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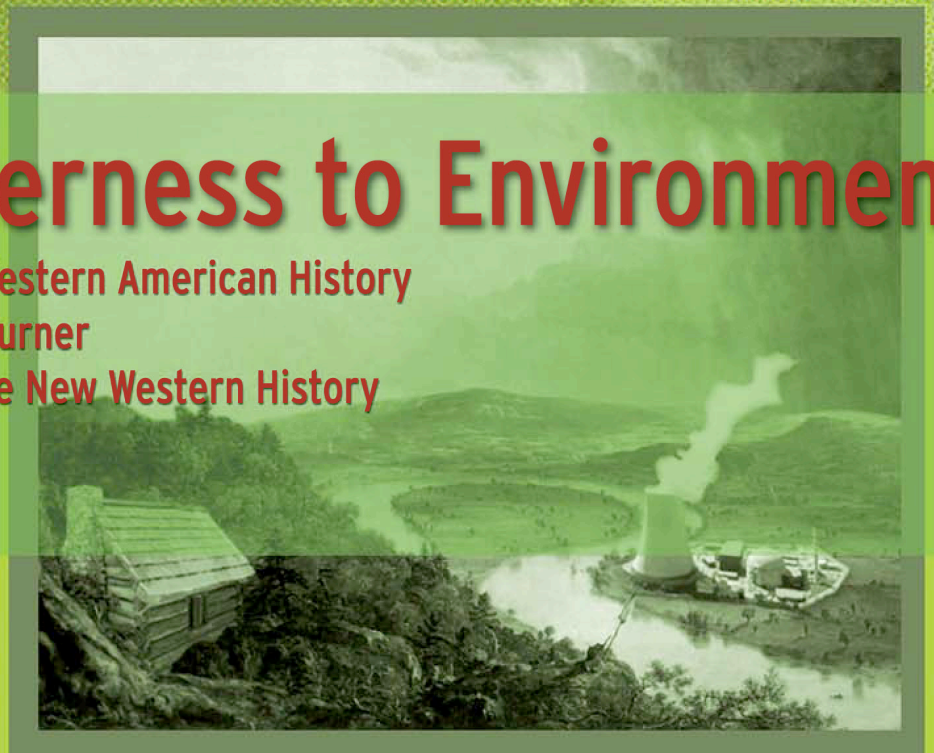


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From Wilderness to Environment

The Role of ›Nature‹ in Western American History
from Frederick Jackson Turner
to Donald Worster and the New Western History



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For my parents

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*“The history of any land begins with nature,
and all histories must end with nature.”*

Frank J. Dobie
Guide to Life and Literature of the Southwest

O. Introduction

Like no other western country, the United States of America locates the core of its national identity in the relationship of its people to their natural environment. According to the American myth of origins, this special relationship towards nature is grounded in the self-perception of the American nation as a people of European descent that regenerated themselves in the American wilderness into a model civilization. The transformation of the continent's nature—from the Puritan survival in the American wilderness to the establishment of a new civilization that eventually turned into the world's super power—is thus the quintessential American narrative.

At the heart of this narrative is a positive concept of 'progress' as an agent of environmental transformation. "From the beginning," American Studies scholar Leo Marx notes, "the arriving Europeans perceived the underdeveloped environment of the 'New World' in the context of their collective power to transform it" ("Environmental" 327). This positive concept of 'progress' is rooted in the Puritan perception of American nature as a "hideous and desolate wilderness," a hostile, chaotic, and lawless environment that threatened the order of Puritan society and thus needed to be overcome (Bradford, *Plymouth* 62). For Puritans, the American wilderness symbolized the very antithesis to the divine order of the Garden of Eden and 'nature' is thus from the beginning of American cultural history defined as an entity to be transformed.

The concept of 'wilderness' as an entity to be transformed did not emerge from within the colonies, but was rather part of the cultural baggage Puritans took with them on the voyage to the New World. As Carolyn Merchant points out in *Reinventing Eden: The Fate of Nature in Western Culture*, the Puritan concept of 'wilderness' was embedded in the tradition of the Judeo-Christian 'recovery narrative,' a religious doctrine that maintained that human redemption could be achieved by recovering the lost order of the Garden of Eden. According to Merchant, this recovery narrative is at the heart of Western culture:

The Recovery of Eden story is the mainstream narrative of Western culture. It is perhaps the most important mythology humans have developed to make sense of their relationship to the earth. Internalized by Europeans and Americans alike since the seventeenth century, this story has propelled countless efforts by humans to recover Eden by turning wilderness into garden. (*Reinventing* 2)

Merchant outlines that the Judeo-Christian recovery narrative portrays human history as a cycle of fall and recovery in which nature plays a central, symbolic role. After humankind's expulsion from Paradise, the recovery narrative goes, nature is in a post-Edenic, chaotic state. To reverse the fall, nature has to be transformed back to its original, orderly state. The recovery narrative, first in religious terms and in the eighteenth and nineteenth century in the language of Western science and capitalism, thus legitimizes the human domination and exploitation of the earth. Accordingly, the Puritan mission to transform the American wilderness has to be seen in the larger context of Judeo-Christian attitudes towards nature.

Translated to an American context, the recovery narrative turns the Puritan project into a divine mission to create a new society to serve as a model for the whole world and to fail the mission is thus to fail before God and all of humankind.¹ "For wee must Consider," John Winthrop described the Puritan mission, "that wee shall be as a Citty upon a Hill, the eies of all people are upon us" (qtd. in Miller, "Errand" 11). The transformation of 'wilderness' into 'civilization' thus has originally a strong religious connotation in American culture. From its European, Judeo-Christian origins, the 'wilderness' eventually developed into a main symbol of American culture, representing the roots of American selfhood in the American wild. As Roderick Frazier Nash summarizes in *Wilderness and the American Mind*, wilderness is "the basic ingredient of American culture. From the raw materials of the physical wilderness, Americans built a civilization. With the idea of wilderness they sought to give their civilization identity and meaning" (xi).

In the centuries following the early Puritan experience, nature remained the key referent of a quickly growing American civilization. While nineteenth-century Americans moved ever further westward, settled the continent, and laid the foundation for the emergence of the United States as the world's super power in the century to follow, America's leading minds simultaneously interpreted nature to be at the core of the national experience. Whereas wilderness had been perceived by Puritan culture as a brutal, life-threatening force, the protagonists of American romanticism now celebrated the sublime landscapes of the North-American continent as the birthplace of a new sturdy nation of independent, freedom-loving Americans. "The sublime wilderness," historian William Cronon notes, "had ceased to be a place of satanic temptation and become instead a sacred temple" ("Trouble" 69). Drawing from Rousseau's concept of the 'noble savage' and a romantic glorification of primitivism as the antidote to European over-civilization, American artists like James Fenimore Cooper or Albert Bierstadt now pointed towards nature as the corner stone of the American

¹ For an introduction to Puritan culture, see Perry Miller's classic *Errand into the Wilderness* (Cambridge: The Belknap Press of Harvard UP, 1956).

national experience and depicted the landscapes of the American wilderness as the source of national identity. America, these artists suggested, was ‘nature’s nation.’²

However, while the continent was being transformed at a breathtaking speed, American artists simultaneously expressed a strongly ambivalent attitude towards the notion of progress. Although civilization’s march westward across the continent was generally celebrated as the quintessential American story during the second half of the nineteenth century, critical voices at the same time outlined civilization as an ambiguous force that erased the sublime landscapes around which the origin story of American identity had been shaped. Explorers, writers, poets, and painters like John Muir, Henry David Thoreau, and Albert Bierstadt now drew attention to the decline of pristine nature and proclaimed their concern for the preservation of untouched wilderness. This romantic impetus to protect pristine nature as a source of national identity later also influenced the emergence of the conservation movement, the first wave of American environmentalism at the end of the nineteenth century.

Accordingly, the American definition of ‘nature’ as expressed in the concept of ‘wilderness’ oscillated between two opposing poles during the second half of the nineteenth century: A romantic celebration of pristine wilderness as the cradle of American identity and the simultaneous celebration of progress and civilization as the antidotes to the wilderness condition. As Perry Miller notes, the nineteenth-century interpreters of the American origin story “present us with the problem of American self-recognition as being essentially an irreconcilable opposition between Nature and civilization” (“Nature” 208). Accordingly, it is not one coherent, genuinely American definition of ‘nature’ that serves as the main concept in the American myth of origins, but rather an ambiguous tension between two opposing forces, between civilization and nature, or, as Leo Marx phrases it, the machine and the garden.³

This *Ur*-American narrative about a new civilization being built in the wilderness is essentially a story of initiation, whose plot is set in the mythic region of the American West. In the American cultural imagination, no other region represents the mythic struggle between civilization and wilderness as strongly as the West. “This nation has made the American West the center stage for our drama of technological conquest over

² The phrase ‘nature’s nation’ is borrowed from Perry Miller. For Miller’s analysis of the meaning of ‘nature’ in American cultural history, consult especially his essay “Nature and the National Ego,” *Errand into the Wilderness* (Cambridge: The Belknap Press of Harvard UP, 1956): 204-16.

³ One of the best images giving expression to the machine-in-the-garden opposition in American cultural history of the nineteenth century is Henry David Thoreau’s description in *Walden* of a locomotive disturbing the peaceful solitude of Walden Pond. “We do not ride the railroad, it rides upon us,” Thoreau expresses his critical attitude towards the impact of progress and technology on American society (*Walden* 174). The opposing, positive description of technology can be found in Walt Whitman’s poem “To a Locomotive in Winter,” in which the locomotive is celebrated as a “fierce-throated beauty” (*Leaves* 362). The competing images employed by Thoreau and Whitman paradigmatically express the opposing attitudes towards technology dominant in nineteenth-century American culture.

nature,” historian Donald Worster summarizes the significance of the region in American culture (“Country” 242). Concepts of ‘nature’ dominating American cultural history are thus often linked to the region of the American West and, conversely, popular concepts of the American West are often based on specific American concepts of ‘nature’ as the source of national identity.

The mythic struggle between civilization and wilderness is most strikingly embodied in the national myth of the frontier. No other piece of writing expresses the myth of the frontier and the meaning of nature in American culture more than historian Frederick Jackson Turner’s essay “The Significance of the Frontier in American History,” presented for the first time at the Columbian Exposition in Chicago in 1893. Drawing from two centuries of imagery and narratives configured around the wilderness-civilization dichotomy in American culture, Turner interpreted the transformation of the American wilderness from trading post to farm to boomtown as the central saga of the nation. Defining the frontier as the meeting point of wilderness and civilization, Turner argued that the rough living conditions along the frontier helped settlers to shed their European cultural baggage and initiated a process of cultural renewal and regeneration that ultimately resulted in the birth of a new species. The American thus born in the wilderness was characterized, Turner argued, by self-reliance and a pragmatic, egalitarian, and anti-authoritarian mindset. The basis for American democracy, Turner claimed, was to be found in the wilderness condition of the American West. As William Cronon phrases it, Turner’s Frontier Thesis depicted the invasion of the North American continent as “an epic march toward enlightened democratic nationhood” (“Place” 1352). Turner thus not only stressed the importance of nature for the development of the American nation, but simultaneously elevated the American West as the most important of all American regions. For it was in the West, Turner argued, that an over-civilized European culture reinvented itself in a heroic struggle against the forces of nature. In the decades to follow, Turner’s characterization of an American as a person of European descent that had regressed to primitive conditions in the wilderness of the American West and renewed himself to an independent, self-reliant individual developed into the most widely accepted and applauded definition of what it meant to be an American. “In the symbol of the frontier,” Harold Simonson notes, “Turner captured the emotions and visions of an entire nation” (“Frederick” 20).

However, Turner not only inaugurated an academic tradition of locating American identity in the American forest, he simultaneously initiated the founding of a new academic discipline, Western American History. By depicting the frontier as the main catalyst driving

the Americanization of European settlers, Turner claimed a new academic status for the hitherto neglected region of the American West. It was Turner's great achievement to raise awareness for the West's significance in the nation's cultural history and to launch Western American History as a new academic discipline whose discourse was mainly configured around interpreting the interaction between Americans and nature. Turner, historian Susan Rhoades Neel observes, "put nature at the center of western history.... For Turner, nature was a transforming agent, an object of Euro-American desire, a stage for the play and a metaphor for the drama's meaning" ("Place" 107-108). Accordingly, Turner's historic achievement was to have laid the foundations of Western American History and to have firmly established concepts of 'nature' as central to the discipline's discourse.

Generations of historians have since revised and criticized Turner's essay for its shortcomings—from its neglect of the role of the American Natives to its unscientific rhetoric and blatant chauvinism. However, the frontier story as encapsulated in Turner's essay has shown a remarkable resistance to the criticism directed against the ideology it transports. To this day, the frontier myth remains the central narrative in American cultural history that summarizes American attitudes towards nature as well as the meaning of the American West for American national identity. Regardless of its scientific accuracy, Turner's frontier narrative eventually "transformed into a national myth whose metaphors transcended issues of historical veracity" (Kushner, "Persistence" 54).

There are many reasons for the persistence of Turner's paradigm throughout much of the twentieth century. Undoubtedly, the strength of Turner's narrative was that it combined a variety of preceding discourses and images of highly symbolic relevance for American culture. Most importantly, Turner's essay drew from the Puritan concept of America as a paradise regained; on this religious level of interpretation, Turner's frontiersman was an American Adam, turning the desert into a garden, thereby completing the Puritan errand into the wilderness. Next to its religious components, Turner's Frontier Thesis equally drew from major political philosophies, such as eighteenth-century Jeffersonian agrarianism. According to the Jeffersonian ideal, American democracy was essentially built around a class of independent farmers. Like Jefferson, Turner stressed the argument that the availability of 'free land' to be taken into possession and developed by American settlers was the corner-stone of American democracy and that rural democracy served as an antidote to modernism as expressed in the rise of the American metropolis. Furthermore, Turner's thesis mirrored Alexis de Toqueville's argument, who interpreted American democracy as the result of the continuing exploitation of natural resources by a westward moving population. Finally, Turner's frontier narrative combined the essence of the leading discourses and concepts of his time, among others Rousseauian

primitivism, Kantian philosophy, and Darwinian biology. The frontier narrative as presented by Turner is thus more than an interpretation of the nation's Western past. It is a heroic narrative of epic dimensions, synthesizing the main themes of American cultural history into one coherent plot that functions to explain American identity, at the heart of which is Americans' relationship to the land. The synthesizing qualities of Turner's essay mainly explain the success of the frontier paradigm in American culture.

Despite increasing challenges of Turnerian frontier historiography from within American academia since World War II, the American West and the mythic stories and icons associated with it continue to occupy a central position in American culture. "A dominant factor in our national heritage, the frontier is omnipresent in this country's popular culture," Ronald H. Carpenter notes ("Frederick" 117). In the popular imagination, the American West is alive with a myriad of images and folk heroes, all of which are associated with principal American values: freedom, independence, self-reliance. The mythic West thus shows a remarkable resistance against all revisions and challenges and continues to function as the national repository of American identity. As historian Arthur Schlesinger, Jr. writes, "the West still remains vital to our understanding of the republic—and of ourselves as Americans" ("Agenda" 17). Located in the mythic West, the frontier narrative is arguably the most powerful and the most enduring of all American myths. "Although the myth of the Frontier is only one of the operative myth/ideological systems that form American culture," Richard Slotkin observes, "it is an extremely important and persistent one" (*Fatal* 15). According to popular opinion, the mythic West offers the essence of what it means to be American. As Californian writer Wallace Stegner once put it, the West is "America only more so" ("Variations" 103). Accordingly, to understand the frontier myth is to understand American identity and to understand the frontier myth, one essentially needs to understand Americans' relationship to nature.

In this dissertation, I want to examine the concepts of 'nature' that have dominated Western American Historiography from Frederick Jackson Turner to the New Western History, a group of historians that have promoted a radical revision of Turnerian frontier historiography since the late 1980s. Whereas the American West as portrayed by the frontier myth is a place of freedom and opportunity, the New Western Historians highlight the more negative aspects of the region's past and do not refrain to counter-portray the mythic West as a land of oppression, exploitation, and failure. For the New Western Historians, the 'winning of the West' was not a peaceful march of progress that turned the wilderness into a blooming garden as myth would have it, but rather an imperial act of violent conquest that went hand in hand with the exploitation of the native population and nature alike. Turner's frontier paradigm, the New Western Historians argue, has contributed considerably to the mystification of the American

West as a place of grand ideals and heroic stories and has thus prevented a more down-to-earth, historically accurate understanding of the region's history.

Although the New Western Historians reexamine traditional frontier historiography via a number of analytical categories such as race, class, and gender, I argue that the most central category of analysis among the New Western Historians is the environment. As I will illustrate, the leading protagonists of the New Western History such as historians William Cronon, Richard White, and Donald Worster are all environmental historians who examine the relationship between humans and their environment and write against the mythic West by taking a new, more critical look at the way Americans perceived and transformed nature. Just as 'wilderness' functions as the central point of reference in the Old Western History, the New Western Historians try to rewrite the history of the American West by taking a second, more critical look at Americans' relationship with nature. As Cronon, White, and Worster argue, a demystified understanding of American history needs to evolve out of an environmental analysis of Americans' relationship to the land. In order to provide such an environmental analysis of American history, the New Western Historians examine the concepts of 'nature' that have determined American cultural history and have served as the basis for the transformation of the continent. "Understanding the western past," Donald Worster writes paradigmatically, "must always begin with understanding the land itself, or what today we ambiguously call 'the environment'" ("Rediscovering" 103). In this sense, Western American History as practiced by the New Western Historians is to a great extent environmental history.

As a new academic discipline, environmental history emerged during the late 1970s in the context of a growing awareness among Americans for environmental issues and the formation of the environmental movement. Studying the interaction of humans and the environment over time, environmental history was at its outset an academic discipline that was influenced by the political agenda of the environmental movement to protect the environment from human abuse. As the field matured and its theoretic foundations became more sophisticated throughout the 1980s, American environmental historians applied research methods and models from neighboring sciences like, among others, ecology, biology, and geology to investigate human transformations of the North American continent prior to and after the arrival of white people. Especially the ecological changes resulting from the expansion of European and Anglo-American systems of land use and the definitions of 'nature' these agricultural systems were based on were in the focus of many of the best achievements in environmental history of this period. These environmental studies were often made up of a strong regional focus on specific environments of the American West. Accordingly, the agendas

of Western American History and American Environmental History increasingly merged, sharing 'nature' as their main subject of analysis.

Among the New Western Historians, William Cronon, Richard White, and Donald Worster represent the fusion of Western American History and American Environmental History most tellingly. Of the three, Donald Worster is arguably the most outspoken environmentalist and the harshest critic of American concepts of 'nature' as they determined the transformation of the continent. According to Worster, the conquest of the American continent by European cultures is the most negative example of environmental mismanagement and degradation in recent human history. As Worster writes, "no people went through an environment faster, and more destructively and more wastefully than Americans have gone through North America" (qtd. in Pristin, "Taming"). Accordingly, Worster places the history of the American West in the much larger history of Western capitalism and examines capitalism's detrimental impact on the environment. In contrast to the competitive capitalist value system, Worster promotes the idea of an egalitarian society, whose cultural basis is the recognition of the existential interdependence between humans and their natural environment; such egalitarian societies, Worster is convinced, would be characterized by a less domineering attitude towards nature than capitalism.

Simultaneously, Worster's environmental histories are not only marked by a fundamental rejection of the value system driving American capitalism, but also by a profound distrust towards contemporary discourses such as postmodernism, which question and undermine the material, graspable reality of nature. "Among the New Western Historians," Gerry Kearns correctly observes, "none has been more explicit about the normative basis of their categories than Worster" ("Virtuous" 386). Rejecting postmodern discourse theory as detrimental to environmental protectionism, Worster is the most value conservative, but at the same time most interesting New Western Historian. Although his anti-postmodern, rigidly environmental stance has made Worster a highly unfashionable subject of study during the heyday of postmodernism in the 1990s, I believe Worster's environmental histories receive renewed meaning as the impact of global warming increasingly influences our lives. As global climate changes for the worse, the critical reinvestigation of humankind's relationship to nature that Worster demands seems timely. In "The Wealth of Nature," Donald Worster summarizes his position on the subject as follows:

The ecological crisis we have begun to experience in recent years is fast becoming the crisis of modern culture, calling into question not only the ethos of the marketplace or industrialism but also the central story that we have been telling ourselves over the past two or three centuries: the story of man's triumph by reason over the rest of nature. (218)

Climate change, Worster rightly points out, will undoubtedly pose great challenges for the world's cultures in the decades ahead and our efforts to come to terms with these challenges will surely result in the emergence of new paradigms—economic, environmental, or other—and in the decline of old paradigms that hitherto dominated western culture. Most notably, the western preoccupation with the postmodern focus on discourse and semantics will increasingly be replaced by a new awareness for all things material as floods, droughts, hurricanes, and species shifting challenge the ways of human life on the planet. Aside from the changes triggered by 9/11 and the 'war on terrorism' in the global political architecture, it will thus very likely be ecological issues that will determine the future of the global community. I believe this trend to be reflected by a new awareness for ecological issues in the humanities. As Leo Marx points out, "recent years have shown a steady movement by humanists toward sustained analysis of environmental issues" ("Environmentalism" 28). In this context, the ambition of this dissertation is not only to outline the role of 'nature' in Western American history, but to outline more generally the relevance of environmental history as an important approach to interpreting human history.

In the opening chapter of this dissertation, I will outline the evolution of Western American History from Frederick Jackson Turner to the 1980s. Starting by recapitulating Turner's "The Significance of the Frontier in American History," I will especially outline Turner's notion of 'environmental determinism,' the idea that American values and institutions—most notably a genuine American definition of democracy—have been shaped by the geophysical characteristics of the continent. Furthermore, I will characterize Turner's Frontier Thesis as a legitimization of 'American exceptionalism,' a central idea in American culture that portrays the development of the American continent as a unique chapter in world history—especially in rigid separation from European history. Turner's main achievement as a historian, I will point out, lies in characterizing the United States as a unique democracy, whose supposedly genuine American values have been generated by the frontier experience in the wilderness of the American West.

In a second step, I will summarize the main paradigms that shaped Western American historiography after Turner up to the emergence of the New Western History in the 1980s. I will mainly concentrate on summarizing the contributions of those historians who elaborated on Turner's theme and added new insights to the environmental analysis of the American West, most notably Walter Prescott Webb, James C. Malin, and Earl Pomeroy. By doing so, I will trace the development of Western American History after World War II, from its initially strong position to its decline during the Vietnam era. In a final step, I will outline how environmental

history emerged during the 1970s in the context of the strengthening of the American environmental movement. I will define environmental history as a discipline that—oscillating between a morally driven urge to protect nature from human manipulation and a scientific urge to use the methods of ecology to better understand the human-nature relationship—rejects the traditional primacy of person-oriented historiography. Elevating nature to an agent in historical processes, environmental historians seek to erase the traditional boundary in Western culture between the sphere of nature and the sphere of humans and outline the ways in which nature and human society have shaped each other. “[Environmental History’s] goal is to deepen our understanding of how humans have been affected by their natural environment through time,” Donald Worster summarizes, “and conversely and perhaps more importantly in view of the present global predicament, how they have affected that environment and with what results” (“Transformations” 1089). I will finally show how environmental history eventually contributed to the revival of Western American History during the 1980s, thereby contributing to the emergence of the New Western History.

In the second chapter, I will portray the New Western History as a revisionist school of American historians who—in contrast to traditional frontier historians—reject the interpretation of the American West as the cradle of American exceptionalism and rather relocate the history of the West in the broader context of European colonialism. Whereas Turner had defined the democratic identity of the United States specifically in contrast to feudal, aristocratic Europe, the New Western Historians place the history of the American West back into the context of European imperialism and the expansion of European markets. “The frontier that Turner portrayed as ‘isolated,’” William Cronon summarizes the revisionist perspective of the New Western Historians, “was instead part of the worldwide expansion of European economies and nation-states that traced back to the fourteenth century and before” (“Becoming” 8-9).

Focusing on the imperialist legacy in the region’s history, the New Western Historians replace Turner’s positivistic vocabulary with more negative terms, expressing their decidedly more critical outlook on the West’s past. “To characterize the process that shaped the region, new western historians have available a number of terms—invasion, conquest, colonization, exploitation, development, expansion of the world market,” Patricia Nelson Limerick summarizes representatively the revisionist angle of the New Western Historians (“What” 85-86). For the New Western Historians, the American West is thus not the place of origin of a genuine American definition of democracy and freedom, but rather an imperial battleground over power of competing groups of people. As I will outline, the New Western Historians’ critical approach towards traditional American

frontier ideology resonates with the political agenda of the 1960s counter-culture, especially that of the New Left.

After a general introduction of the New Western Historians' main analytic categories—race, class, gender—and their main topics—regionalism, imperialism, capitalism, and multiculturalism—I will in a second step outline the specific role environmental history plays in the New Western History. Of the four leading New Western Historians—Patricia Nelson Limerick, William Cronon, Richard White, and Donald Worster—all but Limerick are to be considered environmental historians. In contrast to Turner's celebration of Americans' relationship to nature, Cronon, White and Worster take a much more critical look at the way Americans have perceived and treated their natural environment. The environmental histories of Cronon, White, and Worster are culturally significant, I claim, as they undermine the founding myth of the American nation as being rooted in an ideal nature, more specifically in an idealized *relationship* to nature. Simultaneously, the New Western Historians reject the scientific accuracy of central terms and concepts like 'wilderness,' 'pristine nature,' or 'frontier' around which traditional frontier historiography has been configured; in contrast, the New Western Historians argue that traditional concepts of the American continent as pristine nature are Eurocentric perceptions that deny the impact Native Americans had on the environment.

In my presentation of the New Western History as environmental history, I will especially outline the three different levels of analysis environmental historians operate on: The study of ecosystems over time, the study of human interactions with nature in specific societies, and the semantic study of human perceptions of nature. As I will show, Worster puts the emphasis of his environmental histories on the second level of analysis and Cronon and White emphasize the semantic third level of analysis. I will conclude my introduction to the New Western History by providing a summary of the critical debate that accompanied the emergence of the revisionist school, both within and outside of academia. By outlining the critical voices that argued against the New Western Historians, I will simultaneously set the stage for my case study of Donald Worster's writings in the chapter to follow.

In the third chapter, I will analyze in detail how Donald Worster reinterprets the history of the American West from an environmental perspective. In a first step, I will outline Worster's theory of American capitalism, a position he summarizes as 'antimaterialistic materialism.' Worster's criticism of capitalism highlights the material reality of nature as a relevant factor in American history and examines how the American capitalist value system has affected the environment. Worster's criticism is especially directed against the American glorification of 'progress,' which he believes to be linked to a utilitarian misconception of 'nature' as a passive, controllable entity to be exploited for profit maximization. Unlike Marxian criticism, Worster's

reading of American capitalism does not highlight the exploitation of human labor, but rather the exploitation of natural resources as the central aspect of capitalism. Criticizing the neglect of 'nature' as an analytic category in Marxian theory, Worster instead builds his analysis of American capitalism on the theories of the Frankfurt School, especially Adorno and Horkheimer's theory that the human rule over nature inevitably leads to the rule of human beings over other human beings. The human relationship towards nature as established under the rule of the capitalist ethos of profit maximization, Worster argues, triggers totalitarian societies. In radical opposition to Turner, who had explained the free, democratic character of American society through its special relationship to nature, Worster claims that Americans' belief in progress and human domination over nature has in reality produced strongly hierarchical societies. Hence, Worster's environmental histories of the American West are not merely examining a distinctly American relationship between humans and nature, but are simultaneously studies on power structures in American society.

Following the introduction of Worster's theory of capitalism, I will examine in the following two subchapters how Worster combines his theories on environmental history and capitalism in order to re-examine the history of the American West. Worster believes that the specific geophysical realities of the American West, most significantly aridity, have prevented the easy transfer of European modes of agriculture to the region. Worster argues that American culture has developed two distinct capitalist modes of production that are only to be found in the American West, the 'hydraulic mode' and the 'pastoral mode.' Following the theories of German historian Karl August Wittfogel, Worster defines the hydraulic mode as a form of water management that produces a water-owning and water-controlling elite and is typical of societies living in arid conditions. Worster's analysis of how the hydraulic mode of production operates is thus an investigation into the relationship of water and power in the American West.

Worster's definition of the pastoral mode of production in turn denotes a specific form of agriculture and ranching to be found on the Great Plains. In contrast to the Jeffersonian ideal of America as a democracy being built around a class of independent farmers, Worster claims that the pastoral mode of production has resulted in forms of environmentally unsustainable practices of agriculture and farming that are governed by the monopolistic concentration of power in large companies and in the federal government. Worster uses his definitions of the hydraulic and the pastoral mode of production to sustain his argument that the relationship Americans have established to nature has produced a society of monopolies and oligarchies that is in rough contrast to the mythic West of freedom, individualism, and democracy. As Worster uses the Dust Bowl phenomenon of the 1930s as a showcase for his theories, I will outline his reading of

this environmental catastrophe at length in order to illustrate how Worster puts his theories to work.

In the final, fourth chapter, I will critically discuss Donald Worster's concept of 'nature.' As I will outline, Worster's work as an environmental historian depends on the definition of nature as a material referent, whose human-induced transformations can be measured and categorized in order to evaluate historical processes from an environmental perspective. Presupposing an inherent order in the greater economy of nature, Worster's concept of 'nature' thus ultimately serves to judge human actions by the degree to which they interrupt the order of nature. My analysis of Worster's concept of 'nature' will thus focus on the idea of 'order' and 'balance' in nature, which I believe to be central to Worster's environmental histories. Worster's definition of nature, I will show, embraces older concepts of 'nature' organized in stable, linear ecosystems and is opposed to contemporary scientific paradigms such as chaos theory and quantum physics, which highlight the disorderly, nonlinear aspects in nature. Similarly, Worster rejects the various discursive paradigms in the humanities that have been summarized under the label 'postmodernism.' As I will outline, Worster believes that postmodernism promotes a relativism that is detrimental to his overall cause to protect nature from further human corruption. I argue that Worster's environmentalist ambition to protect nature from human degradation necessarily involves a concept of 'nature' as a pre-cultural entity, a higher order which exists independent of human signification. Such a concept of 'nature,' I argue, is in opposition to the relativization of historical knowledge in the postmodern discourses.

Overall, I hope to show that Donald Worster—although employing concepts of 'capitalism' and 'nature' that can be considered value-conservative or outdated if measured against the mainstream of contemporary discourse—belongs to the most noteworthy historians of the American West. Focusing on the demystification of Americans' relationship to nature, Worster's work is at heart always a criticism of the core American myth, the ideology that depicts America as an ideal nation of new beginnings, a land where human beings shed the trappings of their past and start over again by regenerating themselves in the continent's wild nature. As Worster's environmental histories suggest, neither the American relationship to nature, nor American society is as ideal as the frontier myth suggests.

*“Whatever be the truth regarding European history,
American history is chiefly concerned with social forces,
shaping and reshaping under the conditions of a nation changing
as it adjusts to its environment.”*

Frederick Jackson Turner
“Social Forces in American History”

I. From Wilderness to Environment – Western American History’s First Century

I.1 Frederick Jackson Turner’s Frontier Thesis and the Birth of Western American History

Although it has become increasingly unfashionable among Western American historians to applaud Frederick Jackson Turner’s achievements as a historian, his essay “The Significance of the Frontier in American History” is undoubtedly a landmark in American history writing. First presented by Turner at age 32 during the World Columbian Exposition in Chicago on July 12, 1893, his Frontier Thesis marks the birth of Western American History, the inauguration of a new, specialized sub-discipline within the American historical profession. It was the success of Turner’s frontier paradigm that turned the hitherto neglected American West into a respected subject of analysis among historians. Turner was the first historian to argue in a scientific manner that of all American regions, the West had had the most decisive impact on the development of the American nation and that the settlement of the West had thus to be understood as the most relevant chapter in American history. Although many had drawn attention to the meaning of the frontier in American culture before, the young historian from the Midwest was the first to outright claim that the frontier experience explained the development of American society as a whole.⁴ The success story of Turner’s essay is thus at the same time the story of how the trans-Mississippi West entered American history books.

Catering to patriotic sentiments among contemporary Americans who felt that the recently witnessed ‘conquest of the West’ was the glorious achievement of a young and sturdy nation, Turner’s Frontier Thesis evolved soon after its publication as the key paradigm in American historiography and enjoyed great popularity far beyond the realm of academia.⁵ By the time Turner became chair of Harvard University’s history department and the president

⁴ It has been widely acknowledged that Turner’s argument as presented in 1893 was not entirely new, but was rather an elaborate synthesis of popular notions about the West at the time. “I think you have struck some first-class ideas, and put into definite shape a good deal of thought that has been floating around rather loosely,” President Theodore Roosevelt commented on Turner’s essay (qtd. in Faragher, *Rereading* 230). Similarly, Richard White notes that “Turner did not have to tell Americans about the frontier; he could play off of images they already knew” (“Buffalo” 12).

⁵ The success of Turner’s Frontier Thesis was not as automatic or immediate as suggested here. As Turner-biographer Ray Allen Billington and other scholars have noted, Turner’s essay did not make an immediate impression on his audience when first presented, nor did its reputation evolve effortlessly following the Chicago meeting. Rather, Turner had to promote his argument relentlessly in order to achieve the desired awareness and publicity. As legend has it, Turner purchased hundreds of prints and circulated them not only within academia, but also among prominent members of the nation’s intellectual elite. “I found it necessary to hammer pretty hard and pretty steadily on the frontier idea to get it in,” Turner later confessed (qtd. in Faragher, “Nation” 3).

of the American Historical Association in 1910, his frontier argument had become the commanding view within the American historical profession. Such was the impact of the Frontier Thesis that it held its almost unrivalled position for more than half a century. “Turner’s thesis helped reorient American historical writing,” Richard W. Etulain evaluates the impact of the Frontier Thesis, “providing a new way to define American identity and laying out a fresh method by which to interpret the frontier and the American West” (“Frontier” 4). The fact that Turner’s essay catered to the patriotic sentiments of its contemporary readership undoubtedly helped its eventual status as “the single most influential piece of writing in the history of American history,” as John Mack Faragher phrases it (“Nation” 1). To this day, Turner’s frontier paradigm holds an exceptional status within American historiography that no other academic publication has achieved ever since.

When Frederick Jackson Turner first presented his essay “The Significance of the Frontier in American History” in 1893 in Chicago, he could hardly have chosen a better place and timing.⁶ For Americans, Chicago was more than a city, it was a national icon representing the young nation’s virility, strength, and ingenuity, its astonishingly rapid conquest of the North-American continent, and its seemingly unstoppable rise to a political and economic world power. Where only a human lifespan before there had merely been a few fur trader posts in the middle of what Americans perceived to be an otherwise untouched wilderness, there was now the ‘White City,’ the fastest-growing metropolis in the Mid-West. “No other city in America had ever grown so large so quickly, none had so rapidly overwhelmed the countryside around it so quickly to create so urban a world,” William Cronon describes the city’s early development in his history of Chicago, *Nature’s Metropolis* (9). Chicago’s insignia of metropolitan urbanism—skyscrapers, train stations, theaters, ports, and the famous stock market—sent a clear, highly symbolic message to the visitors of the World Columbian Exposition: Within a few decades only, Americans had succeeded in taming the ‘wild West.’ “Chicago’s magical growth was, in microcosm, the story of America,” historian Brian W. Dippie summarizes Chicago’s symbolic power (“American” 113). For fin de siècle Americans, Chicago thus symbolized the success story of the nation as a whole.

⁶ For details regarding the setting of Turner’s first presentation of the Frontier Thesis, consult especially Lee Benson, “The Historical Background of Turner’s Frontier Essay,” *Agricultural History* 25 (1951): 59-82; Brian W. Dippie, “American Wests: Historical Perspectives,” *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 112-36; John Mack Faragher, “A Nation Thrown Back Upon Itself”: Frederick Jackson Turner and the Frontier,” *Rereading Frederick Jackson Turner: “The Significance of the Frontier in American History” and Other Essays*, ed. John Mack Faragher (New York: Henry Holt and Company, 1994): 1-10; Richard White, “Frederick Jackson Turner and Buffalo Bill,” *The Frontier in American Culture*, ed. James R. Grossman (Berkeley, Los Angeles: U of California P, 1994): 7-65, and “When Frederick Jackson Turner and Buffalo Bill Both Played Chicago in 1893,” *Does the Frontier Experience Make America Exceptional?*, ed. Richard W. Etulain (Boston, New York: Bedford / St. Martin’s, 1999): 46-57.

In the highly symbolic setting of Chicago's Columbian Exposition, Turner presented his essay at the annual meeting of the American Historical Association in the form of a social theory that characterized the settlement of the West as the key experience in the evolution of the American nation. "Up to our own day," Turner declared in his introduction, "American history has been in a large degree the history of the colonization of the Great West" ("Significance" 31). The colonization of the West, Turner argued, centered in essence around the transformation of the continent's 'wilderness' into a genuinely American 'civilization.'⁷ To understand the genesis of the American people, Turner continued his argument, historians had to study the gradual occupation of the West's 'free land' as settlers moved westward across the continent. "The existence of an area of free land, its continuous recession, and the advance of American settlement westward, explain American development," Turner declared in the most famous sentence of his essay ("Significance" 31). The transformation of 'free land' into colonized land, Turner claimed, was the key process in American nation-building. Turner argued that this process of transforming wild land into civilized land had been taking place along the frontier, which he defined as "the meeting point between wilderness and civilization" ("Significance" 32).⁸

Equally important, Turner argued that while settlers conquered the wilderness, they simultaneously had to adapt to the conditions of the wild country. Turner, who strongly believed in environmental determinism—the idea that the specific composition of any given natural environment decisively shapes the development of societies inhabiting this environment—thus defined the process of settling the West as a reciprocal one: Just as the land had to give in to the civilizing force of the settlers, the settlers, in turn, had to succumb to the geophysical conditions of the frontier. This reciprocal act of transformation taking place between settlers and the land, Turner argued, was the key process that had shaped and defined the character of the American people. As this process of transformation and adaptation had been taking place in the wild areas of the American West, Turner concluded that of all the nation's regions, the American West had had the most decisive influence on the development of the American people. Hence, Turner believed that the American West was the cradle of a genuine American civilization.

⁷ Turner nowhere clearly defined the term 'wilderness.' For Turner's purpose of portraying the West as the cradle of American national identity, it was sufficient to generalize the West's nature simply as 'wilderness,' a vague entity of untamed nature, which functioned initially as an obstacle to civilization, but was eventually overcome by the progressive forces of humanity. Similarly imprecise was his definition of the American West, whose exact location and characteristics Turner did not specify.

⁸ In accordance with census statistics, Turner defined the 'frontier' as "the margin of that settlement which has a density of two or more to the square mile" ("Significance" 33). However, Turner used the term rather vaguely, referring to the frontier sometimes as 'meeting point,' sometimes as a 'demarcation line,' or sometimes as 'waves of settlement' that spread across the continent. As historian Allan Bogue criticizes, Turner's "frontier was sometimes boundary, sometimes region, sometimes historical era, and sometimes process" ("Frederick" 214). Turner explicitly admitted to his vague use of the term 'frontier' in his essay, stating that the term "is an elastic one, and for our purposes does not need sharp definition" ("Significance" 33).

Highlighting the significance of the American West in the nation's development, Turner challenged the two major paradigms that had hitherto dominated the American historical profession. The first paradigm was associated with the teachings of Professor Hermann Eduard von Holst, who interpreted American history in the context of the slavery controversy and stressed the impact of the South on the nation's history. The second paradigm was promoted by Turner's former teacher, Herbert Baxter Adams of Johns Hopkins University, whose 'germ theory' explained American institutions as the outgrowth of English—or rather ancient Teutonic—germs planted in the New World and focused on their development in the East Coast states. Turner explicitly contradicted both von Holst and Adams by arguing that the West, not the East or the South, was the most important region in American history.

Adams had argued for the persistent European influence on American institutions as the nation evolved and declared that "it is just as improbable that free local institutions should spring up without a germ along American shores as that English wheat should have grown there without planting" (qtd. in Claviez, "Ideology" 567). Adams' interpretation of American society as an outgrowth of European society is tellingly summarized by William Coleman:

[The proponents of the germ theory] declared that social germs were translated from the forests of medieval Germany to England, and at a later date this same self-perpetuating association of people and institutions crossed the Atlantic and germinated in the rich soil of the New World. These admirable Aryan germs, it was claimed, were the real cause of American liberties and democracy. Virile Anglo-Saxons came to agree that genuine democracy and bold individualism had originated in the remote German forests. The American experience was therefore nothing truly extraordinary, being but the unfolding of the familiar Teutonic germ in a new land. ("Science" 26)

According to this perception, American society had to be understood as a variant of European culture. American democracy was modeled after its European antecedents, Adams argued, and accordingly the American nation did not represent a genuinely new body politic.

Turner, in contrast, believed that the germ theory's focus on the European heritage in American culture was misleading, as it neglected the unique American experience of settling a wild continent. "Too exclusive attention has been paid by institutional students to the Germanic origins, too little to the American factors," Turner contradicted Adams ("Significance" 59). American institutions, Turner declared, were not so much modeled after European institutions, but had rather successively been adapted to the needs of settlers as they moved westward across the continent. "The peculiarity of American institutions," Turner wrote,

is the fact that they have been compelled to adapt themselves to the changes of an expanding people—to the changes involved in crossing a continent, in winning a wilderness, and in developing at each area of this progress out of the primitive economic and political conditions of the frontier into the complexity of city life. (“Significance” 31-32)

According to Turner’s interpretation, frontier conditions had fostered Americans’ strong sense of freedom, individuality, and self-reliance and had thus provided the basis for a genuine American democracy. “The frontier is productive of individualism,” Turner wrote and concluded that “frontier individualism has from the beginning promoted democracy” (“Significance” 53).

