents throughout the western United States had begun to establish and develop communication networks in newly established national parks and monuments. Communication technologies were essential for creating spaces of connected wilderness that were more appealing, accessible, and most importantly, less dangerous than the wild landscapes that had typified the region for so long. By connecting perceived spaces of wilderness to the network of Euro-American communities, park managers and the National Park Service tamed the *wildness* of the natural landscape and allowed visitors to experience *wilderness* without becoming disconnected from their community.

Prior to the development of the telegraph and telephone in the West, communication technologies consisted primarily of roads, trails, railroads, and other

modes of transportation that required physical travel to communicate over long distances.[2] Even with the development of advanced communication technologies like the telegraph and telephone, older modes of communication continued to function as both methods of transportation and communication during the nineteenth and twentieth centuries. As Paul Starr argues, the telegraph arrived in a world that the postal service had already revolutionized, in terms of the speed of communication. The postal service had already improved the speed of communication during the first half of the nineteenth century, allowing news to travel from Washington to Boston in only three days by 1841, a feat that took six times as longer only fifty years earlier.[3] While the telegraph may have put Pony Express riders out of a job, letters and packages continued to serve as essential forms of communication throughout the nineteenth and twentieth centuries.

Although my research primarily explores the impacts of advanced methods of communication like the telegraph and telephone, communication technologies in all forms, have a direct impact on the legibility and familiarity of a given landscape, regardless of aesthetic value. Communication technologies like telegraphs, roads, telephones, and trails allow both the state and residents to better understand and manage the landscape. In other words, communication technologies make the landscape more legible, more familiar, and less uncertain.

During the nineteenth and twentieth century, the perception of sublime beauty in nature was partially contingent upon the ability of communication technologies to tame wilderness and keep people connected to their larger community within a perceived

[2] Paul Starr, *The Creation of The Media: Political Origins of Modern Communications* (New York: Basic Books, 2004), 153.
[3] Starr, *The Creation of The Media*, 155.

wilderness landscape. With the development of Euro-American networks in places like the national parks and other nature preserves, spaces of wilderness became more accessible and attractive to potential tourists. Man-made communication technologies and the growth of tourism worked in tandem to create networks of connected wilderness throughout the American West, resulting in altered experiences, confrontations, and myths surrounding the perception of "wilderness" amongst the general public.

The development of telegraphs and telephones had the most dramatic impact on the ability to communicate in the West, and altered the role that nature played in communicating across the region. Where trails and roads required physical confrontation with nature in order to communicate, telegraphs and telephones allowed instant communication across much larger distances without the need to physically transport the message. For any given community in the West, nature and wilderness ceased being obstacles in the way of long distance communication the moment that a telegraph or telephone line connected them to the growing network of Euro-American communities throughout the country.

For visitors and inhabitants of the National Parks, communication technologies not only connected them to the outside world, but also allowed them to control and manipulate the natural environment of the parks to preserve and protect them as bastions of natural wonder. The accounts of early travelers and park managers in and around the regions that would later become the United States' earliest national parks provide an invaluable look into popular perceptions of wilderness prior to the development of Euro-American communication networks in nature preserves. Popular perceptions of wilderness landscapes have often been contingent upon class divisions and their related

motivations for confronting natural landscapes. As nineteenth and twentieth century tourists sought to escape growing urbanization and experience the Romantic sublime in nature, they held expectations that differed greatly from the men and women who primarily made their living off of the land. In analyzing the experiences of these early travelers and inhabitants of the region this paper seeks to produce a better understanding of the way communication technologies impacted the popular perception of wilderness and nature in the West throughout the nineteenth and twentieth centuries.

In addition to the experience of early visitors, a great deal of my research relies on the correspondence and actions of early park superintendents and federal employees who intentionally constructed networks of advanced communication technologies in National Parks throughout the West. This correspondence reflects the overwhelming desire to create spaces of connected wilderness for the purposes of nature tourism and park management. Park superintendents throughout the West recognized the function that advanced communication technologies could serve in taming wilderness and worked to establish strong networks within their parks. In exploring this process I argue that communication technologies have been undervalued in their impact on the popular perceptions of wilderness in the United States, and contend that places defined as wilderness were often based around notions of connectivity, familiarity, and legibility prior to the development of electronic networks. With the growth of telegraphs and telephones throughout the West, wilderness slowly shifted from an obstacle in the way of communication, to a place preserved and revered in the eyes of the general public.

The development of the early national parks provides a unique example of advanced communication technologies converging with expansive natural landscapes at a

time of rapid change in the American West. Before the Cook-Folsom-Peterson expedition in 1869, and the Washburn-Langford-Doane Expedition a year later, Yellowstone was largely an unknown region in the eyes of the American public. By the 1890s, however, tourists in Yellowstone National Park could contact relatives, or business partners, in Chicago without leaving the comforts of the Old Faithful Inn. Throughout the late nineteenth and early twentieth century National Parks all over the West developed similar levels of communication accessibility both as a necessity for tourism and as a tool to control their natural surroundings. By the time congress established the National Park Service in 1916, the U.S. military and the Department of the Interior had already established communication networks within the parks. As director of the newly created National Park Service, Stephen Mather, along with his assistant Horace Albright, made the continued development of reliable communication networks one of several priorities in improving the infrastructure of the parks in order to promote tourism and the continued growth of the National Park system.[4]

The ability to communicate quickly and travel across large distances has been one of the driving forces in the history of the American West. As a result, the importance of both the telegraph and the railroad in the history of the West has been well documented.[5] The impact of advanced communication technologies on the changing perceptions of wilderness in the U.S., however, has received very little attention by historians. The shift

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[4] Alfred Runte, *National Parks: The American Experience* (Lincoln: University of Nebraska Press, 1997), 83.

[5] Sarah H. Gordon, *Passage to Union: How the Railroads Transformed American Life, 1829-1929* (Chicago: Ivan R. Dee, 1996); John Hoyt Williams, *A Great and Shining Road: The Epic Story of the Transcontinental Railroad* (New York: Times Books, 1988); Oscar Osburn Winther, *The Transportation Frontier: Trans-Mississippi West, 1865-1890* (New York: Holt, Rinehart, and Winston, 1964).

from a popular perception of wilderness as an evil or feared place to one that was celebrated by an ever-growing portion of American society was the product of several changing influences during the nineteenth century. While the cult of romanticism, the writing of authors like Henry David Thoroeau and John Muir, and the growth of nature tourism were all important factors in the changing perceptions of wilderness in the nineteenth century, the impact of communication technologies has been vastly under valued in historical scholarship.

The changing perceptions and cultural constructions of wilderness has been a common subject in the field of environmental history, and the history of the American West. Frederick Jackson Turner's frontier thesis, first presented at the 1893 meeting of the American Historical Association, argued that a clear line separated wilderness from civilization. With savage and wild nature on one side, and the transforming powers of civilization on the other, wilderness was an actual place that could be altered and controlled through the advancement of civilization. The frontier, Turner argued, was the most important influence on the history of the United States as it slowly moved westward across the country, attached to the feet and wheels of westward marching trappers, miners, and homesteaders. A contemporary of John Muir and other early preservationists who shared these dualistic perceptions of wilderness and civilization, Turner's thesis reflected the general tenor and understanding of nature and wilderness during the nineteenth century.[6]

While much different than Turner, twentieth century authors like Clarence

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[6] Richard White, "When Frederick Jackson Turner and Buffalo Bill Cody Both Played Chicago in 1893," in Richard Etulain, ed., *Does the Frontier Experience Make America Exceptional?* (Boston: Bedford/St. Martin's, 1999), 45-57.

Glacken and Roderick Frazier Nash, who have provided expansive analyses of the changing meanings behind the term wilderness in popular culture, continue to operate under the notion that wilderness and civilization are antagonistic terms. Though the perception of wilderness has changed from an odious and feared place that man sought to destroy to a desirable and romanticized idea that encouraged preservation, the western world has generally viewed wilderness as something separate from civilization and society. In its fourth edition Nash's *Wilderness and the American Mind* remains one of the premier pieces of scholarship on the changing perceptions of wilderness throughout the history of the United States. Although it rests somewhat on an outdated wilderness ideal, it brilliantly highlights the dualism that has existed between civilization and wilderness in the minds of scholars and the general public throughout the history of the country.[7]

Early Euro-American notions of wilderness stemmed from Judeo-Christian ideals that viewed wilderness as an evil and unwelcoming place, something that needed to be destroyed and controlled in favor of civilization. These ideas were so engrained in European religiosity, in fact, that Christian missionaries often celebrated the destruction of wild groves where Pagan's had previously practiced their spiritual rituals.[8] This type of attitude towards wilderness followed colonists to the new continent and caused similar reactions across North America. As Nash explains, wilderness was an extremely threatening place for early American settlers who spent far too much time in close proximity to wild lands to appreciate them like the Romantics who lived in urbanized

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[7] Roderick Frazier Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 2001).
[8] Roderick Frazier Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 2001), 17.

towns and cities.[9]

Alan Taylor expands on this argument in his exploration of early northeastern settlers during the late eighteenth century and their dramatic ecological impacts on the landscape of the region. Taylor argues that these early settlers were not ignorant of their ecological destruction, but that they felt so inclined to destroy the bountiful resources of the northeast as a way to cope with the hardship that untamed nature had often caused, or was perceived to have caused, in early Euro-American settlement. While wilderness contained useful natural resources that settlers certainly took advantage of in building their community, it also contained overwhelming dangers that posed little threat in the towns and cities. For these settlers, wasteful destruction of natural resources was an early opportunity for them to assert power over wilderness and enact a form of revenge on their surrounding environment.[10]

Contempt was not the only thing driving the transformation of the American landscape after European contact. Melanie Perreault argues that the natural features of sixteenth and seventeenth century America held divergent meanings for the imperial powers seeking to grab a piece of the continent. For the Spanish, who practiced a method of exploitive colonialism, wilderness was largely an obstacle in the path of resource extraction. In contrast, English settlers felt that transforming the wildness of the landscape was necessary in order to avoid degenerating into a savage state.[11] Without a controlled landscape they feared that the wild environment would encourage colonies to

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[9] Nash, *Wilderness and the American Mind*, 24.
[10] Alan Taylor, "Wasty Ways: Stories of American Settlement," in *Environmental History*, Vol. 3, No. 3 (Jul., 1998), 292.
[11] Melanie Perreault, "American Wilderness and First Contact," in *American Wilderness: A New History*, Michael Lewis, ed., (New York: Oxford University Press, 2007), 16-21.

live like savages, and rely on wild natural resources rather than farming for subsistence. William Cronon's exploration of colonist's impact on the New England landscape in *Changes in the Land* provides an excellent analysis of the role that economy playing in the control and manipulation of the landscape.[12] Colonists viewed the natural resources of New England as marketable commodities, Cronon argues, and they sought make a living selling those resources on the open market. As a market economy developed in the region changes in land distribution and property ownership had a dramatic impact on the natural, environment of the region. Carolyn Merchant, provides a slightly different perspective on Euro-American attempts to control the natural landscape of North America, and argues that the dramatic transformation of the landscape has been driven by the conscious or unconscious desire to recreate an image of the Garden of Eden on the continent.[13]