Turner based his argument on the assumption that frontiers were places distant from federal or state authority and hence promoted a form of self-reliance and individualism in settlers that ultimately resulted in a distinctly anti-authoritarian mindset. The frontier, Turner declared, “produces antipathy to control, particularly any kind of direct control” (“Significance” 53). Turner believed this antipathy to centralized authority to be at the heart of American democracy. In “Contributions of the West to American Democracy,” published in 1896, Turner reiterated the central political statement expressed in the Frontier Thesis. The frontier experience, Turner wrote,

gave to the pioneer farmer and city builder a restless energy, a quick capacity for judgment and action, a belief in liberty, freedom of opportunity, and a resistance to the domination of class which infused a vitality and power into the individual atoms of this democratic mass. Even as he dwelt among the stumps of his newly-cut clearing, the pioneer had the creative vision of a new order of society. (95)

To understand the evolution of American democracy, Turner argued, one had to study America’s frontier history. Following the idea that frontier conditions had promoted a genuine American democracy, Turner drew a rigid line between the Old and the New World by depicting Europe as feudal and aristocratic and America as free and democratic. Accordingly, Turner’s interpretation of American democracy was fundamentally at odds with Adams’ germ theory.

Similarly, Turner contradicted van Holst, who highlighted the South’s impact on American democracy. Whereas van Holst argued that the emancipation from slavery had been the most crucial chapter in American history due to its impact on the meaning of ‘freedom’ in American culture, Turner claimed that it was again the West that had challenged and finally obliterated the slavery system. “Even the slavery struggle, which is made so exclusive an object of attention by writers like Professor von Holst,” Turner reasoned, “occupies its important place in American history because of its relation to westward expansion” (“Significance” 32). As the slavery debate had received its decisive dynamic when the pro or contra slavery status of new states to be admitted to the union was at stake, Turner implied that the abolition of slavery had to

be traced back to westward expansion and the democratic impact of frontier settlements on the nation as a whole. “The free pioneer democracy struck down the slave-holding aristocracy on its march to the West,” Turner later stated in “Contributions of the West to American Democracy” (89). Believing that the theories of both Adams and von Holst were misleading, Turner declared that “the true point of view in the history of this nation is not the Atlantic coast, it is the Great West” (“Significance” 32).

Not surprisingly, the American character traits Turner linked to the frontier experience were in sharp contrast with the stereotypes most commonly associated by his contemporaries with Europe. Whereas Europe represented for many Americans an old, weak, feudal, and decadent culture, Turner portrayed the American nation as young, strong, democratic, and pragmatic and located the origin of its best assets in the frontier experience:

To the frontier the American intellect owes its striking characteristics. That coarseness and strength combined with acuteness and inquisitiveness; the practical, inventive turn of mind, quick to find expedients; that masterful grasp of material things, lacking in the artistic but powerful to effect great ends; that restless, nervous energy; that dominant individualism, working for good and for evil. (“Significance” 59)

For Turner, Americans were people of European descent that had regenerated themselves in the wild. When Turner writes that Americans lack in the “artistic,” he sets up an implicit dichotomy, which is crucial for an understanding of the text. Whereas Europeans were according to Turner ‘artificial,’ Americans were ‘natural.’ Turner thus contrasts Americans as the pragmatic, juvenile, energetic children of nature with a decadent, over-civilized European culture. Nature as encapsulated in Turner’s ‘wilderness’ concept is thus characterized as an antidote to the corrupting influences of civilization.⁹ William Cronon summarizes the regenerative function of nature in Turner’s essay as follows:

Easterners and European immigrants, in moving to the wild unsettled lands of the frontier, shed the trappings of civilization, rediscovered their primitive racial energies, reinvented direct democratic institutions, and thereby reinfused themselves with a vigor, an independence, and a creativity that were the source of American democracy and national character. Seen in this way, wild country became a place not just of

⁹ As Richard Slotkin has illustrated at length in *Regeneration Through Violence: The Mythology of the American Frontier, 1600-1860* (New York: Harper, 1996), Turner’s portrayal of the American wilderness as a regenerative force is embedded in a larger American cultural tradition of defining America as a place of new beginnings and interpreting the ‘wilderness’ as a catalyst in this process of initiation. Slotkin’s *Regeneration through Violence, Fatal Environment: The Myth of the Frontier in the Age of Industrialization, 1800-1890* (New York: Harper, 1994) and *Gunfighter Nation: The Myth of the Frontier in Twentieth-Century America* (New York: Atheneum, 1992) are equally instructive about the role of the frontier and the wilderness myth in American culture.

religious redemption but of national renewal, the quintessential location for experiencing what it meant to be an American. (“Turner’s” 76)

At the heart of Turner’s frontier interpretation is thus the concept of nature as a catalyst, an archaic, cleansing force that forces European settlers to succumb to the wilderness condition and abandon their cultural heritage. Simultaneously, Turner’s nature-culture opposition is aligned along a second pair of opposites, West and East, America and Europe.

Turner’s image of wild nature as a regenerative force and his usage of key terms in the Frontier Thesis such as ‘regression,’ ‘evolution,’ ‘adaptation,’ ‘birth,’ and ‘rebirth’ indicate the extent to which both his logic as well as his rhetorical style were indebted to Darwin’s *On the Origin of Species by Means of Natural Selection*, published in 1859. In analogy to Darwin’s description of the evolution of non-human biologic organisms, Turner understood society as a social organism, determined by its natural environment. Turner believed that human societies, just like their animal counterparts, evolved through differentiation and natural selection to forms of ever-higher complexity. Turner best expressed his Darwinian interpretation of American society in his essay “The Problem of the West,” published in 1896:

The history of our political institutions, our democracy is not a history of imitation, of simple borrowing; it is a history of the evolution and adaptation of organs in response to changed environment, a history of the origin of new political species. (62)

For Turner, the evolution of American society represented the latest and hence most advanced form of social cooperation in human history.

According to Turner, the initiation of American society began with “a return to primitive conditions on a continually advancing frontier line,” a process of regression among settlers to a primitive mode of life in frontier areas (“Significance” 32). Turner portrayed nature as the historical agent driving this process of social regression: “At the frontier the environment is at first too strong for the man. He must accept the conditions which it furnishes, or perish” (“Significance” 33-34); or, as Turner stated in Spencerian language: “The wilderness masters the colonist” (“Significance” 33).¹⁰ Once the settlers’ cultural heritage, their ‘cake of custom’ had been broken by this act of social regression, the process of regeneration and Americanization could begin. As both regression and regeneration were triggered by frontier conditions, Turner concluded that “the frontier is the line of most rapid and effective Americanization” (33).

¹⁰ Unlike Darwin, Turner never clearly specified the exact characteristics of the environment he believed to have had such a crucial influence on American society. As William Coleman notes, “[Turner’s] metaphor of the social organism suggested the inner vitality of society and its responsiveness to external influences.... While the metaphor thus discloses much of Turner’s understanding of the structure and adaptability of society, it tells little of his conception of ‘environment,’ above all, the American environment” (“Science” 43).

Based on Darwin's theory, Turner perceived the transformation of Europeans into Americans as a repetition of larger evolutionary patterns. The course of human evolution, Turner believed, repeated itself all over again in a condensed time frame along the American frontier. The conquest of the West as portrayed by Turner was thus a process of epic proportions that found its heroic conclusion in the birth of American society, the highest form of social organization ever achieved in human history.¹¹

Apart from the Darwinian, biologic interpretation of nature's role in American history, Turner added an economic dimension to his thesis by arguing that the availability of large quantities of 'free land' in the West had functioned as the material basis for the development of American democracy. In Europe, Turner claimed, the political dependence of the common people was the result of their economic dependence on a land-owning aristocracy. Accordingly, Turner believed that the 'free land' of the American West and its natural resources like oil, timber, and metal, guaranteed Americans' political freedom by providing the basis of their economic independence. For Turner, economic and political independence went hand in hand. "So long as free land exists, the opportunity for a competency exists, and economic power secures political power," Turner declared ("Significance" 55).¹² Based on the idea that the availability of 'free land' stabilized American social relations, Turner eventually developed the so-called 'safety-valve theory.'¹³ According to this theory, social tensions between classes could be mitigated in America as long as the resources of the American West's hinterlands provided economic opportunities for immigrants who arrived in ever-larger numbers in American cities. Turner believed that without the West's economic opportunities, which attracted newcomers from the coastal regions of the East, economic tensions and social conflicts would sooner or later arise in the East's urban centers.

Underlying Turner's safety-valve theory is a rigid dichotomy between rural and urban spaces. Drawing from existing anti-modern sentiments and anxieties regarding America's rapid

¹¹ Turner's worldview was in general strictly progressive. According to Turner's understanding, humankind "advances by spiral progress, each step is higher than the one proceeding it" (qtd. in Wächter, *Erfindung* 13). For an analysis of Turner's progressive philosophy, see especially Richard Hofstadter and Seymour Martin Lipset, eds., *Turner and the Sociology of the Frontier* (New York: Basic Books, 1968).

¹² Turner's free-land-theory draws from the ideas of political economists like Richard T. Ely and the Italian scholar Achille Loria. For an analysis of Achille Loria's influence on Turner, see especially Lee Benson, "Achille Loria's Influence on American Economic Thought, Including His Contribution to the Frontier Hypothesis," *Agricultural History* 24 (1950): 182-99. Furthermore, Turner's Frontier Thesis arguably resonates with Adam Smith's economic theory as put forth in *The Wealth of Nations* in 1776. Smith claimed that to secure a nation's wealth, a "system of natural liberty" must be provided by government, in which "every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest in his own way, and to bring both his industry and capital into competition with those of any other man, or order of men" (qtd. in Worster, "Wealth" 215). Claiming that America was a free society due to the 'free' natural resources it offered, Turner simply reversed Smith's argument.

¹³ For an analysis of Turner's safety-valve theory, see especially Mark Bassin, "Turner, Solovev, and the 'Frontier Hypothesis': The Nationalist Signification of Open Spaces," *Journal of Modern History* 65.3 (1993): 473-511.

urbanization and the quick rise of American industrial capitalism, Turner depicted the frontier as a distinctly anti-urban, anti-modern place. “Anxiety about modernity fueled fears of the city as it romanticized rural life, whose purest form took shape on an imagined frontier,” Howard Kushner summarizes the cultural tension between urban and rural spaces in American culture in Turner’s days (“Persistence” 58). As Kushner suggests, Turner built the rhetorical impact of the Frontier Thesis around widespread feelings of nostalgia in fin-de-siècle America regarding the nation’s passing frontier days.

Turner’s frontier paradigm is thus characterized by a paradox celebration of two opposing forces: Whereas Turner’s Frontier Thesis on the one hand celebrates civilization’s march of progress across the continent, it on the other hand simultaneously celebrates the primitive, regenerative powers of the American wilderness. If one follows Turner’s logic as expressed in the dichotomy he creates between natural and cultural, urban and rural, western and eastern spaces, the American West represents the very antithesis to the civilizing influence of all urban spaces, be it European or American. According to Turner’s logic, regeneration took place in nature and degeneration took place in civilization. “If one saw the wild lands of the frontier as freer, truer, and more natural than other, more modern places,” William Cronon summarizes Turner’s anti-urban sentiment, “then one was also inclined to see cities and factories of urban-industrial civilization as confining, false, and artificial” (“Trouble” 77).¹⁴ The Frontier Thesis was built around a striking paradox, an inherent logic conflict. If, as Turner believed, American democracy had been born in the American wilderness while the triumphant progress of American civilization had simultaneously transformed this wilderness into cultural spaces, the crucial question remained how American society would further develop in an increasingly urban, frontier-less America.

Turner does not explicitly answer this question in the Frontier Thesis, but his otherwise optimistic essay radiates with a pessimistic undertone of dark foreboding. In the opening paragraph, Turner announces the closing of the frontier as a watershed moment in American

¹⁴ It must also be noted that Turner’s urban-rural dichotomy correlates with an opposition between feminine and masculine spaces. Whereas the city arguably represented for Turner the taming, feminine influence of civilization, the frontier was in analogy described as a strongly masculine place—rough, wild, and untamed. What follows from this gendering of urban and rural spaces is that if American society had indeed been shaped by its frontier experience, the character of the American nation had to be essentially masculine. In turn, the closing of the frontier and America’s increasing urbanization represented—on a psychological level—a threat to American masculinity. Theodore Dreiser’s *Sister Carrie*, published in 1900, is probably one of the best cultural documentations of the challenges urbanism presented to American masculinity at the closing of the nineteenth century. The male protagonists in Dreiser’s novel get corrupted by two forces, Carrie’s femininity and modern city life of Chicago. Read this way, Dreiser’s novel portrays male anxieties regarding the corrupting influence of civilization, which is in turn associated with the sphere of women. In contrast, the American West represents a male space of regeneration. No other figure in American literature represents the longing for the West as a place of refuge from the corrupting, confining influence of civilization better than Mark Twain’s Huck Finn. Turner’s Frontier Thesis is built around this gendered configuration of urban and rural spaces in American culture.

history, “the closing of a great historic movement” (“Significance” 31). Drawing from Robert P. Porters 1891 census report, Turner claimed that the ‘winning of the West’ had been completed and that no frontier areas could be found any longer:

Up to and including 1880 the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line. In the discussion of its extent, its westward movement, etc., it can not, therefore, any longer have a place in the census reports. (“Significance” 31)¹⁵

With the frontier gone, Turner believed the first phase of American history, which had essentially been configured around the settlement of the continent, had come to an end. The crucial implication, Turner concluded, was that the frontier’s ‘free land’ had vanished forever: “never again will such gifts of free land offer themselves” (“Significance” 59).

Turner’s Frontier Thesis thus resonates with the anxieties of a nation evolving rapidly from a predominantly agrarian to a modern, industrial society. By the time Turner presented his essay in 1893, America had already changed into a strongly industrialized nation, whose cities grew continuously in population. Industrial capitalism and factory labor increasingly changed the face of the American economy, which had hitherto rested predominantly on the agricultural sector. For many Americans, the transition from agrarian economy to industrial capitalism manifested itself in the rise of giant corporations, which evolved into the trusts and monopolies that would eventually characterize the first decades of the twentieth century.

Simultaneously, the United States was suffering from severe economic depression and previously unknown unemployment rates at the beginning of the 1890s. John Mack Faragher summarizes the nation’s economic situation at the time:

¹⁵ Donald Worster specifies the Census Bureau statistics that Turner referred to: “[By 1891] the population of the seventeen western states and territories had reached 6,451,100, and the number of people was so large and they were so spread out that there was no longer a single discernible line of advancing settlement” (“Rediscovering” 117). It is important to note that Turner’s methodology of processing the data as provided by the Census Bureau relied tremendously on cartography, especially map analysis, a method Turner adapted from the field of geography. Believing that the environment and its specific conditions determined various social phenomena—from settlement to voting patterns, from illiteracy to land-use methods—, Turner used maps in order to underline his theories with the help of data made graphically visible. As Turner later explicitly stated, he was convinced to be able to illustrate humankind’s progressive settlement of the planet with the help of cartography: “Looking back over my work as a University teacher...I find that the central interest of my study has been that of these maps of population advance. Not as a student of a region, but of a process. From cave-man to the occupation of the planet” (qtd. in Block, “Frederick” 34). Robert H. Block has provided an excellent analysis of the impact of geography as an academic discipline on Turner’s methodology in his essay “Frederick Jackson Turner and American Geography,” *Annals of the Association of American Geographers* 70.1 (1980): 31-42. As Block points out, Turner’s preoccupation with maps and their application to his theories of history made him, together along with Ellen Churchill Semple and Albert Perry Brigham, “the founder of a sub-discipline in American geography that is concerned with the spatial consequences of the interface between geography and history” (“Frederick” 31).

The stock market had crashed shortly before the Chicago meeting, and that year some six hundred banks closed, more than fifteen thousand commercial houses failed, and seventy-four railroad corporations went into the hands of receivers. Unemployment rose to levels greater than any time in living memory. (“Nation” 3)

At the same time, ever-greater numbers of immigrants were flooding the country and seemed to be absorbed less quickly into the nation’s social and economic structure than during the frontier days. In this context of national economic downturn, Turner’s thesis offered a convincing explanation for the current crisis: The closing of the frontier and the nation’s economic downswing were interrelated incidents. As ‘free land’ had been described by Turner as the economic foundation of American democracy, the closing of the frontier had a troubling implication: The frontier’s safety-valve function, which according to Turner had up to now mediated and relieved arising social tensions within American society, had vanished along with the frontier. Turner thus linked the nation’s social and economic problems at the closing of the nineteenth century to the end of frontier prosperity.

Turner later claimed that the decline of the American agrarian economy went hand in hand with the decline of the value system he had attributed to the frontier era. Especially the formation of large trusts and monopolies at the outset of the twentieth century represented for Turner the erosion of what he believed to be a genuine American value system. As Turner expressed in his 1910 Presidential Address before the American Historical Association:

The old pioneer individualism is disappearing, while the forces of social combination are manifesting themselves as never before. The self-made man has become, in popular speech, the coal baron, the steel king, the oil king, the cattle king, the railroad magnate, the master of high finance, the monarch of trusts. (“Social Forces” 125-26)

Turner took his theory even further and suggested that the closing of the frontier explained the imperial character of American foreign policy during the 1890s. Turner suggested that since Americans had succeeded in conquering the North-American continent, the nation’s expansionary drive demanded new outlets in foreign territories:

Having colonized the Far West, having mastered its internal resources, the nation turned at the conclusion of the nineteenth and the beginning of the twentieth century to deal with the Far East, to engage in the world-politics of the Pacific Ocean. Having brought to its logical conclusion its long continued expansion into the lands of the old Spanish empire by the successful outcome of the recent war, the United States became the mistress of the Philippines at the same time that it

came into possession of the Hawaiian Islands, and the controlling influence in the Gulf of Mexico. (“Social” 122-23)

Turner’s criticism of frontier individualism is already visible in the Frontier Thesis. Despite his overall positive interpretation of frontier conditions, Turner acknowledged that frontier life could potentially trigger negative, exaggerated forms of individualism, which he believed to be in direct opposition to American democratic ideals. As Turner wrote in the final passages of the Frontier Thesis:

But the democracy born of free land, strong in selfishness and individualism, intolerant of administrative experience and education, and pressing individual liberty beyond its proper bounds, has its dangers as well as its benefits. Individualism in America has allowed a laxity in regard to governmental affairs which has rendered possible the spoils system and all the manifest evils that follow from the lack of a highly developed civic spirit. (“Significance” 55)

Turner’s Frontier Thesis thus catered to the feelings of all those Americans who had a nostalgic longing for the value system and lifestyle associated with the frontier era and who feared that the country was losing touch with its roots.

However, the Frontier Thesis would not have been as successful as it eventually was had it not triggered ambivalent, conflicting sentiments. As much as the Frontier Thesis implied troubling questions about the nation’s present and future, it simultaneously catered to strong nationalistic sentiments. As the United States gradually developed into a world power, the Frontier Thesis offered a compelling explanation for the nation’s rapid rise in the international arena, politically and economically. Turner’s proclamation of America’s coming of age and his analysis of a unique American character summarized contemporary sentiments that saw in America a better, more democratic, and economically more successful version of old Europe.¹⁶ According to such sentiments, a superior democracy had been born in the American wilderness, an evolutionary act that seemed to finally fulfill the Puritan mission of erecting a ‘city upon a hill’ in the New World. The nation’s extraordinary achievement of settling the continent, many Americans believed, attested to its superiority, its youthful vigor, strength, and pragmatism. Americans who had—like Turner himself—witnessed the transformation of the continent from ‘wilderness’ to ‘civilization’ could relate to Turner’s progressive narrative depicting the birth of a genuine American democracy. Hence, as Allan Bogue rightly points out, Turner’s Frontier Thesis represents the “surging nationalism of the time” (“Frederick” 198).

¹⁶ For a detailed analysis of the impact of the Frontier Thesis on American self-consciousness, a good reference is Tiziano Bonazzi’s essay “Frederick Jackson Turner’s Frontier Thesis and the Self-Consciousness of America,” *Journal of American Studies* 27.2 (1993): 149-71.

Undoubtedly, Turner painstakingly calculated the emotional impact of the Frontier Thesis. As much as Turner the historian employed scientific methodology such as cartography, census statistics, and map analysis to sustain his argument from a scientific point of view, Turner the orator used a variety of rhetorical styles, images, and techniques in order to address his audience on an emotional level. Especially Turner's use of poetic imagery and metaphor as well as his almost literary style accounted for much of the essay's rhetorical power. As Harald P. Simonson notes, "brilliant imagery, poetic cadences, plus metaphor that becomes epical in its proportions give to [Turner's] frontier hypothesis a vitality and penumbra of symbolic importance integral to the hypothesis itself" ("Symbol" 18).¹⁷ As Simonson notes, the great success of Turner's essay is explained to a considerable extent by its epic qualities, invoked by Turner's frequent reference to core American myths and symbols.

To reach his audience on an emotional level, Turner employed a variety of images portraying American nature in the form of untouched, sublime landscapes, thereby promoting the already existing concept of America as 'nature's nation.' Especially Turner's wilderness concept draws from the romantic concept of nature as the location of a positive primitivism, "the belief that the best antidote to the ills of an overly refined and civilized modern world was a return to simpler, more primitive living (Cronon, "Trouble" 76). In accordance with Jean-Jacque Rousseau's concept of the 'noble savage,' Turner suggested that the wilderness was able to counterbalance the negative influences of modern civilization. Along the same lines, Turner idealized the American farmer as the nucleus of American democracy. Following Jefferson's vision of America as an agrarian society of independent farmers, Turner believed that American democracy depended fundamentally on the existence of an independent class of land-owning farmers; Turner merely modified Jefferson's idea by arguing that American democracy not only depended on an agrarian lifestyle based on close contact with the land, but had actually evolved from the land itself. However, Turner's nature imagery centers less around the American farmer than around the American pioneer regenerating himself in the American wild. The landscapes Turner

¹⁷ For a detailed analysis of Turner's style and rhetoric, see especially Ronald H. Carpenter's "Frederick Jackson Turner and the Rhetorical Impact of the Frontier Thesis," *Quarterly Journal of Speech* 63 (1977): 117-29; *The Eloquence of Frederick Jackson Turner* (San Marino: Huntington Library, 1983) and his essay "Wisconsin's Rhetorical Historians, Frederick Jackson Turner: A Review Essay," *Wisconsin Magazine of History* 68 (1985): 199-203. Equally recommendable are: William Coleman, "Science and Symbol in the Frontier Hypothesis," *The American Historical Review* 72.1 (1966): 22-49; Thomas Claviez, "Ideology and Rhetoric: The Function of Mythopoeisis in Frederick Jackson Turner's Frontier Thesis," *Amerikastudien* 39 (1994): 563-77; Rudolf Erben, "After Turner and Smith: Recent Interpretations of the American West as Symbol and Myth," *Arbeiten aus Anglistik und Amerikanistik* 18.1 (1993): 23-36; Merrill Lewis, "Language, Literature, Rhetoric, and the Shaping of the Historical Imagination of Frederick Jackson Turner," *Pacific Historical Review* 45 (1976): 399-424; Harald P. Simonson, "Frederick Jackson Turner: Frontier as Symbol," *Beyond the Frontier: Writers, Western Regionalism and a Sense of Place* (Fort Worth: Texas Christian UP, 1989): 16-27; and "The West as Archetype," *Under the Sun: Myth and Realism in Western American Literature*, ed. Barbara Meldrum (Troy: Whitston, 1985): 21-28.

depicted in his essay were neither Jefferson's cultivated, southern farms, nor the far West's dry grass prairie, but rather the Midwest's forested landscapes he knew first-hand from his childhood days in Portage, Wisconsin.

Turner's depiction of sublime American landscapes as places of human inspiration and rejuvenation is clearly rooted in the tradition of nineteenth-century American landscape painting, especially the Hudson River School.¹⁸ During the nineteenth century, landscape painters such as Thomas Cole, Frederick Edwin Church, Thomas Moran, or Albert Bierstadt depicted the grandeur of American landscapes such as Niagara Falls or Yosemite as representations of American identity. Elizabeth Mankin Kornhauser describes the role of nature in nineteenth-century American culture as follows:

As a new nation attempting to define itself, America celebrated in its art the novelties of its landscape—scale, freshness, and variety. The wilderness, which had been feared and loathed in the eighteenth century, was now considered to be America's most distinctive feature—a symbol of the nation's potential as well as its history. (“All” 6)

The wild American landscapes were thus portrayed by the painters of the Hudson River School as grounds for identity. Whereas Europe had culture, America had nature. For some, the scale and grandeur of American nature even indicated American superiority over Europe. As Robert Chianese writes, “nineteenth-century America was ideologically poised to exalt the sublime power of nature in a land whose mountains, waterfalls, prairies, lakes, rivers, and canyons eclipsed those of Europe in size and drama” (“Avoidance” 438).

However, Turner as well as the artists of the Hudson River School not only celebrated untouched nature, but also the transformation of nature through human progress. “Most landscape imagery of the first half of the nineteenth century celebrated human progress in transforming the landscape—that is, claiming and settling America's wilderness,” Kornhauser notes (“All” 8). Turner employed two central images in the Frontier Thesis to illustrate the arrival of progress in the wilderness—the pioneer and the log cabin. Richard White has astutely observed how the image of the log cabin works in Turner's thesis to symbolize rootedness in nature and, more importantly, progress:

¹⁸ For an introduction to American landscape painting and for a collection of reprints by the most prominent protagonists of the Hudson River School, see Stephan Koja, ed., *America. The New World in 19th-Century Painting* (Munich, London, New York: Prestel Verlag, 1999); Elizabeth Mankin Kornhauser, *Neue Welt. Die Erfindung der amerikanischen Malerei* (München: Hirmer Verlag, 2007); Elizabeth Mankin Kornhauser, Amy Ellis, Maureen Miesmer, *Hudson River School. Masterworks from the Wadsworth Atheneum Museum of Art* (New Haven and London: Yale UP, 2003); Andrew Wilton and Tim Barringer, *American Sublime: Landscape Painting in the United States 1820-1880* (London: Tate Publishing, 2002).

A cabin, built with simple tools from local materials, proclaimed self-reliance and a connection with place. Usually isolated, it stressed the courage of the builder and the challenge that the surrounding wilderness represented. But most of all, the cabin had come to represent progress. (“Frederick” 21)

Again, Turner’s usage of the log cabin as a representation of progress drew from the imagery American landscape painters had already made prominent in American culture. Two good examples for the portrayal of the log cabin before a wide landscape of American wilderness are Thomas Cole’s *The Hunter’s Return* and Frederic Edwin Church’s *A Country Home*. Both paintings show sublime American landscapes in which civilization has intruded. Similarly, Turner draws from other popular images used by American painters of his time. In the following passage, Turner invites the reader to imagine himself at an elevated position, witnessing the march of progress unfold across the American continent:

Stand at Cumberland Gap and watch the procession of civilization, marching single file—the buffalo following the trail to the salt springs, the Indian, the fur-trader and hunter, the cattle-raiser, the pioneer farmer—and the frontier has passed by. (“Significance” 39)

Clearly, Turner’s imagery is an almost exact copy of the imagery portrayed by American painters such as John Gast in *American Progress* or Emanuel Leutze in *Westward the Course of Empire Takes its Way*. The visual style of Turner’s Frontier Thesis is thus firmly rooted in nineteenth-century American art, whose imagery Turner copied to achieve a maximum of emotional response in his audience.

But there is another, even more striking similarity between Turner’s Frontier Thesis and the landscape paintings of the Hudson River School. While idealizing American nature, both are completely silent about all negative aspects relating to the ‘conquest of the West,’ be it the genocide of Native Americans or the rapid urbanization of America society. As Stephan Koja remarks:

The tendency toward idealization also probably explains the partial denial of reality in American painting. Themes such as war, industrialization, the destruction of landscape, urbanization, and topics with similar socially critical content found hardly any expression in fine art and were only taken up toward the end of the century. (*America* 10)

The same is undoubtedly true for the Frontier Thesis, as Turner—just like nineteenth-century American landscape painters—marginalized the fate of the Native Americans. Whereas the

painters of the Hudson River School occasionally placed Native Americans in their paintings as a marker for ‘wilderness,’ Turner almost completely omits any references to the fate of the American Natives in the Frontier Thesis.

Finally, Turner’s nature depiction shows a religious component by alluding to the cultural value system of seventeenth-century Puritan America. Turner’s wilderness-civilization dichotomy mirrors the Judeo-Christian definition of ‘wilderness’ as the chaotic, post-Edenic state of nature. As outlined in the introduction, Turner’s frontier narrative alludes most specifically to the ‘recovery narrative,’ the Christian idea that humanity can reverse its fall from grace by civilizing and ordering nature, thereby recreating the lost order of the Garden of Eden.¹⁹ Turner’s Frontier Thesis is firmly located within the Judeo-Christian value system, which legitimizes human domination over nature as expressed in Genesis 1:28, “Be fruitful and multiply, and replenish the earth and subdue it.” Thus placed in the context of Judeo-Christian approaches towards nature, Turner’s definition of progress, which is based on the human transformation of wilderness into civilization, resonates with religious connotations.

In summary, the many concepts of ‘nature’ Turner employed in the Frontier Thesis—economic, biologic, romantic, and religious—were all put to use to achieve not only a rational, but an emotional response in the reader. The effect Turner desired was to infuse a young, heterogeneous society with the spirit of national identity. Turner thus stands in the tradition of nineteenth-century American thinkers like Ralph Waldo Emerson, Walt Whitman, and Henry David Thoreau who define American nature as the source of national identity. Stephan Koja summarizes the mythic function of nature in nineteenth-century American culture as follows:

The new American nation first had to create its own myth, which it found in the sublimity and purity of nature, particularly that of the West. The beauty of this incomparable landscape stood as the unifying factor over all the races, cultural origins, and religions of its inhabitants and of the people who were pouring into the land in a constant stream. As its own history was short and not very rich, people sought their identity in geography. (*America* 10)

Accordingly, Turner grounded American identity in the romantic landscapes of the West and portrayed ‘nature’ as a synthesizing, nation-building force. Summarizing a wide range of popular nineteenth-century concepts of what it meant to be an American, Turner’s “The

¹⁹ For a detailed analysis of the impact of the Judeo-Christian value system on Western, more specifically American attitudes towards nature, consult Carolyn Merchant’s *Reinventing Eden: The Fate of Nature in Western Culture* (New York: Routledge, 2003) and her essay “Reinventing Eden: Western Culture as a Recovery Narrative,” *Uncommon Ground: Toward Reinventing Nature*, ed. William Cronon (New York: W.W. Norton & Co., 1995): 132-59.

Significance of the Frontier” is a historical document, reflecting the mindset of the American nation as it entered the twentieth century. The nature of the American West, Turner had pointed out in the Frontier Thesis, was the essential factor in the development of American culture.

As the Frontier Thesis received ever-greater attention within and outside of academia after its publication in 1893, Western American History simultaneously took shape as an academic discipline. Throughout the first decades, the Frontier Thesis remained the largely unchallenged manifesto of the new discipline. It was only after Turner’s death in 1932 that his work experienced major critical revisions. In the following chapter, I will recapitulate the course of Western American History after Turner.

I.2 Between Tradition and Reorientation: Western American History after Turner

In the following subchapter, I will give an overview of the main trends in Western American History after Turner's death in 1932 up to the 1980s. It is not my ambition to present an all-encompassing, in-depth summary of Western American History's course throughout the twentieth century, as this would undermine the true focus of the dissertation. Rather, I will provide a comprehensive summary of the main trends that have shaped the field up to the emergence of the New Western History, paying special attention to those scholars that have amended or corrected Turner's portrayal of the American West in ways that have arguably anticipated the revisionism of the New Western Historians or had a decisive influence on their work.²⁰ As I will show, the New Western History neither emerged unexpectedly, nor did its scholarship break with all traditions that had hitherto dominated the field. Rather, the New Western Historians elaborated on many issues identified and introduced to Western American historiography by scholars preceding them.

Although minor attacks were launched against the Frontier Thesis prior to Turner's death in 1932, the frontier paradigm was by and large accepted by American historians throughout Turner's lifetime. Having themselves witnessed the rapid transformation of the continent that Turner had described, his contemporaries more often than not regarded the Frontier Thesis as an accurate summary and interpretation of the events that had shaped their own lives: "For them," Richard Etulain writes, "the frontier thesis was the most convincing way to explain the American past and American identity" (*Does v*). Turner's essay was believed to express the *zeitgeist* of its era like no other piece of writing and by World War I, the document had been

²⁰ My comprehensive summary is greatly indebted to Gerald D. Nash's outstanding, exhaustive *Creating the West: Historical Interpretations, 1890-1990* (Albuquerque: U of New Mexico P, 1991). As Nash shows through a meticulous source study, American historians have been critically examining Turner's Frontier Thesis ever since it evolved as the leading paradigm of Western American History. Nash argues that a critical revision of Turner's paradigm did not experience its first peak with the New Western History, but rather with the historians revising the history of the United States against the background of the Vietnam War during the 1960s and 1970s. Apart from Nash's *Creating the West*, the following publications offer a good overview of the course of Western American historiography in the twentieth century: Martin Wächter, *Die Erfindung des amerikanischen Westens: Die Geschichte der Frontier-Debatte* (Freiburg im Breisgau: Rombach, 1996); Richard W. Etulain, ed., *Writing Western History: Essays on Major Western Historians* (Albuquerque: U of Mexico P, 1991); Allan G. Bogue, "The Course of Western History's First Century," *A New Significance: Re-envisioning the History of the American West*, ed. Clyde A. Millner II. (New York: Oxford UP, 1996): 3-28; Brian W. Dippie, "American Wests: Historical Perspectives," *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 112-36; Gene M. Gressley, ed., *Old West/New West* (Norman: U of Oklahoma P, 1997); The West: Past, Present, and Future," *Western Historical Quarterly* 17.1 (1986): 5-23; Patricia Nelson Limerick, Michael P. Malone, Gerald Thompson, and Elliott West, "Western History: Why the Past Might be Changing," *Montana: The Magazine of Western History* 40 (1990): 60-76; Michael P. Malone, ed., *Historians and the American West* (Lincoln: U of Nebraska P, 1983); Michael P. Malone and Richard W. Etulain, eds., *The American West: A Twentieth-Century History* (Lincoln: U of Nebraska P, 1989); Gerald D. Nash, "New Approaches to the American West," *Old West—New West: Centennial Essays*, ed. Barbara Meldrum (Moscow: U of Idaho P, 1993): 15-27; "Point of View: One Hundred Years of Western History," *Journal of the West* 32.1 (1993): 3-4.

widely accepted by American historians. Especially the rise of corporate trusts and industrial giants during the first decade of the twentieth century seemed to underscore that the frontier days of rural America were a thing of the past. The more the effects of industrialism, urbanism, and immigration permeated American life, the more interested Americans became in the portrayal of the old West in novels, pulps, magazines, paintings, and illustrations, and the distinction between the real and the mythic West became increasingly blurred in the popular mind.²¹ By enshrining the mythical West in the popular imagination, Americans “could retain the advantages of a technological age while at the same time giving their allegiance to the mythical anti-industrialized civilization they envisaged in their minds, vividly recreated by the mass media and the survivors of the older Indian and Hispanic cultures,” Gerald D. Nash summarizes the cultural mindset that provided the framework for Turner’s success during the first two decades of the twentieth century (*Creating* 215).

When the United States emerged out of World War I as the world’s new economic leader, it revised its doctrine of political isolationism, which had hitherto characterized the nation’s foreign policy.²² The internationalization of American politics triggered the emergence of a more international-minded, less America-centered perspective in American history departments. Whereas the success of Turner’s Frontier Thesis had been based on the portrayal of the American frontier as a unique, American phenomenon, historians started placing the American experience back in an international context after World War I and rediscovered the existence of other frontiers pushed by European expansion.

However, the first criticism of the Frontier Thesis did not occur until the 1920s, when the nation’s rapid industrial growth, the increasing pace of technological advance, and the rise of consumer culture provided the cultural background for a more critical approach to Turner’s paradigm. With more Americans living in cities than ever before in the country’s history, historians now started regarding Turner’s paradigm as an insufficient model for explaining the increasingly urban character of American society. In contrast to Richard W. Etulain’s assessment that “historians in the twenties accepted and emphasized the significance of Turner’s frontier thesis,” I argue that especially the attacks launched by historian Charles A. Beard left a permanent impression on the perception of Turner’s frontier paradigm (“American” 318).

²¹ The great success of Owen Wister’s best selling novel *The Virginian*, published in 1902, is an exemplary expression of the strong demand for romanticized portrayals of the American West in American culture at the outset of the twentieth century.

²² American isolationist politics had already been interrupted by the nation’s interventions during the war against Spain and the acquisition of the Philippines and Puerto Rico in the 1890s. By 1904, American politicians had reinterpreted the Monroe Doctrine of 1823 by legitimizing the politics of intervention in Latin America.

Beard, who was among the most pronounced Turner-dissenters of the 1920s, argued that American history had not been determined by environmental, but by economic factors.²³ Focusing on the development of agrarian America, Beard claimed that Turner had overlooked slavery and the rise of capitalism as major forces in the nation's history:

[Turner's] agrarian thesis is inadequate when applied to American politics and utterly untenable as the clue to American history in the large. The reason is simple. Besides agriculture, three other powerful economic forces have operated in the course of our affairs: *capitalism* in its manifold aspects such as manufacturing, commerce, banking, credit, and transportation, the *slave-planting system*, and *industrial labor*. ("Culture" 272-73)

Drawing attention to Turner's failure to place the settlement of the West in the larger context of capitalism, Beard anticipated one of the New Western History's main points of criticism, namely that Turner neglected to place American history in the larger context of European colonialism and the expansion of European markets. Outraged by Turner's apparent neglect of economic issues and his yet unchallenged status, Beard accused the American Historical Association of silencing Turner-criticism: "The American Historical Association is as regular as Louis XVI's court scribes," he complained ("Frontier" 350).²⁴

A second novelty introduced to Western American History during the 1920s was multiculturalism, a perspective brought to the field by Herbert Eugene Bolton, who examined the influence of Spanish colonialism in the American West. Bolton's work focused on the region of the Spanish borderlands and drew attention to the fact that this region had been settled and shaped by peoples of various and mixed origins long before white settlers had moved westward from the East Coast as Turner had described. Especially in his classic *The Spanish Borderlands: A Chronicle of Old Florida and the Southwest*, published in 1921, Bolton drew attention to the heritage of Spanish colonialism in the region and counterbalanced Turner's limited focus on the impact of British settlements in American history. Bolton pointed out that prior to the Louisiana Purchase in 1803, all of the trans-Mississippi West had belonged to Spain and that between 1762 and 1800 Spanish influence had extended as far north as North Dakota, the upper Missouri River, and southern Minnesota. In the domain of its influence, Bolton illustrated, Spain had established missions, presidios, fur trading posts, as well as mining and ranching activities and accordingly, the areas which had historically been dominated by Spanish

²³ For Beard's economic approach to the history of the American West, see his articles "The Frontier in American History," *New Republic* 16 February 1921: 349-50 and "Culture and Agriculture," *Saturday Review of Literature* 5 (1928): 272-73.

²⁴ Similarly, John C. Almack criticized the unchallenged acceptance of Turner's frontier paradigm in "The Shibboleth of the Frontier," *Historical Outlook* 16 May 1925: 197-202. "For thirty years," Almack lamented, "American historical thought has been dominated by the frontier shibboleth" (197).

influence differed substantially from those regions shaped by Anglo-American settlement. Without including the history of Spanish exploration and conquest, Bolton pointed out, the region's history could thus not be adequately explained:

It is needless to state that his long period of Spanish occupation and the half century of conflict between the Spanish and Anglo-American frontiers constitute a most important portion of American history, or that the subsequent development of the West...cannot be properly interpreted without first devoting to their antecedents a complete and thorough study. (qtd. in Worcester, "Bolton" 201)

According to Bolton, the Anglo-American presence in the trans-Mississippi West had to be understood to follow first Spanish and later Mexican dominance in the region. Pointing towards the multicultural history of the West, Bolton anticipated the New Western History's interpretation of the West as a contested meeting ground of diverse groups of people—entering the region not only from the East, but also from the South, North and West—by over half a century.

Whatever kind of doubts and anxieties Americans had about their future as members of an industrial world power prior to 1929, the crash of the stock market in October 1929 utterly defeated any illusions about American exceptionalism. The total collapse of the American economy between 1929 and 1932 resulted in an unprecedented pessimism in American society and the crash of the global economic system underlined that the United States was not an exceptional, isolated nation, but was rather deeply entangled in world affairs. During the decade following the Great Crash of 1929, the general assessment of Turner's Frontier Thesis shifted for obvious reasons. Whereas Turner's frontier paradigm had stressed the importance of America's rural past as a factor explaining American history, the context of the economic depression now emphasized capitalism, industrialism, and urbanism as more adequate lenses of historical analysis.

Leading historians like Walter Prescott Webb, Bernard DeVoto, and Joseph Kinsey blamed East Coast capitalism for the apparent ruin of the West, claiming that the region was, in DeVoto's words, a 'plundered province,' victimized and betrayed by eastern capital.²⁵ The plundered-province doctrine seemed especially appealing in the light of the environmental catastrophe starting in 1934 on the Great Plains that became known as the Dust Bowl, a series of dust storms caused by agricultural over-farming and simultaneous drought on the plains. Viewed in the context of the country's overall economic crisis, the Dust Bowl shed further negative light on the way Americans had organized their capitalist economy. As the Dust Bowl

²⁵ Compare especially Bernard DeVoto's essay "The West: A Plundered Province," *Harper's Magazine* 169 (1934): 355-64.

seemed to prove, the American way of transforming wilderness into civilization was apparently flawed. If, as Turner had claimed, American society progressed from frontier conditions to ever-higher levels of sophistication, how was the apparent mismanagement, the exploitation and degradation of the Great Plains as well as the collapse of the whole economy to be explained?

In the context of the economic and environmental crises of the 1930s, the American ideal of taming and transforming nature suddenly appeared to be an inadequate cultural ideal. As DeVoto and other scholars now pointed out, the same industrial growth that had provided the pioneers with the means to settle the West had simultaneously turned the Northeast into the center of the nation's banking, business, and corporate life. According to such perspectives, East Coast money controlled the West's rich farmlands and its vast amounts of precious metals, timber, petroleum, and other resources. In contrast to Turner's depiction of the West as an isolated place of individualism and freedom, the plundered-province doctrine portrayed the West as a dependent region firmly in the grip of Eastern capitalism. Hence, American historians of the 1930s especially questioned the validity of Turner's safety-valve theory and argued that the frontier did not mitigate class differences, but promoted them.²⁶

While the Dust Bowl phenomenon indicated that the ecological equilibrium on the Great Plains had been severely disturbed by agrarian mismanagement, which was in turn based on misleading environmental concepts of the region, historian Walter Prescott Webb simultaneously published his most influential *The Great Plains* in 1931. In his regional study, Webb presented an analysis of the specific climatic characteristics of the Great Plains and their impact on the development of the region. In contrast to Turner, who had stereotyped the geography of the West very generally as 'wilderness,' Webb described the specific climatic features of the Great Plains. Basing his research on a close study of local environmental details, Webb introduced a new trend to Western American historiography that would later be labeled as 'regionalism.' A regional approach based on environmental knowledge, Webb argued, was essential for an adequate understanding of Western American history.²⁷

²⁶ See especially Frederic Logan Paxson, "A Generation of the Frontier Hypothesis: 1893-1932," *Pacific Historical Review* 2 (1933): 34-51. Similarly, historian Louis Hacker of Columbia University argued that an understanding of the emergence of American monopolistic capitalism was the prerequisite for an adequate understanding of the nation's present economic crisis. See Louis M. Hacker, "Review: 'The Significance of Sections in American History,'" *Nation* 137 (1933): 108-10.

²⁷ Webb's definition of 'regionalism' had much in common with Turner's theory on the development and function of the 'section' in American history. As Richard White points out, "Turner and Webb were united not only by their devotion to the frontier, but by their conviction that regionalism mattered greatly in American history" ("Trashing" 34-35). For Turner's definition of a 'section,' see especially Turner's essays "Sections and Nation," *Rereading Frederick Jackson Turner. "The Significance of the Frontier in American History" and Other Essays*, comp. John Mack Faragher (New York: Henry Holt, 1994): 181-200; and "The Significance of the Section in American History," *Rereading Frederick Jackson Turner. "The Significance of the Frontier in American History" and Other Essays*, comp. John Mack Faragher (New York: Henry Holt, 1994): 201-24. For the influence of Turner's definition of 'section' on Western American historiography, see also Michael C. Steiner, "The Significance of Turner's Sectional Thesis," *The Western Historical Quarterly* 10.4 (1979): 437-466 and "Frederick Jackson Turner and

Webb's definition of the Great Plains region was simple but full of implications: Beyond the 98th meridian, Webb argued, the American West was arid or semi-arid, treeless and flat.²⁸ This Great Plains environment was so radically different from the humid, forested East, Webb claimed, that it forced settlers to invent new technologies, new methods of farming, and new modes of subsistence in order to survive in the region. As Webb later argued in his classic essay "The American West: Perpetual Mirage" in 1957, aridity was the most defining characteristic of the West. Webb interpreted the Great Plains desert as a 'gigantic fire' within the region that extended from south of Montana, Idaho, and Wyoming, through Nevada, Utah, and Colorado, down to Arizona and New Mexico. "The heart of the West is a desert, unqualified and absolute," one of Webb's most pointed declarations reads (qtd. in McGerr, "There" 244-45). According to Webb, deficiency in water and timber was greatest in the plains proper, the corridor of land stretching from west Texas into Canada and from roughly the 98th meridian to the Rockies; however, Webb believed that in most of the remaining West one or two of those characteristics—aridity or lack of timber—applied. As Webb summarized, "east of the Mississippi civilization stood on three legs—land, water, and timber; west of the Mississippi not one but two of these legs were withdrawn—water and timber—and civilization was left on one leg—land" (qtd. in Cronon, "Place" 1355). Most notably, Webb observed, the region received less than twenty inches of rain per year, a deficiency that had shaped all forms of life in the West.

Accordingly, Webb argued that the 98th meridian functioned as an institutional fault line. East of this line traditional European modes of agriculture could be maintained, but west of the line the lack of rainfall and the absence of trees demanded human ingenuity and adaptation. Webb claimed that humans could only meet the challenges of the arid West through the invention of new technologies and the adaptation of new modes of subsistence. The invention of barbed wire, windmills, irrigation and the Colt revolver were, according to Webb, such human inventions made necessary by the climate of the plains. Webb believed that especially the invention of barbed wire revolutionized life on the Plains. Setting up fences—a fundamental prerequisite for cattle ranching—had been a major problem for American farmers due to the lack of trees on the plains. With the invention of barbed wire in 1874, the problem became obsolete immediately and life on the plains literally changed over night: "The invention of barbed wire," Webb claimed, "revolutionized land values and opened up to the homesteader the fertile Prairie Plains, now the most valuable agricultural land

Western Regionalism," *Writing Western History: Classic Essays on Classic Western Historians*, ed. Richard W. Etulain (Albuquerque: U of New Mexico P, 1991): 103-35.

²⁸ As I will outline in detail in chapter III, Webb's argument was borrowed from nineteenth-century Grand Canyon explorer John Wesley Powell, who had identified the 100th meridian as the line dividing the humid from the sub-humid American regions in his *Report on the Lands of the Arid Region of the United States*, published in 1878.

in the United States” (qtd. in Worster, “Country” 250). Similarly, Webb pointed out that the invention of windmills for pumping water from underground aquifers—the only reliable source of water in a semi-arid environment—had been triggered by plains conditions.

Webb thus counterbalanced Turner’s portrayal of the West as a place of plenty and instead highlighted the region’s deficiencies and shortcomings. “Granted the prevailing influence of the desert,” Webb wrote, “it is obvious that the West is in comparison to the East a land of deficiencies. It is full of negatives and short on positives” (qtd. in McGerr, “There” 245). Furthermore, Webb, like Turner, believed that the closing of the frontier had strong negative implications for American democracy. In 1937, Webb reflected upon the link between the disappearance of the frontier, the rise of corporate America and the nation’s current economic and social crisis in *Divided We Stand: The Crisis of a Frontierless Democracy*:

Historians have told us that [the frontier] promoted individualism, stimulated self-reliance, fostered equality and political democracy; they have not told us...that the absence of the frontier tends as surely through undernourishment to destroy those things that its existence stimulated. (qtd. in McGerr, “There” 44)

Like Turner, Webb concluded that the absence of frontier conditions and the simultaneous rise of corporate America promoted anti-democratic forces in American society. The economic and social turmoil of the 1930s thus confirmed for Webb that the happy days of American society had come to an end.

Overall, however, Webb portrayed the West with sympathy. For him, the West was the most American of all regions and displayed enduring physical characteristics that dated back long before the arrival of the white settlers. Unlike Turner, who had argued that the West’s way of life had shaped the lifestyle of the nation at large, Webb believed that the region’s environmental characteristics had shaped a way of life that made sense nowhere else in the United States. By defining the specific forms of life sustainable in the arid regions of the American West, Webb became the father of Western American regionalism.

Next to Webb, especially historian James C. Malin from the University of Kansas contributed new impulses to Western American History between the 1920s and the 1950s.²⁹ Following Webb’s lead, Malin further intensified the study of environmental factors in the region’s history, studying especially human adaptation to the sub-humid climate of the central

²⁹ For an assessment of Malin’s influence of Western American historiography, see especially Allan C. Bogue, “James C. Malin: A Voice from the Grassland,” *Writing Western History: Essays on Major Western Historians*, ed. Richard W. Etulain (Albuquerque: U of New Mexico P, 1991): 215-43.

American grasslands.³⁰ Published in 1947, Malin's *The Grasslands of North America: Prolegomena to Its History* soon became a standard reference book for the plains region. Like Webb, Malin regarded human adaptation to the conditions of the plains as the most rewarding point of study in Western American history: "One of the most interesting problems in the history of the westward movement in the United States is the adaptation of the agricultural system to the environment" (qtd. in Bogue, "Voice" 237). Malin was intrigued by Webb's hypothesis that an 'institutional fault line' separated the humid regions in the East from the sub-humid and arid regions west of the 98th meridian. The adaptation of a European forest-culture to the treeless grassland environment of the Great Plains demanded great ingenuity and resourcefulness from settler communities, Malin confirmed Webb's central thesis.

Malin studied the evolution of population patterns in the grasslands and concluded that the grassland's geophysical conditions were so harsh that settlers had always had difficulties to make a living in the region. Due to human failure to adapt to the condition of the grassland, extraordinary high rates of population turnover were the result, Malin argued.³¹ Based on this assumption, Malin rejected the common interpretation of the Dust Bowl phenomenon that hit the plains during the 1930s. Contradicting the conclusion of New Deal politicians, who believed wrong resource policies and unsound agricultural practices to be responsible for the disaster, Malin claimed that the population exodus from the region during the Dust Bowl years was not exceptional, but rather the norm. Dedicating a series of three essays to the study of population turnover in Kansas, Malin concluded that frontier communities had experienced serious difficulties in adapting their agricultural practices and social institutions to the environmental realities of the grasslands ever since moving into the region.³² As Malin's data seemed to prove, the climate of the grasslands posed a challenge that only very few settler communities were able to meet over a longer period of time. Malin thus interpreted the Dust Bowl phenomenon as a natural expression of the grassland's climatic features rather than as the result of human mismanagement.

In 1950, Malin summarized his perspectives on the relationship between humans and the environment in his essay "Ecology and History," which can be regarded as an early contribution to the theory of environmental history. Malin generally opposed widespread assumptions concerning the human corruption of nature and argued that conservationists had

³⁰ See especially James C. Malin, "The Adaptation of the Agricultural System to the Sub-Humid Environment," *Agricultural History* 10 (1936): 118-41.

³¹ See especially James C. Malin, "The Turnover of Farm Population in Kansas," *Kansas Historical Quarterly* 4 (1935): 339-72.

³² Compare James C. Malin, "Dust Storms: Part One, 1850-1860," *Kansas Historical Quarterly* 14.2 (1946): 129-44; "Dust Storms: Part Two, 1861-1880," *Kansas Historical Quarterly* 14.3 (1946): 265-96; "Dust Storms: Part Three, 1881-1890," *Kansas Historical Quarterly* 14.4 (1946): 391-413.

exaggerated the impact of humans on the American environment in order to politically legitimize conservation programs. “How much has man modified the ecological setting of history in America?,” Malin phrased his central question and formulated the following provocative answer:

The samples of ecological history completed indicate less fundamental change than is usually assumed by conservation propagandists. At present, answers must, perforce, be tentative, and largely a matter of personal opinion. This is peculiarly unfortunate when public attention is being bombarded by propaganda to authorize gigantic programs dealing with natural resources. (“Ecology” 297)

Although Malin followed Webb in arguing that the process of human adaptation to the environment of the American West was crucial to an understanding of the region’s history, he simultaneously rejected Turner’s and Webb’s environmental determinism. The environment, Malin believed, was not as limiting a factor on human development as Turner or Webb had allowed; instead, Malin stressed the creative potential of human culture to shape its surroundings: “At any level, cultures afford man the opportunity to exercise options in ordering his relations with environment with himself, and as the culture changes the range of the options shifts” (“Ecology” 295). Accordingly, Malin argued that to interpret the environment as the most crucial factor determining human development was to reduce historical analysis to a distorting narrowness:

Both history and ecology may be defined as the study of organisms in all their relations, living together, the differences between plant, animal, and human ecology or history being primarily a matter of emphasis. Therefore, all forms of single- or limited-factor interpretations are rejected as fragmentation of knowledge, with its resultant distortion of facts. (“Ecology” 295)

Malin’s environmental approach to history was thus far less deterministic than either Turner’s or Webb’s interpretation of human evolution in the region.

Stressing the creative potential of culture in the human-nature relationship, Malin provided further innovative impulses to the historiography of the American West by interpreting the history of the region as a struggle between competing perceptions of the land, held by different groups competing for the land. Arguing that the invading European cultures legitimized their claim for the land by defining its own culture as superior and by denying legitimacy for the land to the native population, Malin implicitly attacked the Eurocentric stance of Turner’s frontier paradigm:

Americans considered their culture a superior, or master, culture, and themselves perhaps a master race, and thought of “discovery” and of “frontier of new land” in a subjective and egocentric sense. For the most part, the invading culture refused to recognize that the displaced cultures possessed any values, or that the peoples concerned possessed any rights which should be respected. (“Ecology” 296)

Malin thus drew attention to the racism inherent in the frontier ideology long before such revisionist interpretations became a trend in Western American historiography during the late 1960s and the 1970s.

In summary, Malin’s studies of the American grasslands and his theory on the relationship between history and ecology are classic contributions to American environmental history. While elaborating on Webb’s interpretation of the Great Plains as an arid desert, Malin at the same time rejected the environmental determinism that characterized both Turner’s and Webb’s approach. Simultaneously, Malin’s application of ecologic theory to historical analysis promoted environmental history as an academic practice long before either the term or the academic discipline surfaced. “Since ecology has become a recognized discipline,” Malin stressed the importance of ecology for historical knowledge, “it is appropriate to re-examine history with special reference to ecological relations and the significance of these shifting options” (“Ecology” 295). Malin thus anticipated the growing environmental awareness among historians that was to surface two decades later in the context of the environmental movement of the 1970s.

In the period after World War II, Western American historiography reflected the fundamental social and demographic changes in American society. As the United States emerged from the war as the new political and economic super power of the world community, American historians now increasingly focused on global, comparative approaches in American history. Comparative frontier studies now questioned the uniqueness of the frontier experience by pointing towards other frontiers around the world and the common origin of these frontiers in European colonial politics. Highlighting the persistent influence of the European imperial heritage, American historians undermined the notion of American exceptionalism that had dominated Turnerian frontier historiography. The revived focus on European influences in American culture reflected a more general trend among American historians after World War II towards highlighting cultural and neglecting environmental factors within Western American historiography. This new focus on cultural determinants was promoted and accompanied by the simultaneous emergence of the new social science theories during the second half of the twentieth century.

Simultaneously, historians reflected on the changes that had been taking place in the American West during the war years by stressing urban and industrial aspects in the

region.³³ As the mainland of American war production, the American West had prospered tremendously during the war years. The resulting growth of urban-industrial centers in the region thus further intensified the discrepancy between the nineteenth-century image of the West as America's rural, agrarian hinterland and the now increasingly urban-industrial character of the present-day West. At the same time, American culture at large experienced a number of far reaching social and economic changes, among others increasing technical innovation and capitalist productivity, growing urbanization, changing gender roles, shifting distributions of income benefiting the lower income classes, and the gradual evolution of a new self-confidence among African-Americans. Against the background of these fundamental changes in American society in the second half of the twentieth century, a demographic factor contributed to the paradigmatic shift of focus in Western American historiography: The generation of historians dominating the discourse of the American West in the decades following World War II had been born and raised in twentieth-century urban America and had not, like Turner's generation, personally experienced the frontier West. Accordingly, this new generation of historians wrote about a completely different, post-frontier West.

One of the first historians to reflect on the world's new political architecture and America's new self-awareness was Carlton J. Hayes.³⁴ For Hayes, the end of World War II marked the beginning of a new era of multilateral politics, which demanded from American society a new open-mindedness towards world affairs. In his presidential address to the American Historical Association in 1945, "The American Frontier—Frontier of What?," Hayes stated that the U.S. Senat's ratification of the UN Charter reflected the nation's shift from isolationism to internationalism. In the context of the founding of the United Nations, Hayes perceived Turner's notion of American exceptionalism as well as his separation of American history from world history as outdated:

It is no longer a question of creating a great American nation. It is now a question of preserving and securing this nation in a world of nations.... The question now is whether as a nation we are going to be sufficiently informed and intelligent about foreign conditions, sufficiently free from provincialism, to ensure the effective operation of the United Nations. ("American" vi)

³³ For a comprehensive study on the impact of World War II on the American West, see Gerald D. Nash, *The American West Transformed: The Impact of the Second World War* (Bloomington: Indiana UP, 1985). For the development of the urban West in the twentieth century, consult Gerald D. Nash, *The American West in the Twentieth Century: A Short History of an Urban Oasis* (Englewood Cliffs: Prentice-Hall, 1973).

³⁴ See especially Carlton J. H. Hayes, "The American Frontier — Frontier of What?," *American Historical Review* 51 (1946): 199-216.

Hayes pointed out that the American frontier had to be replaced into world history by studying its origins in European imperialism. In contrast to Turner's paradigm, Hayes acknowledged the relationship between European imperialism and the development of the American frontier.

Walter Prescott Webb, who by now enjoyed a reputation as one of the great scholars of Western American History, demanded for a globalization of frontier history in *The Great Frontier*, published in 1952. Webb declared that "the American frontier concept...needs to be lifted out of its present national setting and applied on a much larger scale to all western civilization in modern times" (qtd. in Nash, *Creating* 55). Like Hayes, Webb argued that the American frontier was not a unique chapter in world history, but had actually been preceded by similar frontiers elsewhere on the globe. "What happened in America," Webb stated, "was but a detail in a much greater phenomenon, the interaction between European civilization and the vast raw lands into which it moved" (qtd. in Nash, *Creating* 55).

Apart from comparative aspects, American historiography after 1945 is characterized by a diversification and specialization of the field, which is to a certain extent explained by the increasing social fragmentation within American society. With more and more historians of varied racial, ethnic, religious, and social backgrounds entering the American historical profession, mono-causal and single-perspective explanations of the nation's history became increasingly unpopular. The founding of American Studies as a new interdisciplinary field of study dedicated to the analysis of the myths and symbols that defined American culture expressed this trend in the 1950s. Cultural symbols were now understood as ingredients of myths and myths were recognized as the main narratives informing a nation's identity and ideology. Against the background of this new awareness for the myths and symbols shaping the nation's identity, the frontier and its icons became a major focus of analysis. Accordingly, American historians developed an acute awareness for the chauvinist aspects of Turner's Frontier Thesis. As Richard Hofstadter observed in "Turner and the Frontier Myth" in 1949, the frontier Turner had described had become an integral part of the American imagination and the appeal of the frontier as a central idea in American culture was based on "the common desire to root native history in native soil" (437-38).

Especially the publication of Henry Nash Smith's *Virgin Land: The American West as Symbol and Myth* in 1950 inaugurated the academic treatment of the American West as a place of myth and ideology. As Smith pointed out, the myths, symbols, images, and stereotypes associated with the frontier West had become deeply embedded in American

popular culture and had been transmitted to twentieth-century America as the primary American myth. Smith illustrated how deeply Turner's Frontier Thesis—especially his heavily romanticized celebration of nature's regenerative powers—was rooted in the American agrarian tradition as shaped by Thomas Jefferson and others. Tracing the nature symbolism of Turner's thesis back to the agrarian tradition while at the same time outlining the impact of Turner's conceptualizations of the West in the present, Smith laid the groundwork for a broader reinvestigation of the ideological components in Turner's work. Looking back on the ecologic catastrophe that had taken place on the Great Plains during the 1930s and judging from the rapidly increasing industrialization and urbanization of the American West, Smith argued that the apparent corruption of ecologic systems in the region was distinctly at odds with Turner's celebration of the progressive transformation of nature and his simultaneous glorification of pristine nature as the source of American selfhood. As Smith pointed out, the main weakness of Turner's essay was that it had followed the ideology of the agrarian tradition by rooting the definition of American exceptionalism in the forces of both nature *and* culture: "The capital difficulty of the American agrarian tradition is that it accepted the paired but contradictory ideas of nature and civilization as a general principle of historical and social interpretation" (*Virgin* 260). Due to this paradoxical configuration, Smith argued, the Frontier Thesis was unsuited to explain and assess the rapid and all-encompassing transformation of nature in the present day American West:

A system which revolved about a half-mystical conception of nature and held up as an ideal a rudimentary type of agriculture was powerless to confront issues arising from the advance of technology. Agrarian theory encouraged men to ignore the industrial revolution altogether, or to regard it as an unfortunate and anomalous violation of the natural order of things. (*Virgin* 259)

In this sense, Smith's *Virgin Land* was the first in-depth study of the symbolic, rhetorical and ideological composition of Turner's Frontier Thesis. For Smith, the American agrarian tradition around which Turner had shaped the symbolic configuration of his essay was an outdated system of thought, inadequate to explain the reality of the twentieth-century West.

Smith's student Leo Marx elaborated more generally on the dichotomy between the pastoral ideal and the simultaneous celebration of technology in 1964 in *The Machine in the Garden: Technology and the Pastoral Ideal in America*. Marx studied the pastoral ideal as a genuine American theory of society and outlined the inadequacies of the theory to come to terms with an increasingly industrialized, technology-driven society. As Marx claimed, the tension between the significance of the pastoral ideal in American culture on the one hand and the

technocratic order of American reality on the other hand was the central paradox informing American culture.

While Smith relocated Turner's frontier concept in the agrarian tradition, Perry Miller, like Smith a member of the first generation of American Studies scholars, reminded the American historical profession of the cultural impact of seventeenth-century Puritanism on the wilderness idea. As Miller claimed in his influential *Errand into the Wilderness* in 1956, Turner had neglected and obscured the influence of Puritan thought on American notions of the 'frontier.' Tracing dominant concepts of 'nature' in American culture from seventeenth-century Puritanism to nineteenth-century romanticism and the American Renaissance, Miller further contributed to a historical understanding of the nature-iconography underlying the American frontier cult.³⁵

During the 1950s, Earl S. Pomeroy emerged as one of the most outspoken Turner critics and most influential advocates for a reorientation of Western American History. In 1955, Pomeroy published "Towards a Reorientation of Western History: Continuity and Environment," a paradigmatic essay in which he outspokenly criticized Turner's belief in environmental determinism, more specifically Turner's notion that the frontier had functioned as a catalyst of Americanization. In contrast to Turner, Pomeroy was convinced that humans had a strong tendency to hang on to their cultural heritage when being transferred to unfamiliar territory, a human characteristic that Pomeroy believed to be also true for Europeans transplanted to the American West. According to Pomeroy, Turner's conviction that the frontier had extinguished settlers' cultural heritage, thereby preparing them for becoming genuine Americans, was simply wrong.

As Pomeroy claimed, the settlement of the West was not so much accompanied by the erasure of old cultural patterns, but by cultural continuity and persistence. In Pomeroy's version of Western history, settlers hung on to their cultural traditions and resisted change to a much greater extent than Turner had allowed. Contradicting Turner and Webb, Pomeroy insisted that cultural practices, political institutions, as well as social structures had been reproduced in the West in accordance with the models provided by East Coast or European culture. "The Westerner," Pomeroy declared, "has been fundamentally imitator rather than innovator....His culture was Western European rather than aboriginal. He was often the most ardent of conformists" ("Towards" 582). Pomeroy thus negated Turner's credo that the environment of the American West had fostered a distinct American identity and

³⁵ For Miller's study of Puritan influences on concepts of 'nature' in American culture, consult especially his essay "From Edwards to Emerson," *Errand into the Wilderness* (Cambridge: The Belknap Press of Harvard UP, 1956): 184-203, and "Nature and the National Ego," *Errand into the Wilderness* (Cambridge: The Belknap Press of Harvard UP, 1956): 204-16.

questioned that ingenuity or anti-authoritarianism were special character traits of Westerners.³⁶

Reiterating Beard's earlier criticism, Pomeroy blamed American historians for having followed the Turnerian tradition for too long and for having overrated the impact of the West's environment on American culture. As Pomeroy argued, American historians had mainly worked with large abstractions by basing their historical analyses geographically often on the most extreme regions:

Historians still tend to concentrate on those aspects of the West where the impact of environment is clearest and sharpest. In so doing, they forget that they have performed an act of abstraction from a larger scene. They argue the importance of environmental influences in the West while demanding that the West qualify as West by being the place where environment predominates. ("Towards" 580)

Pomeroy saw the wrong emphasis of environmental factors in Western American historiography intertwined with a second shortcoming in Western American historiography, the neglect of the West's increasingly urban character. In his path-breaking study *The Pacific Slope: A History of California, Oregon, Washington, Idaho, Utah, and Nevada*, Pomeroy illustrated in 1965 that by the end of World War II, the Pacific rim states had developed into urban centers to such an extent that the far West had to be counted among the nation's most urban regions. Accordingly, Pomeroy demanded a new awareness among historians of the American West for the impact of urban centers on the region's history.³⁷

In summary, Pomeroy asked for a general shift of focus among historians when writing about the American West. Following Turner's environmental interpretation, Pomeroy warned, American historians had trapped themselves within a formula that neglected the cultural influences that had shaped the West: "Although he may scorn the popular appeal of the 'Western' novel and motion picture, the historian has himself often operated within a formula, neglecting the spread and continuity of 'Eastern' institutions and ideas" ("Towards" 579). Hence, Pomeroy demanded a reorientation of Western American historiography towards a focus on the impact of Eastern institutions on the West's development and on the continuities between the nineteenth- and the twentieth-century West, as well as the expanding power of western urban areas. The persistent impact of the Turnerian formula on Western American History was responsible for the field's aura of antiquarianism

³⁶ Pomeroy reiterated his belief that the West was as a place of imitation rather than of innovation in 1960 in his essay "Rediscovering the West," *American Quarterly* 12 (1960): 20-30.

³⁷ For Pomeroy's study of the urban far West, see also "The Urban Frontier of the Far West," *The Frontier Challenge: Responses to the Trans-Mississippi West*, ed. John G. Clark (Lawrence: UP of Kansas, 1970): 7-29.

and its isolation from the mainstream of national historiography, Pomeroy believed. Through his outspoken rejection of Turner's frontier paradigm and his questioning of Western American History's standing within the larger framework of American historiography, Pomeroy's work came to represent the reconceptualization of Western American History in the years after World War II.

However, the reorientation in Western American historiography was not as homogenous as Pomeroy's example might suggest. If Pomeroy's approach represents the emerging revisionist wing within Western American History after World War II, Ray Allen Billington represents the most ardent defense of Turner's legacy. As Patricia Nelson Limerick writes, Billington's career "provides a remarkable case study in loyalty and persistence, in the working out of one man's conviction that Turner's frontier thesis held a significance so central that American scholars who rejected the thesis did so at the nation's peril" ("Persistent" 277-78). In *Westward Expansion: A History of the American Frontier*, published in 1949, Billington reiterated Turner's main assumptions. Billington agreed with Turner and maintained that the evolutionary process of settlers' adaptation to the frontier conditions was repetitive and defined the better part of American history. As Billington stated, Americans had ventured westward through 'unoccupied' terrain and were reshaped by "the repeated rebirth of civilization;" they first regressed to the "primitive," a "state of nature", and then progressed to the "complex" (qtd. in Limerick, "Persistent" 281). Billington regarded Turner's Frontier Thesis as an accurate definition of the frontier as the cradle of the American character. According to Billington, the frontier had offered economic opportunity, which had in turn created a distinctly American society. Hence, Billington argued that the democratic character of communities in the American West was "traceable largely to the greater degree of opportunity for self-improvement that distinguished the American Wests from the American Easts, and from Europe" (qtd. in Limerick, "Persistent" 292). In 1958 Billington published *The Frontier Thesis: Attack and Defense*, a direct answer to the mounting criticism directed against Turner's Frontier Thesis. Despite the rising anti-Turnerian currents in American history after World War II, Ray Allen Billington remained one of the most influential historians of the American West in the second half of the twentieth century. Throughout his career, Billington never abandoned the basic theories on the American West as put forth by Turner. Among American historians, Billington stands out as the foremost promoter and defender of Turner's legacy throughout the second half of the twentieth century.

Turner-criticism reached a climax during the 1960s. Under the impressions of the Vietnam War and the assassinations of President Kennedy, Martin Luther King, and Malcolm X, a profound sense of self-doubt and pessimism permeated American society.

Although the United States had emerged morally strengthened from World War II as the defender of democracy, willing to sacrifice the lives of hundreds of thousands of soldiers to rid the world of the fascist regimes in Europe, it nevertheless lost most of its moral standing in the world community during its engagement in Vietnam. As Americans learned about the atrocities committed by American soldiers in Mai Lai and other places in Vietnam, the nation's moral authority was increasingly questioned from within American society. As a response, several counter-cultural movements emerged during the 1960s—most prominently the anti-Vietnam movement, the women's movement, and the Civil Rights movement—and challenged the existing order of American society. All of these movements attested to the fact that fundamental changes in American society were underway.³⁸

Especially the political activists associated with the New Left fueled the fight against racism, sexism, and inequality—whether at home or abroad. As a political phenomenon, the New Left was not a homogenous movement, but an anti-capitalist, anti-imperialist counterculture with many diverse views and fractions. Probably the most unifying theme within the New Left was an anti-capitalist stance that saw the capitalist system as responsible for racism, social inequality, the oppression of minorities, as well as for the pollution and destruction of the environment. The New Left challenged the myth of the American dream, condemned much of the American experience in the past, and attributed special attention to the masses of oppressed people—the poor, ethnic and racial minorities, women, or anyone outside the white, male mainstream of American society.

The appearance of the New Left coincided with the emergence of the 'new histories,' which claimed to introduce new perspectives to American historiography by focusing on what used to be the so-called margins of the American experience. Relying on the quantitative methodologies of the social sciences, the new histories aimed at describing historical processes 'from the bottom up,' from the perspective of all those groups of people whose experiences had been neglected by traditional historiography's focus on the lives of a predominantly white power elite. The impact of the Civil Rights Movement triggered multicultural approaches in history departments and the emergence of the so-called minority and ethnicity studies. At the same time, the women's movement of the 1960s and 1970s—especially as shaped by the publication of Betty Friedan's *The Feminine Mystique* in 1963—pushed gender issues onto the agenda of the humanities. Traditional historiography, which had hitherto neglected the academic study of women's lives, was now under attack. In this context, American society became increasingly sensitive for the mistreatment of minorities and

³⁸ For an introduction to the culture of the 1960s in the United States, consult *The Sixties: From Memory to History*, ed. David Farber (Chapel Hill & London: The U of North Carolina P, 1994).

outsiders in the nation's history and as a result, historians of the 1960s changed the focus of historical observation from the centers to the margins of power by emphasizing issues of race, class, and gender.

Shifting their focus of attention to the abuse of minorities, women's underprivileged role in society, ethnic and class conflicts, urban poverty, and environmental degradation, the generation of historians maturing during the 1960s challenged whatever consensus might have hitherto existed in Western American History. Against the background of the nation's growing negativism towards its past and present, Turner's frontier idealism seemed utterly outdated. Many Americans felt that the settlement of the West was not a glorious, but rather a shameful chapter in American history. Gerald D. Nash summarizes this significant change of paradigm as follows:

Sometime about 1960 the positive self-image of Americans began to disintegrate, resulting in significant changes in the perception of the role of the frontier. The major new emphases of frontier historians now mirrored the nation's preoccupations, a new self-consciousness about race, class, poverty, gender, and the natural environment. That led to a significant shift in *Weltanschauung*. Historians no longer espoused the hope and optimism of the postwar decade. Reflecting a loss of self-confidence, and increasing pessimism, they now busied themselves with condemning much in America's past, including the frontier. (*Creating* 51)

The new generation of American historians emerging during the 1960s thus translated their widely felt disaffection with American society into critical revisions of Western American history, denying academic legitimacy to Turner's Frontier paradigm. "By the 1960s," Cronon, Miles, and Gitlin summarize, "the traditional frontier historiography struck many as racist, sexist, and imperialist in its depiction of western settlement" ("Becoming" 4). Accordingly, the drastic increase in Turner revisionism surging during the 1960s reflects the decade's broader ideological currents.

In this context, the mistreatment of minority groups such as Native Americans, African-Americans or Hispanic and Asian immigrants was especially in the focus of the new, revisionist histories. Historians now openly acknowledged that Turner had neglected the less flattering chapters in Western American history. As Richard Hofstadter argued, Turner

had little countervailing response to the shame of [Western American history]—to such aspects of Western development as riotous land speculation, vigilantism, the ruthless despoiling of the continent, the arrogance of American expansionism, the pathetic tale of the Indians, anti-Mexican and anti-Chinese nativism. (*Progressive* 104)

In similar fashion, Wilbur R. Jacobs advocated a general revision of American history. Americans, Jacobs wrote in 1969, “can no longer afford to be satisfied with a version of our history designed primarily to obscure the more dubious actions of our ancestors” (“British” 100). Jacobs specifically attacked the absence of Native Americans in traditional Western American historiography and attributed the neglect of minority issues to the unquestioned rule of Turner’s paradigm. In 1973 Jacobs published a paradigmatic essay titled “The Indian and the Frontier in American History—A Need for Revision.” “The Turnerian theme of progress and development as an explanation of frontier advance is largely an interpretation of Euro-American white history,” wrote Jacobs; “it has little to do with Indians, blacks, Orientals, Mexican-Americans, or other minorities” (“Indian” 43-44).

With the rise of the feminist movement and women’s studies in academia, historians—mainly female historians—set out to correct Turner’s gendered version of Western history. As Glenda Riley argued in 1977, women had been for Turner “an invisible or perhaps non-existent force” (“Images” 191). Historians like Riley now investigated the lives of women in the historic West, unearthing their stories as documented in first-hand accounts such as diaries and travel journals. Whereas traditional frontier historiography had been based on a heroic celebration of the West as a gendered space of male energy, the historians of the 1960s drew attention to the realities of women’s lives in the West and pointed to the decisive role women played in settling the region.

Next to the strong focus on cultural categories such as race, class, and gender, the political analysis of centralized power equally gained momentum during the 1960s and the 1970s. While the United States government was under attack for its actions in Vietnam, historians simultaneously drew attention to the central role federal government had played in the conquest of the West, contrasting Turner’s image of the region as a playground of self-reliant individualists. As historian Curtis Martin argued in 1964, “government had a greater impact upon the West than the West had upon government.... The myth of the individualistic, isolated, self-sufficient Westerner is largely that—a myth” (“Impact” 51). Once historians acknowledged the plight of minority groups in Western history and reinvestigated the role of the federal government in the region’s past, it was only a small step to linking the darker sides of American history to the nation’s imperial policies of conquest.

Despite the new revisionist impulses, the interest in Western American History declined among American historians throughout the 1960s. In the context of critical issues such as the Vietnam War, the Cuba Crisis, or the race with Russia for dominance in outer space, the issues

of traditional Western American historiography appeared antiquarian and old-fashioned. Cronon, Miles, and Gitlin explain the general decline of the field during the 1960s as follows:

The issues of the twentieth century that loomed largest in the minds of historians after World War II—communism, the atom bomb, civil rights, urban poverty, racism, feminism—seemed to have no obvious connection to the rural past of the western frontier. As historians of the 1950s and 1960s sought to explore the problems that mattered most to them, the western past seemed at best an irrelevant distraction. It was no longer on the cutting edge of historical research. The numbers of scholars studying the field declined. (“Becoming” 4)

Especially in the context of the civil rights movement, which put racial issues and the South to the forefront of historical interest, the study of the American West seemed outdated. By the 1960s, historian Walter Nugent states, “the region requiring scrutiny was the South, where a past of slavery, Reconstruction, and Jim Crow laws demanded wholesale reinterpretation. The West, meanwhile, seemed more than ever the region of cowboys and Indians,...an antiquarian fun house not to be taken very seriously” (“Western History”).

In response to the general decline of Western American History after World War II and the fundamental shifts taking place within the profession, the leading historians of the field founded the Western History Association (WHA) in Santa Fe, New Mexico, in October 1961. The WHA was later to publish the most important journal in the field, the *Western Historical Quarterly*. However, the negative trend continued throughout the 1960s. To many historians, Western American History was an antiquated field of study. As Turner’s Frontier Thesis lost its status as the central point of reference, the field underwent a fragmentation that intensified the feeling of crisis. The many new issues introduced to Western American History during the 1960s did not lead to the field’s reorientation, but rather to a feeling of disorientation among historians regarding the discipline’s purpose, direction, and overall common denominator. Patricia Nelson Limerick describes the fate of Western American History during the 1960s as follows:

The rigidity of the Turner Thesis left it particularly vulnerable to a great expansion of scholarship, accelerating in the 1960s and afterward. Individual historians simply set aside the Thesis and studied particular Western places, peoples, and events. The diversity those studies revealed...represented an intellectual revolution.... Few of the findings fit the Turnerian conceptual model. Thus a central irony: the very vitality of Western research, by exploding the model, made mainstream historians declare that the field was dead.... The breakdown of the old organizing idea fostered chaos; the corral built to contain Western history had been knocked apart. (*Legacy* 22)

Paradoxically, however, as the West declined as a topic of interest within academia, the American West as a region steadily increased its influence in the second half of the twentieth

century. By the 1970s, the American West was widely recognized as the United States' new center of power. Not only did the booming states of the Sun Belt or the Pacific Rim seem to economically overpower the declining Rust Belt of the East and Mid-West, but the region also seized political control of the nation with the presidencies of archetypical westerners such as Richard Nixon (1969-1974), Ronald Reagan (1981-1989), George H. W. Bush (1989-1993), and George W. Bush, Jr. (since 2001). Simultaneously, the West had become the region with some of the nation's biggest metropolises, the most prestigious universities and research centers, the most innovative businesses and the most diverse communities. Paradoxically, while the real West prospered during the 1970s and 1980s and established new political and economic centers that decisively shaped the character of the United States on its way to the twenty-first century, American historians simultaneously regarded the subject of the West "as intellectually light with little historical significance or present relevance" (Thompson, "New" 52). As I will outline in the following subchapter, it was eventually the emergence of American Environmental History that contributed to the revitalization of Western American History during the 1980s.

I.3 The American Environmental Movement, Environmental History, and the Revival of Western American History

The emergence of American Environmental History as a new academic discipline during the 1970s prepared the ground for the revitalization of Western American History in the 1980s; the emergence of environmental history, in turn, was fundamentally linked to the formation of the American environmental movement during the 1960s and 1970s. When the alarming impact of capitalist consumer culture on nature was attacked by American environmentalists through hands-on, grassroots activism during the 1970s, American historians simultaneously developed a new awareness for environmental issues when describing historical processes. The growing interest of American historians in environmental issues eventually resulted in the formation of environmental history, which sought to provide the scientific analysis of human transformations of the environment. As the negative side effects of urbanization and large-scale agriculture were most visible in the American West, the region reappeared in the focus of American historians. Whether it was air and water pollution, the depletion of fish and wildlife, nuclear waste disposal, or the salinization of irrigated lands: Nowhere was the degradation of nature in America more visible than in the American West. Trying to understand the environmental degradation of the region, historians now took a second look at Americans' relationship to the environment. "We look to the past," Wilbur R. Jacobs wrote in 1978, "to understand environmental themes which help to explain origins of ecological transformation taking place in our lifetime" ("Despoliation" 16). While American historians discovered the environment as an important variable in historical analysis and turned especially to the West to study Americans' impact on nature, American Environmental History and Western American History became increasingly overlapping disciplines. In the following chapter, I want to outline the development of both the American environmental movement after 1945 as well as the emergence of American Environmental History during the 1970s, thereby illustrating the extent to which both contributed to a revival of Western American History during the 1980s and, eventually, to the emergence of the New Western History.

From an environmental perspective, the decades after World War II were characterized by the consequences of the rapid growth of population, consumption, and industrial production. Evolving out of the war as the world's strongest economy and biggest consumer society, the United States like no other country exemplified in terms of scale, comprehensiveness, and both visibility and subtlety of impact the new dimensions of environmental transformations in modern capitalist societies. The impact of industrial capitalism and consumerism on the

environment slowly dawned upon Americans and paved the way for the emergence of new environmental values in the decades to follow. Against the background of an increasing awareness for environmental degradation, the simultaneous expansion of environmental knowledge in the sciences, and the larger context of the political protest movements of the 1960s, the American environmental movement started to take shape. Although the protection of nature had been a major concern in American cultural history before 1945, the ‘environment’ emerged next to ‘race,’ ‘class,’ and ‘gender’ as a major analytic category in the context of the social justice movements of the 1960s.³⁹ “Spurred on by the Civil Rights and antiwar movements, environmentalists chastised ‘the establishment,’ especially corporate America, for polluting air and water,” Mark W. T. Harvey contextualizes the strengthening of environmental concerns in American society during the 1960s (“Humans” 9).

Under the impression of accelerating environmental degradation of water and air, the nuclear threat of the cold war period as exemplified by the Cuba crisis, and the new perception of planet earth’s fragile place in the vast expanses of the universe as visualized by the first photos taken from outer space, the American environmental movement firmly established itself during the 1960s and 1970s with the explicit purpose to protect a supposedly fragile nature and damaged biosphere from the excesses of western capitalist consumer societies. In 1968 Paul R. Ehrlich expressed the central question that concerned environmentalists in *The Population Bomb*: How many humans could the biosphere support without collapsing under the impact of pollution and consumption of natural resources? In accordance with Ehrlich’s provocative question, the American environmental movement initially aimed not only at protecting nature from human corruption, but also at protecting the human species from its self-destructive tendencies. “The goal was to save the living world around us, millions of species of plants and animals, including humans, from destruction by our technology, population, and appetites,” Donald Worster summarizes the tenet of the early environmental movement (“Shaky 142-43).

Placed in the context of the political movements of the 1960s, the new American environmentalism had a distinct democratic, grassroots thrust whose form of protest differed essentially from the more elitist conservation movement that had dominated environmental action in the United States during the late nineteenth and early twentieth century. However, the

³⁹ Environmental concerns in American cultural history were expressed by the conservation movement of the late nineteenth and early twentieth century. Promoted by such diverse characters as John Muir and Theodore Roosevelt, the most well-known result of the conservation movement is the establishment of the national park system. For further reference on the conservation movement, see Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920* (Cambridge: Harvard UP, 1959). For the history of the American national park system, consult Alfred Runte, *National Parks: The American Experience*. 3rd ed. (Lincoln: U of Nebraska P, 1997).

American environmental movement was not simply an affair of negativism and protest against corporate America, pushed by the lower ranks of society. Rather, as Samuel P. Hays has shown, the modern American environmental movement was equally a product of the fundamental changes taking place in postwar American society. A growing middle class, advancing levels of education, an increase in leisure time as well as a general increase in standards of living in an advanced consumer society all became characteristic of postwar America and resulted in new values regarding physical and mental fitness, health, personal creativity and self-development, and the general definition of the ‘good life.’⁴⁰ As Hays argues, the environmental consciousness emerging in the United States after World War II is linked to the general shift of values pushed by middle-class America. “The environmental drive in modern society stems from new human values about what people want in their lives,” Hays writes about American society after 1945 and concludes that “the ‘good life’ now referred not only to material goods but also to the quality of the environment where people lived, worked, and played” (*Politics* 22). Due to these value-shifts, the concept of ‘pristine nature’ experienced a new significance in American society. Uncorrupted nature now became the setting of ‘recreation,’ the core-activity of a health-conscious postwar American society that defined time spent outdoors as quality time for body and soul:

Americans experienced natural environments both emotionally and intellectually, sought them out for direct personal experience in recreation, studied them as objects of scientific and intellectual interest, and desired to have them within their community, their region, and their nation as symbols of a society with a high degree of civic consciousness and pride. (Hays, “Conservation” 110)

As Americans increasingly valued leisure time in nature for its positive impact on both physical and spiritual health, the outdoor recreation movement experienced a considerable growth, promoting activities such as hiking, camping, and fishing, which became characteristic of American society in the postwar decades. While Americans prospered, increased their leisure time, and enjoyed nature and life outdoors to an unprecedented degree, they simultaneously acknowledged the beneficial effect of nature on their beauty and health and developed a growing environmental concern.