Despite the many changing perceptions of wilderness throughout the history of the United States, and the contemporary influences of historians throughout the nineteenth and twentieth centuries, the perceived dualism between humans and nature has remained an important theme. Historians like William Cronon, Richard White, and J. Baird Callicott dispute the perception of dualism, and argue that wilderness and civilization are culturally constructed concepts that are actually harmful to the preservation of natural resources. By describing wilderness and civilization in dualistic terms, humans separate themselves from their impact on the ecology of a landscape and

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[12] William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 1983).
[13] Carolyn Merchant, "Reinventing Eden: Western Culture as a Recovery Narrative," in *Uncommon Ground*, William Cronon, ed., (New York: W.W. Norton and Company, 1996), 134.

create a harmful foundation for understanding the human relationship to nature. [14]

In "The Trouble With Wilderness, or, Getting Back to the Wrong Nature," William Cronon critiques the concept of the modern wilderness ideal and its viability as a foundation for the human relationship to nature. Cronon explores the perceived differences between the culturally constructed ideas of wilderness and civilization, and argues that humans and nature exist as different points on a natural continuum, rather than two antagonistic forces. By describing wilderness and civilization in dualistic terms in narratives of the American West and environmental history, we dehumanize and devalue groups like American Indians as historical actors, and separate metropolitan communities from their ecological impact on the land. Instead of idealizing and seeking to preserve spaces of unaltered wilderness, we should appreciate nature's *wildness*, the natural qualities of the world that can be found all around and within us. By valuing the wildness of a shrub in Brooklyn the same way we might value a wildflower in Yosemite, Cronon argues, we can more efficiently highlight the ecological and cultural relationship that humans have had with their landscape throughout history.[15]

In *Dispossessing the Wilderness*, Mark Spence does just that in his exploration of Indian removal and exploitation in the development of Yellowstone, Glacier, and Yosemite National Parks during the nineteenth century.[16] Park managers considered the

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[14] William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground*; Richard White, "Are You an Environmentalist or Do You Work for a Living?": Work and Nature," in *Uncommon Ground*; J. Baird Callicott, "The Wilderness Idea Revisited" in *The Great Wilderness Debate*, J. Baird Callicot and Michael P. Nelson, eds., (Athens: University of Georgia Press, 1998).
[15] William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground*, 89.
[16] Mark Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999).

Indian communities who's tribal lands laid within the boundaries of these newly established parks a nuisance, and felt their impact on the natural resources of the region were not conducive to a tourist environment. In order to preserve the landscape as an "undisturbed" wilderness, and to create a more welcoming space for tourists, park managers forced tribes to relocate or adhere to Euro-American cultural standards. Karl Jacoby's *Crimes Against Nature* explores a similar process as it took place against lower class white subsistence farmers in the Adirondack Mountains and trappers in the Yellowstone National Park.[17] Likewise, authors such as Marcus Hall, Susan Schrepfer, and Mark Fiege have shown that the human relationship to nature is culturally constructed, and is often contingent upon race, gender, class, and several other socio-economic factors.[18]

Although arguments over the perceived dualism in wilderness and civilization continue to rage, historians generally agree on the process by which Euro-Americans began to view wilderness with admiration rather than revulsion. The development of Romanticism and the search for the sublime in nature, along with the myths of the American frontier helped change the popular perception of wilderness into something that should be preserved and celebrated, rather than conquered and controlled.[19] Indeed, all of these were major factors in the development of preservation, the National Parks,

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[17] Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkely: University of California Press, 2003).
[18] Marcus Hall, *Earth Repair: A Transatlantic History of Environmental Restoration* (Charlottesville: University of Virginia Press, 2005); Susan Schrepfer, *Nature's Altars: Mountains, Gender, and American Environmentalism* (Lawrence: University Press of Kansas, 2005); Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West* (Seattle: University of Washington Press, 1999).
[19] Nash, *Wilderness and the American Mind*, 44; Cronon, "The Trouble with Wilderness or, Getting Back to the Wrong Nature," in *Uncommon Ground*, 72.

and modern environmentalism. Scholars on both sides of the debate place Thoreau and Muir as prominent figures in the cultural shift from an evil and tempting wilderness to a sacred and sublime temple that was worthy of preservation. Likewise, J. Baird Callicott rests the philosophical changes on the shoulders of Emerson and Thoreau, and portrays Muir as the spearhead of a national campaign to preserve and celebrate the wilderness of the United States.[20] While there are numerous other factors that have been considered in the development of a modern wilderness ideal, most historians rightly place these men, along with the likes of George Perkins Marsh, Stephen Mather, and Aldo Leopold as central figures in the changing perception of wilderness during the nineteenth and twentieth centuries.

Several historians have noted the religious, specifically Protestant and Puritan, influences that these men represented as perceptions of wilderness shifted during the nineteenth century.[21] Mark Stoll argues that the Reformed Protestantism of the British, Dutch and French Huegenots, exemplified by Muir, unintentionally made wilderness a sacred place by over criticizing the works of man while celebrating the work of God. Stoll, like Carolyn Merchant, views the American experience with wilderness as a Protestant encounter with Eden, and at the heart of preservation lies a desire to protect the last remnants of Eden, the perfect and unchanged natural creation of a Judeo-Christian God, from the destructive forces of civilization.[22]

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[20] J. Baird Callicott, "The Wilderness Idea Revisited" in *The Great Wilderness Debate*, J. Baird Callicot and Michael P. Nelson, eds., (Athens: University of Georgia Press, 1998), 340.
[21] J. Baird Callicott, "That Good Old-Time Wilderness Religion" in *The Great Wilderness Debate*, 390-391.
[22] Mark Stoll, "Religion "Irradiates" the Wilderness" in *American Wilderness* (New York: Oxford University Press, 2007), 51.

In critiques of the 1964 Wilderness Act, a premier piece of environmental legislation that allowed Congress to preserve wilderness landscapes on federally controlled land, historians have often challenged the notion of an untouched wilderness, noting that the concept is nearly impossible in our modern world. Cronon's argument for *wildness* provides a better foundation for preservation and the development of a modern land ethic than the type of wilderness preservation laid out by Congress in the 1960s. However, it also undermines the power of isolation and unknown landscapes in the historical experience of sublimity in places of wilderness. For example, Mesa Verde National Monument was a bustling village in the fourteenth century with unquestionable human impact on the natural landscape. Yet five hundred years later a park superintendent described the region as an unbroken wilderness, despite the obvious historic and modern human environmental impacts on the region.[23] Clearly it had been well "trammeled" by man, yet park rangers considered it a wilderness because it was isolated from the network of Euro-American communities in the West. Certainly, the amount of human impact on a landscape has played an important role in the popular perception of wilderness throughout history. However, the impact of communication technologies, legibility, and familiarity with a given landscape should not be overlooked in the human relationship to nature and the definition of wilderness in the American West.

James Merrell briefly discusses the impact of roads and trails on both Euro-American and American Indian perceptions of landscape and nature during the

[23] Thomas Rickner to Secretary of the Interior, 12 August 1914, Box 108, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

seventeenth and eighteenth centuries in *Into the American Woods*. Merrell argues that roads and trails made the Pennsylvania landscape more legible for translators from both cultures, despite the fact that each group noted a sense of unfamiliarity, or wilderness, while visiting the towns and territories of their cultural counterparts.[24] Further, these roads would not have resembled anything like the deliberate networks of railways, telegraphs, and roads that Euro-Americans constructed during the nineteenth century. Despite their ability to make the landscape more legible, Patrice Flichy argues that early transportation technology was more concerned with being connected to neighboring towns than as a part of an extended network.[25]

Although rare, a handful of historians have incorporated brief discussions of the impact of communication technologies on nature in their scholarship. Carolyn Marvin argues that electricity and electric communication technologies had a powerful taming force on natural landscapes in *When Old Technologies Were New*.[26] Marvin argues that electric communication technologies moving across the landscape "signified human triumph over nature, increasing with each scientific advance."[27] While her analysis is far broader than the impact of communication technologies on the human relationship to nature, it does provide a valuable look into the cultural reaction toward new technologies during the nineteenth century.

Similarly, Hal Rothman's *Blazing Heritage* provides a broad exploration of

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[24] James Merrell, *Into the American Woods: Negotiators on the Pennsylvania Frontier* (New York: Norton, 1999), 128-156.
[25] Patrice Flichy, *Dynamics of Modern Communication: The Shaping and Impact of New Communication Technologies* (London: Sage Publications, 1995), 30.
[26] Carolyn Marvin, *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century* (New York: Oxford University Press, 1988).
[27] Marvin, *When Old Technologies Were New*, 114.

National Park Service policy and action regarding wild fire control in the history of the parks.[28] Rothman provides some analysis, however brief, on the role that communication technologies have had on fire control within the national parks. He also explores several valuable secondary examples of how telephones and radios were used to control nature within the parks in the nineteenth and twentieth centuries. Likewise, Ralph R. Mcfadden's *From Ground Wires to Microwaves* provides an overview of the construction and development of early communication networks within the parks, and explores how these technologies were used as a means to control nature within the national park system.[29] McFadden's report is particularly useful as he incorporates both historical research and his own first hand knowledge of the development of telephone and radio communications in the parks based on his service as a park ranger.

While the majority of park rangers welcomed the construction and use of advanced communication technologies within the parks, not everyone shared this positive attitude. Literature on the impact of communication technologies in rural communities provides a comparison for the way some people reacted to advanced communication technologies in natural settings. Ronald R. Kline's *Consumers in the Country* provides an analysis of this process, and explores both the negative and positive reactions to the telephone by rural communities in the twentieth century.[30] Likewise, Claude Fischer's *American Calling*, a social constructivist exploration of the development of the telephone

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[28] Hal Rothman, *Blazing Heritage: A History of Wildland Fire in the National Parks* (New York: Oxford University Press, 2007).
[29] Ralph R. McFadden, *From Ground Wires to Microwaves: A Chronicle of Fifty Year of Telephone and Radio System Development in our National Park System* (Washington D.C.: NPS-WASO-OE, 1991).
[30] Ronald Kline, *Consumers In the Country: Technology and Social Change in Rural America* (Baltimore: The Johns Hopkins University Press, 2000).

in the U.S. is an invaluable resource that explores the ways rural and working class communities used and implemented the technology in their daily lives.[31]

Unlike the impact of communication technologies in nature, most historians share the view that tourism was one of the greatest factors in transforming the perception of wilderness in popular culture during the nineteenth century. In *Wild Things*, Patricia Jasen argues that tourism is a practice that requires a state of mind in which imagination plays a key role. Tourists in search of the Romantic sublime, she argues, visited nature seeking to feel something spiritual and transcendent that had previously been found in religion.[32] This, of course, comes from Edmund Burke's definition of the sublime as the type of pleasure that can be found in danger without the reality of actually being at any risk. Susan Schrepfer beautifully describes this confrontation as the *masculine* sublime, while her analysis of the *feminine* sublime focuses on the garden and isolation that is often available in nature.[33] While tourism has certainly had a taming influence on nature, communication technologies have provided more accessibility to both the masculine and feminine sublime as they tamed the wildness of natural landscapes, making wilderness safer and more familiar to nature tourists.

Richard West Sellars' *Preserving Nature in the National Parks* cites the growth of tourism as a taming force on nature and wilderness, allowing the sublime interpretation of nature to gain momentum in popular culture and bringing an ever-growing number of

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[31] Claude Fischer, *America Calling: A Social History of the Telephone to 1940* (Berkley: University of California Press, 1992).
[32] Patricia Jasen, *Wild Things: Nature, Culture, and Tourism in Ontario, 1790-1914* (Toronto: University of Toronto Press, 1995), 4-7.
[33] Susan Schrepfer, *Nature's Altars: Mountains, Gender, and American Environmentalism* (Lawrence: University Press of Kansas, 2005).

tourists to wild landscapes.[34] Sellars, along with authors such as Runte and Rothman, argue that railroads were central to this process as they brought tourists in increasingly large numbers to the national parks, and worked with the federal government in lobbying for preservation legislation with the financial benefits of increased tourism in mind.[35] Similarly, Mark Daniel Barringer's *Selling Yellowstone* argues that the commercial interests of several types of businesses, not just the railroads, helped drive early preservation in the United States.[36] Concessionaires saw Yellowstone and other parks as a potential goldmine, and as they continued to develop new amenities in the parks, tourism continued to increase, taming the wildness of the parks one hot dog stand at a time.

While studies like Alfred Runte's *National Parks*, which explores the impact of transportation technologies on nature tourism and the National Parks, informs scholarship on the impact of communication technologies in nature, very few historians have provided an adequate analysis. Paul Sutter's *Driven Wild* offers some insight as he argues that the development of paved roads and auto-tourism directly influenced major proponents of wilderness preservation in the first half of the twentieth century.[37] In analyses of transportation technologies, however, Sutter is primarily interested in their impact as methods of transportation rather than communication technologies.

Historians have yet to produce an exploration of the impact that communication

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[34] Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven: Yale University Press, 1997).
[35] Alfred Runte, *National Parks*, 44-45; Hal Rothman, *Devil's Bargains: Tourism in the Twentieth-Century American West* (Lawrence: University Press of Kansas, 1998).
[36] Daniel Barringer, *Selling Yellowstone: Capitalism and the Construction of Nature* (Lawrence: University Press of Kansas, 2002).
[37] Paul S. Sutter, *Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement* (Seattle: University of Washington Press, 2002).

technologies have had on the human relationship to nature, particularly in terms of culturally constructed or personal perceptions of "wilderness." Much like tourism, religion, and advanced transportation technologies, the ability to communicate has "tamed" nature, or wilderness. The development of the telegraph and telephone, and radio technology shortly thereafter, allowed humans to tame and control the *wildness* of nature much faster than they ever had before. In many cases, communication technologies arrived in areas of wilderness well before tourists or transportation technologies like the railroad or automobile were developed. For this reason alone, the impact of communication on the human relationship to nature deserves scholarly attention. However, even along side technologies like the automobile and railroad, the telegraph and telephone had clear and important impacts on the human relationship to nature in the nineteenth and twentieth centuries. With this analysis I hope to begin a new discussion on the role that communication technologies have had in the history of wilderness in the U.S., and to explore the significance of telegraphs and telephones in the development of nature tourism and the national parks.

In his introduction to *American Wilderness: A New History*, Michael Lewis points out that *Wilderness and the American Mind*, a book written at the height of the wilderness preservation and environmental movement of the 1960s, still reflects the tenor of that movement and the hardnosed defense of nature that typified the era.[38] To a great extent, the same way Muir and Turner were products of their time, Nash's writing was a product of the work by wilderness activists like Aldo Leopold, and Bob Marshall who often viewed urbanization as a destructive force on wilderness, and made ecological arguments

[38] Michael Lewis, *American Wilderness*, 7.

in support of its preservation.

Much like Nash, contemporary realities have helped influence my decision to explore the impact of communication technologies on the perception of wilderness. Cell phone and satellite phone technologies have already made incredible strides in the twenty first century, and one can easily imagine worldwide communication access from any location on the planet within the next two or three decades. What does this mean for the future of nature and wilderness preservation in the U.S., and throughout the world? What sort of economic, and political impacts might the development of advanced communication technologies have on cultures who are currently living in places that the western world perceives to be a “wilderness?” At the time that I write this, there are plans to build a cell phone tower at the base of Mt. Everest. Mobile telephone companies create ads that claim their customers will be able to stay in contact with their friends while sitting next to their campfire. Likewise, someone watching an Old Faithful eruption can take a digital photograph and immediately send it to all of their friends. Let me be clear, I do not intend to demonize the growth of the cell phone industry, nor do I hope to make any teleological connections between the impact of telephones on popular perceptions of wilderness with our current abilities to communicate globally. Rather, I only seek to explore the early history of technologies like the telegraph and telephone, and their impact in the human relationship to nature in the early development of nature tourism and perceptions of wilderness in the nineteenth and twentieth centuries.

Without the existence of clear communication technologies, whether they’re trails, roads, smoke signals, or telephones, the American wilderness experience has often become much less enjoyable in the eyes of tourists and park management alike. The

ability to communicate with members of a homogenous community is an essential factor in seeking a desirable wilderness experience. A place as complicated and diverse as the American West will pollute any assertion of a positivist argument in the development of nature tourism and the shifting perceptions of wilderness during nineteenth and twentieth centuries. However, by focusing on the early development of the National Parks, rather than the entire region, I hope to bring further clarity to a part of the field that is as translucent and heated as a Yellowstone mud pot.

TOURISM AND THE DEVELOPMENT OF COMMUNICATION

On August 22, 1870 a group of nineteen men set out from Fort Ellis, Montana Territory, to explore the region that would later become Yellowstone National Park. The expedition, later known as the Washburn-Langford-Doane expedition, included several outdoorsmen, military personnel, cooks, along with a few lawyers, and politicians for good measure. While Yellowstone was not necessarily a household name when the expedition set out, the region was not a blank space on the map either. In 1871, an expedition led by Ferdinand Hayden became the first official exploration of Yellowstone grabbing the attention of several nineteenth century explorers and politicians. Likewise, the larger Yellowstone region had long been a home, and well-known hunting ground for several tribes of American Indians and a handful of European and American trappers for several decades. For the most part, however, the Yellowstone region was unfamiliar territory, and it was certainly not a part of the extended network of trails, roads, telegraphs, and railroads that connected the different parts of nineteenth century Euro-American society. Soon after the expedition left Fort Ellis in that late August morning, they disconnected themselves from the bare boned network of postal and telegraphic communication that connected the remote communities of the Montana Territory.[39]

With a such a large group, including a military escort, disconnecting from access

[39] Alfred Runte, *National Parks: The American Experience* (Lincoln: University of Nebraska Press, 1997), 36-37.

to direct communication with Fort Ellis and the larger Euro-American community was not exactly the same type of isolation, that a trapper or hunter might have experienced around the same time. Like any other mapping expedition during the nineteenth century, leaving access to direct communication with Euro-American communities was expected, and the experienced guides and military personnel who led the way helped to ease the unfamiliarity with the Yellowstone region. Further, maps and notes taken from the Hayden and Folsom expeditions, and the trails made by local Indian tribes and Euro-American hunters helped mark the landscape, making it more legible and accessible.[40]

Early in the expedition several of the explorers made mention of the sublime beauty and grandeur of the Yellowstone landscape.[41] They marveled at the magnificence of the canyon and its waterfalls describing them as a "stupendous climax of wonders," and also wondered at the strangeness of the mud pots and geysers that dotted the landscape.[42] All of that changed, however, when Truman C. Everts, an eastern politician who joined the expedition as a way to see the West before he moved back home, was separated from the group and lost in the endless miles of thick pine that covered the Yellowstone plateau. On September 9, 1870, Everts lost contact with the rest of the party as they traversed a large patch of dead and fallen timber. The following day, his horse disappeared with most of his supplies, and Everts found himself completely alone, in unfamiliar territory, without any necessary tools for long term survival. Facing snow storms, famine, and the threat of hungry predators, his primary objective became

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[40] Aubrey L. Haines, *The Yellowstone Story*, Vol. 1 (Yellowstone National Park: Yellowstone Library and Museum Association, 1977), 105-115.
[41] Alfred Runte, *National Parks: The American Experience*, 37.
[42] Nathaniel Pitt Langford, "Discovering Yellowstone – 1870," in *Adventures in Yellowstone: Early Travelers Tell Their Tales*, Mark Miller, ed., (Guilford, CT: The Globe Pequot Press, 2009), 27.

reuniting with the main company.

Writing about his experience years later, Everts reminisced about the sublime beauty and grandeur of the Yellowstone country. However, while in the moment his experience must have been much more intense. Everts explained that the consciousness of being alone, and admitting to himself that he would not be able to find his company again was almost more than he could bear. His solitude became so intolerable, in fact, that in order to cope with the isolation Everts began conversing with an imaginary companion who kept him from crossing the border into complete insanity before he could reach help. Indeed, his isolation in the unknown and extensive wildness of the Yellowstone region was so unnerving that the only thing that could calm Everts down was communication with another person, regardless of how imagined that person may have been.[43]

When he realized he would no longer be able to find his party, the first thing Everts began to do was search for a line of communication. He knew in which direction Virginia City lay. However, the shortest route happened to be over difficult terrain, so Everts chose a longer route towards somewhat known territory in order to find an established trail. Even when he had resigned himself to death a few days before he was found, Everts found comfort in the fact that he had made it to the main trail, that his body would eventually be found, and his friends and family would know what had become of him.[44] Knowing that he had reached a line of communication with his larger community helped to tame the overwhelming feelings of solitude that the surrounding natural

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[43] Truman Everts, "Thirty-Seven Perilous Days-1870," in *Adventures in Yellowstone: Early Travelers Tell Their Tales*, 57-79.
[44] Truman Everts, "Thirty-Seven Perilous Days-1870" in *Adventures in Yellowstone: Early Travelers Tell Their Tales*, 77.

landscape had created.

Yellowstone, a place that is teaming with telephone lines, cell phone towers, roads, trails, and an abundance of tourists today, was once so disconnected from Euro-American communities that it drove a man in solitude to near insanity. While it was not a lack of communication alone that fueled Everts' madness, it played a very large role. The loss of his horse and most of his supplies had a dramatic impact on his experience in the Yellowstone country, and perhaps his ordeal would have been much less extreme if he had the proper supplies for an extended stay outdoors. However, the impact that a total lack of communication had on his psyche is clear, regardless of supplies. Separated from his party, he did not find comfort in the sublime grandeur of the Yellowstone country any longer. Rather, comfort came in the form of conversation with an imaginary colleague and a familiar trail. While the trail did not provide shelter, supplies, or even conversation, it brought him comfort in knowing that he was no longer separated from his community.