⁴⁰ For a comprehensive analysis of the shifts of value taking place in post-war American society and their impact on the emergence of the environmental movement, the publications of Samuel P. Hays are the best starting point. For further reference, consult especially Samuel P. Hays, *A History of Environmental Politics since 1945* (Pittsburgh: U of Pittsburgh P, 2000); *Beauty, Health, and Permanence: Environmental Politics in the U.S., 1955-1985* (Cambridge: Cambridge UP, 1987); and his essay “From Conservation to Environment: Environmental Politics in the United States Since World War II,” *Out of the Woods: Essays in Environmental History*, ed. Char Miller and Hal K. Rothman (Pittsburgh: U of Pittsburgh P, 1997): 101-26.

Within the context of these shifts of value in American society, Rachel Carson, a former government biologist, published her book *Silent Spring* in 1962, in which she chronicled the association between wildlife mortality and over-use of pesticides like dieldrin, toxaphene, heptachlor, and DDT in agriculture. Carson argued that the use of pesticides was characteristic of the postwar industrial order in America and drew attention to the environmental hazards pesticides and other toxic substances represented not only for nature, but also for human health. Claiming that the hazardous practices and technologies of industrial capitalism ultimately threatened the welfare of human beings by polluting their natural environments, Carson challenged the American drive to master nature through technology. “The control of nature,” Carson wrote in the concluding paragraph of *Silent Spring*, “is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man” (81). Based on her research, Carson concluded that the environment was under attack from the sciences and specialized technologies created by an industrial order, operating regardless of public needs and concerns. Carson demanded that industrial capitalism’s scientific knowledge and its technological practices had to be relocated within the democratic structures of public opinion and decision. Initiating a debate over the environmental degradation caused by toxic substances in American agriculture and industry, Carson’s book became an essential stimulus for a new era of environmental protest in the United States. “In a period when the question of pollution was only just beginning to receive significant public attention,” Robert Gottlieb summarizes the impact of *Silent Spring*, “Carson’s research suggested that public health and the environment, human and natural environments, were inseparable” (“Reconstructing” 154).

Besides the growing awareness among Americans for the pollution of water and air in their local communities and their strengthened sensibility for the beauty of nature as a source of physical and mental inspiration, the threat posed to humanity by atomic bombs and radioactive fallout became the overarching topic of the environmental movement of the 1960s. Since the testing of the first atomic bomb in Alamogordo, New Mexico, on July 16, 1945, and the droppings of atomic bombs on Hiroshima on August 6, 1945, and on Nagasaki three days later, humankind’s dramatically increased potential to harm the natural environment had become evident. Nagasaki and Hiroshima not only represented modern technology’s terrifying potential to inflict hitherto unknown damage upon humankind, the first use of nuclear weapons simultaneously signified humanity’s new power to inflict irremediable damage on the biosphere, even to the point of self-extinction.

For Americans, the concept of nuclear threat received a completely new meaning during the Cuba Crisis of 1962. With Russia and the United States at the brink of nuclear

warfare, Americans realized from first-hand experience that nuclear technology was a deadly threat of hitherto unknown dimensions. Just at the time in history when American society prospered and looked positively into a future of the new frontiers young President Kennedy had promised, the nation realized in awe the very real possibility of nuclear attack and devastation. As the Cuba Crisis subsided, American's new awareness for the nuclear threat remained and was intensified further by the discovery of such formerly unknown hazards as the 'nuclear winter' phenomenon. The impact of the Cuba Crisis on the emerging American environmental movement during the 1960s can hardly be overestimated.

The general atmosphere of an impending ecologic crisis of global dimensions was further increased in the United States by the first moon landing on July 20, 1969, which raised the awareness of the planet's fragility by illustrating its beauty as seen from outer space. Although the moon landing represented, on the one hand, for many Americans the superiority of American technology in the arms race with the Soviet Union and the nation's ability to master the limits of nature, the photogenic visualization of 'mother earth' simultaneously added stimulus to the environmental movement. As historian Alfred W. Crosby notes, "the moon shot had the paradoxical effect of converting many to earth worship" ("Past" 1186). As Americans started to develop an awareness for the negative impact of capitalist culture and modern technology on the environment, the fear of global ecological disaster was intensified by the photos depicting the beauty and vulnerability of a blue planet before a background of black nothingness.

The celebration of the first Earth Day on April 22, 1970, gave expression to the scope and size of the new environmental awareness that had gathered momentum since World War II in the United States. Initiated by Gaylord Nelson, a Democratic senator from Wisconsin, an estimated 20 million Americans took part in the largest demonstration not linked to Civil Rights issues or the Vietnam War. Taking on the form of grassroots protest, the Earth Day had participants and celebrants in two thousand colleges and universities, roughly ten thousand primary and secondary schools, and hundreds of communities across the United States. Eventually, Earth Day became an annual holiday. In the aftermath of the first Earth Day, membership in the top twelve environmental groups rose from 124,000 at the end of the 1960s to a combined total of 1,127,000 in 1972.

It is difficult to measure and prove the exact impact of any of the individual changes taking place in American society after World War II on the American environmental movement. However, the rapid growth of an environmental consciousness in American society during the postwar decades is documented by an outburst in federal legislation passed by congress during the 1960s and the 1970s, answering the call of a majority in American

society for a change of paradigm in environmental politics. Among the most prominent laws passed during this period are the Wilderness Act of 1964, the Clean Air Acts of 1963 and 1970, the Endangered Species Act of 1966 (strengthened in 1973), the Clean Water Acts of 1960, 1972, and 1977, the Federal Water Pollution Control Act 1972, and, most importantly, the National Environmental Policy Act, signed into law by Richard Nixon in January 1970, later that year accompanied by the launch of the Environmental Protection Agency, dedicated to ensure compliance of the government's environmental legislation, especially in the realms of water and air protection.⁴¹

In the context of a growing awareness in American culture for environmental degradation, the American environmental movement firmly constituted itself during the 1960s and 1970s with the explicit purpose to protect a supposedly fragile nature and damaged biosphere from the excesses of western capitalist consumer society. In this context, 'environmental history' emerged as a new academic discipline during the 1970s, representing a response among a group of American historians to the issues addressed by the environmental movement in the preceding years.

The academic recognition of environmental history was first documented in August 1972, when the *Pacific Historical Review* devoted its entire issue to environmental history. Roderick Frazier Nash, who had published *Environment and Americans: The Problem of Priorities* earlier that year, introduced the new discipline in his essay "American Environmental History: A New Teaching Frontier." "Environmental history," Nash states, "refers to the past contact of man with his total habitat;" referring to the leading paradigms in ecology at the time, Nash further specified the agenda of environmental historians: "The environmental historian like the ecologist should think in terms of wholes, of communities, of interrelationships, and of balances" (363). As Nash's statement indicates, environmental history was from the outset based on concepts of 'nature' dominating the discourse of ecology at that time. According to the ruling ecological paradigms, nature was organized in ecosystems that showed a tendency to develop a state of balance and equilibrium between its individual components. Nature as understood by early environmental historians was stable, orderly, and self-equilibrating—unless disturbed by human intervention.

In 1973, the first official, organized step was undertaken to inaugurate environmental history as an autonomous academic field in the United States. As legend has it, historian John Opie approached Donald Worster during the 1973 meeting of the American Studies Association in San Antonio, Texas, in order to discuss ways to better organize the issues of historians

⁴¹ For a detailed analysis of the individual acts, see Samuel P. Hays, *A History of Environmental Politics since 1945* (Pittsburgh: U of Pittsburgh P, 2000).

interested in environmental issues. At the end of the association's meeting, Opie and Worster congregated with other scholars, among them Susan Flader, Stephen J. Pyne, Roderick Nash, Wilbur Jacobs, and Samuel Hays, and founded the *American Society of Environmental History*. According to Worster's recollection of the atmosphere during the inaugural event, there was a "universal feeling of enthusiasm" among the historians who laid the foundation for the new discipline (qtd. in Miller and Rothman, *Out* xiv).

In order to promote its agenda, the society began to publish a newsletter, the *ASEH News*, and founded a journal in 1973, the *Environmental History Review*, which was recently merged with *Forest and Conservation History* and renamed into *Environmental History*.⁴² The goal of the society was the same back then as it is formulated on the ASEH's website today:

The American Society for Environmental History seeks understanding of the human experience of the environment from the perspectives of history, liberal arts, and sciences. The Society encourages cross-disciplinary dialogue on every aspect of the present and past relationship of humankind to the natural world.⁴³

During the journal's first decade, the content of its various issues reflected the themes and topics dominating environmental history during the field's early years. Drawing from the impulses provided by Samuel P. Hays' *Conservation and the Gospel of Efficiency* and Roderick Nash's *Wilderness and the American Mind*, environmental historians tended to focus on two issues: The history of the conservation movement in the United States of the late nineteenth century and the role of the wilderness concept in American cultural history.

Within the context of a growing environmental awareness in American culture, publications focusing on the decline of public lands through soil erosion, deforestation, and urban pollution skyrocketed during the 1970s.⁴⁴ "These analyses often were marked by an urgent sense of advocacy, as their authors believed they had an obligation to alert the public to the character and consequences of ecological devastation, historical and contemporary," environmental historian Char Miller characterizes the agenda informing early environmental historiographies (*Out* xv). American environmental history thus displayed from the outset a close affiliation with the environmental movement's political reform agenda. Observing the moral proximity of the American environmental movement and environmental history, Martin V. Melosi correctly notes that early environmental historians

⁴² The journal can be accessed via the website <http://www.historycooperative.org/ehindex.html>.

⁴³ Information on the *American Society for Environmental History* is available on the society's website at <http://www.h-net.org/~environ/ASEH/>.

⁴⁴ Published in 1979, Donald Worster's *Dust Bowl: The Southern Plains in the 1930s*, an in-depth study of soil erosion on the Great Plains during the 1930s, paradigmatically exemplifies this trend.

often shared a common set of values, including a biocentric (or more precisely an ecocentric) world view, a belief in the intrinsic value of nature, a faith in ecological balance, and skepticism about—if not contempt for—uncontrolled economic growth. (“Equity” 195)

Accordingly, the generation of environmental historians active during the 1970s set out to investigate the supposedly destructive impact of the secular, progressive, and materialist philosophy of modern western societies on nature. Subscribing to the ethos of the 1970s environmental movement, environmental historians challenged the philosophical foundation of western capitalist culture by questioning ever-increasing economic growth as a desirable political primate and American consumerism as a responsible way of life in the context of large-scale environmental destruction and dwindling of natural resources. As Donald Worster points out, “environmental history was born out of a moral purpose, with strong political commitments behind it” (*Ends* 290).⁴⁵ In order to put limits to the apparent causes of environmental degradation—overpopulation, technological advancement, and capitalist production and consumption—American environmental historians rejected the destructive lifestyle of capitalist consumer culture and advocated a way of life characterized by material simplicity and spiritual richness.

As American Environmental History matured as an academic discipline during the 1980s and the 1990s, the field became a highly specialized, even trendy field of expertise. Numerous universities throughout the United States have established environmental history departments and widely recognized scholars like Carolyn Merchant, William Cronon, Richard White or Donald Worster are only the most visible representatives of a large, growing community of American environmental historians.

Although American scholars have played a significant role in shaping the field of environmental history during the past three decades, environmental history is nevertheless not an American invention. Environmental history’s earliest roots lie in France, in the theories of the Annales School, which derived its name from the French scholarly journal *Annales d'histoire économique et sociale*, which was co-founded in 1929 by Marc Bloch, a historian of medieval France, and Lucien Febvre from the University of Strasbourg.⁴⁶ Both Bloch and Febvre focused

⁴⁵ Historian Roderick Nash has noted the strong ties between environmental history and the New Left history of the 1970s, arguing that both write history from the bottom up, with the difference that in environmental history, “the exploited element [is] the biota and the land itself,” not a group of people (“American” 363). Although most scholars generally agree that the discourses that stimulated the environmental movement and environmental history were to a considerable degree interchangeable during the 1970s, it has to be acknowledged that both discourses have increasingly diversified over the years and are today too heterogeneous to be reduced to any one single agenda. Martin V. Melosi gives a good introduction to the diversification of the environmental movement during the past decades in “Equity, Eco-racism, and Environmental History,” *Out of the Woods: Essays in Environmental History*, ed. Char Miller and Hal K. Rothman (Pittsburgh: U of Pittsburgh P, 1997): 194-211.

⁴⁶ The journal was renamed in 1994 as *Annales. Histoire, Sciences Sociales* and is now called *Annales. Economies, sociétés, civilisations*.

their research on the environmental basis of societies and emphasized the role nature played in shaping human behavior. Furthermore, the Annales historians employed the methodologies of the social sciences—a remarkable innovation in the early twentieth century—and rejected the up to then dominant emphasis among historians on politics, diplomacy, and war. In contrast to the traditional political or military history of ‘great white men,’ the Annales historians aimed at writing ‘history from below.’ As a form of social history, history from below as promoted by the Annales school was supposed to focus on the perspectives of ordinary individuals within society as well as individuals and regions that had previously not been considered as historically important. In addition, the Annales historians promoted the analysis of historical structures over a long period of time—*la longue durée*—and included as new areas of study geography, material culture, and *mentalities*, the psychology of the epoch, in their historiographies.

Building on the work of Bloch and Febvre, Fernand Braudel revolutionized history as an academic discipline when he published his landmark study *The Mediterranean and the Mediterranean World in the Age of Phillip II* in 1949. Outlining the environmental conditions in the Mediterranean and their impact on the local cultures, Braudel attempted to show how geography determined both the social and economic conditions in societies and argued that geography had to be recognized as a relevant factor in global history. According to Braudel, nature—the land as shaped by mountains, plains, and seas—was a most decisive factor in the evolution of human societies. As Braudel wrote, man was “a prisoner of climate, of vegetation, of the animal population, of a particular agriculture, of a whole slowly established balance from which he cannot escape without the risk of everything being upset (qtd. in Crosby, “Past” 1185). Braudel believed that history had to be understood as nature’s slow impact on human society through constant repetition and ever-returning cycles, not as the mere succession of events in human lives. Arguing that humans’ sense of place was determined by the physical world around them, Braudel demanded that historians should focus on the interdependence of human life and nature.

As the environmental movement gathered momentum during the 1970s, the interest in nature’s role in history received new impetus among the French Annalists, who dedicated a special issue of their journal to “Histoire et Environnement” in 1974. At this crucial point in environmental history, Emmanuel Le Roy Ladurie, a leading environmental historian at the time, defined the discipline as follows:

Environmental history unites the oldest themes with the newest in contemporary historiography: the study of epidemics and climate, those two factors being integral parts of the human ecosystem; the series of natural calamities aggravated by a lack of foresight, or even by an absurd “willingness” on the part of the simpletons of colonization; the destruction

of Nature, caused by soaring population and/or by the predators of industrial overconsumption; nuisances of urban and manufacturing origin, which lead to air or water pollution; human congestion or noise levels in urban areas, in a period of galloping urbanization. (qtd. in Worster, "Doing" 291-92)

Ladurie's statement indicates again that early American environmental history was influenced on the one hand by the environmental movement's concern for the protection of nature from human corruption, and on the other hand by the influence of the Annales school to write history from the bottom up, to consider geographical and environmental factors as relevant forces in human history. Under the influence of the Annales school and the social movements of the 1960s and 1970s, the first decade of environmental history in the United States thus often emphasized the lives of ordinary people—workers, women, the poor, and other minorities and promoted a local, grass roots approach to history. Environmental historians thus put a premium on regional histories that analyzed geophysical conditions in a specific region as they determined the way of life of the people inhabiting this region.

Following the tradition of the Annales school, American environmental historians thus set out to realign human history with the history of nature by studying the interdependent relationship between both. In his essay "Transformations of the Earth: Toward an Agroecological Perspective in History," Donald Worster defines environmental history accordingly. Environmental history, Worster writes, "deals with the role and place of nature in human life. It studies all the interactions that societies in the past have had with the nonhuman world, the world we have not in any primary sense created" ("Transformations" 1089-90). As Worster's statement indicates, environmental historians work under the basic premise that humans depend on their natural surroundings and that the human-nature relationship is at the heart of all historical processes. "Our history can never be truly complete," Worster specifies, "unless we realize how much of it really centers on a process of interaction with the forces of nature.... We can no more get out of a relationship with nature than we can get out of history" ("Paths" 18-19). Based on the general recognition of humanity's dependency on nature, Worster argues that the main agenda of environmental historians is to deepen "our understanding of how humans have been affected by their natural environment through time and, conversely, how they have affected that environment and with what results" (*Ends* 290). Similarly, William Cronon states that "the chief innovation of environmental history has been to assert that discussions of natural context cannot be relegated to an isolated chapter but must be integral to the human history of which they are so fundamental a part" ("Kennebec" 33). Environmental historians are thus interested in the points of intersection between humans and nature as they develop in cultures over time. "Wherever the two spheres, the natural and the cultural, confront or interact

with one another,” Worster summarizes, “environmental history finds its essential themes” (“Transformations” 1090).⁴⁷

Advocating the reintegration of ‘nature’ as an analytic category into the practice of doing history, environmental historians try to erode the rigid separation in academia between the sciences on the one hand—dealing with nature—and the humanities on the other hand—dealing with human culture. As Worster argues, this exclusion of nature from social history has its origins in the nineteenth-century definition of doing history. Worster claims that the professionalization of history during the nineteenth century developed in the broader context of the emergence of the modern nation state and focused thus from the outset on the analysis of political structures. At the same time, ‘nature’ became the exclusive domain of the natural sciences like biology, chemistry, or medicine. This schism between the humanities and the sciences, argues Worster, was accompanied by a cultural revolution in Western societies, which promoted lifestyles that increasingly estranged members within these societies from older ways of life based on regular, direct contact with nature:

Planetary history has been fundamentally environmental history. It has been the story of a long shifting away from direct and local interaction with the earth, as the defining context of daily life, to dealing with it more indirectly and globally, through the impersonal mediation of powerful centralized political institutions, elaborate technologies, and complicated economic structures. (“Vulnerable” 6)

Environmental history seeks to revert the schism in academia between the social sciences and the sciences of nature by combining the main subjects of analysis—humans and nature—in a hybrid-discipline. Environmental history is thus strongly interdisciplinary, combining theories and methodologies from a variety of disciplines, such as geography, biology, ecology, and climatology with those of sociology, history, and politics.

Environmental historians often see themselves in opposition to traditional, people-centered history. According to some environmental historians, people-centered history narrows historical processes down to “the connivings of presidents and prime ministers, the passing of laws, the struggles between courts and legislatures, and the negotiations of diplomats,” as Worster states provocatively (“Doing” 289). In contrast, environmental historians regard nature itself as a historical agent. “Whether defined as climate, as vegetation, as the presence or absence of water, as soil and topography, or more compositely as ecosystem and

⁴⁷ As I will outline in chapters II and IV, the lines of demarcation between the ‘natural’ and the ‘cultural’ are not as self-evident as Worster’s statement above suggests and competing definitions of ‘nature’ and ‘culture’ are a major point of disagreement among environmental historians.

biosphere,” Worster underlines his position, “nature has been a force to be reckoned with in social evolution” (“Grassland” 93). According to such positions, the examination of the human-nature relationship reveals as much about the living conditions and social structures of a given period as conventional, people-centered historiography does. “The story of the prairie bluestem,” William Cronon writes, “or the smallpox virus, or the common barnyard pig, may be no less important than the story of a presidential administration or war” (“Modes” 1122).

Placing nature back in history and observing the points of intersection between nature and culture, environmental historians pay special attention to Western notions of ‘nature’ as an entity to be dominated, managed, and economically exploited. Frequently, environmental historians seek to outline the limits of nature to human use and abuse, thereby advocating limits to human actions that are perceived as detrimental to nature. This is especially true of Donald Worster, who “rejects the conventional assumption that human experience has been exempt from natural constraints, that people are a separate and ‘supernatural’ species, that the ecological consequences of their past deeds can be ignored” (“Doing” 290). Accordingly, the measurement and evaluation of human transformations of nature is a primary task of environmental historians. As Richard White states, environmental history is essentially “the history of the consequences of human actions on the environment and the reciprocal consequences of an altered nature for human society” (“Trashing” 27). In accordance with this statement, environmental historians of the 1970s and 1980s increasingly turned to the American West in order to examine the relationship between Americans and nature. As I will outline in the following chapter, the revival of Western American History as expressed in the emergence of the New Western History in the late 1980s is fundamentally linked to the development of American Environmental History.

*“For this region that was once so lost in dream and idealization,
we have been creating a new history, clear-eyed, demythologized, and critical.
We have been rewriting the story from page one and watching it be accepted.
That has been a slow, hard-won victory, and I think it is time
we acknowledge the achievement.”*

Donald Worster
“Beyond the Agrarian Myth”

II. The Revision of the American West in the New Western History

II.1 The New Western History: Emergence, Issues, and Agenda

The revived interest in the American West among American historians as triggered by environmental history during the 1970s and 1980s eventually contributed to the emergence of the New Western History, a revisionist discourse that advocated a radical break with Frederick Jackson Turner's legacy and revised traditional frontier historiography by re-examining the roles of race, class, gender, and, most importantly, the environment had played and continued to play in the West. The following characterization of the New Western History is based mainly on the publications of historians William Cronon, Patricia Nelson Limerick, Richard White, and Donald Worster.⁴⁸ Although the list of historians that could potentially be associated with the New Western History is decisively longer, Cronon, Limerick, White, and Worster are undoubtedly considered as the main protagonists of the school.⁴⁹ All four scholars belong to the generation of historians that were graduate students during the 1960s and 1970s and have, as critics suggest, been influenced by the political counter-cultures of that era; all four started their publishing careers at some point during the 1980s—with the exception of Donald Worster, who published his first acclaimed book, *Dust Bowl: The Southern Plains in the 1930s*, in 1979.

⁴⁸ Apart from the primary texts referred to throughout the following chapter, my understanding of the New Western History is based on the following publications: Stephen Aron, "Lessons in Conquest: Towards a Greater Western History," *Pacific Historical Review* 63.2 (1994): 125-47; Allan G. Bogue, "The Course of Western History's First Century," *A New Significance: Re-envisioning the History of the American West*, ed., Clyde A. Milner II (New York: Oxford UP, 1996): 3-28; Brian W. Dippie, "American Wests: Historical Perspectives," *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 112-36; "The Winning of the West Reconsidered," *The Wilson Quarterly* 1990: 70-85; Gene M. Gressley, "The West: Past, Present, and Future," *Western Historical Quarterly* 17.1 (1986): 5-23; "Whither Western History? Speculations on a Direction," *Pacific Historical Review* 53 (1984): 493-501; Gene M. Gressley, ed., *Old West/New West* (Norman: U of Oklahoma P, 1997); James R. Grossman, ed., *The Frontier in American Culture* (Berkeley, Los Angeles: U of California P, 1994): 30-52; Gerry Kearns, "The Virtuous Circle of Facts and Values in the New Western History," *Annals of the Association of American Geographers* 88.3 (1998): 377-409; Kerwin Lee Klein, "Reclaiming the 'F' Word, Or Being and Becoming Postwestern," *Pacific Historical Review* 65 (1996): 179-215; Michael P. Malone, "Beyond the Last Frontier: Toward a New Approach to Western American History," *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 139-60; Michael E. McGerr, "Is There a Twentieth-Century West?," *Under an Open Sky: Rethinking America's Western Past*, ed. William Cronon, George Miles, and Jay Gitlin (New York: W. W. Norton, 1992): 239-56; Barbara Meldrum, ed., *Old West—New West: Centennial Essays* (Moscow: U of Idaho P, 1993); Clyde A. Milner II, *A New Significance. Re-envisioning the History of the American West* (Oxford: Oxford UP, 1996); Walter T. Nugent, "Happy Birthday, Western History," *Journal of the American West* 32 (1993): 3-4; "Western History: Stocktakings and New Crops," *Reviews in American History* 13 (1985): 319-29; Paul W. Rodman, and Michael P. Malone, "Tradition and Challenge in Western Historiography," *Western Historical Quarterly* 16 (1985): 27-53; Malcolm J. Rohrbough, "The Continuing Search for the American West: Historians Past, Present, and Future," *Old West/New West*, ed. Gene M. Gressley (Norman, London: U of Oklahoma P, 1997): 125-46; Elliott West, "A Longer, Grimmer, but More Interesting Story," *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 103-111.

⁴⁹ As Limerick points out in "What on Earth Is the New Western History?," The New Western Historians actually reject the term 'school' or 'movement' as a unifying label.

Today, William Cronon is holding the Frederick Jackson Turner Chair of History, Geography, and Environmental Studies at the University of Wisconsin. Before he took on this position, he served for more than a decade at the history department of Yale University, where he received his PhD in 1990. Together with Richard White and Donald Worster, he is among the leading environmental historians of the American West.

Patricia Nelson Limerick received a B.A. in American Studies from UC Santa Cruz in 1972 and held teaching positions at the history departments of Yale and Harvard Universities before accepting her current position at Boulder University, Colorado, where she is Professor of History and chairs the board of the university's Center of the American West. In the past, she has served as President of the Western History Association and the American Studies Association. Her publication *The Legacy of Conquest: The Unbroken Past of the American West*, published in 1987, is considered by many as the founding text of the New Western History.

Richard White, like Limerick a graduate of UC Santa Cruz, taught history at the University of Washington before he took on his current position as Margaret Byrne Professorship in American History at Stanford University. Next to his focus on environmental issues White has specialized in Native American history.⁵⁰

Donald E. Worster is Joyce and Elizabeth Hall Professor of U.S. History at the University of Kansas and sometimes referred to as the 'Dean' of Western American History. Worster is among the most prominent environmental historians in the United States and is a former president of the American Society for Environmental History.

To define any specific date marking the birthday of the New Western History is difficult, as the scholars most commonly associated with the movement like Cronon, Limerick, White, and Worster all started publishing revisionist studies on the American West long before the term 'New Western History' surfaced at the end of the 1980s.⁵¹ Nevertheless, the conference "Trails: Toward a New Western History," held in September 1989 in Santa Fe, New Mexico, can be considered as a starting point of the New Western History. The Trails conference brought together leading historians of the American West and had been initiated to launch a

⁵⁰ Richard White's achievement as a historian has been acknowledged and appreciated by a roundtable of noted historians in 2001. For further reference, see Clyde A. Millner et al., "A Historian Who Has Changed Our Thinking: A Roundtable on the Work of Richard White," *Western Historical Quarterly* 33.2 (2001): 59 p. <http://www.historycooperative.org/journals/whq/33.2/roundtable.html>

⁵¹ Among the studies published prior to the emergence of the term 'New Western History' are: William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 1983); Patricia Nelson Limerick, *Legacy of Conquest: The Unbroken Past of the American West* (New York: Norton, 1987); Richard White, *Land Use, Environment, and Social Change: The Shaping of Island County, Washington* (Seattle: U of Washington P, 1980); *The Roots of Dependency: Subsistence, Environment, and Social Change among the Choctaws, Pawnees, and Navajos* (Lincoln: U of Nebraska P, 1983); Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (Oxford: Oxford UP, 1979); *Rivers of Empire: Water, Aridity, and the Growth of the American Desert* (New York: Oxford UP, 1985).

twenty-four-panel traveling exhibit titled “Trails through Time,” a meditation on routes of travel in the Rocky Mountain West. Patricia Nelson Limerick, who participated as a keynote speaker at the conference, is said to have coined the term ‘New Western History’ during the preparations for the meeting. As Limerick explains in retrospect, the Trails conference was from the outset intended as an opportunity to discuss and evaluate the changes that had taken place within Western American history throughout the past years among the field’s leading experts. The title for the conference had thus been chosen programmatically. At the conference meeting, acclaimed scholars of the American West, most prominently Limerick, White and Worster, presented keynote speeches, in which they summarized recent developments in the field. The historians present agreed that throughout the past few years, an all-encompassing revision of traditional frontier historiography had been undertaken by scholars of the West. This revision had been so profound and widespread that it was legitimate to acknowledge the existence of a ‘New Western History,’ the scholars suggested.⁵²

The essays presented at the meeting, most importantly Donald Worster’s “Beyond the Agrarian Myth,” Richard White’s “Trashing the Trails,” and Patricia Nelson Limerick’s “The Trail to Santa Fe: The Unleashing of the Western Public Intellectual,” were published in 1991 in the edition *Trails: Towards a New Western History*.⁵³ Although editors Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin state in the introduction to *Trails* that the essays not only represent agreement, but also disagreement regarding the definition of the New Western History, the edition received considerable attention upon its publication and was, due to the programmatic character of the essays contained, identified by many as the school’s founding text.⁵⁴

In the introduction to *Trails*, the editors define the New Western History as a revisionist reading of Western American history that opposes the positive, one-sided outlook on the region’s history as advocated by Frederick Jackson Turner and the Old Western History—the term ‘Old Western History’ denoting all those historians that accepted Turner’s frontier paradigm. As the editors of *Trails* suggest, the Old Western History restricted its analysis of the

⁵² For a more detailed introduction to the background of the *Trails* conference, see the introduction by Limerick, Milner, and Rankin in *Trails: Toward a New Western History* (Lawrence: UP of Kansas, 1991); see also Patricia Nelson Limerick, “The Trail to Santa Fe: The Unleashing of the Western Public Intellectual,” *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 59-77; as well as Limerick’s introduction to *Something in the Soil: Legacies and Reckonings in the New West* (New York, London: W Norton & Company, 2000).

⁵³ Apart from the speeches given at the Trails-conference, the edition contains a set of essays that had been written especially for the volume, such as Brian W. Dippies’ “American Wests: Historiographical Perspectives,” Patricia Nelson Limerick’s “What on Earth is the New Western History?,” Michael P. Malone’s “The ‘New Western History,’ an Assessment,” Gerald Thomson’s “Another Look at Frontier/Western History,” and Elliott West’s “A Longer, Grimmer, but More Interesting Story.”

⁵⁴ For a review of the edition following its publication, see Susan Armitage, “Review: Trails: Toward a New Western History,” *The Journal of American History* 79.4 (1993): 1570.

region mainly to the frontier era and neglected to study the development of the West in the twentieth century. By holding on to Turner's frontier paradigm, the revisionists argue, the Old Western History failed to promote innovation within the field after World War II and is thus responsible for the aura of antiquarianism that led to the gradual decline of Western American History during the 1970s and 1980s. Whereas the Old Western History had mainly advocated positive readings of the region's past, the New Western Historians want to acknowledge negative aspects as well. "New Western Historians break free of the old model of 'progress' and 'improvement,'" Limerick states, "and face up to the possibility that some roads of western development led directly to failure and to injury" ("What" 86). In the introduction to *Trails*, the editors summarize the revisionist perspective of the New Western History as follows:

Perhaps most importantly, the New Western History offers a more balanced view of the American past. It includes failure as well as success; defeat as well as victory; sympathy, grace, villainy, and despair, as well as danger courage, and heroism; women as well as men; varied ethnic groups and their differing perspectives as well as white Anglo-Saxon Protestants; an environment that is limiting, interactive, and sometimes ruined as well as mastered and made to bloom; a parochial economy alternately fueled and abandoned by an interlocking national and world order; and finally, a regional identity as well as a frontier ethic.... If the New Western History does nothing else, it helps us consider the old and familiar in new ways. (xi-xii)

Accordingly, the New Western Historians claim for themselves to correct the mainstream of Western American historiography by offering a more balanced, down-to-earth perspective on the region's history.

The balanced approach promoted by the New Western Historians is especially built around a shift of perspective from the centers to the margins of historical experience. Whereas Turner's version of the West focused on the perception of the white, male pioneer, the New Western Historians claim to recover the experiences of those groups that had been formerly marginalized in Western American historiography, most importantly that of women, immigrants of various ethnic backgrounds, and Native Americans. In their introduction to *The New Western History: The Territory Ahead*, a critical examination of the New Western History, Jerome Frisk and Forrest G. Robinson summarize the agenda of the revisionists as follows:

The New Western Historians strive to re-tell regional history from the point of view of the oppressed, colonized, and conquered.... Central to the agenda of the New Western Historians is a shift in perspective that

produces histories told from the “bottom up”—from the point of view of the margins and the marginalized. (5)

The agenda of the New Western Historians to write history from ‘the bottom up’ thus aims at providing counter-histories to Turner’s harmonious frontier paradigm by exposing the “oppression and exploitation on the part of those holding the whip in hand,” as Donald Worster phrases it (“Beyond” 18).

Aiming to uncover the untold, silenced episodes in the region’s history, the New Western Historians especially examine power relations in the West, both past and present. “The West,” Worster writes, “has in fact been a scene of intense struggles over power and hierarchy, not only between the races but also between classes, genders, and other groups within the white majority” (“Beyond” 15). To understand how these power structures historically developed in the West is a central aim of the New Western Historians. As Richard White writes:

New Western Historians look initially at three things: first, the contesting groups; second, their perceptions of the land and their ambitions for it; third, the structures of power that shape the contest. All of these things are relational, all change over time. (“Trashing” 37)

According to the revisionists, the aim to unearth the ideological underpinnings and the power relations that shaped the West is what separates the New Western Historians from traditional frontier historiography. “Perhaps the single most important, most distinguishing characteristic of the new western history,” Worster claims, “is its determination not to offer cover for the powers that be—not to become subservient to them, by silence or consent” (“Beyond” 22). The New Western History is thus characterized by a moral agenda “to stand apart from power and think critically about it,” thereby providing a “more complete, honest, penetrating view,” as Worster phrases it (“Beyond” 22, 25).

Worster’s characterization of the New Western History’s anti-ideological agenda has several crucial implications. First, Worster implies that there is such a thing as historical discourse located outside of power and second, Worster suggests that there is such a thing as ‘true’ or ‘false’ history. Claiming that the New Western Historians stand apart from power, Worster suggests that historians can in principle take on a neutral position located outside of power or ideology and can, from this privileged point of view, observe history with an unbiased, objective eye. When Worster writes that “for this region that was once so lost in dream and idealization, we have been creating a new history, clear-eyed, demythologized, and critical,” he suggests that the New Western Historians are writing from such an objective, non-ideological point of view. Worster’s assumption that historians can make a conscious choice to

write outside the realm of power and ideology is, of course, problematic. I will discuss Worster's concept of history in more detail in chapter IV. For this introduction, it suffices to note that the New Western History's overall agenda to write anti-mythic history and to uncover the power structures in the region's past resembles the rhetoric of the 1960s counter-cultures. "Advocating a change of perspective away from winners and centers to the 'losers' and margins of Western history," Gerry Kearns notes, "the New Western History resonates much of the rhetoric of the New Left and the 'new histories' of the 1960s" ("Virtuous" 399). Critics have thus noted that there is a discrepancy between the New Western Historians claim for objectiveness and their apparent interest in the margins of historical experience.

By focusing on the negative, formerly neglected aspects of Western history, the New Western Historians hope to provide an antidote to the prevailing influence of Turner's mythic frontier narrative. The New Western Historians' strategy thus follows Richard Slotkin's credo, who believes that "we can only demystify our history by historicizing our myths" ("Myth" 80).⁵⁵ According to Slotkin, myth is the narrative reduction of complex history into a single, ideologically charged metaphor. "A myth makes a single metaphor out of a large swath of history," Slotkin argues, "and its implications therefore invoke the authority of the dominant ideology, the givens that shape cultural and political discourse" ("Myth" 77). According to Slotkin's argument, the central metaphor of the mythic West is the 'frontier,' which functions—especially in Turner's frontier paradigm—to encapsulate the essence of American history. As Slotkin describes the function of the frontier myth in American culture:

The original ideological task of the Myth was to explain and justify the establishment of the American colonies; but as the colonies expanded and developed, the Myth was called on to account for our rapid economic growth, our emergence as a powerful nation-state, and our distinctively American approach to the socially and culturally disruptive processes of modernization. (*Gunfighter* 10)

According to the New Western Historians, the concept of the 'frontier' continues to function as the dominant metaphor in American popular culture today. Accepted as a national symbol that

⁵⁵ For a comprehensive introduction to Slotkin's definition of 'myth,' a good starting point is his essay "Myth and the Production of History," published in *Ideology and Classic American Literature*, ed. Sacvan Bercovitch and Myra Jehlen (Cambridge: Cambridge UP, 1986): 70-90. Other good references on the subject of myth and the American West are: Anne M. Butler, "Selling the Popular Myth," *The Oxford History of the American West*, ed. Clyde A. Milner II, Carol A. O'Connor, and Martha A. Sandweiss (New York: Oxford UP, 1994): 771-801; Roy A. Jordan, "Myth and the American West," *American Renaissance and American West*, ed. Christopher S. Durer, Herbert R. Dieterich, Henry J. Laskowsky, and James W. Welke (Wyoming: U of Wyoming P., 1982): 141-48; David Mogen, "Frontier Archetype and Myth," *The Frontier Experience and the American Dream. Essays on American Literature*, ed. David Mogen, Mark Busby, and Paul Bryant (College Station: Texas A & M UP, 1989): 15-30; Harald P. Simonson, "The West as Archetype," *Under the Sun: Myth and Realism in Western American Literature*, ed. Barbara Meldrum (Troy: Whitston, 1985): 21-28; and Max Westbrook, "Myth, Reality, and the American Frontier," *Under the Sun: Myth and Realism in Western American Literature*, ed. Barbara Meldrum (Troy: Whitston, 1985): 11-19.

represents the origins and the soul of the entire nation, the concept of the 'frontier' as a strongly ideological function in American culture, the New Western Historians point out. "When societies adopt metaphors as ideological doctrine," Slotkin describes the ideological function of the frontier, "those metaphors acquire a tyrannical weight that does indeed restrain thought and behaviour" ("Myth" 77). The New Western Historians thus write against the dominant ideological function of the frontier concept in American culture.

In "Beyond the Agrarian Myth," Donald Worster outlines the semantic core of the frontier myth. Drawing from Henry Nash Smith's basic argument in *Virgin Land: The American West as Symbol and Myth*, Worster claims that Turner's version of the frontier myth is built around the agrarian myth. According to Worster, the agrarian myth idealizes the conquest of the American continent as the heroic achievement of sturdy, innocent, good-natured people. "We have had many myths about the West," writes Worster, "but the principal one was a story about a simple, rural people coming into a western country...and creating there a peaceful, productive life" ("Beyond" 6). As Worster claims, Turner's frontier narrative adapts the agrarian myth by portraying the course of American frontier history as the "genesis of a free people" while simultaneously neglecting the "shameful side of the westward movement," most importantly the conquest, dispossession, and genocide of the continent's native population ("Beyond" 10). Worster summarizes the narrative of the agrarian frontier myth as follows:

In this great, good place, human nature was supposed to rise out of its old turpitude and depravity to a new dignity. Sturdy yeoman farmers would have here the chance to live rationally and quietly, free of all contaminating influences. By the millions they would find homes in the undeveloped vastness stretching beyond the settlements, bringing life to the land and turning it into the garden of the world. ("Beyond" 8)

In coherence with the agrarian frontier myth, Worster continues his argument, Turner's interpretation of American history celebrated the American frontier as the place where a historic event of global dimensions took place: the triumph of civilization's progressive forces over primitive nature. "Nothing less than the mythical conquest of nature is the meaning of [Turner's] symbolic frontier," Worster states ("Beyond" 22).

In order to re-historicize the mythic frontier West, the New Western Historians reject the term 'frontier' as such. Although Limerick emphasizes in "What on Earth is the New Western History" that there "is not a set of principles to which all members must swear allegiance," the total rejection of the frontier concept has to be considered as a basic characteristic of the New Western History (88). Especially Limerick has argued vehemently against the concept of the

‘frontier,’ stating that it is an “unsubtle concept in a subtle world,” unfit to encapsulate the story of the colonization of North America (*Legacy* 25). The term ‘frontier,’ Limerick notes, “is nationalistic and often racist (in essence, the area where white people get scarce); when cleared of its ethnocentrism, the term loses an exact definition” (“What” 85). In “The Trail to Santa Fe,” Limerick writes that Turner’s frontier model “relentlessly trivialized the West, ignoring the enormous complex convergence of diverse people” (69). In the same essay, Limerick continues to criticize traditional frontier historiography for its tendency to present the history of the West as a narrative of happy-endings, propelled by keywords such as ‘progress,’ ‘individualism,’ or ‘exceptionalism.’

Limerick’s assessment is representative of the New Western Historians’ attitude towards Turner’s frontier paradigm. Only William Cronon demands a more balanced assessment of Turner’s achievement. Although acknowledging the shortcomings of the ‘frontier’ concept, Cronon points out that “Turner was surely right to see the long European (and African and Asian) invasion of North America—and the resistance to it by the continents existing inhabitants—as the pivotal event in American history” (“Becoming” 6). However, Cronon’s moderate, balanced position is a minority opinion among the New Western Historians. As Alan Brinkley points out, “central to almost all descriptions of the new western history is an obligatory, almost ritualistic repudiation of Frederick Jackson Turner” (qtd. in Frisk, “Theoretical” 21). The New Western Historians’ programmatic rejection of Turner’s legacy is documented, for example, in Richard White’s *“It’s Your Misfortune and None of My Own:” A New History of the American West*, published in 1991. In this extensive revisionist history of the American West, White does not mention the term ‘frontier’ once on over five hundred pages.

For the New Western Historians, the shortcomings of Turner’s frontier concept are manifold. The New Western Historians criticize that Turner’s frontier paradigm is not applicable to the urban, industrial, twentieth-century West and hence reject Turner’s idea that the processes associated with the frontier West ended in 1893. “New Western Historians,” Limerick writes, “reject the notion of a clear cut ‘end to the frontier,’ in 1890 or in any other year” (“What” 86). According to the New Western Historians, Turner’s announcement of the closing of the frontier in 1893 has led to the wrong assumption that the West’s significance for the development of the nation at large ended in 1893. The New Western Historians point out, however, that two major characteristics of the nineteenth-century West continued after 1893: large scale immigration and exploitation of natural resources in the extractive industries. “If the ‘frontier’ meant, in one of its many and changeable definitions, the discovery of new resources and the rush of population to exploit

those resources,” Limerick writes, “then 1890 was no deadline” (“What” 83). In *Something in the Soil*, Limerick notes more specifically:

There was more homesteading after 1890 than before. A number of extractive industries—timber, oil, coal, and uranium—went through their principal booms and busts after 1890. If one went solely by numbers, the nineteenth-century westward movement was the tiny, quiet prelude to the much more sizable movement of people into the West in the twentieth century. (*Soil* 19)

More importantly, the New Western Historians point out that the imperial politics of the frontier era continue to influence the present-day West. As Limerick writes in *Something in the Soil*:

Any number of conflicts and dilemmas, stirred up in the nineteenth century, remain to hunt Westerners in the twentieth century. Conflicts over water use, public lands, boom bust economies, local authority versus federal authority, relations between Mexico and the United States (as well as between Mexican Americans and Anglos), Indian land and water claims, as well as freedom of religious practice—most of the issues that had agitated the nineteenth-century West continued to stir things up a century later. (*Soil* 19)

Finally, the New Western Historians point out that the West, in terms of its power and influence, developed its real significance only throughout the twentieth century: Both the West’s urban-industrial order as well as its power elite, best exemplified by the presidencies of such archetypal western characters as Richard Nixon, Ronald Reagan, George H. W. Bush, and George W. Bush, Jr. only developed after 1893.

More importantly, the revisionists criticize that Turner’s frontier paradigm was silent about silenced violence as a central aspect in the region’s history, thereby obscuring the bloody conflict between colonizers and colonized. Turner’s ‘free land,’ the New Western Historians point out, was nothing of that sort, but had to be wrested from the native population through acts of conquest that involved acts of violence. As Cronon, Miles, and Gitlin phrase it, “‘settlement’ meant land taking, and land taking meant violence,” (“Becoming” 14-15). Especially Richard White has pointed out that Turner’s romantic frontier of pioneers and log cabins was in sharp contrast to the violent realities of the West. These violent aspects, White argues, were portrayed by another famous nineteenth-century interpreter of the frontier, Buffalo Bill Cody and his Wild West Show known as “Buffalo Bill’s Wild West and Congress of Rough Riders of the World.” Richard White has published two essays, “Frederick Jackson Turner and Buffalo Bill” and “When Frederick Jackson Turner and Buffalo Bill Both Played Chicago in 1893,” in

which he compares Turner's and Cody's narratives.⁵⁶ White argues that whereas Turner's narrative presented a rather peaceful process of pioneers and settlers taking possession of the land, Cody's portrayal of frontier history centered around the violent conflict between colonizers and colonized, between 'whites' and 'savages.' According to White, Cody and Turner divided the two central aspects of American frontier history—land settlement and Indian Wars—between them, each employing different national icons: Whereas Cody's story centered around the rifle and the bullet, Turner uses the ax and the plow as the central icons in his narrative. As White points out, Turner's account of frontier history is crafted around an agrarian idyll, which masks or silences all aspects of violence.

In order to reintroduce violence as a central aspect into the region's history, the New Western Historians argue that the term 'settlement' should generally be substituted with the term 'conquest.' Especially Patricia Nelson Limerick has promoted the idea that the notion of 'conquest' is best suited to replace the concept of the 'frontier.' Two years before the Trails conference brought the New Western History to public attention, Limerick argued in *The Legacy of Conquest* that the violent conquest of the West by white invaders had been the defining experience in the region's history.⁵⁷ Limerick claims that up until today, the history of violence in the region continues to determine its present-day society. To approach the history of the region as one that has essentially been shaped by colonial conquest and violent conflict is thus key to an understanding of the modern West, argues Limerick: "Reorganized, the history of the West is a study of a place undergoing conquest and never fully escaping its consequences" (*Legacy* 26). Accordingly, Limerick claims that Turnerian frontier historiography has to be rejected as a valid historical model, as it silences all aspects of conquest. The term 'frontier,' Limerick argues, "blurs the fact of conquest and throws a veil over the similarities between the story of American westward expansion and the planetary story of the expansion of European empires" ("Adventures" 75).⁵⁸

⁵⁶ As White points out, it is one of the curious incidents in history that Cody's Wild West Show entertained an audience of up to 18,000 on Chicago's fair grounds at approximately the same time Turner was presenting his Frontier Thesis.

⁵⁷ Upon its publication in 1987, *Legacy* became one of the most widely noted publications associated with the New Western History. For an assessment of Limerick's *Legacy* and its impact on the formation of the New Western History, consult Donald Worster, Susan Armitage, Michael P. Malone, D. J. Wever, and Patricia Nelson Limerick, "The Legacy of Conquest by Patricia Nelson Limerick: a Panel of Appraisal," *Western Historical Quarterly* 20.3 (1989): 303-32.

⁵⁸ In *Something in the Soil*, Limerick reiterates her position by stating that "there is no clearer fact in American history than conquest" (34). Published in 2000, Limerick's *Something in the Soil* can be regarded as her personal retrospective on the New Western History. Noteworthy is especially her introduction, in which she elaborates on the '4 Cs' which to her mind are the key words describing the focus of the New Western History: continuity, convergence, conquest, and complexity. Limerick summarizes the main insights denoted by key words as follows: 1. Continuity: The relevance of the West for the nation did not end in 1890, but continues, even grew in the twentieth century; 2. Convergence: The West was neither empty nor predominantly white, but was a place of convergence between various ethnic groups; 3. Conquest: the settlement of the West was not a peaceful movement

According to Limerick, the essential shortcoming of the Old Western History is its perception of European imperialism as a process taking place in South Africa, the Belgian Congo, Algeria, New Zealand, and Australia, but not in America, where the conquest of the continent was portrayed as a progressive, harmonious process resulting in freedom, opportunity, and democracy. Similarly, Richard White argues in *Misfortune* that the American West is the

product of conquest and of the mixing of diverse groups of peoples. The West began when Europeans sought to conquer various areas of the continent and when people of Indian, European, Asian, and African ancestry began to meet within the territories west of the Missouri that would later be part of the United States. (4)

Placing the history of the American West in the context of European imperialism, Limerick and White point out that the conquest of the West was less driven by abstract ideals such as freedom and democracy, but rather by the desire of the colonizing forces to exploit the West's natural resources. "Western history has been an ongoing competition for legitimacy," states Limerick, "for the right to claim for oneself and sometimes for one's group the status of legitimate beneficiary of Western resources" (*Legacy* 27).

Thus, the New Western Historians present the history of the West in the broader context of the European imperialist expansion of empires and markets. During the past five hundred years, Limerick points out, "the biggest story on the planet has been the movement of Europeans from Europe into every other continent" and claims that the history of the American West has to be seen as an inter-related part of that process (*Soil* 20). By relocating the conquest of the American West in the broader context of European colonialism, the New Western Historians challenge Turner's interpretation of American frontier history as an exceptional chapter in world history, taking place in the remote vacuum of frontier conditions. As Richard White writes, "New Western Historians, by and large, do not seek essentialism, they do not search for the master traits and master factors of western history" ("Trashing" 36). Rather, the New Western Historians strive "to put the West back into the world community, with no illusions about moral uniqueness" (Worster, "Beyond" 16). In the introduction to *Under an Open Sky*, editors Cronon, Miles, and Gitlin summarize the perspective of the New Western History as follows:

If North American frontiers emerged when Europeans invaded Indian territory, then frontier history is anything but the unique story that earlier scholars made of

of settlers into 'free land,' but a process of conquest involving violence and genocide; 4. Complexity: The region's history is far more complex than the one-dimensional mythic West of the Old Western History.

it. The frontier that Turner portrayed as “isolated“ was instead part of the worldwide expansion of European economies and nation-states that traced back to the fourteenth century and before. As such, we can best know the history of the American West if we read it as a chapter in the much larger history of European colonialism. (Cronon, Miles, Gitlin, “Becoming” 9)

By thus internationalizing Western American historiography, the New Western Historians seek to counterbalance the field’s aura of provincialism and antiquarianism that had contributed to its general decline during the 1970s.⁵⁹

Re-examining the politics of conquest in the nineteenth-century West, the New Western Historians investigate especially the role of federal authorities in the region. As the New Western Historians argue, the rapid increase in power of the United States federal government has to be seen in the broader context of the emergence of the modern nation state in eighteenth- and nineteenth-century Europe. As Worster writes, the historic West was “a land of authority and restraint, of class and exploitation, and ultimately of imperial power” (*Rivers* 4). Accordingly, the New Western Historians argue that the West was not built by individual or community efforts alone, but rather and more importantly by federal agencies.⁶⁰ The West as interpreted by the New Western Historians is thus characterized by the power and intervention of a centralized state, whose administrative tasks and activities were pivotal to the conquest and the development of the region. “The armies of the federal government conquered the region, agents of the federal government explored it, federal officials administered it, and federal bureaucrats supervised...the division and development of its resources,” Richard White summarizes the strong dependence of settlers on federal power structures (*Misfortune* 58). Along the same lines, Limerick writes that “from the beginning of Western development, federal

⁵⁹ The discourse of the New Western History can thus also be located in the broader context of current debates among American historians regarding the concept of ‘American Exceptionalism’ in American culture. For an introduction to the debate, see Ian Tyrell’s “American Exceptionalism in an Age of International History,” *American Historical Review* 96.4 (1991): 1031-55 and his essay “Making Nations / Making States: American Historians in the Context of Empire,” *Journal of American History* 86 (1999): 1015-44. On the same topic, see also Michael Kammen’s “The Problem of American Exceptionalism: A Reconsideration,” *American Quarterly* 45 (1993): 1-43, and Byron E. Shafer, ed., *Is America Different? A New Look at American Exceptionalism* (New York: Oxford UP, 1991). For a discussion of the frontier concept and American Exceptionalism, the following publications are good points of reference: Richard W. Etulain, “The Frontier and American Exceptionalism,” *Does the Frontier Experience Make America Exceptional?*, ed. Richard W. Etulain (Boston: Bedford / St. Martin’s, 1999): 3-14; Seymour Martin Lipset, *American Exceptionalism: A Double-Edged Sword* (New York: Norton, 1997); David M. Wrobel, *The End of American Exceptionalism: Frontier Anxiety from the Old West to the New Deal* (Lawrence: U of Kansas P, 2001); Richard W. Etulain, “The Frontier and American Exceptionalism,” *Does the Frontier Experience Make America Exceptional?*, ed. Richard W. Etulain (Boston: Bedford / St. Martin’s, 1999): 3-14.

⁶⁰ On the subject of empire building, see also Jay Gitlin, “On the Boundaries of Empire: Connecting the West to Its Imperial Past,” *Under an Open Sky. Rethinking America’s Western Past*, ed. William Cronon, George Miles, and Jay Gitlin (New York, London: Norton, 1992): 71-89, as well as Walter T. Nugent, “Frontiers and Empires in the Late Nineteenth Century,” *Western Historical Quarterly* 20 (1989): 393-408.

goodwill (manifest concretely in the form of cash and indirectly in the form of a permitted access to land, grass, water, and timber) had been one of the West's principal resources" (*Legacy* 138).

Hence, the New Western Historians often focus on outlining the various activities crucial to the development of the West that depended on the federal government as mediator, manager, and investor, most prominently land distribution and land management, the provision of capital resources for land occupation and development, the subsidizing of private business for the development of the region—best documented in the financing of private railroad companies in order to built up transport infrastructure—, the management of water resources and water infrastructure, the development of frameworks enabling large-scale agriculture, the support of private investors in the extractive industries, the building of state-nurtured, usually monetized, commodity markets to capture frontier production, as well as the regulation of population streams through immigration politics.⁶¹ In addition, the New Western Historians point out that the two key activities in the nineteenth-century West—controlling the native population and distributing and exploiting the land taken from the native tribes—were federal tasks. Initially carried out by the United States army and later by gigantic federal bureaucracies, both activities involved considerable expenses that only federal resources could provide.

The New Western Historians are especially interested in outlining the federal government's role in setting up the necessary framework for a functioning market economy. The revisionists thus counterbalance the idealistic West with a capitalist West determined by the rules of the market place and the quest for easily available resources and quick profits, as nothing undermines Turner's image of an isolated 'wilderness' more than the West's existential link to foreign markets. "North American frontier areas are best understood as hinterlands," Jay Gitlin notes, "edges of the worldwide expansion of European economies" ("Boundaries" 72). Donald Worster

⁶¹ Among federal policies, the Homestead Act of 1862 represents one of the most significant acts of legislation that influenced the growth of American capitalism during the second half of the nineteenth century. Providing one quarter section—160 acres—of public land for private use for any family or citizen over twenty-one, the Homestead Act served as the federal tool to distribute the newly acquired land to settlers, thereby populating the territories and preparing them for development. The New Western Historians point out that such federal land legislation followed the Jeffersonian vision of the United States as an agrarian democracy. According to this national dogma, the opening of the public domain to private ownership was to guarantee upward mobility to Americans by enabling new farms and other private entrepreneurship. However, as Richard White shows in *Misfortune*, land distribution as regulated by the Homestead Act was frequently abused and often failed to provide the desired stimulus to agrarian development as the land distributed was often too small and of too poor quality to sustain its owners in an arid environment. For a detailed analysis, see especially Richard White's essays "Exploring the Land" and "Distributing the Land" in "*It's Your Misfortune and None of My Own.*" *A New History of the American West* (Norman: U of Oklahoma P, 1991). For further reference on federal activities in the American West, see especially Limerick's chapter "Uncertain Enterprises" in *The Legacy of Conquest: The Unbroken Past of the American West* (New York: Norton, 1987): 97-133 and Carl Abbott's chapter "The Federal Presence" in *The Oxford History of the American West*, ed. Clyde A. Milner II, Carol A. O'Connor, and Martha A. Sandweiss (New York: Oxford UP, 1994): 471-99.

summarizes the West's dependence on federal agencies and market structures as follows:

The frontier process was and is a global one based upon state power, access to capital, intensive agriculture connected to commodity markets, and the existence of surplus population in some segments of the globe. ("Climate" 33-34)

A strong focus of the New Western Historians is thus to examine the economies that dominated the historic West such as lumbering, livestock ranching, agriculture, and mining and to outline the dynamics between American federal government, private entrepreneurs in the home market and the global market place.

Furthermore, the New Western Historians emphasize issues of race and ethnicity. "In the post-Turnerian West," White notes, "the topic of race relations has moved from the periphery to the center" ("Race" 411). As outlined above, a principal aim of the New Western Historians is to rewrite the history of the West from the perspective of those ethnic groups whose experiences they claim to have been marginalized in the Old Western History. Donald Worster summarizes the underlying conviction among the New Western Historians as follows:

Until very recently, many western historians acted as though the West had either been empty of people prior to the coming of the white race or was quickly, if bloodily, cleared of them, once and for all, so that historians had only to deal with the white point of view. ("Beyond" 16)

In contrast, the New Western Historians stress that "the frontier of North America encompassed a multitude of cultures with divergent views" and aim at giving "the invaded and subject peoples of the West...a voice in the region's history" (Faragher, "Americans" 90-91; Worster, "Beyond" 16). Following this aim, the New Western Historians examine race and ethnicity as culturally constructed categories and investigate on the one hand how these ethnic categories developed historically and, on the other hand, how they continue to shape American society today. Among the New Western Historians, Patricia Nelson Limerick and Richard White have concerned themselves most strongly with issues of race and ethnicity in the American West.⁶² Limerick has argued that the nation's 'legacy of conquest,' the ethnic layering

⁶² The publications of the New Western Historians represent a general trend in Western American History of the 1980s and 1990s to focus on the experience of ethnic groups in the region's history. For studies on Mexican-American or Chicano culture in the American West, consult John Mack Faragher, "Americans, Mexicans, Métis: A Community Approach to the Comparative Study of North American Frontiers," *Under an Open Sky. Rethinking America's Western Past*, ed. William Cronon, George Miles, and Jay Gitlin (New York: Norton, 1992): 71-109; David G. Gutiérrez, "Significant to Whom?: Mexican Americans and the History of the American West," *The Western Historical Quarterly*, 24.4 (1993): 519-39. For the role of African Americans in the West, see Lillian

of American society today, is to a great extent rooted in nineteenth-century racial conflicts between colonizers and colonized as well as between other ethnic groups:

Along with arbitrary political borders or reservations, reserves, states, and nations, the borders of ethnic identity emerged from the workings of colonialism. If there is anything more regrettable than the direct and immediate injuries of colonialism, it is the long-term capacity of these hardened ethnic identities to make sure that the dispossessed stay divided and disunited. (“Going” 39)

Following this assumption, New Western Historians like Limerick and White investigate the degrees of political and economic inequality as they historically developed between the different ethnic groups in the West. The revisionists claim that without moving these ethnic dynamics to the center of historical analysis and without placing them alongside the economic history of the region, a serious insight into the reality of life in the American West is not possible. “The barrios, Chinatowns, Indian reservations, and black ghettos which seemed for so long peripheral to whatever significance the West has had in American history,” Richard White points out, “will, in the long run, emerge as crucial to any Western claim of historical distinctiveness, and, more significantly, to any real understanding of Western society and history” (“Race” 411).

Among the minority studies of the New Western Historians, publications on native-American cultures occupy a prominent role. Beyond merely drawing awareness to the obvious fact of genocide and mistreatment of Native Americans throughout the region’s history, New Western Historians aim specifically at correcting racial stereotypes in American culture and point out that homogenous categories such as ‘Native American’ or ‘Indian’ are rather vague. “Americans reduced the complex view of Indians to a few simple categories,” White notes and criticizes that Americans have tended to suggest a homogeneity among Native American tribes

Schlissel, *Black Frontiers: A History of African American Heroes in the Old West* (New York: Simon & Schuster, 2000); Quintard Taylor, *In Search of the Racial Frontier: African Americans in the West, 1528-1990* (New York: W. W. Norton, 1998). For the history of Asian minority groups in the West, consult Sucheng Chan, *This Bitter-Sweet Soil: The Chinese in California Agriculture, 1860-1910* (Berkeley: U of California P, 1986); Patricia Nelson Limerick, “The Multicultural Islands,” *American Historical Review* 97.1 (1992): 121-35. For more general studies on the role of race and ethnicity in the American West, see Gregory H. Nobles, *American Frontiers: Cultural Encounters and Continental Conquest* (New York: Hill and Wang, 1997); Patricia Nelson Limerick, “Disorientation and Reorientation: The American Landscape Discovered from the West,” *Journal of American History* 78 (1992): 1021-49; Ronald Takaki, “The Tempest in the Wilderness: The Racialization of Savagery,” *The Journal of American History* 79.3 (1992): 892-912. On issues of race and ethnicity in borderland regions, see especially Jeremy Adelman and Stephen Aron, “From Borderlands to Borders: Empires, Nation States, and the Peoples in Between in North American History,” *American Historical Review* 104.3 (1999): 814-41; Gerald E. Poyo and Gilberto M. Hinojosa, “Spanish Texas and Borderlands Historiography in Transition: Implications for United States History,” *Journal of American History* 75 (1988): 393-416; and Donald Worster, “The Significance of the Spanish Borderlands to the United States,” *Western Historical Quarterly* 7.1 (1976): 4-18.

that in reality does not exist (*Land* 41).⁶³ Gary Paul Nabhan, Director of the Center for Sustainable Environments, summarizes this common generalization as follows: “Individuals from two hundred different language groups from three historically and culturally distinct colonizations of the continent are commonly lumped under the catchall terms ‘American Indian’ or ‘Native American’” (“Cultural” 90). In contrast, Richard White stresses the very different lifestyles of the various native groups that historically inhabited the continent and points out that these native cultures were as diverse as the continent’s geophysical compositions. In addition, the New Western Historians strictly reject the popular perception of Native Americans and other minority groups as passive victims of a colonizing power. “As ‘subjects of rape,’” Nabhan summarizes the tendency towards victimization of native groups in American culture, “American lands and their resident human populations are simply reduced to the role of passive victims, incapable of any resilience or dynamic response to deal capably in any way with such invasions” (“Cultural” 95). In order to restore agency to minority groups, the New Western Historians focus especially on outlining the various strategies of resistance employed by native peoples in order to react to the invasion of their territories. “Indians—and African Americans and Mexican Americans and Asian Americans—were not passive victims we all recognize now,” Limerick summarizes the change of perspective in western history, “they were active participants in making and shaping their own history” (*Soil* 61).⁶⁴ Or, in Gerry Kearns words: “Rather than passive impediments to European expansion, Native Americans sought many and varied forms of accommodation with the imperialists” (“Virtuous” 396).

Among the New Western Historians, Richard White has contributed most significantly to a new understanding of native cultures and their resistance to white colonization in the nineteenth-century American West.⁶⁵ Especially noteworthy are White’s studies on the role of the Sioux on the northern and central Great Plains during the eighteenth and nineteenth century.

⁶³ White even questions the adequacy of the term ‘tribe’ to denote the most meaningful unit of aboriginal life on the American continent. As White outlines in *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815* (Cambridge: Cambridge UP, 1991), tribal designations “should be understood largely as ethnic rather than political or even cultural designations” (xiv).

⁶⁴ Limerick acknowledges that this trend is not entirely new to Western American historiography: “In the last twenty years the rejection of this model of passivity and victimization has become an article of faith among most American historians” (*Soil* 61). As pointed out in chapter 1.2, revisionist ethnic studies have been well under way since the 1970s. Historian Robert F. Berkhofer, for example, anticipated the trend of revising popular misperceptions of Native Americans in American culture already in 1978 in *The White Man’s Indian: Images of the American Indian, from Columbus to the Present* (New York: Alfred A. Knopf, 1978).

⁶⁵ The following publications by Richard White are all excellent examples of new interpretative approaches to native cultures in the American West: “The Winning of the West: The Expansion of the Western Sioux in the Eighteenth and Nineteenth Centuries,” *Journal of American History* 65.2 (1978): 319-43; “The Cultural Landscape of the Pawnees,” *Great Plains Quarterly* 2 (1982): 131-40; “Race Relations in the American West,” *American Quarterly* 38.3 (1986): 396-416; “Shulush Homa: Red Shoes of Coueichitto,” *Struggle and Survival in Colonial America*, ed. Gary Nash and David Sweet (Berkeley: U of California P, 1981): 49-68; and, most importantly, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815* (Cambridge: Cambridge UP, 1991).

As White illustrates, the Sioux were by the nineteenth century—together with the U.S. Army—the most powerful presence on the Plains and were feared as aggressors by other tribes even more than the white invaders:

The warfare between the northern plains tribes and the United States that followed the Fort Laramie Treaty of 1851 was not the armed resistance of a people driven to the wall by American expansion. In reality these wars arose from the clash of two expanding powers—the United States, and the Sioux and their allies. If, from a distance, it appears that the vast preponderance of strength rested with the whites, it should be remembered that the ability of the United States to bring this power to bear was limited. The series of defeats the Sioux inflicted on American troops during these years reveals how real the power of the Tetons was. (“Winning” 342)

White specifically argues two points that are in conflict with popular perceptions of Native Americans: First, as the case of the Sioux illustrates, native American tribes were far more successful in countering the invasion of white colonizers than usually allowed; second, the lines of conflict ran not simply between colonizers and colonized, but also between native tribes. White thus erases the traditional distribution of good and bad, active and passive roles between colonizers and colonized. By depicting native peoples as diverse entities reacting individually or collectively towards the cultural challenges instigated by the processes of colonization, the New Western Historians thus try to challenge the simple cliché-worlds of the mythic West that juxtaposed good white settlers with bad Indians. At the same time, the New Western Historians reject the melodramatic reduction of Native Americans as passive victims of a ruthless colonizing power as, for example, found in Dee Brown’s *Bury My Heart at Wounded Knee* or the romantic redistribution of good and bad roles in Hollywood productions such as *Dances with Wolves*.⁶⁶

Next to race and ethnicity, gender is another major revisionist category in Western American historiography of the past two decades. However, Cronon, Limerick, White, and Worster are not specialized in gender studies and accordingly, gender issues are not as strongly associated with the New Western Historians as are issues of class, race, ethnicity, or the environment. Still, the revision of the West from a gender perspective is undoubtedly associated with the revisionist tendencies in Western American historiography represented by the New

⁶⁶ It is noteworthy that while the New Western History promoted the revision of Western American history during the late 1980s and early 1990s from within academia, a series of revisionist, postmodern Westerns produced by the Hollywood movie industry simultaneously erased or questioned popular Western themes and stereotypes. Most noteworthy are Clint Eastwood’s *Unforgiven* (1992), Jim Jarmusch’s *Dead Man* (1995), the movie adaptation of Larry McMurtry’s *Lonesome Dove* (1989), as well as Roger Young’s *Geronimo* (1993) and George P. Cosmatos’s *Tombstone* (1993). Noteworthy in this context is also the HBO series *Deadwood*, a revisionist portrayal of the historic mining camp of Deadwood in the Dakota territories, aired in the United States from 2004 to 2006.

Western History.⁶⁷ As gender-oriented scholars have pointed out since the 1970s, traditional frontier historiography has focused mainly on the role of male protagonists and has neglected the role of women in the development of the West. “Frederick Jackson Turner’s frontiers were devoid of women, his pioneers were explorers, fur trappers, miners, ranchers, all of them male,” Sandra L. Myres writes (*Westering* 8). Rejecting the gendered reading of the West promoted by the Old Western History, the New Western Historians try to uncover the integral role women played in developing the West and recover their lost histories by excavating and publishing the personal reminiscences of nineteenth-century women.⁶⁸ In addition, the New Western Historians point out that family units were central to the rapid development of the West: “Families, it seems, were a key not only to economic transformations but also to social and even political changes, including the making of communities and development of labor unions,” Elliott West points out (“Longer” 106). By highlighting the importance of family structures, revisionist historians of the West not only write against the male frontier of cowboys and pioneers, they also stress the significance of cultural continuities in the region. Whereas Turner portrayed the West as a land of new beginnings, gendered readings of the West illustrate how strongly settler communities tried to preserve their cultural heritage in foreign environments and how decisive the role of the family was. In this context, traditional male activities associated with the frontier such as conquering ‘virgin’ land, subduing Indians, as well as mining, farming, ranching, and building railroads are counterbalanced with the central tasks women fulfilled in frontier communities, from traditional household activities and child-rearing, to farming and prostitution.⁶⁹ Introducing women’s overall contributions to the development of the American

⁶⁷ For further reference on gender issues in Western American historiography, see Susan Armitage, “Here’s to the Women: Western Women Speak Up,” *The Journal of American History* 83.2 (1996): 551-59; “Household Work and Childrearing on the Frontier: The Oral History Record,” *Sociology and Social Research* 63.3 (1979): 467-74; “Women and Men in Western History: A Stereotypical Vision,” *Western Historical Quarterly*. 16.4 (1985): 380-95; Susan Armitage and Elizabeth Jameson, eds., *The Woman’s West* (Norman: U of Oklahoma P, 1987); Sarah Deutsch, *No Separate Refuge: Culture, Class, and Gender on the Anglo-Hispanic Frontier in the American Southwest, 1880-1940* (New York: Oxford UP, 1987); Julie Roy Jeffrey, *Frontier Women: The Trans-Mississippi West, 1840-1880* (1979); Annette Kolodny, *The Land Before Her: Fantasy and Experience of the American Frontiers, 1630-1860* (Chapel Hill: North Carolina UP, 1984); Katherine G. Morrissey, “Engendering the West,” *Under an Open Sky. Rethinking America’s Western Past*, ed. William Cronon, George Miles, and Jay Gitlin (New York: Norton, 1992): 132-44; Ruth B. Moynihan, Susan Armitage, and Christine Fischer Dichamp, eds., *So Much to Be Done: Women Settlers on the Mining and Ranching Frontier* (Lincoln: U of Nebraska P, 1990); Sandra L. Myres, *Westering Women and the Frontier Experience, 1800-1915* (Albuquerque: U of New Mexico P, 1983); “Western Women,” *Historians and the American West*, ed. Michael P. Malone (Lincoln: U of Nebraska P, 1983): 369-86; Peggy Pascoe, *Relations of Rescue: The Search for Female Moral Authority in the American West, 1847-1939* (New York: Oxford UP, 1990); Glenda Riley, *The Female Frontier: A Comparative View of Women on the Prairie and the Plains* (Lawrence: U of Kansas P, 1988); “Women in the West,” *Journal of American Culture* 3 (1980): 311-29; Lillian Schlissel, Vicki Ruiz, Janice Monk, eds., *Western Women: Their Land, Their Lives* (Albuquerque: U of New Mexico P, 1988).

⁶⁸ See especially Martha Allen, *Travelling West: Nineteenth Century Women on the Overland Routes* (El Paso: Texas Western UP, 1987); Sandra L. Myres, ed., *Ho for California! Women’s Overland Diaries from the Huntington Library* (San Marino, CA: Huntington Library, 1980, 1990); and Lillian Schlissel, *Women’s Diaries of the Westward Journey* (New York: Schocken Books, 1982).

⁶⁹ On the subject of prostitution, see especially Anne M. Butler, *Daughters of Joy, Sisters of Misery: Prostitutes in the American West, 1865-1890* (Urbana: U of Illinois P, 1985). Prostitution is also portrayed as a major aspect of the historic West in the HBO series *Deadwood*. For further reference, see Kathleen E. R. Smith, “Whores, Ladies,

West, gender studies of the American West thus try to break the monopoly of male readings of the West and challenge the dominance of masculine icons associated with the region in the popular imagination.

Apart from category-specific issues such as race, class, or gender, the New Western Historians try to answer the more general question of what or where 'the West' actually is. "The West is our most myth-shrouded region, so much so that we often cannot say where its actual physical boundaries are," Worster describes a basic problem of Western American historians ("Kingdom" 117-118). In contrast to the Old Western History where, as Worster claims, "the West is just about anything that anyone has ever wanted it to be," the New Western Historians are eager to provide a more accurate, scientific definition of the West ("New" 20). Hence, the New Western Historians attempt to clearly define the geophysical characteristics of the American West, as they believe that such unifying geophysical characteristics indeed exist. "A region may acquire many cultural meanings," Worster points out, "but it also has underlying physical realities that provide a unifying experience and a common set of challenges" ("Legacy" 8). The New Western Historians attempt to define the physical realities of the various regions united under the catch-all phrase 'the West' is thus inspired by their general ambition to distance themselves from traditional frontier historiography and to describe the West as a real rather than a mythic place.

Although the New Western Historians agree that traditional frontier historians have failed to provide clear definitions of the West, they are controversially debating how to best solve this semantic problem.⁷⁰ In "New West, True West," Donald Worster summarizes the significance of this question for Western American History as follows:

The field is still groping about in adolescence. It doesn't quite know who it is or what it wants to be when it grows up. What are its boundaries? Where is 'West' and where is not? There is still no settled, mature answer. (20)

Worster's statement indicates a general dissatisfaction among scholars of the American West concerning the vague definition of its subject, a problem of definition that is mainly related to the geophysical diversity of the West's regions as well as to the great variety of analytic categories potentially suited to define the West. Gerald D. Nash summarizes the principal dilemma of Western American historians as follows:

and Calamity Jane: Gender Roles and the Women of HBO's *Deadwood*," David Lavery, ed., *Reading Deadwood: A Western to Swear By* (London, New York: I. B. Tauris, 2006): 79-90.

⁷⁰ Walter T. Nugent's essay "Where is the American West? Report on a Survey," *Montana. The Magazine of Western History* 42 (1992): 2-23, offers a good summary of perspectives on the issue.

According to your personal interest you may want to define the West in terms of topography, soil, climate, water, crops, livestock, minerals, freight rate structure, politics, distance, or height. (“Where’s” 8)

Donald Worster, for example, argues with John Wesley Powell and Walter Prescott Webb that aridity is a major characteristic of the West. This focus on climate, however, is not shared unanimously among his colleagues. Richard White questions the scientific appropriateness of trying to find one unifying climatic or geographic feature of the West, be it aridity or any other category:

Pick a geographical criterion to make sense of western boundaries, and vast sections of the region fail to fit and drop away while neighboring regions demand entrance.... Selecting some geographical criterion to define the West not only does not work, but also distorts the nature of the western environment itself by making static what was dynamic. (*Misfortune* 3)

Similarly, Susan Rhoades Neel objects to Worster’s focus on environmental categories such as aridity by pointing out that like process-oriented frontier history, such regional definitions work through abstractions and the homogenization of a diverse environment: “Whatever virtues region may have over frontier,” writes Rhoades Neel, “precision and constancy are not among them. Nothing better illustrates this than the role accorded environment in the efforts to define what constitutes the West” (“Place” 111). Thus, instead of choosing any one factor in order to define the West—be it climatic, geographic, political, or economic—, most New Western Historians rather promote a list of several criteria in order to solve the problem of defining the West.

Although there is no general consensus regarding such a list of criteria, Patricia Nelson Limerick has provided a good summary in *Something in the Soil*. According to Limerick, the American West is defined by its imperial past, its lack of rainfall (with the exception of selected regions especially in the Pacific rim states), its shared border with Mexico (determining Hispanic immigration and immigration politics), the Pacific Rim states (the point of entrance of Asian immigration, the economic center of the twentieth-century West), its large public domain and the accompanying strong presence of federal land management agencies, the overall strong presence of federal power (exemplified by the agencies of the Department of the Interior), its distinct economic history (as exemplified by the extractive industries like mining, logging, ranching, oil drilling, and commercial farming as well as its military and nuclear enterprises in the twentieth century), its mythic qualities (the mythic West as the location of icons, images, folktales and folk heroes), and its role as the nation’s dumping ground for waste, specifically nuclear wastes (exemplifying the history of environmental degradation in the West).

Although the various scholars associated with the New Western History might highlight one aspect and neglect another in their respective definitions of the West, Limerick's list unites the most common contemporary definitions of the West. However, regardless of the faults or merits of this list of criteria, scholars of the West face another major problem: The historic contingency of the term 'West.' For one thing, the term 'West' is often used to refer to real landscapes as well as to landscapes of the imagination; second, the term refers to different geographic areas at different times in history. The further one goes back in American history, the further east the region the term 'West' denotes actually lies. The definition of what and where the American West actually is thus differs from time to time and from scholar to scholar. Nevertheless, most New Western Historians agree that the West is today demarcated geographically to the East and West by the hundredth meridian and the Pacific rim and by the Canadian and Mexican border in the North and South. As Limerick writes, the "New Western Historians define 'the West' primarily as a place—the trans-Mississippi region in the broadest terms, or the region west of the hundredth meridian" ("What" 85). Most New Western Historians agree that the region thus demarcated is characterized by some or all of the criteria summarized in Limerick's list outlined above.

In order to counterbalance the Turnerian portrayal of the West as an abstract place and to avoid hazy definitions, the New Western Historians promote regional approaches to the West. For the New Western Historians, regionalism is an antidote to the mythic frontier West. Susan Rhoades Neel describes the regional emphasis among the New Western Historians as follows:

Underlying this most recent effort to replace the frontier paradigm with regionalism is a sense, forged from the historians' own experiences, that the history of a real place and those who made their lives there has been distorted and obscured by the 'vaporous frontier.' ("Place" 109)

Similarly, Patricia Nelson Limerick further specifies that the Old Western History's focus on the various processes of transformation—wilderness into civilization, Europeans into Americans—"worked against a recognition of the American West as a real place, as a region of significance with a serious history" (qtd. in Bogue, "Frederick"). Initially, the New Western Historians thus promoted a place- over a process-centered approach to Western American history, as the process-centered interpretation of the West was associated with Frederick Jackson Turner and traditional frontier historiography from which the revisionists wanted to distance themselves through regional approaches to the West.

In the New Western History, regionalism translates into historiographies that examine the West in clearly defined, limited geographic areas. This focus on regionalism is based on the

belief that the relationship between people as well as between people and the land is best studied when the area of analysis is limited to local levels. “The study of such relations,” Cronon writes in *Changes in the Land*, “is usually best done at the local level, where they become most visible” (14). Aspects of regionalism are especially strong in environmental studies of the American West, which investigate transformations of nature in specific geographic areas. Central to the strong presence of regional aspects in contemporary Western American historiography is the idea that the relationship between humans and the environment is a key factor explaining the history of the region. Donald Worster, for example, summarizes the link between regionalism and environmental history in the New Western History:

In other words, the history of the region is first and foremost one of an evolving human ecology. A region emerges as people try to make a living from a particular part of the earth, as they adapt themselves to its limits and possibilities. What the regional historian should first want to know is how a people or peoples acquired a place and, then, how they perceived and tried to make use of it. He will identify the survival techniques they adopted, their patterns of work and economy, and their social relationships. (“New” 27)

I argue that it is the regional focus on environmental processes of transformation that characterizes the New Western History most. As I tried to point out, the emergence of the New Western History by the late 1980s and the simultaneous revival of interest in Western American History are both linked to the development of American Environmental History as a new field of study. After having introduced the general scope and agenda of the revisionist school, I will outline in more detail in the following subchapter the role environmental history plays in the New Western History.

II.2 The New Western History as Environmental History

Despite the strong focus on issues of race, class, and gender, the most important focus of analysis in the New Western History is the environment. As Susan Rhoades Neel points out,

the new western history, for all its theoretical sophistication and attentiveness to the too-long-neglected issues of cultural diversity, race, class, and gender continues in significant ways to be configured around ideas about nature and its role in shaping western society. (“Place” 106)

The New Western Historians’ environmental focus is based on the belief that the relationship between Americans and nature is far more problematic than traditional frontier historiography allows. The conquest of the West, the revisionists argue, was not only accompanied by the subjugation and exploitation of the native population and other minority groups, but also by the degradation and exploitation of nature. “The drive for the economic development of the West,” Worster writes in *Trails*, “was often a ruthless assault on nature, and it has left behind it much death, depletion, and ruin” (“Beyond” 13). In accordance with this general insight, especially William Cronon, Richard White, and Donald Worster have reexamined the history of the West from an environmental perspective.

Whereas Turnerian frontier historiography celebrated the mythic transformation of wilderness into civilization, environmental historians like Cronon, White, and Worster investigate the negative impact of American culture on the environment. Richard White summarizes the differing approaches between the Old and the New Western History as follows:

In a sense, much of the difference between the New and Old Western Historians is revealed by what they make of the garbage so lavishly strewn along the trails. Old Western Historians looked past the garbage and saw “nature.” For them, untouched nature was preeminent. They wanted to see wilderness because from it they derived the culture of the West. Many New Western Historians—particularly environmental historians—see the garbage first. They see the cultural, and from it they try to explain the “natural.” The New Western Historians—particularly environmental historians—have an affinity for trash as the evidence of human actions, the relics of culture. Where Old Western Historians see nature, New Western Historians see the debris and the consequences of human use. (“Trashing” 26-27)

As White outlines, the New Western Historians want to reconfigure Western American History by studying the environmental consequences of a genuinely American definition of progress as celebrated in Turner's frontier paradigm. The reorganization of nature as influenced by the development of American capitalism is thus a primary focus of the New Western Historians.

Whereas Donald Worster mainly studies the impact of a distinct form of American capitalism on the environment, William Cronon and Richard White examine especially how the lives of Native Americans have been challenged by the environmental transformations brought about by the invading European cultures.⁷¹ "By working to reproduce the world they had left behind, Europeans brought massive ecological changes to New World environments," Cronon points out and observes that "ecology and empire went hand in hand" ("Becoming" 12). Similarly, Richard White argues that the ecological transformations triggered by the invading European cultures resulted in drastic, irreversible changes for the native population:

By introducing new species, eliminating existing ones, and changing the physical conditions in which life maintained itself, Europeans profoundly changed the natural world of the Western Hemisphere. They altered what they discovered well before they fully learned what was there. ("Discovering" 877)

It is thus a major aim of Cronon and White to understand how Europeans created what Alfred W. Crosby has called 'Neo-Europes' on the American continent and how these environmental transformations challenged the lives of Native Americans. As Cronon and White illustrate, the rapid exploitation and monopolization of environmental resources by European settlers severely interrupted native-American lifestyles and contributed significantly to the decline of individual tribes into economic dependency:

The movement of migrants into the West disrupted both existing human communities and existing ecological communities. The two processes were intertwined. When western migrants destroyed native plants and animals, inevitably they undercut the economies and cultures of the peoples who used those plants and animals to procure food, clothing, and shelter. When they exterminated buffalo, diverted streams, and planted or grazed holy grounds, they were subverting different ways of understanding and ordering the world. (White, *Misfortune* 212)

⁷¹ For introductory essays on the topic, see the joint publications of William Cronon and Richard White, "Ecological Change and Indian-White Relations," *Handbook of North American Indians*, ed. Wilcomb E. Washburn (Washington, D. C.: Smithsonian Institution, 1988): 417-29 and "Indians in the Land," *American Heritage* 37.5 (1986): 18-25.

Accordingly, Cronon and White examine the various strategies of adjustment employed by individual native groups to adapt to the rapid environmental changes taking place in their environment. Especially Richard White's *The Roots of Dependency: Subsistence, Environment, and Social Change Among the Choctaws, Pawnees, and Navajos*, published in 1983, his *Land Use, Environment, and Social Change: The Shaping of Island County, Washington*, published in 1980, and William Cronon's *Changes in the Land: Indians, Colonists, and the Ecology of New England*, published in 1983, are paradigmatic publications on this issue.