Everts' story provides a brief glimpse into the way that communication technologies, or the lack thereof, can impact the human experience in wild landscapes. His experience is particularly relevant when comparing the class differences that took place in the popular perception of wilderness, and the impacts that communication technologies had on both upper class tourists and local outdoorsmen in their relationship to wild landscapes. Everts, a Virginia politician and wealthy urbanite, was unfamiliar with the Yellowstone landscape and felt isolated in the remote wilderness. This stands in direct contrast to the way a local Shoshone or Bannock Indian, or Euro-American outdoorsman would have related to the very landscape that they made a living on, and the gap has only continued to grow as popular perceptions of wilderness have changed

throughout the twentieth century. As Richard White argues, modern leisure mimics labor in nature, a process that allows upper and middle class environmentalists to separate themselves from their ecological impact on the landscape while simultaneously alienating laborers who actually make a living off of the land.[45]

Considerable economic and cultural shifts that took place as a result of industrialization and urbanization during the nineteenth century had a dramatic impact on the growth of conservation, preservation, and the changing perceptions of wilderness in the United States. In an effort to stave off the fear of feminization caused by urban living, upper class men confronted wilderness to engage nature, and re-enact the masculine activities that had once defined the frontier experience of the West.[46] Dr. von Savigny's hunting excursion, for example, was a pleasure excursion that allowed him to assert his masculinity in nature by hunting buffalo and other big game. Teddy Roosevelt, one of the most famous sportsmen of the era, similarly sought the masculine sublime in countless hunting trips and mapping expeditions throughout the world.[47] Unlike the settlers of late eighteenth century New York, wilderness allowed these sportsmen the opportunity to maintain their masculinity in nature without experiencing the same implications or threats to their livelihood.

Why then, would someone like von Savigny feel comfortable in a place like Yellowstone, and why did so many metropolitan tourists begin to seek wilderness in the second part of the nineteenth century when settlers vehemently sought to control and

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[45] Richard White, "Are You an Environmentalist or Do You Work for a Living?": Work and Nature," in *Uncommon Ground*.
[46] Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkley: University of California Press, 2003), 15-16.
[47] Nash, *Wilderness and The American Mind*, 342.

destroy wilderness only a generation before them? These tourist experiences closely resembled Edmund Burke's definition of sublimity in nature. Upper class male tourists sought to feel the pleasure that came from being in danger without the reality of actual danger. The early development of the national parks advanced communication technologies, along with the development of guidebooks, brochures, and guided tours helped tame the wildness of the landscape and allowed upper and middle class tourists to experience sublimity in wilderness without the threat of being disconnected from their community.

The impact that communication technologies had on the wilderness experience was partly contingent on how a visitor's economic and cultural background helped shape their perception of wilderness. The earliest European and American visitors, who were explorers, trappers, or men who spent a great deal of time laboring in nature, had little problem with the natural surroundings and general solitude of the west during the early nineteenth century. Indeed, one of the first Euro-American explorers to visit the Yellowstone region was the trapper Osborne Russell. In his reminiscence of his time hunting and trapping in the Yellowstone region, Russell highlighted the wonders and curiosities that are unique to Yellowstone. Moreover, his extended stay in the landscape, completely disconnected from direct communication with any Euro-American community, never took on the tone of fear or isolation that Everts' did. Like Everts, Russell was also separated from his party, and severely injured in the process. However, he never lost his composure while trapped in the isolation of the Yellowstone country. His familiarity with the region and skills as an outdoorsman played a significant role in his ability to maintain self-control despite his separation. Despite this familiarity,

however, Russell still relied on forms of communication like signals and carvings on the trees in order to eventually reunite with his party and make his way out of the Yellowstone region.[48]

In the years following the establishment of Yellowstone National Park, visitors were overwhelmingly closer to Carl von Savigny's socio-economic background than Osborne Russell's. After congress created the park in 1872, Park managers quickly prohibited hunting and trapping within its boundaries, and outdoorsmen like Russell, along with several tribes of American Indians could no longer enter the park for subsistence.[49] Instead, urban and wealthy tourists paid for guides and permits to hunt as sportsmen within the parks. Irish aristocrat Windham Thomas Wyndam Quin, the fourth Earl of Dunraven, became one of the earliest Yellowstone tourists when he visited the park in the summer of 1874. In his book *The Great Divide* he recounts his experience in the park and provides a perfect example of the differences between the perceptions of an upper class tourist and the hunters and trappers who had frequented the region to that point:

> In the afternoon we passed quite a patriarchal camp, composed of two men with their Indian wives and several children… we soon discovered that the strangers were white, and, moreover, that there were only two men in camp… What a lot of mutually interesting information was given and received! We were outward bound and had the news, and the latitude and the longitude. They were homeward bound, had been wandering for months, *cut off from all means of communication with the outside world*, and had but the vaguest notion of their position on the globe.[50]

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[48] Osborne Russell, "Geysers and Blackfeet – 1839," in *Adventures in Yellowstone: Early Travelers Tell Their Tales*, 3-13.
[49] Jacoby, *Crimes Against Nature*, 94.
[50] Earl of Dunraven, *The Great Divide: Travels in the Upper Yellowstone in the Summer of 1874* (Lincoln: University of Nebraska Press, 1967), 209-210.

For this group, being cut off from "the outside world" was a normal part of life and their chosen means of subsistence. Unlike most of the upper and middle class tourists who came to Yellowstone, these hunters were comfortable and familiar with the solitude of a wild landscape, and felt free to remain there for an extended period of time. In contrast, Quin was unaccustomed to being disconnected for so long in a place that was so completely foreign to him. To remain disconnected from his community, and to gain subsistence in the same manner that these hunters did, would have been an extremely disorienting experience for the Irish royal. Following maps and established trails along the way, with access to guides and lasting only a few weeks, his excursion through the Yellowstone region only vaguely resembled the experience of a three month long subsistence hunting trip.

Communication technologies like the mail service and outdoor guides, and especially the telegraph and telephone as they became more common in popular culture, became important amenities in the national parks as they helped attract tourists who could afford to make the trip West. The ability to communicate helped tame the wildness and isolation of the parks and allowed upper and middle class tourists from urban or aristocratic backgrounds to feel more comfortable and connected to the outside world while in the unfamiliar surroundings of the national parks.

While the earliest developments of communication technologies in parks throughout the west are somewhat obscure, there are enough scattered primary sources to construct an understanding of how the development of advanced communication technologies within the parks began. In 1883, President Chester Arthur, planning a trip to Yellowstone, caused quite a stir amongst park managers when he inquired about the

communication abilities within the park before he embarked on his trip. When he discovered that park management was unsure about whether or not a line would be available, President Arthur decided that a capable telegraph line was of such great importance that he offered to divvy up the funds for construction of a military line to be finished prior to his arrival. When the logistics of construction became more complicated than he expected, however, Arthur considered canceling the trip completely, thinking he would revisit the idea after communications had become more advanced and reliable within the park.[51] However, the confusion was only a misunderstanding as Mammoth Hot Springs did indeed have access to telegraphic communications in the fall of 1883, and the trip continued as planned.

The very notion that Arthur would cancel based on a lack of advanced communication technologies, however, speaks to their importance as a public amenity even in the very early development of the national parks system. Although President Arthur may be an extreme example, he was not alone. Countless tourists depended on advanced communication technologies in order to enjoy nature tourism in the early development of the parks, which resulted in the speedy construction of several private lines in parks throughout the country as private telegraph and telephone companies saw a new business opportunity arising in the national park system.[52]

Indeed, early in the history of the national park system the private sector was responsible for a vast majority of internal improvements within the boundaries of the parks. Park management relied heavily on railroad companies and transportation companies like the Wylie Permanent Camping Co., to bring tourists to the parks and

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[51] Ralph R. McFadden, *From Ground Wire to Microwave*, 4.
[52] Ibid, 3-4.

provide the expected amenities therein. Between 1886 and 1916 Yellowstone and several other national parks were managed by the U.S. Army, who saw its role as protectors and managers of natural resources, not as facilitators of the tourist trade. Swift thinking businessmen saw solid moneymaking opportunities in Yellowstone and quickly began to offer accommodations and guided outings to the early tourists who were interested in the wonderlands of the park.[53]

These early businessmen not only provided whiskey and shelter to tourists, they also helped mold Yellowstone into a legible and tamed landscape in the minds of each tourist by communicating information about the natural landscape of the region. Early tourists did not march into Yellowstone completely alone. Guides generally accompanied visitors to ensure that no one ended up in a situation like Truman Everts'. In this way, early guides acted as a liaison between nature and tourists, keeping visitors oriented, safe, and happy as they explored an unfamiliar territory. Like park guides, guidebooks provided maps and directions that helped make the Yellowstone landscape more legible and less threatening to tourists. Early guides complained that visitors relied too heavily on guidebooks, strictly adhering to their schedules, and burying their nose deep in their pages.[54] While this certainly speaks to the power of consumerism in the National Parks, it also speaks to the tourist's desire to understand and familiarize themselves with their natural landscapes. Few early tourists sought to set out on their own and explore an unknown natural landscape. Rather, they stayed in their coaches or hotels, checking sites

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[53] Barringer, *Selling Yellowstone*, 16-17.
[54] Stanford E. Demars, *The Tourist in Yosemite, 1855-1985* (Salt Lake City: University of Utah Press, 1991), 48.

off of their list and familiarizing themselves with the guidebook.[55]

Despite the importance of these early guides and guidebooks, the need for advanced communication technologies within the national parks quickly became apparent to park management as nature tourism continued to grow in the latter part of the nineteenth century. Although the telegraph to Mammoth had recently been completed in 1883, and despite the fact that the secretary of the interior had issued permits for private entities to construct more telegraph lines within Yellowstone in 1884, the telephone quickly outpaced the telegraph and became the primary benefactor of the growth of nature tourism around the turn of the century. By the early twentieth century, the telephone was the preferred method of long distance communication within most parks in the West.[56]

By the time the military took over management of Yellowstone in 1886, telephone communications likely already existed between Mammoth Hot Springs and several other popular tourist destinations in the park. By 1889 all of the hotels within the park had been connected by either telephone or telegraph and could connect tourists to their larger communities outside of the park. During the last decade of the nineteenth century private companies built several hundred miles of telephone lines throughout the national park system, and have continued to have a major influence on the communication abilities within the national parks throughout the twentieth century.[57]

Private companies were eventually unable to provide adequate services to

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[55] For a discussion of the early development of private business in Yellowstone see Mark Daniel Barringer, *Selling Yellowstone: Capitalism and the Construction of Nature* (Lawrence: University Press of Kansas, 2002), 17-19.
[56] Ralph R. McFadden, *From Ground Wire to Microwave*, 5.
[57] Ralph McFadden, *From Ground Wire to Microwaves*, 6.

everyone within the park, due to extremely high demand for communication during the tourist season. By the early twentieth century the majority of superintendents of parks throughout the West were seeking upgrades of the private telephone lines, or the new construction of federally owned telephone lines. Most of their letters expressed frustration at relying on private businesses to provide adequate telephone service, particularly when the use of telephones and telegraphs were at their peak. As early as 1904 Yellowstone Park Management felt the need for government owned telephone lines that were separate from those managed by the Yellowstone Park Association, and in 1906 forest supervisors in Jackson Hole, Wyoming hoped to hook up with the government line between the Snake River station and Ft. Washakie with plans to build a network that extended "all over the valley."[58] The telephone became a popular tool as it allowed rangers and other park management to bypass nature and distance in the day to day management of natural resources. Indeed, superintendents of parks like Rocky Mountain, established in 1915, and Mesa Verde, established by Teddy Roosevelt in 1906, made similar requests for government owned telephones lines in the years following the first World War.[59]

When government lines were not available, park management would often allow hotels and local telephone companies to construct telephone lines within the park with the understanding that the government would receive free service in dealing with official

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[58] Ralph McFadden, *From Ground Wires to Microwaves*, 8; S.N. Leek to John Pitcher, 11 Feb 1906, No. 7450, Letter Box 14, Pre-National Park Service (pre-1916) collection, Yellowstone Archives, Gardiner, Montana.