In their publications, Cronon and White often highlight the environmental transformations triggered by species shifting, "the movement of alien organisms into ecosystems from which they were once absent" (Cronon, "Becoming" 11). As Cronon states, "the introduction of alien plants, animals, and diseases is one of the fundamental stories of environmental history throughout the American West" ("Kennecott" 41). For the New Western Historians, the impact of imported species on the native ecology especially underlines that Turner's interpretation of the frontier process as an isolated chapter in world history is misleading. Alien organisms introduced by white invaders, William Cronon notes,

were the most visible proof that a frontier area had become linked to the rest of the world in a new way. Europe, Africa, and Asia were now reproducing themselves—quite literally—in America. We now know that human colonists were by no means the most challenging opponents the Indians faced. More important, at least at the outset, were the nonhuman invaders that accompanied the Old World migrants: strange crops, new weeds, tame animals, and—worst of all—lethal microorganisms. ("Becoming" 11-12)

Accordingly, the New Western Historians interpret the unintended radical decimation of native peoples through imported European microorganisms as a major ecological, historical factor in the region's history. "The modern world has seen nothing like the epidemics that killed millions of Indians in the wake of Old World contact," William Cronon summarizes the decisive role microorganisms played in the colonization of the continent. "Of all the biological fellow travelers that accompanied the whites onto the North American continent," Richard White confirms Cronon's assessment, "their diseases spread the most quickly and had the most obvious impact" (*Land Use* 26). Environmental historians thus examine species shifting as the ecological consequence of European invasion and consider the complex interruptions and transformations of ecological relationships triggered by species shifting to be as important as the cultural consequences of colonization.⁷²

⁷² For the impact of imported microorganisms on the native population in North America, see especially Alfred W. Crosby, Jr., "Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation of America," *The William and Mary Quarterly* 33.2 (1976): 289-99; "Conquistadores y Pestilencia: The First New World Pandemic and the Fall of the

Furthermore, environmental historians point out that the cultural perceptions of nature and the actual transformations of nature are interdependent processes. The New Western Historians claim that it is necessary to study the various, at times competing concepts of 'nature' of all groups present in the West in order to understand the ecological revolutions that have been taking place in American history. Dedicated to outlining the perceptions of nature that have shaped American environmental history, Cronon and White have especially reexamined the relationship between Native Americans and the environment. Whereas Donald Worster is especially interested in the definition of 'nature' in American capitalist culture, Cronon and White investigate popular stereotypes regarding Native American ways of life, most specifically the idea that native people generally lived in harmony with their natural surroundings and did not significantly alter the environment they inhabited. In his essay "Environmentalism and Indian Peoples," White traces the stereotype of the nature-loving American Indian back to the agenda of the American environmental movement of the 1970s. The environmental movement, White argues, contrasted a supposedly ecologically sound lifestyle of native tribes with the destructive lifestyle of modern capitalist society, thereby creating a powerful stereotype that served well to advocate an agenda of environmental protectionism. "The great appeal of Indian peoples to the modern environmental movement is their ecological otherness," White writes and claims that "for environmentalists, Native American existence represents a dramatic alternative to modern relations with the natural world ("Environmentalism" 125).⁷³ As Richard White points out, especially the Deep Ecology movement of the 1970s contrasted the environmental destruction caused by western civilization with an Indian way of life that was supposedly characterized by a profound respect for the order of nature. White thus argues that the environmental movement promoted the misperception of Native Americans as the 'ecological other' by assuming that native

Great Indian Empires," *The Hispanic American Historical Review* 47.3 (1967): 321-37; "Ecological Imperialism: The Overseas Migration of Western Europeans as a Biological Phenomenon," *Texas Quarterly* 21 (1978): 10-22; *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport: Greenwood Press, 1972); *Ecological Imperialism: The Biological Expansion of Europe, 900 – 1900* (Cambridge: Cambridge UP, 1986); *Epidemic and Peace, 1918* (Westport: Greenwood Press, 1976); as well as "Reassessing 1492," *American Quarterly* 41.4 (1989): 661-69.

⁷³ In his essay "The Social Siege of Nature," Michael E. Soulé similarly traces the stereotyping of Native Americans as environmental saints back to the environmental movement and the multiculturalism of the 1970s: "A corollary of the myth of Western moral inferiority is the belief (an aspect of multiculturalism) that native peoples, particularly Native Americans, always behave in an exemplary way toward living nature, holding it in great reverence" (147). Roderick Frazier Nash also links the popular portrayal of Native Americans as 'ecological saints' to the American environmental movement in *The Rights of Nature: A History of Environmental Ethics*. As Nash states, "most white American environmentalists believed that nature had an important place in the Indians' moral community;" although Nash clarifies that this notion simplifies reality, he nevertheless acknowledges that "there is little doubt that [the natives] accepted more restraints in their relationship to their environment than did the people who displaced them" (*Rights* 117).

“cognitive worlds will not yield the environmental damage that Western civilization does” (“Environmentalism” 127).

Furthermore, Cronon and White frequently point out in their publications that Native Americans did not share one coherent way of perceiving and interacting with nature, a point that Gary Paul Nabhan summarizes as follows:

There is a shared assumption that all Native Americans have viewed and used the flora and fauna in the same ways. This assumption is both erroneous and counterproductive in that it undermines any respect for the realities of cultural diversity. (“Cultural” 91)

In contrast to this popular misperception, Cronon and White outline the very different lifestyles individual tribes have developed in specific geographic areas and illustrate that the stereotype of one homogenous, nature-loving Indian culture is the invention of white culture. In order to counterbalance this stereotype, Cronon and White describe the ways in which the native population transformed their environment and undermine the popular idea that the North American continent was an uncorrupted, pristine wilderness prior to the arrival of white people. “Far from being creatures of their environment, these people had shaped their world and made it what it was when whites first arrived,” White claims (*Land Use* 26). Along the same lines, Cronon shows in detail in *Changes in the Land* how common and widespread burning was used among New England’s native cultures as an effective way of shaping their surroundings in accordance with their needs. As Cronon illustrates, native tribes manipulated the New England forests by burning the undergrowth in order to create better hunting conditions, thereby involuntarily improving the growing conditions for trees and stimulating the growth of white pines of extraordinary height.⁷⁴ Similarly, Richard White illustrates in *Land Use* how the Salish used burning as a method to alter their environment: “The Salish used fire not only to maintain their nettle grounds, but also as an instrument for shaping the ecology of the entire prairie” (21). Like Cronon, White links the extraordinary growth of Douglas firs on Washington Island to the natives’ method of burning. “It was this burning that gave the Douglas fir its advantage and enabled the tree to dominate the forests of the islands,” White writes (*Land Use* 24). Ironically, the first generation of white

⁷⁴ For anthropologic studies on the history of fire, see especially Stephen J. Pyne, *Fire: A Brief History* (Seattle: U of Washington P, 2001); *Fire in America: A Cultural History of Wildland and Rural Fire* (Princeton: Princeton UP, 1982); *Vestal Fire: An Environmental History, Told through Fire, of Europe and Europe’s Encounter with the World* (Seattle: U of Washington P, 1997); for a brief introduction, see Pyne’s essay “Consumed by Either Fire or Fire. A Prolegomenon to Anthropogenic Fire,” *Earth, Air, Fire, Water. Humanistic Studies of the Environment*, ed. Jill Ker Conway, Kenneth Keniston, and Leo Marx (Amherst: U of Massachusetts P, 1999): 78-101.

settlers primarily admired the extreme height of the trees as a ‘natural’ phenomenon characteristic of the New World’s natural abundance, as Cronon and White illustrate.⁷⁵

According to Cronon and White, such patterns of misperception were common among settlers, who saw the results of native landscape transformations, but did not perceive them as such. “Since humans had not shaped the West into a landscape familiar to expectations conditioned by western Europe and eastern North America,” Richard White writes, “they concluded that humans had not shaped the land at all” (*Misfortune* 57). Furthermore, William Cronon points out in *Changes in the Land* that according to Puritan perception, Native Americans did not have a justified claim to land ownership, as they did not use the land in ways Puritan society recognized or valued as appropriate. “By refusing to extend the rights of property to the Indians,” Cronon states, “[Puritans] trivialized the ecology of Indian life and paved the way for destroying it” (*Changes* 58). In turn, Puritans saw themselves entitled to possess the land as they actively used it and simultaneously regarded Native Americans as poor as they lived in an abundant nature without using it appropriately. By illustrating how native tribes transformed their environment through burning, flooding, and other measures, Cronon and White counterbalance the belief that the American natives passed over the land without changing it, a stereotype that makes Native Americans seem “like an animal species, and thus deprives them of culture” (White, “Indians” 20). As White argues, the concept of America as ‘pristine nature’ prior to the arrival of white people has denied Indian peoples the “capacity to make changes” and is thus “an act of such immense condescension” (“Are you” 175). By outlining the extent to which Native Americans had altered the environment prior to the arrival of white people, Cronon and White try to show that Turner’s portrayal of the American West as an untouched ‘wilderness’ was simply wrong and has to be understood as being culturally located in the context of the pristine myth, a Eurocentric concept that denies Native American people the capacity to actively change their environment.

In “The Pristine Myth: The Landscape of the Americas in 1492,” historian William M. Denevan has summarized contemporary environmental arguments against the pristine myth. Like Cronon and White, Denevan argues that Native Americans had substantially altered the continent’s landscape prior to Columbus’ landing on the Indies:⁷⁶

⁷⁵ Perceptions of North America’s ‘pristine’ state of nature and ‘natural abundance’ in colonial culture are an area of interest for environmental historians. “What seemed most remarkable to colonists about North America,” Mark W. T. Harvey writes, “was its abundance of resources. None had ever seen such vast quantities of animals, expansive forests, or sizeable parcels of land” (“Humans” 5). Environmental historians like Donald Worster often argue that the lack of environmental awareness in American culture is linked to the notion that natural resources are inexhaustible in the West.

⁷⁶ Interesting in this context is Richard White’s essay “Discovering Nature in North America,” *The Journal of American History* 79.3 (1992): 874-91, in which he presents an analysis of Columbus’ definition and perception of ‘nature’ when he landed on the Indies. As White points out, Columbus believed Indians to be part of nature whereas

By 1492 Indian activity throughout the Americas had modified forest extent and composition, created and expanded grasslands, and rearranged microrelief via countless artificial earthworks. Agricultural fields were common, as were houses and towns and roads and trails. All of these had local impacts on soil, microclimate, hydrology, and wildlife. (“Pristine” 370)

Denevan points out an important aspect that further explains the pristine myth: Eyewitness descriptions of American nature primarily stem from the period between 1750 and 1850 when Americans started to explore and occupy the interior of the continent. Already around 1650, however, the native population had been drastically reduced by imported diseases by as much as 90 percent.⁷⁷ Hence, the landscape explorers, pioneers, and settlers encountered between 1750 and 1850 was indeed much more sparsely populated than the original landscape and the impact of native transformations of the environment was accordingly less visible than in 1492. The landscape as Native Americans had shaped it prior to 1492 was thus largely gone around 1750, “not through a European superimposition,” as Denevan argues, “but because of the demise of the native population” (“Pristine” 370).

Although “research on the pre-Columbian American physical environment has shown evidence of sometimes extensive human manipulation of nature and thereby qualified the belief in ‘pristine nature’ beyond recovery,” as Mart A. Stewart writes, there is nevertheless disagreement among contemporary historians of the American West regarding the degree to which Native Americans manipulated their environment (“Environment” 358). In contrast to Cronon and White, Donald Worster questions the accuracy of studies highlighting native transformations of the environment. Especially in his essay “The Nature We Have Lost,” Worster argues that the environmental transformations brought about by Native Americans are minimal in comparison to the drastic environmental changes brought about by western capitalist culture. “Without bogging down in pedantic wrangles over definitions,” Worster states, “we can say that before contact the native peoples were dwelling on a largely undomesticated continent, wild or nearly wild over much of its extent” (“Lost” 5). Worster thus believes that Cronon and White overstress the impact Native Americans had on the environment. Native Americans, Worster states,

were a Stone Age people, living by hunting and gathering or, where they were agricultural, cultivating their scattered, shifting fields with bones and digging

Europeans did not belong to nature. “Perhaps the most important decision Europeans made about American nature in the centuries following Columbus was that they were not part of it, but Indians were,” White claims (882).

⁷⁷ It is estimated that between four and twelve million people populated the North Americas when white people first set foot on the continent. The first generation of colonizers clearly underestimated the total number of native population on the continent, which contributed further to a misperception of native impact on the environment.

sticks; by far their most potent technology was fire, which they used liberally but undoubtedly controlled even less effectively than we control our nuclear reactors and pesticides. To describe their relationship with the whole continent as “management” would be a considerable exaggeration. (“Lost”5)

According to Worster, pre-contact America was thus “over most of its extent, an untrammelled land by the standards of either early modern western Europe or today’s America” (“Lost” 5). In contrast to Cronon and White, who outline at length the various ways in which Native Americans have transformed the environment, Worster thus tries to put native transformations of the environment in relative terms.⁷⁸

As a result, Worster promotes an understanding of pre-contact America that to a certain extent affirms the pristine or wilderness myth. The following paragraph outlines Worster’s perception in an exemplary manner and is worth being quoted in full length:

In the beginning of white discovery North America must have been a glorious place, brimming with exquisite wild beauty, offering to agriculturists some of the earth’s richest soils, incredible stands of trees, booty on booty of mineral wealth. Think for a moment of the infinitude of animals that once teemed but are now diminished or gone. In the most comprehensive, detailed analysis yet offered, Frank Gilbert Roe estimated that forty million bison roamed the continent as late as 1830.... Ernest Thompson Seton estimated forty million white-tailed deer before there were farms and guns. Someone else has said there may have been five billion prairie dogs, as many as the present total human population of the world. And as many as three to five billion passenger pigeons, migrating in dark, torn clouds that blotted out the sun, breaking trees when they came down to roost. (“Lost” 1)

As this passage illustrates, Worster’s depiction of pre-contact America picks up central aspects of the pristine myth, such as America’s natural abundance, its fertility and wildness. In contrast to Cronon and White, it is not Worster’s priority to illustrate the extent to which Native Americans transformed their environment. Rather, Worster wants to outline the extent to which the degradation of the environment accelerated after the arrival of European cultures on the continent, as he believes that “it is in the area of the immigrant white man’s culture that we can locate the profoundest causes of environmental change” (“Lost” 8). As I will show in more detail in chapters III and IV, Worster’s environmental histories are thus configured around a

⁷⁸ Kirkpatrick Sale argues a position similar to that of Worster in *Conquest of Paradise* (New York: Alfred A. Knopf, 1990). Sale contrasts a Native American lifestyle that was essentially in harmony with nature with a western lifestyle that resulted in the first noteworthy environmental transformations on the North-American continent. Leo Marx has similarly argued for the continent’s original abundance and wildness. As Marx states, “it is foolish to deny that at one time American nature really was...exceptional in its immensity, its spectacular beauty, its promise of wealth, its accessibility to settlers from overseas, and it was exceptional, above all, in the extent of its underdevelopment or, in a word, its wildness” (“Pandering” 2).

comparison between an ideal, uncorrupted pre-contact nature and an environment corrupted by capitalist culture.

Worster contradicts Cronon and White further by claiming that Native Americans had indeed a distinctly different, altogether healthier perception of nature. The following excerpt from Worster's *Dust Bowl: The Southern Plains in the 1930s* again deserves to be quoted in full length, as it contrasts Worster's perspective with that of Cronon and White:

But for all their creative, exuberant force, these Indians did not drastically alter the ecological order. Wild claims have been made about their burning the entire Great Plains vegetative cover to provide better forage for game (which supposedly was what kept the grassland free of trees) or about their depleting the bison, or about their overbreeding to the point of Malthusian disaster. The truth, however, is that the Plains Indians completely merged into the natural economy; they simply became another predator—successful, highly intelligent, making themselves felt as other creatures did, but accepting in every way the primacy of the grass. They did so not because they were especially noble or righteous, although they had those qualities too, at times. More important to their adaptiveness was their assumption of complete dependence: their unwillingness to consider that any other relationship with the grassland might be possible. From the beginning of their occupancy there was a limit on these Plains people's potential due to their full acceptance of the natural order, but at the same time that acceptance enforced a pattern of ecological restraint in their behavior. They carefully kept their numbers down to what the ecological community could support. They wasted little of the resources they could tap. They thrived, if not in great affluence, at least with enough security to develop a unique and in many ways an appealing and satisfying culture. (77)

Worster claims that whereas Native Americans had adapted to the environmental conditions of the grasslands and had established an environmentally sound lifestyle, capitalist culture depleted the environmental equilibrium within a few decades. Thus, Worster in fact promotes the idea that Native Americans had a more sustainable relationship towards nature than the invading white cultures. Unlike Cronon and White, Worster believes that such a position does not belittle Native Americans, but rather enables environmental historians to realistically measure and put into context the transformation brought about by western cultures.

The dispute among the New Western Historians regarding the pristine state of nature in pre-colonial America gained momentum when William Cronon published his essay "The Trouble with Wilderness: or, Getting Back to the Wrong Nature" in the *New York Times Magazine* in 1994, republished a year later as the lead essay of *Uncommon Ground: Toward Reinventing Nature*.⁷⁹ In his essay, Cronon severely criticized the environmental movement's

⁷⁹ Responding to various criticism triggered by the essay, Cronon published a second essay, "The Trouble with Wilderness: A Response," *Environmental History* 1.1 (1996): 47-55.

instrumentalization of the wilderness idea. According to Cronon, the notion of pre-colonial America as a pristine wilderness is a fantasy produced by people who never had to work the land for a living. “Only people whose relation to the land was already alienated,” Cronon writes, “could hold up wilderness as a model for human life in nature” (“Trouble” 80).⁸⁰ More importantly, Cronon criticizes the environmental movement—and implicitly Donald Worster—for embracing an abstract wilderness ideal as a convenient standard against which to measure post-colonial environmental decline:

The critique of modernity that is one of environmentalism’s most important contributions to the moral and political discourse of our time more often than not appeals, explicitly or implicitly, to wilderness as the standard against which to measure the failings of our human world. Wilderness is the natural, unfallen antithesis of an unnatural civilization that has lost its soul. It is a place of freedom in which we can recover the true selves we have lost to the corrupting influences of our artificial lives. Most of all, it is the ultimate landscape of authenticity. (“Trouble” 80)

William Cronon’s statement that “the illusion that if we can somehow wipe clean the slate of our past and return to the tabula rasa that supposedly existed before we began to leave our marks on the world” can be read as a direct criticism of Worster’s position on this issue (“Trouble” 80).

The debate between Cronon, White, and Worster regarding the pre-contact state of the American environment is further intensified by their dissenting opinions regarding the theory and methodology of environmental history. Despite their overall agreement that ‘nature’ has been a neglected variable in traditional historiography, Cronon, White, and Worster have argued extensively with one another about semantics in the practice of environmental history, especially the general definition of ‘nature’ and the underlying ecological models used to examine and describe ‘nature.’ As I will outline in detail in chapter IV, Donald Worster’s opinion represents a value-conservative point of view that approaches ‘nature’ mainly as an entity whose material order exists independent of human signification. Worster regards postmodern debates about the semantic definition of ‘nature’ as misleading and believes that the order of nature is a fact that exists independent of human life. According to Worster, environmental historians should thus focus on studying the interactions between humans and nature instead of discussing what ‘nature’ actually is. In contrast, Cronon and White have argued for a practice of environmental history that incorporates the challenges of postmodern semantic disputes, explores new ecologic

⁸⁰ Richard White argues the same point in “‘Are You an Environmentalist or Do You Work for a Living?’: Work and Nature,” also published in Cronon’s edition *Uncommon Ground: Toward Reinventing Nature* (New York: W. W. Norton & Co., 1995): 171-85.

paradigms evolving in the context of quantum physics and chaos theory, and transcends the primary goal of advocating environmental protectionism.⁸¹

In order to further illustrate the dissenting opinions between Cronon, White, and Worster, I want to outline in more detail their perspectives on methodology of environmental history. All three historians differentiate between three levels of analysis in the practice of environmental history: The first level of analysis studies and describes the dynamics of ecosystems over time, the second level examines the specific economies cultures establishes within a given natural environment, and the third level studies the ideas and cognitive perceptions of ‘nature’ of individual cultures.⁸² In “Modes of Prophecy and Production: Placing Nature in History,” William Cronon summarizes the main focus of each individual analytic level as follows:

- 1st level: nature
- 2nd level: political economy
- 3rd level: belief

White, in turn, characterizes the different levels of analysis as follows in “Environmental History, Ecology, and Meaning:”

- 1st level: base (natural history)
- 2nd level: structure (productive relations or modes of production)
- 3rd level: superstructure (culture and ideology)

In general, environmental historians combine all three levels of investigation in their historiographies. However, depending on the emphasis historians place on any of the three levels, the resulting historiographies vary considerably in their evaluation of historical processes. Donald Worster’s strong emphasis on the second level of analysis—especially when combined with his tendency to downplay the relevance of the third, semantic level—results in

⁸¹ Donald Worster has voiced his definition of environmental history most exemplarily in “Transformations of the Earth: Toward an Agroecological Perspective in History,” *The Journal of American History* 76.4 (1990): 1087-1106. Cronon responded to Worster in “Modes of Prophecy and Production: Placing Nature in History,” *The Journal of American History* 76.4 (1990): 1122-31. White expresses his perspective in “Environmental History, Ecology, and Meaning,” *Journal of American History* 76.4 (1990): 1111-16. On the same subject, see also William Cronon’s “A Place for Stories: Nature, History, and Narrative,” *The Journal of American History* 78.4 (1992): 1347-76, and “Seeing Beyond Culture,” *Journal of American History* 76 (1990): 1142-47.

⁸² Carolyn Merchant has suggested that a fourth level of analysis focusing on gender issues should be included in environmental history. As Merchant writes, “A gender perspective can add to his conceptual framework in two important ways. First, each of his three categories can be further illuminated through a gender analysis; second, in my view, environmental history needs a fourth analytical level, that of reproduction, which interacts with the other three levels” (“Gender” 1117). I will neglect Merchants suggestion, as it is not of primary importance for my analysis of the New Western History.

historiographies that are different in tone and character than Cronon's and White's, who regard both levels as equally important, stress the connections between both and answer the challenges of postmodern discourse theory on the third, cognitive level of analysis.

As the analysis of Worster's environmental histories depends on an understanding of his theoretical approach to the practice of environmental history, I want to outline his perspective on the three levels in more detail. According to Worster, the first level of analysis focuses on "the structure and distribution of natural environments of the past" ("Transformations" 1090). "Before one can write environmental history," Worster states, "one must first understand nature itself—specifically, nature as it was organized and functioning in past times" ("Transformations" 1090). As Worster outlines, environmental historians working on this level of analysis try to better understand how ecosystems were organized in past times, especially in periods prior to human existence or prior to human recordings—or in periods when human manipulations of the environment were of minimal impact. Specialists in this field try to retrieve data from past natural environments in order to reconstruct the hypothetic composition of these habitats and to trace their transformations over time. As Mart A. Stewart summarizes, environmental historians operating on the first level are especially interested in the "physical attributes of past environments, the changing distribution of plants and animals, of landforms and climate, and the study of changes in past environments" ("Environmental 353). As there are usually no or only few written records documenting the composition of natural environments in past times, environmental historians are dependent on elaborate, expensive technologies in order to retrieve the necessary data. "Where there were no documents," William Crosby points out, "historians had to content themselves with the vast and enduring: soil fertility, erosion, climate, nutrition, disease burden, flora and fauna" ("Past" 1182-83). To collect and assess organic samples is thus a main task for environmental historian operating on the first level of analysis.

Many of the techniques employed on the first level are borrowed from archaeologists, who have tried to understand ancient climates and ecosystems with the help of modern technologies since the beginning of the twentieth century. Hence, the methodological and technological tools environmental historians use today were developed by scholars who study prehistory and undocumented history. Examining the development of ecosystems over long periods of time, the first level of analysis can be seen in the tradition of early environmental history as shaped by the Annales School's focus on *la longue durée*. Although Cronon, White, and Worster do not emphasize the first level of analysis, their environmental histories occasionally draw from the respective methodologies. In *Changes in the Land*, for example, William Cronon refers to the results of pollen analysis, a typical method of reconstructing past environments, to explain changes in forest cover in colonial New England. Similarly, Donald

Worster refers to the long-term study of climate cycles on the Great Plains in *Dust Bowl* in order to assess the droughts of the 1930s.

In contrast to the first level of analysis, the second level focuses on the interaction between humans and their environment. “Here we are concerned,” writes Worster “with tools and work, with the social relations that grow out of that work, with the various modes people have devised of producing goods from natural resources” (“Doing 293”). According to Worster’s definition, the second level examines any given society’s ‘modes of production,’ which he defines in contrast to the Marxist meaning of the term not primarily as the various ways in which societies organize human labor and machinery, but more importantly as the principles according to which they transform nature. In analyzing these modes of production, Worster sees the focus of environmental historians on the “productive technology as it interacts with the environment,” more specifically “on understanding how technology has restructured human ecological relations, that is, with analyzing the various ways people have tried to make nature over into a system that produces resources for their consumption” (“Transformation” 1090).

Second-level environmental analysis thus examines how specific cultures derive their means of life from the environment and how, accordingly, the social, political, economic, and ecological spheres are organized within these cultures. “A community organized to catch fish at sea may have very different institutions, gender roles, or seasonal rhythms than one raising sheep in high mountain pastures,” Worster outlines the socio-economic focus of second-level analysis (“Doing” 293). However, the human-nature relationship is understood as an interdependent and reciprocal process on the second level of analysis. The study of human transformations of the environment is thus given as much attention as the impact of a changing environment on the development of human societies. William Cronon outlines the environmental historian’s interest in the human-nature relationship as follows:

An ecological history begins by assuming a dynamic and changing relationship between environment and culture, one as apt to produce contradictions as continuities. Moreover, it assumes that the interactions of the two are dialectical. Environment may initially shape the range of choices available to a people at a given moment, but then culture reshapes environment in responding to those choices. The reshaped environment presents a new set of possibilities for cultural reproduction, thus setting up a new cycle of mutual determination. Changes in the way people create and re-create their livelihood must be analyzed in terms of changes not only in their *social* relations but in their *ecological* ones as well. (*Changes* 13)

For Donald Worster, the analysis of the human-nature relationship in any given culture necessarily involves the analysis of the socio-economic structures of that society. “Power to make decisions, environmental or other, is seldom distributed through a society with perfect equality so locating the configurations of power is part of this level of analysis” (“Transformations” 1090). As I will argue in more detail in chapter III.1, Worster believes that the relationship any society develops towards nature necessarily determines the character of social relations within that culture. For Worster, one of the most interesting questions in environmental history is “who has gained and who has lost power as modes of productions have changed” (“Transformation” 1090). Worster’s studies of the human-nature relationship are thus always investigations of the power structures that inform the individual economies of any given culture.

The third, cognitive level of analysis deals with the purely mental or intellectual realm of ideas, ethics, laws, myths, iconographic representations, and ideologies by which any culture’s perceptions of nature are determined. “Ideas of nature have a history,” Worster notes, “and their history is linked inextricably to the history of culture” (“Paths” 25). These concepts of ‘nature,’ environmental historians know, not only change over time, but also vary from culture to culture and even between individual groups within societies. Dealing with issues of human cognition and signification, the third level of analysis thus translates into a self-reflexive investigation of environmental history’s narrative structures, its semantic definitions, key concepts as well as the cultural value system that determines all of them. Environmental historians are especially interested in the various concepts of ‘nature’ as they developed historically in the discourses of Western science. “We cannot hope to clarify the relations in question,” Leo Marx writes, “without taking account of (1) the history of the specific attitudes involved and (2) the mediation of attitudes toward the social role of science and technology by (as a result of their inclusion in) larger belief systems” (“Environmental” 326).

As I will outline in more detail in chapter IV, environmental historians have been especially challenged on the third level of analysis by postmodern theory and recent developments in the life sciences. Questioning language’s capability of truthfully representing any independent reality outside of its own system of signification, postmodern discourse theory undermined the traditional Western concept of ‘nature’ as a fixed material entity whose composition and ‘eternal laws’ can be decoded by humans. Humans know nature—like everything else—only through language and our understanding of ‘nature’ is thus always a

cultural product that contains endless meanings and realities, postmodern philosophers argue.⁸³ Simultaneously, the advancement of the life sciences—best exemplified by the decoding of the human DNA code and new cloning techniques—has further undermined the traditional separation of the ‘natural’ and the ‘cultural’ in Western culture. Is a genetically engineered sheep a product of ‘nature’ or of ‘culture’?⁸⁴ And, more generally, if global climate change affects nature on a global scale and is really the result of human action, is it then justified to argue that all nature has become cultural, as Bill McKibben suggests in *The End of Nature?* Or a simpler question: Does an urban park, designed by landscape architects, represent ‘nature’ or is it a human construct? Where does the ‘natural’ end and the ‘cultural’ begin? Whatever answers environmental historians offer to these questions, they agree that clear definitions of ‘nature’ are hard to come by while they agree at the same time that “patterns of human perception, ideology, and value have often been highly consequential, moving with all the power of great sheets of glacial ice, grinding and pushing, reorganizing, and recreating the surface of the planet” (Worster, “Transformations” 1091).

Although environmental historians in theory differentiate between three levels of analysis, they in practice usually combine them, especially the second and the third level. Thus intertwined, the three levels in fact “constitute a single dynamic inquiry in which nature, social and economic organization, thought and desire are treated as one whole,” Worster notes (“Doing” 293). Environmental historian Arthur McEvoy similarly states that

any explanation of environmental change should account for the mutually constitutive nature of ecology, production, and cognition.... To externalize any of the three elements...is to miss the crucial fact that human life and thought are embedded in each other and together in the non-human world. (“Toward” 300-1)

Environmental histories should thus not be categorized in analogy to the three levels of analysis outlined above, but rather according to the links they established between the different levels. “The great challenge in the new history does not lie in merely identifying such levels of inquiry,” Worster claims, “but in deciding how and where to make connections among them” (“Transformations” 1091). Nevertheless, environmental historians usually prefer one level of

⁸³ A good starting point for the debate on concepts of ‘nature’ in environmental history in the context of postmodern theory is William Cronon’s *Uncommon Ground: Toward Reinventing Nature* (New York: W.W. Norton & Co., 1995); on the same subject, see also John P. Herron and Andrew G. Kirk, *Human/Nature: Biology, Culture, and Environmental History*, (Albuquerque: U of New Mexico P, 1999) and Michael E. Soulé and Gary Lease, *Reinventing Nature? Responses to Postmodern Deconstruction* (Washington: Island Press, 1995).

⁸⁴ Donna J. Haraway has contributed provocative thoughts to the culture/nature debate in the context of the techno sciences. In the postmodern era, Haraway argues, technology (culture) has permeated human life (nature) to such an extent that we are living in an age of cyborgs where the line between culture and nature has been almost completely erased. For an introduction to her arguments, consult especially Haraway’s “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century,” *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991): 149-81.

analysis over another and Cronon, White, and Worster have debated extensively on which level to place the emphasis and how to combine them.

Stressing the second, material level of analysis, Worster takes the position of the environmental protectionist and argues that postmodernism has led to an exaggerated occupation with the realm of discourse while the ‘real,’ material aspects of daily life have been neglected.

In modern times, when the balance of power has shifted more and more away from nature and in favor of humans, the third level, the sum of people’s perceptions and ideas about nature, has clearly become the decisive one in promoting change. The gathering strength of the human imagination over nature is so obvious and dramatic that it is in no danger of being neglected by historians. What has been neglected, however, or left conceptionally underdeveloped, is the second level of inquiry I mentioned. (“Transformations” 1091)

Worster believes that postmodernism’s emphasis on all things cultural to be a paradigmatic expression of a vain, self-centered Western culture that—influenced by the ever-accelerating advance of science and technology—has estranged itself from nature and denies its existential dependence on the environment. Worster thus advocates a definition of environmental history that focuses on the analysis of the *practical* rather than the *theoretical* relationship between humans and nature: “Without reducing all thought and value to some material base, as though the human imagination was a mere rationalization of the belly’s needs,” Worster writes, “the historian must understand that mental culture does not spring up all on its own” (“Doing” 303). As I will outline in detail in chapter III, Worster focuses his environmental histories on the ‘agroecological modes of production’—the cultural and technological practices of food production societies develop—as he believes that methods of food production most tellingly reveal the human-nature relationship in any given culture:

Humans have extracted an extraordinarily diverse array of resources from the natural world, and the number and magnitude of them is growing all the time. But the most basic and revealing of them in the study of human ecology have been the resources we call food. (“Transformations” 1091)

Worster argues that the growth of the human population as well as growing mass-consumption in Western societies have led to a global reorganization of nature for the purpose of large-scale food production. It is this transformation of ‘natural’ ecosystems into managed agroecosystems that Worster mainly investigates in his environmental histories.

In his essay “Modes of Prophecy and Production,” William Cronon answers Worster’s definition of environmental history and criticizes Worster for his “materialist styles of analysis” and his “excessive materialism” (1122). In contrast to Worster’s emphasis on the second level

of analysis, Cronon focuses on the third, semantic level and points out that the concept of ‘nature’ environmental historians use is “an astonishingly complex human construction” and must therefore always be closely defined before put to use (“Modes” 1122). Cronon questions the notion that ‘nature’ as a human idea and ‘nature’ as a material reality can be separated from one another. Rather, Cronon regards nature and culture—and thus second and third level of analysis—as intertwined realms that can hardly be kept apart:

“Nature” is a human idea, with a long and complicated cultural history which has led different human beings to conceive of the natural world in very different ways. Far from inhabiting a realm that stands completely apart from humanity, the objects and creatures and landscapes we label as “natural” are in fact deeply entangled with the words and images and ideas we use to describe them. (*Uncommon* 20)

Cronon claims that Worster’s mode-of-production analysis neglects the cultural frameworks these modes are embedded in and thus fails to provide an integrative model of interpretation that incorporates material as well as the semantic aspects. Cronon thus believes that Worster’s definition of environmental history weakens the standing of the discipline as such, as it strengthens the bias among environmental historians “against integrating ideology with political economy and environment that has been a continuing problem for environmental history” (“Modes” 1124). By disregarding postmodern language theory and at the same time over-stressing material issues via capitalist criticism, Worster gives environmental history an ideological, old-fashioned aura, Cronon suggests.

Furthermore, Cronon accuses Worster of using simplistic definitions. Cronon claims that Worster perceives nature as “naïve reality” and embraces an outdated concept of ecosystems, in which nature is believed to strive towards order, balance, and equilibrium—unless manipulated by human intervention (*Uncommon* 34). Such widespread, simplistic concepts of ‘nature,’ Cronon criticizes, are detrimental to the development of environmental history as an academic discipline. “An oversimplified holism,” he writes, “is a chief reason for this failure of the field, and little in Worster’s essay helps guard against its dangers” (“Modes” 1129). Cronon is equally dissatisfied with Worster’s definition of the term ‘modes of production,’ which he believes to be much too vague and simplistic in order to be applicable to the complex structure of today’s globalized capitalism. “Although several environmental historians have framed their studies of ecological change as examples of the transition to a *capitalist* mode of production, we have not succeeded in defining that term very rigorously,” Cronon writes (“Modes” 1125). Finally, based on his general criticism that Worster’s analysis is too materialistic and pays too little attention to the semantic definition of central terms such as

'nature,' 'ecosystem' or 'mode of production,' Cronon challenges Worster's overarching agenda to measure human-induced environmental changes in capitalist market economies:

Even if we can recognize certain imperatives that seem to flow from the logic of the capitalist market place, their implications in different cultural and environmental contexts are so complex that a metanarrative concentrating only on exploitation and despoliation is unlikely to do them full justice. ("Modes" 1130)

Cronon thus characterizes Worster's materialistic approach to environmental history as outdated and simplistic.

Along the same lines, Richard White criticizes Worster's definition of environmental history in "Environmental History, Ecology, and Meaning." Like Cronon, White argues that Worster's overall theoretical outlook is too simplistic. White identifies "the transformative capacity of capitalism" as Worster's main theme and argues that Worster has simplified environmental analysis by contrasting an ideal, untouched nature with nature corrupted by capitalist economies. White negates that the causality Worster delineates between the capitalist modes of production and environmental degradation can as easily be proven as he suggests. "Environmental history has been vague as to how historical change and causation proceed," White states and claims that "without a clear demonstration of causality, a teller's cautionary tale becomes a listener's just so story" ("Environmental" 1114). This is not to say, however, that White generally questions the existence of such causalities. Rather, White is critical of Worster's methodology and theoretical foundations, especially the definitions of 'nature' and 'ecology' Worster bases his environmental histories on. For White, the ecological models environmental historians use are only the discourse of nature, not nature itself, and he thus advocates a greater self-reflexive awareness for the narrative structures of all environmental histories. White suggests that historians like Worster tend to believe that ecology is "the rock upon which they could build environmental history;" however, as White argues, "ecology is, in fact, only an academic discipline" (Environmental 1114).

Accordingly, White claims that Worster's environmental histories are built around an idealized concept of 'nature' as well as a romantic perspective on noncapitalist societies' relationship to the environment. "Writing from within a capitalist economy with its strong instrumentalist focus," White describes Worster's agenda, "historians can easily make people in noncapitalist economies—the majority of the human race over time—similarly instrumentalist in their logic" ("Environmental" 1113). As White claims, Worster sets up a dichotomy between a state of nature corrupted by capitalism and a pristine, original state of nature with the explicit purpose to produce 'cautionary tales,' narratives that are meant to convince the reader that

capitalism is detrimental to the environment and that the capitalist destruction of nature can be measured and controlled.

As I tried to outline, environmental history is an integral aspect of the New Western History. However, despite the strong presence of environmental issues in the New Western History, there is considerable disagreement among the leading environmental historians like Cronon, White, and Worster regarding a series of theoretical and methodological questions, most importantly how to define 'nature' and how to measure change in nature. In order to illustrate more precisely how environmental historians have revisited the American West, I want to examine Donald Worster's work as a point in case. A close analysis of Worster's work will also allow me to contextualize and assess Cronon and White's criticism. Before I analyze Donald Worster's work as an environmental historian, I will first summarize the broad range of criticism brought forth against the New Western Historians in the following subchapter. As I will illustrate, the emergence of the New Western History was accompanied by a heated debate regarding its status within Western American historiography. My case study of Donald Worster's work in chapter III will then put the general criticism voiced against the New Western Historians into perspective while simultaneously contextualizing Cronon's and White's criticism as outlined above.

II.3 The New Western History and Its Critics: Summary of a Debate

Challenging many of the country's most sacred myths and ideals, the formation of the New Western History during the late 1980s was accompanied by critical voices from within and outside of academia alike, questioning the status of this latest revisionist swing in Western American historiography. The New Western Historians were attacked by experts and laymen for their supposedly anti-American sentiment, their general negativism and self-congratulating tone, their neglect of postmodern theory, as well as their disregard for academic predecessors. From the beginning, the New Western History received attention from the American media that can be considered exceptional for an academic discourse.⁸⁵ "Starting in the late 1980s," Lauren F. Winner characterizes the media interest in the New Western History, "media outlets not known for their interest in scholarship scrambled to gather copy about the New Western History" ("True" 24). One of the first articles on the New Western History was published on October 10, 1989, by T.R. Reid in the *Washington Post*, titled "Shootout in Academia over the History of the U.S. West—New Generation Confronts the Frontier Tradition." Reid focused his article on the New Western Historians' criticism of Frederick Jackson Turner and noted that "this new breed of historians has fired away at the patriarch with both barrels" (A3). In *USA Today*, Marco R. della Cava referred to the New Western Historians as a 'revisionist gang' that attacked the nation's most central myths: "Storming through town is the Revisionist Gang - upstart historians bent on replacing myth with reality," della Cava headlined his article and commented that the New Western Historians are "shooting down a larger-than-life West, focusing instead on gritty issues such as women's roles, environmental abuse and federal subsidies" (1D). In May 1990

⁸⁵ The following newspaper and non-academic journal articles are especially noteworthy: Richard Bernstein, "Ideas and Trends: Among Historians the Old Frontier Is Turning Nastier with Each Revision," *New York Times* 17 December 1989: E66; "The Old West," *New York Times Magazine* 18 March 1990; and "Unsettling the Old West: Now Historians are Bad-Mouthing the American Frontier," *New York Times Magazine* 18 March 1990; Jordon Bonfante, "Sky's the Limit," *Time* 142 (6 September 1993): 20-27; Ellen K. Coughlin, "Myth and History Clash As Scholars Question Anew the Traditional Story of the American West," *Chronicle of Higher Education* 21 November 1990; "Plains Truth: Classic Western Myths Are Unmasked by Today's Scholars," *Elle* September 1990; Marco R. della Cava, "Rewriting the West: A Showdown Over Frontier Legends," *USA Today* 7 December 1990: 1D; Miriam Horn, "How the West Was Really Won," *U. S. News and World Report* 21 May 1990: 56-61; Brad Knickerbocker, "A Century After the West Was 'Won': Historians Reexamine Where the Region Has Been, While Other Experts Debate Where It Is Headed," *The Christian Science Monitor* 18 December 1990; Gerald Kreyche, "Preserving the Myth of the Old West," *USA Today* January 1992: 70-71; Larry McMurtry, "Cookie Pioneers," *The New York Review of Books* 25 May 2000; Patrick O'Driscoll, "How the West Was One: Limerick Corrals Our Shared History, Legacies in Rich 'Soil'," *USA Today* 30 March 2000: 6D; Terry Pristin, "'Taming' of the Wild West Is Rewritten by Scholars History: Revisionists Steer Away From the 'Heroic Conquest.' They Focus On the Diverse Peoples' Conditions," *Los Angeles Times* 14 November 1990; T. R. Reid, "Shootout in Academia Over History of U.S. West: New Generation Confronts Frontier Tradition," *Washington Post*: 10 October 1989: A3; William W. Jr. Savage, "The New Western History: Youngest Whore on the Block," *AB Bookman's Weekly* 4 October 1993; Janny Scott, "An Environmentalist on a Different Path; A Fresh View of the Supposed 'Wilderness' and Even the Indians' Place in It," *The New York Times* 3 April 1999; Gerald F. Seib, "Babbitt's Vision: A Changing West, Changed Politics," *Wall Street Journal* 29 December 1993: 6; Bill Turgue, "The Far for the West," *Newsweek* 98 30 September 1991: 20-35; Sherry L. Smith, "Legend and Ambiguous Truth and the Western Frontier," *Chronicle of Higher Education*, 4 April 1990, B 72; Lauren F. Winner, "True West," *The New York Times Book Review* 19 March 2000: 24.

the *U. S. News and World Report* published a headlining story titled “The Old West: The New View of Frontier Life” and in October 1990 the cover of the *New Republic* featured the telling headline: “Westward Ho Hum: What the New Historians Have Done to the Old West.” Within a year after the Trails conference in Santa Fe, media attention to the New Western History had skyrocketed.

While the New Western History drifted into the focus of public attention, it simultaneously triggered critical responses from within academia itself. One of the severest harangues against the New Western History was launched by historian Gerald D. Nash in his article “Point of View: One Hundred Years of Western History,” published in the *Journal of the West* in 1993.⁸⁶ In his essay, Nash questions the self-proclaimed newness of the New Western History. “To claim that NW historians were the first to challenge the Turnerian synthesis,” Nash writes, “is to ignore major figures of the previous generation and to make unwarranted claims” (“Global” 150). Referring especially to the works of Arthur M. Schlesinger, Sr., John D. Hicks, Paul W. Gates, and George W. Pierson, Nash criticizes that the New Western Historians “blithely ignored the large number of historians writing after 1945 who simply did not accept the Turnerian framework” (“Global” 149-50). Nash’s criticism can be considered as representative for a number of critical voices that challenged the self-proclaimed innovative character of the New Western Historians. The Turner-revisionism advocated by the New Western History, Nash and others argued, had been under way for decades and the research presented by the New Western Historians was not nearly as trailblazing as the revisionists themselves suggested. In fact, such critics argued, many of the New Western History’s insights were built on research and argumentations of the preceding generations of historians, who were now often labeled derogatively as ‘Old Western Historians.’ As Alan Brinkley comments on this general criticism in the *New York Times Book Review* on September 20, 1992:

To academic historians in other fields it is sometimes difficult to understand what all the shouting is about. For much of what is new in the history of the West is not new at all to American history generally, which has been preoccupied for years now with issues of racial diversity, class conflict and gender relations, and which rejected the progressive, triumphalistic, ethnocentric assumptions of the Turner thesis two generations ago. (“New” 25)

Accordingly, critics like Nash and Brinkley point out that the work of the New Western Historians draws from the achievements of preceding historians in the field, among them most notably Herbert Eugene Bolton, Alfred W. Crosby, Jr., Bernard de Voto, Gene M. Gressley,

⁸⁶ The essay was later republished in slightly different form as “The Global Context of the New Western Historian,” *Old West/New West*, ed. Gene M. Gressley (Norman: U of Oklahoma P, 1997): 149-62.

Richard Hofstadter, Wilbur A. Jacobs, Howard Roberts Lamar, James C. Malin, Donald J. Pisani, Earl S. Pomeroy, Paul W. Rodman, and Walter Prescott Webb.

Nash argues in a second step that the New Western History is characterized by a general “air of moral superiority” and claims that the revisionists “formulated a ‘party line’ to which the true believers were expected to adhere” (“Point” 4). At the core of this party line, Nash claims, is the New Western Historians’ focus on the perspective of the downtrodden in the region’s history, which he traces back to the political agenda of the New Left of the 1960s: “Many disciples of the New Western History, who are a product of the 1960s, have been busily engaged in belatedly applying New Left perspectives of that era to the history of the American West,” Nash states (“Global” 149). Like the members of the New Left, Nash continues, the New Western Historians show a strong tendency to overstress the role of the oppressed and to habitually dramatize the role of white people as oppressors. “In creating new stereotypes,” Nash writes, the New Western Historians “portrayed alleged victims such as ethnic and racial minorities in a most positive light while they vilified the alleged oppressors, usually Anglo white males” (“Point” 4). Accordingly, Nash argues that the New Western Historians offer an unbalanced perspective by focusing mainly on failure and exploitation in the region’s history while at the same time neglecting positive aspects. As Nash states, “a romanticization of peoples whom the NW group considered victims was a key feature of their writings” (“Point” 3).

Due to their one-sided focus on victims, Nash believes that the New Western Historians’ overall perspective on American history is characterized by pessimism and negativism. “Negativism,” Nash writes, “is a major characteristic of the NW group” (“Global” 156). In contrast to the New Western Historians’ self-description as a non-ideological movement, Nash instead argues that the revisionists’ negativism is the expression of a strong political agenda. “In their negativism and their critique of democratic values,” Nash writes, “the NWHs are destructive in conveying a realistic and truthful vision of the West, both to academicians and the general public” (“Point” 4). For Nash, the New Western Historians’ pessimism is thus ultimately a political, ideological position:

Historians writing in this vein have at times been advocated of political or social causes and have viewed their work as tools or weapons to achieve a social or a political reform. They focused on race and class as major determinants of human affairs. Theirs was not so much a historical as a social mission. (“Global” 155)

Nash adds another turn of the screw and accuses the New Western Historians of promoting “totalitarian ideologies” and claims that “their goals are not the stuff of scholarship but of propaganda” (“Point” 4). Nash becomes even more excessive in his criticism when he compares the rhetoric strategies of the New Western Historians to those of Goebbels and claims that the methods of the revisionists bear “striking similarities to the modus operandi of Nazi, Fascist, and

Communist academicians in their heyday” (“Point“ 4). Like the Nazis, Nash writes, the New Western Historians

formulated a ‘party line’ to which the true believers were expected to adhere. In their published writings, they usually cited only each other, rarely those who were not in fold. In their oral presentations and conferences, they made careful arrangements to exclude all those with different views. These staged presentations came to be dialogues among true believers who presented the same message at different meetings—all carefully arranged to exclude possible criticism. (“Point” 4)

Nash tries to prove his point by claiming that the New Western Historians’ focus on race is inspired by deconstructionism, which he in turn argues to be based on the philosophy of Paul de Man and Martin Heidegger, the latter, as Nash writes, “an avid Nazi in the Hitler era” (“Global” 158).

Apart from the fact that I believe Nash’s comparison between the New Western History and Nazi propaganda to be unnecessarily excessive, I argue that Nash is simply wrong in assuming that the New Western Historians are influenced by deconstructionism. As I will argue in more detail in chapter IV, especially Donald Worster is extremely critical of deconstruction and postmodern theory. Furthermore, Nash is also wrong when he claims that there is no controversial debate among the New Western Historians. As I outlined, especially William Cronon, Richard White, and Donald Worster argue vehemently about a variety of semantic and methodological issues in environmental history. In addition, Nash ignores that three of the four protagonists of the New Western History, namely Cronon, White, and Worster, are not concerned with issues of class, but with environmental issues. Despite the fact that Nash’s major points of criticism—romanticization of victims and neglect of predecessors—are legitimate, his comparison of the New Western Historians with Nazis scientifically disqualifies his efforts. However, Nash’s essays are instructive in so far as they emblematically represent the harsh criticism directed against the New Western History during the early 1990s.

Another major critic of the New Western Historians is American writer Larry McMurtry, author of the Pulitzer Prize-winning novel *Lonesome Dove*. In his article “How the West Was Won or Lost,” published in *The New Republic* on October 22, 1990, McMurtry criticizes the New Western Historians for their negativism and refers to their works as “failure studies” which overstress failure as the main experience in the West (37). “A profession that once mainly concerned itself with national heroes and their actions,” McMurtry summarizes, “now prefers to pay some attention to the victims” (“How” 33). Although McMurtry concedes that failure was indeed a common experience in the region’s past, he argues that the New Western Historians ignore the role positive emotions and the imagination played in the creation of the West. “Failure studies,” writes McMurtry, “often fail themselves because they so rarely do justice to the quality of imagination that constitutes part of the truth” (“How” 37). According to McMurtry, any

history of the West that does not take into account the role of peoples' hopes and dreams about the region is incomplete towards the point of distortion. "Explorers and pioneers of all stamps needed imagination, much as athletes need carbohydrates," McMurtry points out and concludes that "fantasy provided part of the fiber that helped them survive the severities that the land put on them" ("How" 37). Unlike the New Western Historians, who explicitly write against the mythic West, McMurtry claims in contrast that it is precisely the mythical components that have contributed to the reality of the West. McMurtry thus questions the New Western Historians' rigid differentiation between history and myth, between fact and fiction and their limited understanding of what the 'real' West was like.

Furthermore, McMurtry argues that one of the striking aspects of the revisionism is its "post-ness" ("How" 33). The New Western History's focus on the marginalized in history, McMurtry argues, has to be seen in the larger context of the trends dominating academic discourse in the 1990s, especially postcolonial and postmodern theory. In contrast to the New Western History's portrayal in the media as an innovative approach to Western American history, McMurtry claims that abler historians had already revised the history of the West long before the New Western Historians emerged:

The fact is that American readers have been told these messy truths about the West before, and by abler historians than most of the revisionists. They have been told them, indeed, by historians with a deeper sense of the tragic nature of the Western story than the revisionists possess. Those historians wrote, however, before any, or many, Americans were ready to receive bad news from out West. It is impossible to impress a people with truths that they aren't ready to hear, much less to accept. ("How" 33)

Finally, McMurtry claims that the New Western Historians promote an inaccurate reading of Turner's Frontier Thesis. According to McMurtry, Turner's thesis was not primarily a glorification of America's western past, but an elegy on the end of the frontier and hence much more negative in tone than the revisionists allow.

A more balanced assessment of the New Western History is presented by Gene M. Gressley in the introduction to his edition *Old West/New West*, published in 1997. "Seemingly oblivious to fifty years of criticism of Turner," Gressley summarizes critical perspectives on the New Western Historians as brought forth by Nash and McMurtry, "the New West historians began thrashing Turner with unrefined virulence" (*Old* 12). Like McMurtry, Gressley suggests that "failure, not success, was the guidon of the New Western History in depicting western settlement" and that the "unqualified pluralism" of the New Western Historians reflects the larger discursive trends within academia during the 1990s (*Old* 12). Where McMurtry stresses the trendy post-ness of the New Western History, Gressley critically comments on the proclaimed 'newness' of the New Western History:

In the past three decades we have witnessed the “new” political history, the “new” economic history, the “new” labor history—all of which were divorced from the past methodology and interpretation, especially the consensus school. For in an era of tensions, conflict, and upheaval the consensus vision of national progress, cultural and intellectual accommodation to a peaceful history, appeared threadbare and sadly out of fashion. (*Old* 10)

Like Nash, Gressley believes that the supposedly new perspective provided by the New Western Historians is in fact rooted in the political agenda of the New Left and the New Social History of the 1960s. “The West of political correctness, of multiculturalism, cyclical economy, of generational dissent (past and present) and minority rebellion,” Gressley notes, “has become the West of the New Left” (*Old* 19-20). Hence, Gressley suggests that the New Western Historians are inspired by the political agendas of the 1960s counter cultures. “Against this tumultuous panorama of sixties dissent, political correctness, multiculturalism, and social history,” Gressley states, “the new Western History cracked its shell and wobbled into being” (*Old* 12). Finally, Gressley criticizes the methodology of the New Western Historians, arguing that the revisionists tend to generalize and to draw superficial conclusions without giving proper consideration to factual research:

The presentist orientation of New West historiography often results in superficial research. The absence of archival research is most pronounced. In common with much of the New Left historiography of two decades ago, New West historians go for the gold in the grand sweep: the breathtaking generality and the seductive syllogism. (*Old* 13)

In contrast to McMurtry, who claims that the New Western Historians place too much emphasis on the factual than on the imaginary West, Gressley argues that the works of the New Western Historians are characterized by the absence of profound factual research.

Further methodological criticism is voiced by Jerome Frisk and Forrest G. Robinson in *The New Western History. The Territory Ahead*, the only monograph on the New Western History to date, edited and published by Forrest G. Robinson in 1997. In his essay “The Theoretical (Re)Positions of the New Western History,” Frisk—quite in contrast to McMurtry—claims that the New Western History receives its meaning mainly from its post-ness and criticizes the revisionists for their neglect of postmodern theory. As Frisk states, “the New Western histories were conspicuously marked by their disregard for postmodern theory” and accordingly tend to differentiate between ‘old’ and ‘new’—essentially false and true—history (“Theoretical” 17). Hence, Frisk and Robinson suggest, the New Western Historians reject the general insight of contemporary discourse theory, namely that statements or narratives are not so much to be considered as right or wrong, but rather as politically tolerated or repressed.

“Postmodern theory,” Robinson summarizes the lesson he believes the New Western Historians forgot to learn, “emphasizes the textuality of all sources and the interestedness of all points of view, bears with it an obligation to approach all stories with something like an equal eye” (“Clio” 88). As Frisk claims, the New Western Historians’ rejection of all preceding historical discourses violates the postmodern focus on the narrative character of all histories and the denial of all previous, competing histories is linked to the New Western History’s “‘revolutionary trope’ which proclaims the newness of these stories by reductively conflating the histories of their regional precursors” (“Theoretical” 17). According to Frisk, the failure of the New Western History has to be seen in its rejection of a possible third way “that is neither the old history nor their form of the new history” (“Theoretical” 27). If Turner’s frontier narrative was too positive, Frisk argues, the overall approach of the New Western Historians is equally one-sided in its negativism: “Worster and Limerick present their tragic narrative of relentless conquest as the sole legitimate response to the traditional comic story of ‘triumphal procession’” (“Theoretical” 27).

Similarly, Forrest G. Robinson picks up McMurtry’s criticism and suggests that the revisionists show a complete disregard for the critical revisions of the American West provided in the works of numerous American writers of fiction prior to the emergence of the New Western History:

As any student of Western literature knows, writers from Cooper to McCarthy, and including—among many others—Twain, Cather, Rolvaag, Sandoz, Steinbeck, and Stegner, share a strong inclination to represent the regional past in mingled and often tragic lights.... To read Western literature, in short, is to read a story similar in its gravity of tone, its thematic preoccupation, and its historical trajectory, to the one the revisionists claim to be telling for the first time. (“Clio” 66)

In “Literature, Gender Studies, and the New Western History,” which is also included in Frisk’s and Robinson’s edition, Krista Comer supports Robinson’s assessment. Employing arguments borrowed from postmodern discourse analysis, Comer claims that it was indeed Western writers of fiction that have provided the discursive setting for the emergence of the New Western History:

The literary West has paved the way for the New Western History’s critique of, and re-presentation of, the Western past. As long as the literary West plays no role in renderings of the Western past, however, historians misrepresent, by *not* representing, the *discursive* context that has created and facilitated their own emergence as a public history discourse. (“Literature” 125)

According to Comer and Robinson, American writers of fiction have thus not only preceded the New Western Historians’ efforts to revise the popular West, they more

importantly have enabled the existence of the New Western Historians by introducing critical portrayals of the West to the American public. As Robinson and Comer claim, the real pioneers of the new West were writers of fiction, not historians.⁸⁷

Robinson suggests that the New Western Historians' neglect of critical portrayals of the West in American fiction is again the result of their outdated, pre- or anti-postmodern definition of 'fact' and 'fiction' in historiography. "Myth and romance are to the New Western History as falsehood is to truth," states Robinson ("Clio" 67). According to Robinson, the New Western Historians equate literature with myth and hence do not acknowledge the efforts of American writers of fiction, who have preceded the revisionists in their efforts to contrast the heroic West with much more critical portrayals:

Because it is preeminently fictional, literature is aligned with myth—with the old, false triumphal story of white male conquest that the New (and True) Western History puts to rest. This means, of course, that literature cannot possibly tell, or significantly anticipate, the story that White and the other revisionist have to offer. ("Clio" 72)

Robinson claims that the New Western Historians' refusal to acknowledge fiction as a source of historical knowledge has to be seen in the larger context of contemporary battles between history departments and other academic disciplines over historiographic authority. As Robinson suggests, the New Western Historians' neglect of literary revisions of the popular West reflects a more general anxiety of historians to lose their unchallenged claim to interpret the past:

Like many members of their discipline, the New Western historians hold on rather jealously to the notion that their contributions to knowledge are readily distinguishable from those of scholars in adjacent fields. Anxiety on this score has run pretty high in recent years, largely because of assaults on the disciplinary integrity of history coming from theorists within the field, and from others in areas such as literature and philosophy. At the very heart of the historian's self-defense is an insistence that the reality of the past is accessible in empirical evidence which is gathered and synthesized in historical narratives, departures from this "scientific" procedures are said to produce varieties of falsehood. ("Clio" 75)

⁸⁷ The revision of the popular West in American fiction has been documented and examined in numerous publications. For an introduction, see Thomas J. Lyon's essay "The Literary West," *The Oxford History of the American West*, ed. Clyde A. Milner II, Carol A. O'Connor, and Martha A. Sandweiss (New York: Oxford UP, 1994): 707-41. Richard W. Etulain's various publications on the subject also provide a good introduction, among others: *Telling Western Stories. From Buffalo Bill to Larry McMurtry* (Albuquerque: U of New Mexico P, 1999); "The American Literary West and Its Interpreters: The Rise of a New Historiography," *Pacific Historical Review* 45 (1976): 311-48; "Western Fiction and History: A Reconsideration," *Critical Essays on Wallace Stegner*, ed. Anthony Arthur (Boston: G. K. Hall & Co., 1982): 146-63; "Western Stories for the Next Generation," *Western Historical Quarterly* 31.1 (2000): 4-23.

Accordingly, Robinson claims that the New Western Historians are anxious to defend their academic territory as historians, which he describes as being invaded by the discourses of neighboring humanity departments with the help of postmodern theory. Postmodern theory, Robinson points out, undermines the traditional separation between ‘fact’ and ‘fiction’ and thus challenges the very basis of ‘traditional’ historiography. “The rejection of postmodernism,” Robinson thus interprets the strategy of the New Western Historians, “preserves the history/myth distinction and at the same time justifies the refusal to take seriously the tragic narrative widely at large in Western literature” (“Clio” 82).

On a more general level, Robinson implies that until historians accept a postmodern concept of history which considers the realm of fiction as a valid source of historical knowledge, objective history that emphasizes “the textuality of all sources and the interestedness of all points of view” and that approaches “all stories with something like an equal eye” cannot be written (“Clio” 89). Whenever historians try to make sense of the past, Robinson suggests, literary works should be included as historical sources: “Like history, novels are grounded in social reality; but thanks to their imaginative liberty, they often illuminate the past in ways that strictly factual accounts cannot” (“Clio” 90). As I will outline in more detail in chapter IV, the argument presented by Frisk and Robinson that the New Western Historians generally reject postmodern theory is based on a very superficial reading of the respective historians’ work. Although Donald Worster dislikes postmodern theory, William Cronon and Richard White are much more open to postmodern theory than Frisk and Robinson allow.

Apart from the criticism outlined above by Nash, McMurtry, Gressley, Frisk, and Robinson, various scholars have criticized the New Western History along similar lines.⁸⁸ On a general level, many critics show a certain discontent with the New Western Historians’ self-righteous tone and air of moral superiority. As Robert Wooster representatively complains, the New Western Historians’ “self-congratulatory pronouncements of triumph over Frederick Jackson Turner, Walter Prescott Webb, and Ray Allen Billington can sometimes be annoying” (qtd. in

⁸⁸ The following publications represent exemplary responses to the New Western History from within academia: Sally K. Fairfax and Lynn Huntsinger, “An Essay from the Woods (and Rangelands),” *The New Western History. The Territory Ahead*, ed. Forrest G. Robinson (Tucson: U of Arizona P, 1997): 191-210; Carl Gutierrez-Jones, “Haunting Presences and the New Western History: Reading Repetition, Negotiating Trauma,” *The New Western History. The Territory Ahead*, ed. Forrest G. Robinson (Tucson: U of Arizona P, 1997): 135-51; Robert Johnston, “Beyond ‘The West:’ Regionalism, Liberalism, and the Evasion of Politics in the New Western History,” *Rethinking History 2* (1998): 239-77; Michael P. Malone, “The ‘New Western History’: An Assessment,” *Trails: Toward a New Western History*, ed. Patricia Nelson Limerick, Clyde A. Milner II, and Charles E. Rankin (Lawrence: UP of Kansas, 1991): 97-102; Forrest G. Robinson, “The New Historicism and the Old West,” *Old West—New West: Centennial Essays*, ed. Barbara Meldrum (Moscow: U of Idaho P, 1993): 74-95; Gerald Thompson, “The New Western History: A Critical Analysis,” *Old West/New West*, ed. Gene Gressley (Norman, London: U of Oklahoma P, 1997): 51-72; John R. Wunder, “What’s Old About the New West History: Race and Gender Part I,” *Pacific Northwest Quarterly 85.2* (1994): 50-58.

Robinson, *New* 9). Similarly, Steven Tatum argues in “The Problem of the ‘Popular’ in the New Western History” that the revisionists present themselves as historical saviors:

The texture of the New Western historians’ texts weaves together just such a tragic or ironic plot about the course of western history with an implied romance kind of plot about the activities of the New Western historian as an archetypal “deliverer” figure—the wise parent or savvy older brother or sister—who doesn’t blink in the hard light of day, who promotes frank appraisal concerning continuity of conquest and exploitation between past and present, and whose perspective redeems the community from the thrall of myth and symbol. (161)

Along the same lines, several acclaimed scholars of the American West have expressed their bewilderment regarding the New Western Historians’ claim for innovation and pioneering in Western American historiography. Historian John Mack Faragher similarly criticizes the revisionists when he writes that “most of today’s western historians build on the contributions of their anti-, un-, or non-Turnerian predecessors. By failing to give full recognition to these pathbreaking studies, the generational thesis violates one of the cardinal rules of history: close attention to antecedents” (“Frontier” 108). Faragher points out that scholars of the American West like A. Irving Hallowell, Jack D. Forbes, David M. Potter, Roger Daniels, Richard Maxwell Brown, Wilbur Jacobs, and Robert V. Hine had challenged Turner’s Frontier Thesis long before the New Western Historians by examining the diverse experiences of Indians, Hispanics, as well as Asian and European immigrants, both male and female. Walter Nugent, another acclaimed scholar of the American West, points out that the New Western Historians’ Turner-criticism and their focus on the country’s imperial past “is part and parcel of a very old and honorable tradition best called anti-imperialism” (“Western History” 18). As Nugent suggests, the New Western Historians fail to acknowledge the arguments and achievements brought forth by scholars of West such as Henry Nash Smith and Richard Hofstadter during the 1950s and 1960s.

Historian Gerald Thompson also points out that the trend for revisionism in Western American historiography started well before the New Western History emerged in the 1980s. Thomson follows Nash’s and Gressley’s criticism by claiming that the works of the New Western Historians lack serious background studies and promote generalizations and platitudes. Like several other scholars, Thomson also criticizes the one-sided focus of the New Western Historians on the negative aspects in Western American history. “At the heart of the New Western History,” Thomson writes, “is a view of a regional history that stresses the settlement of the West by Americans as primarily a negative experience for almost everyone involved” (“New” 51). Overall, Thomson believes Turner’s paradigm to be more convincing than the

negativism promoted by the New Western Historians: “Turner’s story of success is still more believable than the catalogue of failures coming from the New Western History” (“New” 63). Thomson’s assessment of Turner’s achievement as a historian represents a popular sentiment expressed by many historians during the 1990s in the context of the debate about the New Western History, a sentiment which Peter Schrag expresses as follows: “Triumphalism and the Turner thesis may be gone, but they have not been replaced” (“Burden”).

Much of the criticism outlined above is rather general and represents, I believe, the superficial engagement of the critics with the subject at hand. True enough: Especially in the paradigmatic essays collected in the *Trails*-edition, the New Western Historians present very general statements on a revised West in an at times self-congratulatory manner. However, I argue that the majority of criticism as outlined above is very general, neglects the major points of debate among the New Western Historians and does not do justice to the overall variety and complexity of the New Western Historians’ publications. Rather, most of the critical voices outlined above are very superficial responses to the paradigmatic, provocative essays published in the *Trails*-edition and elsewhere. However, the *Trails*-edition is indeed a collection of programmatic essays and does, as such, not represent the overall academic achievements and capabilities of the individual scholars that contributed to the collection. Neither the very general, self-congratulatory essays of the *Trails*-edition, nor the at times harsh criticism triggered by the programmatic essays are suited for a balanced assessment of the New Western History. Together with the often unbalanced responses to the New Western History from within academia, the media hype that accompanied the emergence of the New Western History at the beginning of the 1990s added further stimulus to a discursive climate which was detrimental to an objective assessment of this latest chapter in Western American historiography. Before I present my case study of Donald Worster’s work in order to contradict and amend the very general criticism of the New Western History, I want to briefly comment on the major points of criticism outlined above in order to provide the discursive setting for my discussion of Donald Worster’s work in the second half of this dissertation.

The most general point of criticism directed against the New Western Historians is their disregard for predecessors and their supposedly unjustified claim of newness. As I outlined in chapter I.2, critical revisions of the frontier West as portrayed by Turner have indeed been provided by American historians throughout the twentieth century—long before the New Western History emerged. Gerald D. Nash, who has brought forth the harshest criticism against the New Western Historians, has extensively documented the achievements of the New Western History’s predecessors in *Creating the West: Historical Interpretations, 1890-1990*. As I already pointed out, anyone who reads Nash’s overview over one hundred years of Western American

historiography will find ample proof for the fact that the revisionist approaches of the New Western Historians are not as new as the name suggests. Hence, the general criticism directed against the New Western Historians is justified in so far, as the name of the ‘movement’ as well as the self-proclaimed victory over the Old Western History seem inappropriate. To quote again from Worster’s contribution to the *Trails* conference: “We have been rewriting the story from page one and watching it be accepted. That has been a slow, hard-won victory, and I think it is time we acknowledge the achievement” (“Beyond” 7). It is such general, self-applauding statements by the New Western Historians that have at times provoked harsh criticism from other colleagues in the field. Although I agree with many of the critics that some of the New Western Historians display some form of excessive hubris regarding their achievements, I nevertheless believe that many critics have focused too obsessively on criticizing the New Western Historians’ ego and have in turn neglected to closely consult the major publications of the revisionists that appeared during the late 1970s and early 1980s, long before the term ‘New Western History’ surfaced.

Furthermore, it has to be observed that the New Western History is in fact not a homogenous ‘movement,’ as critics like Nash claim. As Patricia Nelson Limerick states, the “new western history is not a party line; it is not a set of principles to which all members must swear allegiance” (“What” 88). Although the historians associated with the New Western History share many analytical perspectives—especially an anti-Turnerian stance—, to judge and evaluate their efforts as one homogenous movement does not give sufficient credit to the diversity of their individual publications, their differing focus, and their dissenting opinions on a variety of issues.

A point in case is William Cronon, who neither contributed to the *Trails*-edition, nor expressed such self-congratulatory statements as frequently formulated by Limerick or Worster. In contrast to his colleagues, William Cronon explicitly distances himself from any crude rejection of Turner’s overall significance for the course of Western American historiography. Together with George Miles and Jay Gitlin, Cronon expresses his more moderate take on Turner in “Becoming West: Toward a New Meaning for Western History:”

Although our differences with Turner will rapidly become clear in the pages that follow, we believe that Turner’s critics ultimately went too far in their attacks on his work. Whatever the contradictions and whatever the errors of his scholarship, Turner was surely right to see the long European (and African and Asian) invasion of North America—and the resistance to it by the continents existing inhabitants—as the pivotal event in American history. (6)

When Cronon refers to “Turner’s critics,” he is beyond doubt also referring to Limerick and Worster, who can be argued to have a much more radical position on Turner. Cronon distances himself especially from Limerick’s position when he rejects her proposal to understand the West in opposition to Turner as a distinct place, not a process:

Despite what some scholars seem to believe, it is no easier to define a region than a frontier, and we have no interest in pursuing what long ago became a sterile debate about the relative merits of frontier versus regional history. We have already argued that the two are in fact inextricably entangled with each other and that each is best understood when seen in light of the other. Rather than offer a fixed definition of either, we propose to recognize their common story by placing them next to each other. (Cronon, Miles, Gitlin, “Becoming” 23)

Cronon’s opinion is thus in direct opposition to Limerick’s perspective, who argues that the “New Western historians define ‘the West’ primarily as a place” (“What” 85).⁸⁹ “Whether one speaks of studying comparative frontiers, or colonization, or invasion, or even the legacy of conquest,” Cronon counterbalances the arguments of his colleagues, “one proposes to study process rather than region, and the best of Turner’s approach will still be very much alive” (“Turner’s” 94). In similar fashion, Richard White acknowledges in “Trashing the Trails” that the New Western History has not yet provided an overall new paradigm that can live up to the rhetoric power of Turner’s Frontier Thesis. “One reason the New Western History has failed to displace the Old Western History in the popular imagination,” White states, “is that it lacks an equally gripping and ultimately satisfying narrative” (33). Accordingly, the New Western Historians’ perspective on Turner is not as homogenous or banal as some critics claim.

This is not to deny, however, that the New Western Historians indeed share an overall critical, revisionist approach to Turner and it might even be argued that this anti-Turnerian stance is a defining aspect of their revisionism; but to suggest, as Nash has done, that the New Western Historians are trying—in totalitarian fashion—to promote a one-sided approach to Western American historiography is simply not true. Regardless of their position on Turner, the New Western Historians have in fact dissenting opinions on a variety of issues. Most exemplary is the controversial debate regarding the concept of ‘nature’ and ‘history’ in the context of postmodern theory between Cronon and White on the one hand and Worster on the other hand.

⁸⁹ Limerick later revised her perspective in *Something in the Soil* where she agrees with Cronon that the place versus process debate is indeed a futile one: “The rejection of the word ‘frontier’ set off a wonderfully unnecessary scholarly debate over the comparative validity of analytic preferences for place or process,” she acknowledges in retrospect (*Soil* 21). As the New Western History matured over the years, the place vs. process debate died down.

Although Cronon, White, and Worster share an environmental approach to Western American history, their underlying theoretical concepts differ fundamentally. White, for example, sees one reason for the New Western Historians' failure to replace Turner's frontier paradigm in the overall negativism of their narratives. White specifically refers to the tragic narratives of environmental decline provided by Donald Worster. White believes that Worster writes environmental tragedies "in which the only satisfaction we gain is the knowledge of our limits" ("Trashing" 116). When White writes in "Environmental History, Ecology, and Meaning" that environmental historians have "a tendency to produce cautionary tales," White similarly openly criticizes Worster for the overall narrative tone and structure of his historiographies ("Environmental" 1114). In contrast to Worster, White is strongly opposed to simple narratives of environmental decline. Accordingly, McMurtry's argument that the New Western History should be labeled 'failure studies' due to their overall negative perspective is not entirely misleading, but unbalanced. As White's statements illustrate, there is a strong awareness among the New Western Historians regarding the impact of a one-sided, negative interpretation of the past on the perception of their historiographies and accordingly, there is much dissent among the revisionists as how to measure and qualify 'failure' in history.

Another generalization brought forward by critics is the argument that the New Western Historians disregard their predecessors in the field. When one takes a closer look at the New Western Historians' main works rather than only at the paradigmatic essays published at the beginning of the 1990s, it becomes evident that the New Western Historians are not only aware of their predecessors, but frequently refer to their works. As I will show in detail in chapter III.2, Donald Worster, for example, explicitly credits John Wesley Powell, Karl August Wittfogel, and Walter Prescott Webb for having influenced his theory on water and power in the West. Similarly, the publications of Cronon and White are heavily footnoted works that—in contrast to Nash's claim—cite a variety of dissenting voices, but also explicitly refer to and indicate the achievement of preceding historians in the field. It is not my ambition to outline examples at length, but anyone who wishes to counterbalance Nash's harsh comparison between the methodology of the New Western Historians and that of Nazi propagandists should take a closer look at Richard White's history of the American West, *'It's Your Misfortune and None of My Own,'* which closes every chapter with an extensive bibliography of other scholars' work on the chapter subject. The same is true, of course, for the major works of Cronon, Limerick, and Worster.

Another major point of criticism directed against the New Western Historians negativism regards their focus on the downtrodden in history. On the most general level, I believe this criticism to be valid. Undoubtedly, it is not the New Western Historians' aim to affirm the

achievements of American culture in settling the West, but to ask critical questions regarding the costs and side-effects of these achievements. As critics have correctly noted, the New Western Historians indeed focus on what used to be the ‘edges’ of historical experience—the lives of women, ethnic minorities, etc. The argument, however, that the New Western Historians generally romanticize the downtrodden in history is wrong. As already outlined, especially Richard White has extensively researched and written on the role of Native Americans in American history and has explicitly worked against the victimization of Native Americans. Rather, White aims at showing how native tribes developed strategies of resistance and were—in the case of the Sioux—not victims, but themselves a major force and a feared counterpart of the white invaders on the Great Plains of the nineteenth century. In his essay “The Winning of the West: The Expansion of the Western Sioux in the Eighteenth and Nineteenth Centuries,” published as early as 1978, White states the following:

From the perspective of most northern and central plains tribes the crucial invasion of the plains during this period was not necessarily that of the whites at all. These tribes had few illusions about American whites and the danger they presented, but the Sioux remained their most feared enemy. (320-21)

White insists that any simple categorization of Native Americans as victims crucially simplifies and thus distorts the history of the American West. “Without an understanding of tribal and intertribal histories, and an appreciation that, like all history, they are dynamic, not static, the actions of Indians when they come into conflict with whites can be easily and fatally distorted,” White states (“Winning” 343-44). White’s focus on Native-American forms of resistance thus contradicts the claims that the New Western Historians tend towards the victimization of minorities.

Similarly, Cronon and White have tried to counterbalance the stereotype of the passive Indian in their environmental histories by illustrating the many ways in which native tribes shaped and manipulated their environment. As outlined earlier, Cronon and White have written against the romanticizing of Native American tribes as the ‘ecologic other,’ people that lived in harmony with nature without ever harming, abusing, or exploiting its resources. In his second book, *The Roots of Dependency: Subsistence, Environment, and Social Change among the Choctaws, Pawnees, and Navajos*, published in 1983, White—resisting popular trends among American environmentalists at the time—rejects “the recent canonization of Indians into environmental sainthood” by examining the historical relations of three groups of Indians with their environment (*Roots* xiii). Quite in contrast to the argument that the New Western Historians promote a victimization of minorities, it is thus a central agenda of both Cronon and White to restore agency back to Native Americans by illustrating that American nature was in

many respects not a ‘wilderness,’ but an environment that had been transformed by native tribes for centuries prior to the arrival of white people. In *Land Use, Environment, and Social Change: The Shaping of Island County, Washington*, published in 1991, Richard White, for example, writes the following:

Wilderness has little meaning when applied to Island County and areas like it. This was a land shaped by its inhabitants to fit their own purposes. They populated this land with spirits and powers, but they did not restrict their manipulation to magic. Through observation and tradition, Indians altered natural communities to fit their needs without, in the process, destroying the ability of those communities to sustain the cultures that had created them. Their technology was limited, but they used it effectively. (25)

As outlined, Cronon argues the same point in *Changes in the Land: Indians, Colonists, and the Ecology of New England*, published in 1983. Cronon documents that the landscape of New England had been altered by native tribes prior to the arrival of white people and that the perception of the land as untouched wilderness was thus a cultural misperception. To accuse the New Western Historians in general—and William Cronon and Richard White specifically—of a one-sided victimization of ethnic minority groups is thus at least a generalization that does not withstand critical investigation.

Furthermore, the early publication dates of both Cronon’s and White’s major works on the subject in question indicate that they are not as much part of the trendy ‘post-ness’ as McMurtry wants to make us believe, but rather belong themselves to the group of historians that contributed innovative studies during the late 1970s and early 1980s that would only much later, in the context of the emergence of the New Western History, contribute to the revival of interest in Western American historiography. To argue, as McMurtry does, that Cronon, White, and Worster merely follow academic trends is a generalization that neglects the profound research and insights these historians have contributed to Western American History throughout the 1980s.

Finally, I believe that Frisk’s and Robinson’s claim that the New Western History is characterized by its disregard for postmodern theory is not only inaccurate as far as Cronon and White are concerned, but shifts the focus of attention away from questions of content and towards questions of methodological preference. Frisk and Robinson themselves do not cite or counter the facts or concepts provided in any publication of any of the New Western Historians, but rather attack the supposedly outdated methodology of the New Western Historians. As Frisk and Robinson claim, the New Western Historians are characterized by a belief in historical ‘truth’ that is at odds with a postmodern understanding of history. Apart from the fact that the

New Western Historians' concept of 'history' is neither as homogenous nor as shallow as Frisk and Robinson allow, I think it should be noted that especially Robinson has his own agenda to promote. Robinson's argument, I believe, exemplarily represents the postmodern fight within the humanities about the status of history after the linguistic turn. As a literary scholar, Robinson's main criticism with the New Western Historians is that they ignore works of fiction. Accordingly, I believe that Robinson's discontent with the New Western Historians represents a power struggle in a Foucauldian sense between literary critics on the one hand and historians on the other hand over who has the better way of telling history.

Overall, a balanced assessment of the New Western History can only be based on a close analysis of the individual works published by the scholars associated with the movement. Accordingly, I will present a close reading of Donald Worster's work as a case study in the second half of this dissertation. As I hope to show, Worster's environmental analysis of American capitalism is a significant contribution to the overall course of Western American historiography.

*“Capitalism has been the decisive factor
in this nation’s use of nature.”*

Donald Worster

Dust Bowl

III. Case Study:

Donald Worster's Environmental Theory of the American West

III.1 'Antimaterialistic Materialism:'

Donald Worster's Theory of American Capitalism

As already indicated, Worster's work centers around the *cultural* analysis of American capitalism and the *material* transformations of the environment this culture has brought about. Worster is especially interested in discovering the specific concepts of 'nature' underlying American capitalist culture and in exploring the respective practices and technologies this culture has developed in using the country's natural resources. Worster is convinced that the culture of capitalism has brought about the most fundamental environmental transformations in history. "Personally," Worster explains, "I have followed a long process of study and reasoning to the thesis that capitalism, defined as both ethos and system, has been one of the most revolutionary forces in history, and nowhere more so than in ecological relations" ("Seeing" 1145). Worster's environmental histories are thus grounded in his theoretical understanding of American capitalism, which I will outline in the following chapter.

Trying to define his theoretic positions on environmental history and on American capitalism, Worster has referred to himself as an 'antimaterialistic materialist.' To illustrate Worster's position, the following paragraph from his introduction to *The Wealth of Nature: Environmental History and the Ecological Imagination*, a programmatic collection of essays on American environmental history, is worth being quoted in full length:

My philosophical position as an environmental historian might be described as "antimaterialistic materialism." I want to draw attention back to the material reality of the natural world as it impinges on human society, now shaping, now being shaped, by that society. My dissatisfaction with non-environmental history is that it commonly ignores that material reality, an ignorance that extends far beyond the cloisters of history into contemporary popular attitudes. Our politics, economics, highway engineering, music, newspapers, all could use a little bit more materialism of the right kind: a greater awareness of the materiality of the planet, its limits, diversity, and dynamics. On the other hand, I do not believe that materialism, defined in either ethical or ontological terms, is a fully adequate way to understand the past, let alone organize our desires.... The cultural history of nature is as significant as the ecological history of culture. That may be the core message of environmental history. (ix-x)

Arguing that an understanding of American capitalist culture is essential to write the environmental history of the American continent, Worster's antimaterialistic materialism thus

synthesizes the material *and* the cultural level of analysis I outlined in chapter II.2. Worster wants to uncover the core values of American capitalism, as he believes that these values are the key to an understanding of the environmental transformations that have taken place on the American continent.

Worster's attitude towards capitalism is indicated by his word play in *The Wealth of Nature*, which clearly alludes to Adam Smith's *Inquiry into the Nature and Causes of the Wealth of Nations*. Worster contrasts the value system underlying Smith's economic philosophy of free trade with his own value system as an environmental historian. Whereas Worster's philosophy promotes an egalitarian relationship between humans and the environment and advocates the protection of nature from human greed, Smith is for Worster the "representative modern man" and represents like no other philosopher the rising materialist worldview of capitalism emerging during the eighteenth and nineteenth centuries (*Wealth* 214). As Worster outlines, Smith wrote against British mercantilism by promoting the idea of free trade and argued that in order to increase its wealth, a nation must establish a "system of natural liberty" in which

every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest in his own way, and to bring both his industry and capital into competition with those of any other man, or order of men. (qtd. in Worster, *Wealth* 215)

Although Smith acknowledged that human motives are often based on selfishness and greed, he yet believed that the competition of the free market would benefit society as a whole by keeping prices low and by building an incentive for the existence of a wide variety of goods and services. In contrast, Worster argues that Smith's philosophy of laissez-fair capitalism neglected to take into consideration the exploitative relationship such societies would automatically develop towards nature. As Worster exemplarily summarizes his take on capitalism in *Dust Bowl*:

Capitalism is an intensely maximizing culture, always seeking to get more out of the natural resources of the world than it did yesterday. The highest economic rewards go to those who have done the most to extract from nature all it can yield. Private acquisitiveness and accumulation are unlimited ideals, impossible to satisfy once and for all. (*Dust* 6)

Worster thus believes that Smith underestimated the negative impact of human greed on the overall development of capitalist societies. According to Worster, capitalism is an economic culture based on the production and accumulation of wealth in a free market place and necessarily promotes human greed instead of checking it: "Capitalism, in order to become

so dominant, had to convince people, against all the weight of tradition, that greed was really a virtue” (*Nature’s* 14). Worster is thus convinced that capitalism’s celebration of profit maximization and unhindered economic growth is inevitably linked to a destructive attitude towards nature, which he in turn believes to be the main systemic flaw of capitalism.

Worster argues that American culture has embraced the capitalist ideal like no other culture and that, in turn, the American relationship towards nature has essentially been determined by the cultural logic of capitalism; as Worster phrases it: “Capitalism has been the decisive factor in this nation’s use of nature” (*Dust* 5). According to Worster, the principal ideals informing American capitalism—self-reliance, glorification of private wealth, disdain of centralized authority—have mainly been shaped by the frontier myth. As Worster claims, the aggressive dog-eat-dog character of the Wild West and its harsh living conditions promoted from the beginning competition as the nation’s main principle. The following paragraph illustrates Worster’s assessment of the impact of the frontier myth on the evolution of American capitalism:

By the middle of the nineteenth century, this myth of the frontiersman had begun to serve, openly and emphatically, the capitalist ideology and way of life. That was so largely because the myth was sited in the West, and it was in the West where many of the aggressive new class of entrepreneurs were most active—in mining, railroad building, cattle ranching, and land speculating. But even before that merger, going back well into the eighteenth century, the folklore of the westward-moving frontier had served to prepare people for the emerging capitalistic view of the world. Its heroes were men like Daniel Boone, who had blazed a path into the wilderness to prepare the way for a real-estate scheme, and those legendary Rocky Mountain fur trappers, who were in truth part of the workforce of a global haberdashery. The world such heroes inhabited, or imagined they inhabited, was a hard, cruel place much of the time where they had to fight constantly for survival. They could never relax their vigilance. Nor could the frontier hero depend on his fellows for much aid, because in this competitive environment, each man was mainly interested in his own welfare and the only dependable moral principle was self-reliance. Thus, through the elaborations of myth, the early West came to symbolize the dog-eat-dog world that capitalism was building; supposedly, it revealed in the clearest way that the law of nature was one of cutthroat competition. The myth of rugged individualism on a western frontier has long been our largest and most compelling national myth, and it has helped teach Americans the ideas of a laissez-faire economy and reinforced, however subtly or blatantly, its ethos. (“Kingdom” 118)

In contrast to traditional frontier historiography’s definition of the West as a place where the positive values of American democracy have been shaped, Worster identifies

the frontier West as the place of origin of a genuinely American capitalist rationale, based on an exploitive attitude towards nature. Accordingly, Worster's 'antimaterialistic materialism' has to be understood as a critical investigation of the cultural roots of American capitalism in the national myth of the frontier and its impact on American perceptions of nature.