[59] Superintendent, Rocky Mountain National Park to Director, 28 June 1922, Box 160, Rocky Mountain National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Annual Report, 1922, Box 104, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

park business. This was a fair agreement in principle. However, during the high tourist seasons the government could end up with few options for official communication. Tourist needs would often take precedence over park employees, and private companies often disconnected their lines to the federal buildings for the summer, leaving park employees with little choice as they hoped to remain connected with the outside world during the tourist season.[60]

Early tourists, and even park employees, viewed the parks as something separate or set apart from civilization. Indeed, the term "the outside world" was used often in the early discourse of the national parks to describe the network of Euro-American communities that existed outside of the parks. Several pamphlets and brochures printed during the early development of the parks consistently assured visitors that communication technologies like the telegraph, telephone and mail service existed inside the parks in order to provide direct access to "the outside world." F. Jay Haynes' 1910 guidebook to the Yellowstone National Park reassured wary visitors that "telegraphic communication is maintained at all times with the outside world" by the Yellowstone Park Hotel Company, and the majority of tourist brochures in the early twentieth century contained at least some mention of access to "the outside."[61]

Both park employees and visitors viewed communication technologies as tools that could conquer the isolation of wilderness and tame the wildness of the park's natural landscapes. In 1923, four years after the area received National Park status, the

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[60] Secretary to Edward J. Nally, 9 December 1910, Box 251, Yellowstone, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[61] F. Jay Haynes, *Haynes Official Guide Yellowstone National Park*, Box 5, Howard H. Hayes collection, American Heritage Center, Laramie, Wyoming.

superintendent of Grand Canyon National Park explained that he would need access to "the latest modes of communication with the outside" in order to adequately manage the park's resources.[62] Similarly the superintendent of Mesa Verde National Park sounded almost desperate in a letter explaining the need for telephonic communication within the park, claiming his "line is the sole method of daily intercourse with the outside world in winter… hence the necessity of a trouble proof line."[63]

Park superintendents were not alone in their assessment of communication technologies and their ability to tame the wildness of nature. In describing the power of a strong winter storm and the calming influence the telephone had on the natural landscape a *New York Tribune* article offered this story:

> I was stopping at a country house on an island near Stamford. It was blowing a furious gale of sleet and snow. The water was dashing madly against the rocks and the great trees about the house were swaying in the blast. All nature seemed to be in the wildest commotion, but the wires held fast, and when I rang up a friend in New York and his quiet voice came to me all the way through the wild night without a change in its tone it did seem almost marvelous.[64]

The house could not provide much comfort from the intensity of the storm, nor did the telephone physically change the natural features of the landscape. However, the ability to communicate with a friend forty or fifty miles away tamed the wildness of nature and brought a comfort that was otherwise unavailable in isolation.

The fact that inhabitants viewed the national parks as something set apart from

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[62] George Bolton to Director, 27 April 1923, Box 160, Rocky Mountain National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD

[63] Annual Report, 1922, Box 104, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[64] "Stories of the Telephone," *Western Electrician* (Chicago), June 10, 1899. Quoted from Marvin, *When Old Technologies Were New*, 115.

"the outside world" is significant, particularly in how it relates to communication technologies. Early tourists who may have still held on to early notions that disconnected wilderness was an evil and dangerous place would have considered a connection to the outside world as a necessary service during an extended stay in nature. Communication technologies helped ensure they would not end up lost like Truman Everts, or worse in a situation where they were never actually found. Likewise, communication technologies made it possible for tourists to continue essential business communications while in the parks, or simply allowed them to send a brief message to friends and family that described the natural wonders of the landscape.

Tourists generally used the communication technologies far more than park management in the early development of the parks. In Estes Park, CO, tourist companies used the telephone network so much that the superintendent of Rocky Mountain National Park felt they should have taken over maintenance of the system throughout the entire park.[65] During the 1910 season, four Yellowstone telephone operators reportedly handled between sixteen and twenty thousand messages from Mammoth Hot Springs, and in both the Sequoia and General Grant National Parks the general public accounted for the majority of long distance messages sent during the previous year.[66] Some parks had a

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[65] Superintendent, Rocky Mountain National Park to Director, 28 June 1922, Box 160, Rocky Mountain National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[66] Secretary to Edward J. Nally, 9 December 1910, Box 251, Yellowstone, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Walter Fry to Secretary of the Interior, 4 November 1909, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Walter Fry to Secretary of the Interior, 19 July 1911, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

more established network of communication than others during the early twentieth century, and while telegraph and telephone use varied from park to park, the desire for access to direct communication with the outside world was universal in parks throughout the country.

Before the beginning of the 1910 tourist season, H.G. Benson, the Superintendent of Yellowstone, called the telegraphic service inside the park "a scandal and a disgrace." Benson spent that summer at odds with the Western Union Company in Gardiner who consistently gave preference to private businesses in sending communications during the tourist season. While Benson had no problems during the winter, Western Union cut his connections from the ranger station without notice during the summer to ensure that messages from the Mammoth Hotel would not have any interference. This was not a singular occurrence either. Benson had been experiencing the same problem for several years, forcing the government to send a messenger to the Mammoth Hotel in order to conduct official park business during the tourist season. By the end of the season in 1910, Benson was clearly frustrated with this frequent inability to perform government business because of the communication needs of tourists.[67] Similar problems occurred in Rocky Mountain National Park and the Grand Canyon as companies like the Mountain States Telephone and Telegraph Company were often unable to provide adequate service to park management during the high tourist seasons.[68]

Advanced communication networks took time to construct, and when they were

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[67] H.G. Benson to Secretary of the Interior, 26 September 1910, Item 75: Telegraph and Telephone Lines, 1909 – 1915, Letterbox 35, Pre-National Park Service (pre-1916) collection, Yellowstone Archives, Gardiner, Montana.
[68] May, Chief Ranger in Charge, to Superintendent of National Parks, 19 February 1917, Box 160, Rocky Mountain National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

not available in the parks tourist still needed to know that they were connected with their larger community, at least on some level. William Fry, superintendent of both the Sequoia and General Grant National Parks (today known as the Sequoia and Kings Canyon National Park) considered consistent mail service a necessary amenity during the early development of these parks. In 1909, well after telegraphs and telephones had been established in places like Yellowstone and Yosemite, Fry estimated that at least five hundred tourists avoided General Grant National Park because it lacked satisfactory conditions for mail service. He sent a number of letters to the Secretary of the Interior requesting appropriations for a permanent mail service within the parks during the 1909 and 1910 seasons. After two years of correspondence, and the successful establishment of a permanent mail service, Fry was convinced that the increase in tourists during the 1910 season was a direct result of the mail, and its importance could not be understated.[69] In his final letter regarding the matter, Fry made that point clear arguing "that in maintaining the reservation as a national park hereafter, that in behalf of the general public, and for the best care, protection, and administration of the park, that the mail facilities be immediately put upon a permanent and sound basis."[70]

Fry's concern for the permanency of the mail service was only one portion of an even larger goal that he had in mind. During the first decade of the twentieth century he

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[69] Walter Fry to Secretary of the Interior, 27 October 1909, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Walter Fry to Secretary of the Interior, 25 January 1911, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[70] 33 Walter Fry to Secretary of the Interior, 25 January 1911, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Secretary of Interior to Postmaster General, 19 July 1911, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

was working to create a communication network within the General Grant and Sequoia National Parks in which telephones, telegraphs, and the mail service worked in tandem to keep visitors, soldiers, and laborers within the parks connected with the outside world. Private businesses had already been operating telephone and telegraph lines within the parks for several years, and in 1908 laborers added thirty-two miles of telephone line to the thirty-five that already existed within the parks. In this same year, Fry was encouraging the use of government lines by tourists in a park camp ground, which he thought would "give much satisfaction to the tourists, and would furnish a source of revenue" for the federal government.[71] The next year he also lobbied for H.T. Miller, a northern California businessman who owned a cabin and a large tract of land within the Sequoia National Park, to obtain a grant that would allow him to build a telephone line from his cabin to park headquarters. Fry only did so with the understanding that Miller would provide free government use of the line in perpetuity, and provide valuable information on the conditions of the natural resources in that region of the park.[72]

Despite the small size of both Sequoia and General Grant National Parks (there was a total of two hundred and fifty four square miles between the two of them) the ability to communicate while in the wonders of nature remained an important need for both park management and tourists who spent an extended time within the park. Similarly, the evidence of the human impact on the environment did not change the perception that these parks were something separate from "the outside world." Indeed,

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[71] Walter Fry to Secretary of the Interior, 28 January 1908, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[72] H.T. Miller to Fry, 15 April 1909, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

Sequoia and General Grant were not unmarked regions of natural wonder before, or even after they were set aside as national parks. Paiute and Yokut tribes had been living in the region, and taking advantage of its natural resources for hundreds, if not thousands of years. Likewise, Euro-American sheepherders continued to use the land long after the parks had been set aside in 1890.[73] While the socio-economic background and subsistence practices of local tribes and sheepherders would have given them much more experience in the solitude and isolation of the region, their upper and middle class tourist counterparts were much more dependent on the means of communication that Fry was busy constructing.[74] Sequoia and General Grant National Parks were not necessarily considered a wilderness because of their size or because they had been untrammeled by man. Rather, their remote location and general isolation from the outside world made Sequoia and General Grant undesirable sites to experience the Romantic sublime.

The desire for advanced communication technologies within the National Parks became even more widespread after Stephen Mather joined the Department of the Interior in 1915, and then took control of National Park Service a year after it was established in 1916. Mather's first priority became legitimizing the new agency in the eyes of congress and the general government by bringing a growing number of tourists to the parks. An important aspect of achieving this goal focused on developing the infrastructure and amenities that were available to the general public in parks throughout the country. While maintaining the relationship between railroad companies and the national parks was a significant part of Mather's strategy, the construction of paved roads and the introduction

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[73] Alfred Runte, *National Park*s, 62-63.
[74] Fry to Secretary of the Interior, 23 November, 1908, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

of automobiles within the parks took on a much larger role. Paved roads made the parks more economically and physically accessible to a larger population of people, and had a direct impact on the way people experienced nature within the parks. Soon after the creation of the National Park Service in 1916, the automobile revolutionized nature tourism in the United States, with the park service leading the way.[75]

The development of automobiles within the national park system also changed the way advanced communication technologies were used in the early part of the twentieth century. When tourists began visiting parks more frequently without the use of guides or other tourist organizations, the need to communicate while in the park became even greater. Superintendents throughout the country worried about the possibility of a motorist finding themselves stranded in the middle of a park, with no means of communication, left to face the dangers of wilderness on their own. Similar to Truman Everts half a century earlier, motorists who suddenly found themselves stranded because of an automobile malfunction would be separated from park rangers and the safety afforded by the National Park Service, let alone the outside world. Stephen Mather had personal experience with this possibility and made the construction of additional telephones lines within the park a priority. On a highway headed to the Grand Canyon in 1922, Mather happened upon a motorist whose car had stalled halfway to the park. He and his party provided assistance to the travelers and a crisis was averted, but afterwards Mather insisted that telephones be installed along the road in case something similar

[75] Ibid., 156-158.

should happen again, only with less favorable results.[76]

Similar developments took place around the same time in Mesa Verde National Monument and Rocky Mountain National Park. Each of these parks provide an example of how the need for advanced communication technologies changed with the development of the automobile within the National Parks. In Rocky Mountain National Park, the construction of new roads also meant the construction of new field telephones. In 1917 the chief ranger requested the construction of ten new field telephones after the completion of a new road. Like superintendent Fry in the Grant and Sequoia parks, the rangers in Estes Park were in the process of constructing an advanced communication network that would allow them to further protect and preserve the conditions of the park. Not only did they build telephone lines along the roads for stranded motorists, they also built them along various foot trails in the park "for the convenience of tourists, in case of accidents and for fire protection."[77]

During the summer of 1914, the Superintendent of Mesa Verde National Park was so concerned with the safety of auto-tourists that he requested to have funds slotted for archeological preservation canceled in favor of new telephone lines in the park. Much like Mather in the Grand Canyon, and the rangers in Estes Park, Superintendent Rickner worried that stranded auto-tourists would cause extreme safety concerns that didn't necessarily exist when the majority of tourists entered parks as members of a private tour. In several letters throughout the 1914 and 1915 tourist season, Rickner was adamant that

[76] Memorandum for Mr. Holmes, 26 May 1923, Box 057, Grand Canyon, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[77] May, Chief Ranger in Charge, to Superintendent of National Parks, 19 February 1917, Box 160, Rocky Mountain National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

telephone lines be installed in Mesa Verde for the safety of auto tourists.[78]

Rickner was not simply concerned that tourists would be stranded in his park. Rather, it was that they would instantly be disconnected from the safety and comfort of the outside world. In describing the need for telephones in Mesa Verde he argued that "after leaving the Mancos-Cortez highway, the park road traverses, for twenty-five miles, an *unbroken wilderness*, beyond reach of any possible aid in case of an accident."[79] Although at one time it would have been one of the primary means of communication, with the development of the automobile and auto tourists, this road no longer had the taming impact on wilderness like it might have two or three centuries earlier.[80] By 1914, advanced communication technologies like the telephone were the primary tools that tamed the dangers of travel through wilderness, especially after automobiles provided a greater opportunity for urban and middle class tourists to travel through large areas of wild nature without a guide, or the skills to survive alone for an extended period of time.

From the perspective of nature tourists and park management in the early

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[78] Mark Daniels to Secretary of Interior, 31 Aug 1914, Box 108, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Thomas Rickner to Secretary of Interior, 12 August 1914, Box 108, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Thomas Rickner to Secretary of Interior, 10 April 1915, Box 108, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Thomas Rickner to Secretary of Interior, 22 April 1915, Box 108, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[79] Thomas Rickner to Secretary of the Interior, 12 August 1914, Box 108, Mesa Verde, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD, (emphasis added).

[80] In his book *Into the American Woods: Negotiators on the Pennsylvania Frontier*, James Merrell explores the impact that roads and trails working as communication networks had on the human relationship to nature in Pennsylvania during the sixteenth and seventeenth century.

development of the parks, wilderness could still exist within areas that had been trammeled by man, or even paved by man for that matter. Mesa Verde is an extreme example, as it was set aside as a way to protect what had been built by man, rather than the natural landscape. While Indians were often viewed as a part of wild nature by Euro-American cultures in the early nineteenth century, this notion had begun to change by the early twentieth century. Like so many other superintendents, Rickner was concerned with the solitude, isolation, and danger associated with wilderness at the time. That man-made structures and other human impacts on the landscape were present in Mesa Verde National Park did not change the fact that incoming tourists would still travel through a wilderness when visiting the park. In Mesa Verde, the human footprint was less of an impact on the perception of wilderness than the lack of direct communication to the outside world.

Today nature tourists go camping, visit National Parks, and trudge through federally designated wilderness areas to get away from "civilization." The majority, however, are not interested in visiting even the most remote wilderness areas without some form of communication. A satellite phone connects you to rescuers, a road keeps you within the communication network, or a trail leads you back to community. Even celebrated wilderness proponents like Henry David Thoreau and Edward Abbey relied on communication technologies on some level. Abbey had roads and shortwave radios.[81] Thoreau had railroads and trails.[82] In fact, the only wilderness that Thoreau did not enjoy, Mt. Katadin, was the one that had him more disconnected from his community than any

[81] Edward Abbey *Desert Solitaire* (New York: Random House, 1968), 9, 36.
[82] Henry David Thoreau, *Walden; or, Life in the Woods* (New York: Dover Publications, 1995), 85.

other he experienced. Throughout the history of the human relationship to nature in the United States, communication has been a familiar component in how people have perceived and understood nature, landscape, and wilderness.

The same was true during the development of national parks in the nineteenth and early twentieth centuries. Although some tourist brochures advertised that the civilized man needed to visit a place "where there are no telephones, no telegraphs, no daily news and where the screech of the steam whistle and the hum of the manufactories have no access," to clear his mind, few people actually visited the national parks until these amenities were available.[83] In Alaska's Mt. McKinley National Park, (known as Denali today), often thought to be one of the last remaining vestiges of wilderness, the Superintendent complained that tourists did not want to visit the place *because* of its "pioneer conditions."[84] In parks like Rocky Mountain, Mesa Verde, and Sequoia and General Grant National Park similar observations took place, and the superintendents worked to develop amenities that would attract tourist dollars. As Everts' experience in Yellowstone exhibits, along with the actions of superintendents in parks throughout the West, wilderness was not universally enjoyed until it was tamed by the ability to communicate. Advanced communication technologies like the telegraph and telephone quickly tamed wilderness, and did so using a much smaller amount of time and physical labor than something like a railroad, road, or trail required.

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[83] "Why Doctors should see Yellowstone and How" brochure issued by Wylie Permanent Camping Co., 1910, Howard H. Hayes Collection, American Heritage Center, Laramie, Wyoming.
[84] Henry Karstens, Annual Report, no date, Box 111, Mt. McKinley, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

USING COMMUNICATION TECHNOLOGIES TO TAME AND CONTROL WILDERNESS

Lulu Bach, an employee of the Yellowstone National Park, married Jack Worth in the summer of 1928. Worth, a war veteran who suffered from weak lungs and was the keeper of the Old Faithful Inn, moved to Yellowstone after the First World War to "regain his health" in the "warm sunlight and dry air of the Yellowstone" National Park.[85] After having spent a year working inside the park, and enjoying the honeymoon period of his recent marriage, Worth seemed to be in a pretty good place heading into the winter season of 1929. However, life can change in a flash, especially in a place as isolated as Yellowstone National Park during the dead of winter.

It is no secret that winters in Yellowstone are fierce, and will not hesitate to snatch the life of a man who dares to confront them without the proper protection. Jack Worth nearly became a victim of such a winter while shoveling snow from the roof of the Old Faithful Inn in December of 1929. Presumably a result of his weak lungs, Worth contracted pneumonia soon after and he and Lulu found themselves "isolated-without doctor or medicine," with the wildness of a Yellowstone winter looking them dead in the eye. Stranded and alone, Lulu and Jack's "only contact with the outside world was by

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[85] "Bride Rescues Husband, Ill in Yellowstone," *Iron County Record*, 22 May 1929, http://udn.lib.utah.edu/cdm4/document.php?CISOROOT=/icr&CISOSHOW=56311&CISOPTR=56273 (accessed April 6, 2011)

telephone."[86] Fortunately for them, the snowstorm hadn't knocked out the miles of lines that had been strung up through the park, and the telephone still worked. Moving quickly to save her husbands life, Lulu contacted the Park Service to request the help of some rangers in getting her husband adequate medical attention. By the time the rangers arrived at the Old Faithful Inn, it was clear Worth needed to be evacuated quickly. Deciding that a plane would not be able to land in the snow, and the roads were in too bad of shape for an automobile, the rangers and Lulu bundled Worth up on a sleigh and began marching "through a snow covered wilderness" to get him to adequate medical attention. [87] The group marched for three days, pulling the sickly Worth behind them, until they reached a small railroad station on the border of the park, they quickly boarded Worth on a train headed for Livingston, MT where medical professionals were waiting his arrival.

If Lulu had not been able to contact the rangers by telephone from the couple's snowed in location, there is no telling if Worth would have survived his bout with pneumonia. By 1929, a situation like this was just one of several reasons the park service viewed the installation of advanced communication technologies like the telephone as a pressing need in parks throughout the country. While both the parks service and private companies viewed telephones as a resource for developing nature tourism, and attracting people to the parks, the parks service was also primarily concerned with the safety of park visitors, and managing the natural landscape that attracted them. Advanced communication technologies became an extremely important tool for accomplishing this task, as they centralized the ranger workforce and bypassed the need to travel long

[86] Ibid.
[87] Ibid.

distances over wild landscapes in order to communicate.

Throughout the late nineteenth century and early twentieth century, both the army, and later the park service, installed miles upon miles of telegraph and telephone lines in order to overcome the wildness of the national parks and to create a legible and controlled landscape. With access to advanced communication technologies, situations like the Worth's, or Truman Everts' were less likely to turn deadly. Not only did they provide access to "the outside world," and alter the problem of space within the parks, advanced communication technologies also tamed the wildness of the landscape by reducing the level of danger that was required in order to communicate within the borders of the parks.

Beyond the ability to make isolation in nature safer, communication technologies also directly contributed to the physical changes that took place on the landscape during the growth of conservation and nature tourism in the late nineteenth and early twentieth centuries. Both the army and the park service viewed advanced communication technologies as one of the most important aspects of fire control and centralization within the national parks. Much like the national forest service, superintendents throughout the national park service used telephones and radio technology in order to control wild fires in parks throughout the country. The development of telephone and radio technology as a part of the daily operations of fire control aided in the development of the fire lookout in the west, which became one of the most important figures of fire control on federal lands until the 1960s.[88]

The growth and development of communication networks within the parks during

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[88] Rothman, *Blazing Heritage*, 4-5.

the early part of the twentieth century helped create legible and controlled landscapes that tamed the wildness of nature. Park rangers constant desire to circumvent the dangers and uncertainties involved in communicating over large tracts of wild landscapes drove much of the development of advanced communication technologies within the parks. Although it was far less destructive to the ecology of the land, in some sense, the development of telegraph and telephone networks within the national park system was similar to the attempts at taming and controlling nature that Alan Taylor describes in his analysis of early nineteenth century settlers in the northeast.[89]

In the early history of the National Parks, the desire to control or tame nature was one of the primary goals of park management. Indeed, even before the National Park idea gained widespread support in the United States, the ability to communicate while in wild landscapes was a factor in federal methods for controlling landscapes, resources, or even people that were perceived as a part of wilderness. Karl Jacoby skillfully argues that governmental efforts to create legible landscapes and manage natural resources within preservations urged state simplification of local subsistence practices and the formation of new conservation laws that created criminals out of subsistence hunters, trappers, and gathering groups that lived within the boundaries of the parks.[90]

Likewise, Mark Spence argues that before the national parks were set aside as places to be enjoyed by vacationing white Americans, advocates of nature preservation hoped to protect both the landscape and its native inhabitants.[91] The majority of white

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[89] Alan Taylor, "Wasty Ways: Stories of American Settlement," in *Environmental History*, Vol. 3, No. 3 (Jul., 1998).
[90] Jacoby, *Crimes Against Nature*, 29.
[91] Mark Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999), 4.

America during the early part of the nineteenth century viewed Indians as a part of the wild landscape of the West. In some sense, reservations and nature preserves were formed from the same thought processes, that lands and their "wild" inhabitants should be protected from the inevitable march of civilization across the continent. Preservationists did not actually succeed until the perceptions of sublime beauty and monumental grandeur gained widespread attention in popular culture during the second half of the nineteenth century. However, both the national parks and the reservation system grew out of nineteenth century perceptions of Indians and the U.S. West.

For both reservations and park managers, controlling the wilderness, whether that meant fire or humans, was an important aspect of managing the landscape. In doing so, communication technologies were an important tool that could be used to control a particular region. In September of 1869, while searching for a location to establish a Crow reservation in the valley of the Yellowstone River, an army scout complained that the site would be inadequate because of it's distance from the road, and the difficulties this would pose in communicating with anyone outside of the reservation.[92] When attempting to create legibility across a landscape in order to control its natural resources, access to direct communication was imperative.

While telegraphs were used by the army to combat forest fires within the parks even up until the first World War, the telephone was far more important as a tool for fire control and in regard to the physical changes that took place in the parks during the early

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[92] Sully to Parker, Commissioner of Indian Affairs, 21 September 1869, Reel 489, MS 234, Letters received by the Office of Indian Affairs, United States. Dept. of the Interior. Indian Division.

twentieth century.[93] Even before the war it seems nearly every park manager in the West was clamoring for a more developed government telephone line within the boundaries of their park. In 1907, the commanding officer at Yellowstone requested a separate government line claiming that it was "highly important that all the stations be connected with the base… and this is doubly true of the most distant ones."[94] Likewise, S.F. Ralston, the superintendent of Glacier National Park, got an early start in developing his telephone network for the purposes of fire control. In 1911, the army hung over forty-two miles of telephone lines in Glacier, most of which connected distant ranger stations with the administration headquarters in order to centralize and maintain supervision of fire control policies.[95] However, this was only the beginning. By 1914, Ralston argued that a more developed government owned telephone system was one of the primary needs for Glacier National Park in order to provide adequate fire control throughout his park.[96] Indeed, Ralston continued to request appropriations for the construction of new telephone lines at different locations within the park in several annual reports throughout the early twentieth century.[97]

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[93] Ralph McFadden, *From Ground Wires to Microwaves*, 7.
[94] Henry T. Allen to Adjutant General, 26 October 1907, Box 251, Yellowstone, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[95] Annual Report, 1911, Box 034, Glacier National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[96] Ralston to Secretary of Interior, 3 Oct 1914, Box 034, Glacier National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[97] Annual Report, 1911, Box 034, Glacier National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Annual Report, 1915, Box 034, Glacier National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Annual Report, 1916, Box 034, Glacier National Park,

In letters to their superiors in Washington D.C., superintendents often argued that telephones provided the ability to centralize park management, and make controlling natural resources and enforcing federal laws more efficient. These tasks fell on park rangers who wore many different hats during the early development of the parks. While their primary responsibilities were to provide safe conditions for tourists, and protect the resources of the national parks, these responsibilities fell on a much smaller number of rangers in the early twentieth century than today. Early park rangers were responsible for tracking and arresting the many poachers that roamed the parks, forcing Indians to stay outside of the park boundaries, maintaining peace between the various inhabitants and visitors of the parks, providing first aid services, controlling wildlife resources, collecting scientific data, and fighting forest fires. While many of these remain the responsibilities of rangers today, several became much easier with the centralization and advancement of communication networks within the parks.[98]

That does not mean that everyone within the parks immediately embraced telephone technology. Again, the telegraph remained one of the primary means of long distance communication outside of the parks well into the twentieth century, and when a telephone line was installed people within the park were not completely sure if they were comfortable using it. Ralph McFadden relates several instances in which the telephone became the target of local jokes, or even how one woman from Gardiner, MT who was too scared to say hello to her husband at Mammoth when he called on the new telephone

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Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Annual Report, 1917, Box 034, Glacier National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[98] Ralph McFadden, *From Ground Wires to Microwaves*, 12.

line.[99]

Aversion to the telephone was not uncommon, particularly in a place that was considered separate from urban cities or civilization. Ronald Kline's *Consumers in the Country* explores different ways in which rural Americans disapproved of the telephone, as it changed the perception of their landscape, making them feel "citified."[100] Likewise, a visitor writing a letter of complaint to the Superintendent of Yellowstone National Park in July of 1916, long after telephonic communications had been established in the park, still found their presence in the landscape a bit strange, saying "I wish to complain of the telephone service in the Park, odd as it may seem to complain of such a matter when one has no right in the woods to expect any telephone service."[101] Despite this type of reluctance from some tourists seeking an authentic experience in nature, the government continued to build new lines and partner with private companies in attempts to enhance the communication abilities within the parks and maintain control and protection of their natural resources.

Not only did government owned lines, and to some degree private lines before them, make expediting official park business easier, they were "indispensible" in adequate control of wild fires within the park. As superintendent Ralston explained in a letter to the Secretary of the Interior, with access to a developed telephone network "men can be summoned and reach the scene of a fire before it gains much headway, whereas, by the slower method of notification by mail or by a courier the fire might gain great

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[99] Ralph McFadden, *From Ground Wires to Microwaves*, 6.
[100] Ronald Kline, *Consumers In the Country: Technology and Social Change in Rural America* (Baltimore: The Johns Hopkins University Press, 2000), 23.
[101] John White to Superintendent of Yellowstone National Park, 22 July 1916, Item 48, Pre-National Park Service (pre-1916) collection, Yellowstone Archives, Gardiner, Montana.

headway and valuable timber and scenic beauty be destroyed."[102] Communication networks, even those as primitive as roads or mail delivered by foot, were an essential part of taming the wilderness and controlling natural resources. Moreover, the best planned or most advanced communication networks seemed to allow for better control of natural resources in the early twentieth century.

During the interwar period, the telephone was an integral part of the development of fire control in the national parks, particularly for ranger stations that were built primarily as fire lookouts. In Glacier, lookout cabins and telephone lines became particularly important tools as the region suffered several devastating fire seasons between 1919 and 1922.[103] Likewise, during the spring of 1912, rangers in the Medicine Bow National Forest requested a telephone line extension, stating that the "crying need for means of communication for the larger part of the district is quite painfully apparent," as the process of reporting "a fire would require a wild ride over a rough country" to the closest ranch, and means of communication.[104] Obviously, telephone lines were not the only tools used to improve fire management practices in the early history of the national parks. Copper cables hanging twenty feet in the air extinguished wild fires in the early twentieth century about as well as they do today. However, the vast majority of superintendents requesting appropriations for the construction of telephone lines during the interwar years cited the telephone's unrivaled ability to expedite and centralize fire

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[102] Ralston to Secretary of Interior, 28 September 1915, Box 034, Glacier National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[103] Hal Rothman, *Blazing Heritage: A History of Wildland Fire in the National Parks* (New York: Oxford University Press, 2007), 39-40.
[104] "Medicine Bow, District 5 – Fire Plan," 20 April 1912, Doc Box 3, Medicine Bowl National Forest Collection, American Heritage Center, Laramie, Wyoming.

control within their parks.

Telephone lines not only centralized management of natural resources within the parks, they also served as symbolic and literal extensions of the park service, taming the wilderness that they entered and making the landscape more legible for park management. Superintendent Fry's request to connect the government telephone line in Sequoia with the line to H.T. Miller's cabin in 1909 provides an invaluable look into the perceptions that park managers had on how the telephone would improve or alter the landscape of their parks. One of the primary reasons for requesting the line, Fry claimed, was that it "would open up a region difficult of access, owing to rough precipitous character of the country and bad trails, and in which patrols have, for this reason been infrequent." The telephone would provide park management access to the region through Miller's help in spotting forest fires and trespassers hoping to poach game within the park. Moreover, the construction of the telephone line would also "result in great saving of time and horse flesh, in cases of emergency" where "orders or requests could be immediately conveyed to the entire park force from this point."[105] For Sequoia National Park, and other parks throughout the West, the telephone was an essential tool in taming the wildness of the park and controlling the natural resources it contained.

Despite the widespread belief that improved communication networks would improve fire management and the control of natural resources, the national park service only had seventeen primary fire lookouts before the 1930s when the CCC descended on

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[105] Walter Fry to Secretary of the Interior, 6 May 1909, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

parks throughout the country to greatly improve their communication infrastructures.[106] Without a clear fire control policy from directors of the National Park Service, and with very little appropriations provided from Congress for fire control, superintendents were forced to find clever and innovative ways to suppress forest fires within their parks. Some superintendents relied on light burning, while others simply hoped that fires would not occur. The superintendent at the Grand Canyon came up with a creative fire management method by securing the help of local ranchers and connecting them to the park's telephone line so they could provide services as additional fire lookouts.[107] Despite the many different fire control methods employed by different superintendents before the 1930s, park managers consistently requested appropriations to build telephone lines for the purposes of providing better fire control methods in parks throughout the West.

Superintendents were not the only ones that appreciated the telephone for its ability to connect distant ranger stations with the rest of the park. Park rangers were also well aware of the important dynamic that the telephone offered in managing natural resources, especially those who were left alone in distant stations to serve as extensions of the park headquarters. Indeed, rangers were well aware of the amount of travel that the construction and use of telephone lines made unnecessary. So much so that in 1907 the superintendent of Yellowstone sent a out circular to all of his rangers forbidding the use of the telephone system for personal conversations during the tourist season as they

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[106] Hal Rothman, *Blazing Heritage*, 59.
[107] George Bolton to Director, 27 April 1923, Box 160, Rocky Mountain National Park, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

interfered with a the large amount of important federal business.[108] Despite efforts like these, rangers in remote stations, who may go a week or more without any human contact, would often have the operator connect three or four lines together to avoid loneliness.[109]

Hallie Daggett, the first woman to work for the forest service as a fire lookout, said her telephone "made her feel exactly like a big spider in the center of a web," as she spent a summer in the Eddys Gulch lookout station in the Klamath National Forest in northern California.[110] Her dependence on the device became very clear, however, when a storm took out the line and left her in complete solitude for over twenty-four hours. Although she joked later about being found hiding under a log when her fellow rangers came to fix the phone, it certainly wasn't a laughing matter during her isolation from the outside world.[111]

The telegraph and telephone did not allow park rangers and park management to completely mitigate the impacts of nature, and instances like Hallie Dagget's were a common occurrence during the early history of the National Parks. Snow storms and fallen trees would often completely bring down telephone lines, particularly in situations in which the lines had been attached to trees rather than newly constructed telephone poles. Fallen lines also meant that the soldiers in the parks, and later park rangers, were forced to go back into the natural landscape to repair the line, and while developed

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[108] S.B.M.Young, Circular No. 3, 1 July 1907, Box 251, Yellowstone, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[109] Ralph McFadden, *From Ground Wires to Microwaves*, 32.
[110] Robert H. Moulton, "The Only Woman Forest Fire Lookout in the United States," *Roosevelt Standard*, 5 October 1914, http://udn.lib.utah.edu/cdm4/document.php?CISOROOT=/roos&CISOSHOW=3475&CISOPTR=3374 (accessed April 5, 2011).
[111] Ibid.

communication technologies may have provided information quicker, rangers were still the ones bringing water to the flames or heading out in the snow to track a suspected poacher. For all of the convenience and safety advanced communication technologies may have provided, the lines that were strung up through the heart of a wild landscape were often no match for the powerful forces of nature that typified the parks.[112]

Not only did park rangers and army soldiers take on the responsibility of repairing telephone lines, which was nearly a full time job, they were often responsible for constructing the lines in the first place. Like most responsibilities of park rangers, this was not easy work. Laborers might spend several weeks marching and camping along the path of the telephone lines, not to mention the difficulties one might encounter in searching for broken and fallen telephone lines. In a letter, sited in Ralph McFadden's report, a ranger described the experience of Marion Lewis, who had a difficult time stringing a telephone line over Glacier Point in Yosemite National Park during the 1916 season. This was quite a process, he claimed, and by the time the ranger was finished with the job his clothes had been torn to shreds and he had to spend several days in the hospital to recuperate from the shock of the experience. It was such a taxing experience, in fact, that Lewis was in no mood to collect the several valuable cameras and other items that had fallen out of the hands of careless tourists and lay waiting on the ledge of the cliff.[113]

Whether they were hung on trees or on poles, park management wanted to ensure that the construction of telephone lines did not interfere with the natural beauty of the landscape. Considering the fact that sublime beauty was the major attraction offered by

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[112] McFadden, *From Ground Wires to Microwaves*, 10-12.
[113] McFadden, *From Ground Wires to Microwaves*, 11.

the national parks, this comes as little surprise. While telegraphs and telephones were considered invaluable tools for the control of natural resources and providing adequate service to park visitors, at times telephone lines and poles were also viewed as unsightly additions to the landscape, and distracting from the natural beauty of the park.

In the midst of a heated right of way battle with the Zion Canyon Telephone Company the Superintendent of Zion Nation Park made several complaints about the unsightly manner in which the lines were constructed, and at one point removed a newly constructed pole, claiming that it would "always be a menace and an eye sore" to the general public.[114] Superintendent Reuesch was more concerned with the placement of the telephone poles than anything else. Indeed, Reuesch consistently argued that telephonic and telegraphic communication within the park was a necessity for staying connected with "the outside."[115] The presence of the poles in the perceived wilderness was not an issue. Rather, the poles needed to be out of site of the public, or at the very least constructed in places that were not considered to be particularly scenic.

In Yellowstone the lines had an even more dramatic impact on the physical environment of the park, both in terms of blocking scenic views and impacts on natural resources. In a report on the general quality of the Yellowstone telephone system during the year 1923, the superintendent of the park complained of the rotting timber that telephone lines had been strung up on, and also the manner in which telephone lines had been maintained in previous years. "The pole lines," he complained, "were located

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[114] Walter Reuesch to Director of the National Park Service, 17 June 1924, Box 334, Zion, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[115] Walter Reuesch to Director of the National Park Service, 20 April 1924, Box 334, Zion, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

without any regard for the landscape of the park and many very beautiful views of the park scenery are impaired or destroyed… by these unsightly poles and wires."[116]

The obstruction of scenic views was the least of his issues, however, as he was forced to find a solution to problems created by the telephone poles that had been poorly placed by the army and were threatening the growth and of Yellowstone timber. Before the park service took control of the park, army officials placed poles along the main trail and roads of the park. To ensure that branches and overgrowth would not interfere with the consistent operation of the telephone, the army routinely cut and trimmed the trees surrounding these lines. By doing so, however, the army left "open unpleasant scenes of dead and down timber adjacent to the highways," that the superintendent found completely unacceptable when he took control in 1916. The superintendent's attempt to restore beauty along the roads only created more problems as tree overgrowth impaired the telephone service in the park and left him with no choice but to completely rebuild his telephone system. Although he paid particular attention to the details of the landscape and scenery, the time and expense to rebuild the lines was considerable.[117]

Despite perceptions from tourists and park management that they had somehow escaped from the "outside world," telephones, telegraphs, and even the most basic forms of communication were essential aspects of making the vast natural landscapes of national parks in the West bearable to the general public. The Reuesche family in Zion National Park epitomized this desire for direct communication during the early part of the

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[116] Horace Albright, "Permanent Telephone System for Yellowstone National Park," Report, 1 December 1923, Box 251, Yellowstone, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.
[117] Ibid.

twentieth century. Prior to 1923, while he waited for congressional appropriations, superintendent Reuesche simply paid the telephone bill from his own salary rather than go without communication access.[118] His wife, even more intent on having access to telephonic communication, would often climb the telephone poles within the park to reconnect any disconnected wires, and operated the telephone system in the park when no one else was available.[119] Indeed, for people who felt they were living, or visiting, a place set apart from the "outside world," access to direct communication was a necessity.

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[118] Walter Reuesche to Cammerer, 5 November 1923, Box 334, Zion, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

[119] Walter Reuesche to Director, 20 April 1924, Box 334, Zion, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

CONCLUSION

Ralph McFadden felt that the construction and maintenance of telephone lines within the national parks was more difficult than it might have been in other locations as rangers had to keep the lines hidden from the view of visitors and be sure not to ruin the scenic beauty of the parks. Because of this special attention to scenery, McFadden complained that "travel was up and down over brushy and/or rocky and/or marshy terrain without benefit of a trail," and that the construction of poles was a "procedure that OSHA today would probably outlaw."[120] The continued conflict with the wildness of the parks caused by the necessary construction and maintenance of telephone lines was a primary contributor to the development of wireless radio communication within the parks. Radio technology allowed park rangers to bypass the wildness of the parks even more than telephones did, as radios did not have extensive networks of poles and copper wires that needed constant maintenance and repair in order to remain in working order.

Park managers began to experiment with radio technology as early as the 1920s, and it quickly became one of the primary tools for taming and suppressing the wildness of the national parks landscapes. [121] Much like the development of the railroad, the pony

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[120] Ralph McFadden, *From Ground Wires to Microwaves*, 29.
[121] White to Director, 14 June 1922, Box 196, Sequoia, Central Files, 1907-1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD; Cammerer to White, 21 June 1922, Box 196, Sequoia, Central Files, 1907-

express, the telegraph, and the telephone, westerners found a way to utilize radio technology in order to bypass time and space and overcome the natural features of the U.S. West. The desire for increased mobility and access to direct communication with a common community continued to push the development of the national park infrastructure throughout the twentieth century, and even into the early twenty-first century.

Communication technologies played more than just a passing role in the development of nature tourism, nature preservation, and the growth of the national park system during the late nineteenth and early twentieth centuries. Both visitors and park managers took advantage of the taming influence that communication technologies could have on wild landscapes, and used them in ways that had drastic impacts on the changing popular perceptions of wilderness and on the physical environment of the American West. Likewise, mass communication technologies like guidebooks and brochures helped familiarize the landscapes of the West, making them more legible, tame, and appealing to tourists who may have otherwise felt lost in the vast natural wonders of the region.

Wilderness, an idea that is largely contingent on culture and socio-economic background, was a place much more complex and disconnected than simply a landscape unmarked and untrammeled by man during the early development of the national parks. Feelings of isolation, fear, wonder, and praise brought on by the beauty and grandeur of both the masculine and feminine sublime helped shape places of wilderness during the rise of nature tourism. Likewise, overwhelming natural monuments and places of grand and magnificent splendor might have been labeled as a place of "wilderness" during the

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1939 Entry 9, Records of the National Park Service, Record Group 79, National Archives, College Park, MD.

early development of the national parks. Whether a landscape was considered a wilderness because of its beauty or because of its inherent danger, the ability to communicate with community consistently tamed wilderness and made it more accessible to nineteenth and twentieth century nature seekers.

The history of these places, and the feelings they engendered in preservationists and wilderness proponents throughout the United States has been well established in scholarship over the last several decades. However, it is clear that disconnected, foreign, illegible, and isolated landscapes must now be included and considered when seeking to define the features of perceptions of wilderness and civilization during the nineteenth and twentieth centuries. The ability to communicate, or the perceived ability to communicate, and the accompanying disorientation that is associated with disconnected landscapes has been one of the common themes in the changing perceptions of wilderness throughout the history of the United States.

As an historian of the U.S. West and environmental history, I understand the danger in asserting an argument that dances precariously on the border of positivism within the history of a place as diverse, and atypical as the American West. Communication technologies, and the desire for access to direct communication amongst Euro-American communities were not the sole factors in the growth of nature tourism and the shift in popular perceptions of a feared and dangerous wilderness to a romantic and idealized setting. However, the taming influence of communication technologies, old or new, has been a clear factor in the changing perceptions of wilderness and the human relationship to nature in the history of the United States, and should no longer be ignored in future scholarship on the national parks, wilderness, nature, and the environment.

In his nineteenth century painting, *American Progress*, John Gast depicts the overwhelming popular perception of Manifest Destiny that was held by most Euro-American societies during the nineteenth and early twentieth centuries. Gast portrays the angelic Columbia as she leads miners, stockmen, farmers, and railroads westward across the continent confronting the darkness and perceived wildness of the western landscape. In front of each of these Turnerian anecdotes, Columbia carries a telegraph line that tames the wildness of the region and connects these new western communities to their eastern counterparts. The mountain men and settlers that marched ahead of this established form of "civilization" may not have relied much on the communication accessibility made possible by the industrious Columbia. Likewise, the dehumanized American Indian tribes that Gast depicts as a part of the western wilderness had little use for the telegraph lines that began to envelop the landscape. However, the nature tourists and preservationists who entered the region in the latter part of the nineteenth century considered advanced communication technologies a necessity in wilderness, and increasingly relied on the telegraph and telephone to make the natural landscape a more appealing destination.

Perhaps if Gast had painted his masterpiece fifty years later he would have included auto-tourists and roadside telephones behind the railroads and telegraph lines that tamed the West. An even more modern version of Gast's work might depict a blue tooth headset in Columbia's ear with several cell phone towers laying on the borders of the West's last remaining federally designated squares of "wilderness." Although historians of wilderness will not find a formula in the methods that communication technologies have been used across cultures in taming natural landscapes, it seems likely

that historians will discover that access to direct communication has been a constant factor in the human relationship to nature throughout the history of the United States.

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