Throughout his work, Worster does not provide an extensive definition of capitalism, as he is well aware that such a task would be too complex, especially in the age of globalization. Rather, Worster focuses on outlining capitalism's essential shortcoming, which he sees in its disregard for nature's intrinsic order. Worster believes that nature is indeed governed by a system of order and argues that capitalist culture corrupts this order. In Worster's environmental universe, capitalism and nature are thus antagonistic systems of logic. Worster summarizes his perspective on the logic of capitalism with respect to the economy of nature as follows:

Any suggestion that nature has an intrinsic order that must be preserved has been viewed by many industrial leaders as a serious threat. They have had another, rival order to create—an economic one. Industrialism has sought not the preservation but the total domination of the natural order and its radical transformation into consumer goods. The environment has been seen to exist mainly for the purpose of supplying an endless line of those goods and absorbing the byproducts of waste and pollution. ("Restoring" 179)

The capitalist domination of nature represents for Worster a form of environmental imperialism that he wants to substitute with a more ethic, egalitarian relationship between humans and the earth. "We have had enough of imperialism," he writes; "in this age of deadly mushroom clouds and other environmental poisons, I believe it is surely time to develop a gentler, more self-effacing ethic towards the earth" (*Nature's* 346). Worster is convinced that the logic of capitalism can only be sustained for a relatively short period in human history before it will inevitably unhinge the balance of nature. In order to prevent an environmental catastrophe for both nature's and humanity's sake, the capitalist value system itself has to be questioned and revised, argues Worster.

According to Worster's understanding, capitalism itself produces what he calls in Marxian fashion 'modes of production,' specific ways in which capitalist economic systems produce goods and use the land. For Worster, the term 'modes of production' also signifies the economic values and principles which determine the capitalist exploitation and commodification of nature through science and technology. "The land in this culture," Worster writes, "is perceived and used in certain, approved ways; there are, in other words, ecological values taught by the capitalist ethos" (*Dust* 6). In this sense, Worster borrows

the term ‘mode of production’—*Produktionsweise*—from Karl Marx and Friedrich Engels, who used the term to denote the industrial production of goods in nineteenth-century capitalism. Marx and Engels believed that the capitalist mode of production was characterized most importantly by the selling of labor power on the labor market and the production of surplus value through human labor. Simultaneously, as more and more people left rural areas in search of a better way of life in the urban industrial centers, Marx and Engels argued that the estrangement of humans from the land was a principal feature of capitalism. In *Rivers of Empire*, Worster summarizes his reading of Marx’s definition of capitalism:

For Marx, the underlying base of any society is its “mode of production” (*Produktionsweise*), the process by which people extract from nature their subsistence and accumulate their wealth. It is, in simplest terms, the human interaction with the earth, but there is nothing really simple about it. The mode of production involves a complex mix of ecological factors, technology, and social relations—this last including, for instance, the relations between workers and capitalists in the capitalist mode, which has dominated recent history. All social wealth comes from those elements working in concert, coming in part as the gift of nature (in the form of soil, water, coal, forests, and the like) and in part as the product of human labor. (*Rivers* 25-26)

According to Worster, the essential shortcoming of Marx’s and Engels’ theory was that they concentrated their analysis of the capitalist mode of production mainly on its impact on the reorganization of social relations within society. Worster, in contrast, advocates a broader understanding of capitalism:

When I speak of capitalist mode of production in agriculture, I mean something broader than Marxists do when they use the phrase. For them, the crucial distinguishing feature of the new mode has been the restructuring of *human* relations: the buying of labor as a commodity in the marketplace and the organizing of it to produce more commodities for sale. In my view, the buying of labor is too narrow a feature to cover so broad, multifaceted, and changing a mode as capitalism, even considered in merely human terms. (“Transformations” 1100)

Hence, Worster is not primarily interested in studying the reorganization of human relationships in capitalist culture, but in examining how capitalism transforms the environment: “The reorganization of nature, not merely of society, is what we must uncover,” he writes (“Transformation” 1100). In the following paragraph, Worster argues his point in more detail:

The Marxist exposure of the ugly face of society is well known. Less familiar is its companion argument that the everyday dealings of people with nature were radically altered too, that ecological relations, deriving as they did from human social relations, also became more destructive as they grew more distant. Just as the capitalists organized the new underclass of workers into instruments of profit, so they organized the earth as the raw material for that labor to exploit. (“Vulnerable” 12)

Although Worster’s use of the term ‘mode of production’ in his own environmental theory of capitalism seems to place him at first sight in a Marxist corner, his attitude towards Marxism is indeed quite critical.

Worster criticism is based on Marxism’s general disregard for ecological matters. “You cannot find in [Marx] or his nineteenth-century disciples much concern about preserving any traditional feeling for nature or even any concern for environmental preservation,” Worster claims (“Disorder” 76). More importantly, Worster argues that according to Marxist theory, the ultimate free society is not one that preserves the wealth of nature, but one that places the technological means of production in the hands of the people in order to do precisely the contrary, namely control nature. The only difference between Marxism and capitalism, Worster claims, is that in Marxism, the goods and resources taken from nature are to be distributed evenly among the members of society. For Worster, Marxism, just like capitalism, embraces the idea that nature is an entity to be dominated and exploited:

However much they claimed to put justice above profit, the disciples of Karl Marx had joined in what was becoming a specieswide, transideological crusade for domination [over nature]. Overthrowing the capitalistic world economy, therefore, would not bring an end to the planet’s vulnerability. (“Vulnerable” 17)

Worster believes that Marx was well aware of society’s exploitive relationship towards nature, but made a conscious choice to regard nature as a dispensable category. “The progress of history in the overall evolution from capitalist to a free society,” Worster summarizes his take on Marxism, “involved leaving nature behind as a key formative element, supplanting it with the productive apparatus and class structure contrived by humans” (*Rivers* 26). In “Freedom and Want: The Western Paradox,” Worster quotes the following passage from Marx’s *Grundrisse* in order to prove his point. In human history, Marx writes,

nature becomes purely an object for humankind, purely a matter of utility; ceases to be recognized as a power for itself; and the theoretical discovery of its autonomous laws appears merely as a ruse so as to subjugate it under

human needs, whether as an object of consumption or as a means of production. (qtd. in Worster, "Freedom" 88)

Worster thus suggests that traditional Marxism tolerated the human alienation from nature and understood it—in the long run—as a historical *a priori* for a higher level of civilization. Worster deeply resents this perspective. Advocating an ecocentric worldview that acknowledges and preserves the integrity of nature, Worster is critical of the role of nature in both capitalist and Marxist philosophy. Hence, Worster's environmental criticism of American capitalism must not be confused with the anti-capitalist, Marxist rhetoric popular among 1970s environmentalists. Rather, although Worster adapts the modes-of-production concept from Marxist theory, his self-definition as an 'antimaterialistic materialist' can be considered his way of distancing himself from Marxism's historical materialism.

A second major influence on Worster's definition of capitalism is the Frankfurt School, specifically the theories of Max Horkheimer and Theodor W. Adorno as expressed in the *Dialectic of Enlightenment*. Against the background of the fascist regimes' excesses in Europe during the 1930s and 1940s, Horkheimer and Adorno identified the Kantian rationality as formulated in the context of eighteenth-century Enlightenment as the root cause for the crisis of modernism and Western European civilization. In their theory, Horkheimer and Adorno questioned the Enlightenment project as such: "The fully enlightened earth," they stated in the opening sentences, "radiates disaster triumphant. The program of the enlightenment was the disenchantment of the world; the dissolution of myths and the substitution of knowledge for fancy" (qtd. in Merchant, *Reinventing* 191). Horkheimer and Adorno criticized Western culture's managerial relationship with nature, which they believed to be grounded in Francis Bacon's definition of nature as an entity to be improved by human ingenuity. The Enlightenment project, Horkheimer and Adorno argued, was responsible for the utilitarian reduction of nature to mathematic formulas and numerical categories through mechanistic science. Enlightenment rationality, they claimed, had led to a scientific objectification of nature and the strengthening of instrumental reason, both of which had in turn led to the general objectification and disenchantment of nature in Western culture. "Number becomes the canon of the Enlightenment," they wrote and concluded that "the same equations dominate bourgeois justice and commodity exchange.... Myth turns into enlightenment and nature into mere objectivity" (qtd. in Merchant, *Reinventing* 191). Western society's definition of nature as an entity to be scientifically measured and dominated resulted ultimately in antidemocratic and antihuman societies, Horkheimer and Adorno concluded:

Domination is a repressive act that is total in intention. It springs from a hostility and an alienation that cannot tolerate the otherness of nature, that can see no worth there or respect any right to exist separate from humans. (qtd. in Worster, *Rivers* 56).

In contrast to Marxist theory, the Frankfurt School argued that the domination of nature is not a marginal phenomenon in the modern capitalist state, but rather *the* decisive factor determining all social relations. The human domination of nature, Horkheimer believed, necessarily leads to the domination of humans over humans. “The human being, in the process of his emancipation,” Horkheimer wrote, “shares the fate of the rest of his world. Domination of nature involves domination of man” (qtd. in Worster, “Hoover” 71). According to Horkheimer, power accumulated in modern societies in the hands of a knowledge elite, who controlled the tools of instrumental modern reason. As society became ever more dependent on science and technology, this knowledge elite—most specifically science experts, technocrats and capitalists—controlled not only the fate of nature, but also the rest of society. According to this theory, Enlightenment rationality had not stimulated the growth of freedom and democracy, but had rather resulted in greater inequality.

Like Horkheimer and Adorno, Worster believes that Western culture’s negative relationship towards nature is determined by what he calls “the world-view of materialism” (*Wealth* 210). This worldview of materialism, Worster argues, consists of an economic and a scientific component; the scientific philosophy of materialism regards nature as “nothing but physical matter organized under and obeying physical laws, matter rationally ordered but devoid of any spirit, soul, or in-dwelling, directing purpose” (*Wealth* 211). Following Horkheimer and Adorno, Worster traces this scientific or mechanistic materialism back to seventeenth-century philosophers Francis Bacon and Rene Descartes. Bacon and Descartes, Worster argues, upset the relationship between humans and nature by suggesting that nature was an entity to be explored and improved by humans through the means of science. The understanding of nature expressed in Bacon’s and Descartes’ writings thus represent a change of paradigm with older religious or pagan attitudes towards nature, as Worster claims. Whereas nature had been imagined in medieval cultures as a living entity inhabited by angels and demons, spirits and souls, occult powers and mystical principles, the new scientific paradigms developing during the sixteenth and seventeenth centuries in Europe regarded nature as inanimate matter moved by the laws of physics, which the scientist ought to reveal.

Simultaneously, Worster sees the theories of Bacon and Descartes in opposition to Aristotelian philosophy, in which nature was a respected entity to be studied and observed, but

not to be altered or experimented with; to manipulate nature meant to disrupt its order and to put it in 'unnatural' conditions. In contrast to the Aristotelian nature philosopher, who had been a detached, remote observer, Bacon and Descartes demanded that humans had to apply instrumental reason to improve nature, thereby extending the realm of the human empire. As Worster outlines, Bacon believed that scientific materialism "would provide the means for improving the human economic estate—harnessing ideas to practical ends, thereby making us all rich beyond counting" (*Wealth* 212). According to Bacon, humans were no longer considered an integral, equal part of nature, but superior entities: "The world," Bacon declared, "is made for man, not man for the world" (qtd. in Worster, "Wealth" 212).

Worster believes that Descartes took the objectification of nature one step further by assuming that animals and plants were mere machines, constructed from material particles and conforming with the mathematical laws of motion. For Worster, Descartes laid the foundations for the modern material, mechanistic world view in physics, biology, and mathematics by arguing that animals and plants were insensible, irrational machines, constructed in coherence with the mathematical laws of motion and capable of complex functions like clocklike apparatuses, but lacking souls and thus incapable of feeling pain or emotions. Animals were unconscious beings, humans in contrast had souls and minds, Descartes believed. His famous axiom *cogito ergo sum*—I think, therefore I am—thus not only signifies the faith of the modern subject in rationality, but expresses a new degree of division between humans as conscious living beings and a supposedly insensible, non-human environment. "In a way that no truly traditional Christian, believing in the sanctity of God's creation, could share, Descartes looked on nature simply as raw material to be exploited by the human brain," Worster summarizes what he takes to be the decisive discursive break between the Judeo-Christian value system and the leading paradigms of the Scientific Revolution ("Wealth" 212).

In contrast to traditional schoolbook-teachings of Western philosophy, Worster argues that the theories of Bacon and Descartes do not represent the emergence of a new rational subject which triumphs over medieval ignorance, but rather signify the birth of a new human arrogance that perceives nature as an inferior entity and represent the beginning of the total objectification of nature in Western culture. This scientific objectification of nature introduced by Bacon and Descartes, Worster claims, laid the groundwork for the leading materialistic paradigm of Western culture, which promises "an intellectual conquest of mind over matter that knows no bounds" (*Wealth* 212). According to Worster, the

scientific materialism introduced during the Scientific Revolution and the economic materialism later introduced by the evolving capitalist culture determine, in combination, Western culture's destructive relationship with nature.

Worster thus believes that the combination of economic and scientific materialism in Western culture results in the estrangement of humans from nature. The domination and exploitation of nature as characteristic of capitalist societies, Worster argues, reflects back upon the hierarchic composition of these societies and produces inequality and injustice: "Democracy cannot survive," writes Worster, "where technical expertise, accumulated capital, or their combination is allowed to take command" (*Rivers* 57). Worster thus examines the superstructure of capitalist society in order to expose the underlying value system on which the western dominance of nature is based. "In the capitalist culture and its mode of production," Worster states, "the domination of nature appears in its most virulent, popular form: there we find the chief expression of the destructive sickness that affects modern societies in their ecological behavior" (*Rivers* 56). In analogy, Worster argues that free, egalitarian societies can only exist in those cultures that embrace a more harmonious, less utilitarian and exploitive relationship with nature. As Gerry Kearns correctly notes, Worster believes "that being in harmony with nature would promote a natural egalitarianism and a form of social solidarity rooted in the recognition of ecological interdependence" ("Virtuous" 386). In summary, the Frankfurt School's identification of the human-nature relationship as the central problem of modern capitalist societies is for Worster a more attractive theoretical framework than traditional Marxism, whose historical materialism marginalizes the role of nature in Western societies.

Unlike Horkheimer, however, Worster does not believe that the exploitive capitalist attitude towards nature is rooted in the Judeo-Christian tradition. Whereas Horkheimer argued that the Judeo-Christian value system legitimized the human domination of nature in Genesis 1:28 by formulating God's mission to humanity as to "multiply, and replenish the earth, and subdue it," Worster in contrast argues that the key motivation behind Western attitudes towards nature is economic and scientific, not religious. Worster's position towards the impact of Judeo-Christian thought on concepts of 'nature' in Western culture is best exemplified in his negative assessment of UCLA History Professor Lynn White, Jr.'s classic essay "The Historical Roots of Our Ecological Crisis," published in 1967. In his essay, White argues that Western culture's attitude towards nature has been shaped by the Judeo-Christian tradition. Whereas older pagan cultures had understood humans to be part of nature, White argues, the Judeo-Christian value system has separated humans from nature by defining humans as superior. "Christianity, in absolute contrast to ancient paganism and

Asia's religions," White writes, "not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends" (25). White claims that Western culture's definition of 'progress' and its faith in science and technology as the means to make maximum use of nature is rooted in Judeo-Christian attitudes towards nature and that the Judeo-Christian tradition is thus to be blamed for contemporary environmental problems:

Since both *science* and *technology* are blessed words in our contemporary vocabulary, some may be happy at the notions, first, that, viewed historically, modern science is an extrapolation of natural theology and, second, that modern technology is at least partly to be explained as an Occidental, voluntarist realization of the Christian dogma of man's transcendence of, and rightful mastery over, nature. But, as we now recognize, somewhat over a century ago science and technology—hitherto quite separate activities—joined to give mankind powers which, to judge by many of the ecologic effects, are out of control. If so, Christianity bears a huge burden of guilt. ("Historical" 27)

White's essay initiated a tradition in environmental theory that focused on the Judeo-Christian value system as the corner stone of the Western mind and thus as the main source of the environmental problems surfacing during the second half of the twentieth century.⁹⁰ White's essay, in turn, has to be placed in the larger context of Max Weber's sociological theory as put forth in *Die protestantische Ethik und der 'Geist' des Kapitalismus* in 1904. Weber tried to show that the capitalist drive to increase personal wealth was rooted in the Calvinist idea that wealth had God's blessings and that accordingly, the protestant work ethic had had a formative influence on modern capitalist society. Weber thus linked the justification of class stratification within capitalist societies back to Christian values systems. By linking the capitalist commodification of nature back to the Judeo-Christian value system, Lynn White, Jr.'s essay represents a variation on Weber's theory.

Worster rejects White's theory and is opposed to linking the modern capitalist ethos to the Judeo-Christian value systems:

If we want to understand this significant aspect of the modern environmental crisis, therefore, we must understand the new condition of wealth—understand how and why it was generated. The book of Genesis does not say anything about it, nor do the teachings of Jesus (on the contrary; Jesus denounced wealth and held up the ideal of voluntary poverty). (*Wealth* 209)

⁹⁰ Lynn White, Jr.'s criticism of the Christian value system triggered a nationwide debate regarding the connection between Judeo-Christian values and ecology. White answered his critics in a second essay titled "Continuing the Conversation," *Western Man and Environmental Ethics: Attitudes Toward Nature and Technology*, ed. Ian Barbour (Reading: Addison-Wesley, 1973): 55-64.

According to Worster, the materialistic philosophy characteristic of capitalist culture did not develop out of the Judeo-Christianity religious discourse, but, quite in contrast, signifies a crucial break with the Judeo-Christianity tradition: “I believe the most important roots [for environmental degradation] lie...in modern culture itself, in its world-view that has swept aside much of the older religious outlook (*Wealth* 209). As outlined above, Worster believes that western culture’s faith in progress and its utilitarian perception of nature are rooted in the theories of Bacon and Descartes. By tracing the capitalist utilitarian objectification of nature back to the Scientific Revolution, Worster simultaneously argues that religious discourse did not determine the nature-culture relationship in Western culture, but rather traditionally worked as an antidote to Western materialism:

Religion, on the whole, acted to check that materialism, to question human arrogance, and to hold in fearful suspicion the dangerous powers of greed. Religion, including Christianity, stood firmly against a reductive, mechanistic view of the world. It pointed to a subordinate and restrained role for humans in the cosmos. And, most importantly for the sake of the biosphere, it taught people that there are higher purposes in life than consumption. (*Wealth* 218)

Worster’s criticism of capitalism is thus linked to a critical investigation of the leading scientific and economic paradigms in Western culture, but not to an investigation of the Judeo-Christian value system.

For Worster, the economic rationality of capitalism represents the most utilitarian application of the mechanist worldview. In the modern capitalist economic system, Worster writes, “nature becomes purely an object for humankind, purely a matter of utility” (*Rivers* 26). The capitalist mode of production, Worster claims, is accordingly characterized by the total subjugation of nature to economic principles of consumption and production. It is Worster’s main ambition as an environmental historian to analyze the specific modes of production that determine American culture’s attitude towards nature. Worster, of course, is aware that capitalist modes of production can take on a myriad of varying forms in any given capitalist economy:

The modes of production are an endless parade of strategies, as complex in their taxonomies as the myriad species of insects thriving in the canopy of a rain forest or the brightly colored fish in a coral reef. In broad terms, we may speak of such modes as hunting and gathering, agriculture, and modern industrial capitalism. But that is only the bare outline of any full taxonomy. We must also include, as modes, submodes, or variations on them, the history of cowboys herding cattle across a Montana grassland, of dark-skinned fishermen casting their nets on the Malabar coast, of Laplanders

trailing after their reindeer, of Tokyo factory workers buying bags of rice and seaweed in a supermarket. In all these instances and more, the environmental historian wants to know what role nature had in shaping the productive methods and, conversely, what impact those methods had on nature. (“Doing” 301)

Worster identifies two main modes of production in American culture, the ‘hydraulic mode’ and the ‘pastoral mode.’ Worster’s analysis of the hydraulic mode of production examines the technologies of water engineering as the basis for large-scale irrigated farming in the arid and semi-arid West; his analysis of the pastoral mode of production examines sheep and cattle ranching in the West. Arguing that both modes express the economic and ecological practices of cultural adaptation to the “regional conditions of climate, water supplies, and vegetation” in the West, Worster suggests that an analysis of these modes reveals the cultural values and practices characterizing Western American society:

What we must understand is how [these modes] have evolved side by side, what social impact each has had, where and how they have been in competition with each other, how they have coexisted into our own time, and what cultural values are embedded in each. (Worster, “New” 28)

In the following two subchapters, I will outline in more detail Worster’s definition of the hydraulic and the pastoral modes of production, arguing that Worster—based on his overall theory of capitalism outlined above—employs his mode-of-production analysis to arrive at a general assessment of American culture’s relationship towards nature.

III.2 The Hydraulic Mode of Production:

Donald Worster's Theory of Water and Power in the West

Donald Worster's environmental approach to the history of the American West is based on the assumption that "a region emerges as people try to make a living from a particular part of the earth, as they adapt themselves to its limits and possibilities" ("New" 27). Worster believes that the identity of any society is shaped by the environment and that it is thus essential to study the processes of human adaptation to the climatic and geophysical characteristics of the American West if one wants to understand the evolution of Western American society,:

Historians who want to contribute fundamentally to our understanding of western identity must, it seems to me, pursue the history of those modes of using the land. In other words, they must become informed about the ecological processes of adaptation that have gone on in this particular part of the world. ("Grounds" 230)

Mirroring the principal argument of Frederick Jackson Turner, Worster thus suggests that the character of American society is best understood by examining its adaptation to the continent's natural environment.

For Worster, the central characteristic of the American West is aridity, the lack of water and rainfall. Picking up Walter Prescott Webb's argument, Worster claims that the West is from an environmental perspective mainly a land of deficiencies: "For all its scenic grandeur, for all its abundance of rock and minerals," Worster writes, "this region's landscape says, at least in biological terms, that this is a place of scarcity" ("Freedom" 82). In accordance with his theory of American capitalism, Worster argues that the adaptation of agricultural and technological practices to the arid, deficient conditions of the American West has brought forth a genuine form of capitalism with strongly centralized power structures that are in contrast with the mythic image of the West as a land of freedom. This is the main argument of Worster's environmental history *Rivers of Empire: Water, Aridity, and the Growth of the American West*, published in 1985, a comprehensive study of water development and power structures in Western American history. In *Rivers of Empire*, Worster describes the impact of the West's aridity on the development of a genuinely American capitalist mode as follows:

The American West is an ecological variant on the modern world-circling culture of capitalism: a pattern of culture and society that has branched off, diversified somewhat from the parent that sent it out to find a new home for

itself. It was created by the movement of that capitalist culture into an arid environment, into a land where scarcity of the vital resource of water was the prevailing environmental reality. (283)

Worster argues that this specific form of capitalism that developed in the arid American West is characterized by a specific mode of production, a special form of social organization that Worster calls the ‘hydraulic mode,’ a “techno-economic order imposed for the purpose of mastering a difficult environment” (*Rivers* 6). In the following chapter, I want to outline in detail Worster’s definition of the hydraulic mode of production, which is essentially a socio-economic theory of water and power in the American West and thus a subchapter in Worster’s overall theory of American capitalism.⁹¹

According to Worster’s theory, the hydraulic mode of production has conditioned life in the American West to such an extent that it has become a ‘hydraulic society.’

The American West can best be described as a modern hydraulic society, which is to say, a social order based on the intensive, large-scale manipulation of water and its products in an arid setting. (*Rivers* 7)

⁹¹ Apart from *Rivers of Empire*, my analysis of Worster’s interpretation of water and power in the American West is especially based on the following publications by Worster: “An End to Ecstasy,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 135-41; “Climate and History. Lessons from the Great Plains,” *Earth, Air, Fire, Water. Humanistic Studies of the Environment*, ed. Jill Ker Conway, Kenneth Keniston, and Leo Marx (Amherst: U of Massachusetts P, 1999): 51-77; “Hoover Dam: A Study in Domination,” *Under Western Skies: Nature and History in the American West* (New York: Oxford UP, 1992): 64-78; “Hydraulic Society in California,” *Under Western Skies: Nature and History in the American West* (New York: Oxford UP, 1992): 53-63; “The Kingdom, the Power, and the Water,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 112-22; “The Legacy of John Wesley Powell,” *An Unsettled Country: Changing Landscapes of the American West* (Albuquerque: U of New Mexico P, 1994): 1-30; “Thinking Like a River,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 123-34; “Water as a Tool of Empire,” *An Unsettled Country: Changing Landscapes of the American West* (Albuquerque: U of New Mexico P, 1994): 31-53. For further reference on the role of water and power in the American West, the following publications are a good starting point: Bruce Babbitt, “Age-Old Challenge: Water and the West,” *National Geographic* 179.6 (June 1991): 2-4; William Cronon, “The Flow of Water,” *American History: A Survey*, ed. Alan Brinkley, Richard N. Current, Frank Freidel, and T. Harry Williams (New York: McGraw-Hill, 1991): 405-9; Norris Hundley, Jr., *The Great Thirst: Californians and Water, 1770s-1990s* (Berkeley: U of California P, 1992); “Water and the West in Historical Imagination,” *Western Historical Quarterly* 27.1 (1996): 5-31; “Water and the West in Historical Imagination: Part Two—A Decade Later,” *The Historian* 66.3 (2004): 455-90; *Water and the West: The Colorado River Compact and the Politics of Water in the American West* (Berkeley: U of California P, 1975); Lawrence J. MacDonnell and George Vranesh, *From Reclamation to Sustainability: Water, Agriculture, & the Environment in the American West* (Boulder: Colorado UP, 1999); Donald J. Pisani, *From the Family Farm to Agribusiness: The Irrigation Crusade in California and the West, 1850-1931* (Berkeley: U of California P, 1984); *To Reclaim a Divided West: Water, Law, and Public Policy, 1848-1902* (Albuquerque: U of New Mexico P, 1992); *Water and American Government: The Reclamation Bureau, National Water Policy, and the West, 1902-1935*. (Berkeley: University of California Press, 2002); *Water, Land, and Law in the West: The Limits of Public Policy, 1850-1920* (Lawrence: U of Kansas P, 1996); Marc Reisner, *Cadillac Desert: The American West and Its Disappearing Water* (New York: Viking Penguin, 1986); Michael J. Robinson, *Water for the West: The Bureau of Reclamation, 1902-1977* (Chicago: Public Works Historical Society, 1979); Richard White, *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995).

As Worster outlines, a hydraulic society is characterized by specific power structures, which are determined by the quest for control over water as a scarce resource. The institutions owning the technologies to control and distribute water, Worster argues, determine the power structures within the hydraulic society. In *Rivers of Empire* and elsewhere, Worster aims to show that in contrast to the mythic West of freedom and individuality, aridity has indeed produced power structures in the West that are characteristic of an oligarchy. Worster's interpretation of the American West as a hydraulic society thus examines the interdependence of social development and ecological conditions in the region. "The theory that underlies the specific problem of water and society in history," Worster describes his own approach, "comes out of the interdisciplinary study of culture and ecology" (*Rivers* 21). Although Worster comes to radically different conclusions than Turner, his environmental interpretation of the American West is thus nevertheless based on Turner's idea that the conditions of the West have shaped a specific form of society.

Worster's concept of the hydraulic society is built on the work of earlier scholars, most importantly the writings of nineteenth-century explorer John Wesley Powell.⁹² Hence, I want to briefly outline Powell's impact on the overall discourse of the American West and, more specifically, on Worster's environmental theory of the region. For Worster, Powell represents the first American who understood and scientifically expressed the crucial meaning of water deficiency for life in the American West. Powell started his professional career as a professor of geology at Wesleyan University in Illinois and from 1867 on, he headed a series of expeditions into some of the West's unknown territories, most importantly into the Rocky Mountains and around the Green and Colorado Rivers. His most famous exploration of the Grand Canyon and the Colorado River started in 1869. Traversing almost 1,500 kilometers from the Green River to the Grand and Utah Rivers, Powell and his team were the first to explore the Grand Canyon on water. Following his explorations, Powell became the second director of the U.S. Geological Survey in 1881, a position he held until 1894. He was also the head of the Bureau of Ethnology at the Smithsonian Institution until his death. In his various functions and positions, Powell's influence on the theory as well as the actual development of the American West has been too far-reaching to be given proper

⁹² How central Powell's theories are for Worster is indicated by the fact that Worster published a biography on John Wesley Powell in 2001, *A River Running West: The Life of John Wesley Powell* (New York: Oxford UP, 2001). *A River Running West* is Worster's only publication dedicated to a historical figure, not a broader environmental topic. In shorter form, Worster has illustrated the impact of Powell's life on the understanding of the American West in three essays, "Rediscovering the West: The Legacy of John Wesley Powell," *Old West/New West*, ed. Gene M. Gressley (Norman: U of Oklahoma P, 1997): 103-22; "The Legacy of John Wesley Powell," *An Unsettled Country: Changing Landscapes of the American West* (Albuquerque: U of New Mexico P, 1994): 1-30; and "Landscape with Hero: John Wesley Powell and the Colorado Plateau," *Southern California Quarterly* 79 (1997): 29-46.

consideration here. In order to outline Powell's influence on Worster's environmental history of the American West, it is mainly important to outline the essence of Powell's theory on the role of water in the West as presented in his *Report on the Lands of the Arid Region of the United States* in 1878.⁹³

Drawing from the first-hand experience gathered during his explorations, Powell argued that the West, unlike the East Coast region, was characterized by a crucial lack of water. Powell outlined that living conditions in the East and West were radically different and identified the hundredth meridian as the line roughly dividing the humid East from the sub-humid or arid West. East of this line, claimed Powell, traditional, European ways of farming and farm-making were still possible whereas west of this line such farming was impossible without irrigation:

The eastern portion of the United States is supplied with abundant rainfall for agricultural purposes, receiving the necessary amount from the evaporation of the Atlantic Ocean and the Gulf of Mexico; but westward the amount of aqueous precipitation diminishes in a general way until at last a region is reached where the climate is so arid that agriculture is not successful without irrigation. (qtd. in Worster, "Powell" 10)

Powell based his observation on a rain chart provided by Charles A. Short in 1868 for the Smithsonian Institution. Short's rain chart illustrated that with the exception of a humid strip on the Pacific rim reaching from San Francisco to Seattle and a few mountain regions, the West received in average less than twenty inches of rainfall per year. Furthermore, Short's chart showed that a sub-humid belt covering most of Texas, Oklahoma, Kansas and Nebraska separated the humid East from the arid West. According to Short, the sub-humid belt covered 10 percent of the entire United States, the arid West 40 percent. Taken together, both regions were approximately as big as the humid East. By combining his own observations with the data provided in Short's rain chart, Powell formulated a thesis that was trailblazing at its time: With less than an average of twenty inches of rainfall per year, the arid regions west of the hundredth meridian set harsh terms for human settlement; life as it was known in the eastern states could not be maintained in the American West, Powell argued.

The arid climate of the West, Powell pointed out, set such difficult conditions for human life that settlement was in large parts of the region doomed to failure without federal support.

⁹³ Despite Powell's many achievements as an explorer and theorist of the American West, he was almost forgotten by American historians during the first half of the twentieth century. Interest in Powell was only revived during the 1950s, when two biographies on Powell's life were published: William Culp Darrah's *Powell of the Colorado* (Princeton: Harvard UP, 1951) and Wallace Stegner's *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West* (Lincoln: U of Nebraska P, 1954).

Powell was the first government scientist to draw such a conclusion and to openly express his findings in an official report. Powell knew intuitively that the American West was in popular opinion perceived as the future agricultural heartland of America. In accordance with his findings, Powell thus warned with foresight that the West's arid conditions demanded a specific set of federally administered land and water policies in order to make farming possible at all. Without the support of federal authorities, Powell argued, the basic water infrastructure needed to sustain a new mode of irrigation-agriculture suited for an arid environment could not be provided.

Powell's warning was directed against the booster-propaganda of his days, which promoted the West as the land of opportunity for private initiative. In contrast to the widespread celebration of private entrepreneurship in nineteenth-century American culture, Powell argued that only the federal government had the knowledge and the financial resources necessary to institutionalize and to carry out land and water development in the arid West. Richard White provides a good summary of Powell's main argument in *It's Your Misfortune*:

Water, Powell recognized, was the key to western development, and western water would have to be developed and controlled by the federal government, the state governments, or large corporations. No one else had the resources to do it. Powell's preference was clear. Water, he proclaimed, must be federally developed through dams, canals, and ditches, but control of its use must rest at the local level in democratically organized irrigation and grazing districts consisting only of small landholders. Powell blended an idealized view of communal control of water in the small Mormon villages of Utah with his memories of his own midwestern youth to foresee a rural, democratic, decentralized West. (152-53)

As Richard White points out, Powell tried to warn his contemporaries that farming in the American West was doomed to failure without federal support and backing.

Powell's alternative program for the development of the West promoted a federal "strategy of ecological adaptation" and recommended several measures as preconditions for successful farming in the West (Worster, *Rivers* 138). According to Powell, agriculture was only possible on irrigated plots of land decisively bigger in size than they usually were in the East. The less rain and water available, Powell pointed out, the more land was needed for farmers in order to produce the minimum amount of crop required for economic survival. The Homestead Act of 1862 had declared that

any person who is the head of a family, or who has arrived at the age of twenty-one years, and is a citizen of the United States, or who shall have filed his declaration of intention to become such, as required by the naturalization laws of the United States, and who has never borne arms

against the United States government or given aid and comfort to its enemies, shall, from and after January 1, 1863, be entitled to enter one quarter section or a less quantity of unappropriated public lands. (van Doren, *Webster's* 231).

Arguing that plots of land decisively bigger than the quarter section—160 acres—allowed by the Homestead Act were needed, Powell challenged all existing federal practices of land division and land distribution dating back to the Land Ordinance of 1785. The Land Ordinance had established a national land survey, called the township-and-range system, which divided the country from the Appalachian Mountains to the Pacific Coast into a rigid grid of square one mile parcels, which were subdivided into quarter sections of 160 acres. Powell claimed that however appropriate this land policy might have been in 1785 when it was mainly applied to humid regions east of the hundredth meridian, it was utterly inadequate when applied to the sub-humid and arid regions west of that line in 1868. According to Powell, a 160-acre plot of land might be sufficient for farming in a region with sufficient rainfall, but when placed on the dry surface of a barren mesa, 160 acres were decisively too little. Powell demanded from Congress to revitalize the old, discarded meters-and-bounds system that had been applied east of the Appalachians and had allowed property lines to follow the natural distribution of resources. Powell claimed that this system was suited far better for the West with its highly irregular and complex landscape than the system provided by the Land Ordinance of 1785 and the Homestead Act of 1862.

Powell thus advocated a decisive change of paradigm in federal land policies. According to Powell's vision, two types of land tenure in the West had to be implemented: One with small irrigated farms no larger than 80 acres and one with large 'pasturage farms,' or livestock ranches, no larger than 560 acres. Both farm types were to be arranged in so called 'irrigation' or 'grazing districts' of up to 2,500 acres. Powell's idea was to combine individual landowners in larger collective units in order to embed private, economic interests within a larger, democratic community structure. Powell perceived the individual irrigation districts as "a commonwealth within itself" a political grassroots unit characterized by autonomy, self-determination, and decentralization of autonomy and power; within these districts, settlers would constitute commonwealths "for the regulation of irrigation, the division of waters, the protection of forests, and the protection of the pasturage lands, and for the utilization of all of these values" (qtd. in Worster, *Rivers* 139).

According to this vision, the West was neither to be controlled by private business, nor by federal authorities alone. At the same time, however, Powell was convinced that administrative units larger than his irrigation and grazing districts were best suited to meet

the challenges of water shortage in the West. As the basis of his community-model, Powell thus promoted the idea that the control over land and water development had to rest in the hands of large, powerful institutions such as governments or large corporations. No one else, Powell believed, had the resources—human or financial—to irrigate the arid lands of the West and to make them farmable. For Powell, federally supervised irrigation was thus the essential technological precondition for the future development of the West. While the nation's economy was drifting towards industrial monopoly elsewhere, Powell believed that the domestication of Western land under the supervision of federal authorities would open up new business opportunities and would strengthen American democracy. Powell thus believed in the technological management of nature while he was at the same time aware that power in the West would ultimately culminate in the institutions controlling irrigation and water management.

At its core, Powell's concept of an irrigated West envisioned a gigantic, federally funded infrastructure project. Powell thus recommended that the federal government should develop and distribute water by building and supervising water infrastructure. Wherever water flowed in the West, federal agencies had to be involved, thought Powell. In a second step, the land thus irrigated had to be divided by federal institutions into irrigation and grazing districts and had then to be distributed to private, individual owners. All other, non-irrigated lands would remain in federal ownership; however, as Powell suggested, the timber or mineral resources found on these lands might be sold to private entrepreneurs for revenue. Although Powell promoted the idea of a strong, central water-controlling authority, he wanted the irrigated plots of land to be in the hands of small landholders. The best strategy for dealing with water deficiency in the West, Powell argued, was to combine the federal, centralized development of land and water infrastructure with the distribution of that land to individual entrepreneurs. By liaising federal power with private entrepreneurship, Powell hoped to set up a system of checks and balances between the public and the private sector, a public-private partnership model that would prevent the development of a water-owning oligarchy. Powell phrased his warning against the establishment of a corporate, water-owning elite as follows:

If in the eagerness for present development a land and water system shall grow up in which the practical control of agriculture shall fall into the hands of water companies, evils will result therefrom that generations may not be able to correct, and the very men who are now lauded as benefactors to the country will, in the ungovernable reaction which is sure to come, be denounced as oppressors of the people. (qtd. in Worster, "Legacy" 11)

As Powell hoped, his system of irrigation districts would ensure that water always stayed in the hands of those who owned the land; the ownership and commodification of water by private, non-farming businesses was thus to be avoided and a more democratic society to be guaranteed. “Instead of a monopoly over scarce resources exercised by a few capitalists,” Worster summarizes Powell’s theory, “Powell envisioned a region permanently put into the hands of the rural many, bound together in a common body politic” (“Powell” 13).

Arguing against the applicability of the Homestead Act in the arid regions of the West, Powell’s report was severely criticized by those who feared that his concept would restrict private business, especially the opportunities granted to individual farmers by the Homestead Act to acquire small plots of land. Other critics claimed that Powell’s system mainly supported the interests of big farmers and cattle ranchers, as it promoted the idea that only big farms could survive in the arid West. Big farmers and cattle ranchers, on the other hand, feared that Powell’s irrigation districts would threaten their control over water resources. Land speculators, who abused the Homestead Act to semi-legally obtain 160-acre plots and to sell them on to farming families, saw their options for quick profits radically diminished by Powell’s suggestion to distribute 2,500 acre plots only. Other critics tried to question the scientific accuracy of Powell’s assumptions regarding climate and rainfall patterns in the West. Especially boosters and entrepreneurs looking for business opportunities in the West argued that Powell’s assessment of climate conditions in the region was too negative. Rain would follow the plow—turn the grass under and the sky would fill with clouds—many of Powell’s contemporaries optimistically believed.

Going against the grain of the leading popular sentiments in politics and business, Powell’s ideas were never put into practice by the federal agencies. “Powell’s dream of a ‘commonwealth within itself,’” Worster writes, “was spoiled by the existing settlements, culture, and history of the West” (*Rivers* 142). Powell’s ideas seemed to convey too little optimism, too little faith in progress and were thus at odds with the contemporary mainstream of American booster culture. “Ecological limits,” Worster summarizes the popular opinion of Powell’s days, “were simply challenges to be overcome by human energy” (*Dust* 82). In contrast, as Richard White points out, Powell advocated to conduct “settlement according to the realities of the West instead of people’s hopes about what the West would be” (*Misfortune* 153). More importantly, Powell’s system of federally managed irrigation districts was out of line with those ruling paradigms in American cultural history portraying an agrarian way of life as the ideal American way of living independently of the land. Whereas the Jeffersonian pastoral ideal of America as an agrarian Democracy glorified the self-reliant, individualistic American farmer as the pillar of a free American society,

Powell's model praised cooperative settlement structures as well as federal intervention as prerequisites for successful farming in the West. Challenging core American values, Powell's observations were unpopular, but far ahead of their time in predicting that water shortage would eventually pose considerable environmental problems for the West. As Worster concludes, Powell's influence on his own work lies in the explorer's "early insights into the significance of the land for the region and the need for social adaptation" ("Rediscovering" 119). Understanding the history of the West primarily as a capitalist struggle for resources, a "conflict over which group or class of individuals would gather the region's natural resources into its possession," Powell represents for Worster an early environmental visionary who understood the West's true geophysical characteristics ("Rediscovering" 113).

The second formative influence on Worster's theory of the American West as a hydraulic society is Walter Prescott Webb. More than five decades after the publication of Powell's report on the arid regions of the United States, Walter Prescott Webb revived Powell's theories in his classic publication *The Great Plains* in 1931. Reiterating Powell's main idea that aridity was the decisive environmental factor separating the eastern and the western states, Webb's history of the Great Plains eventually became the most influential interpretation of the American West since Frederick Jackson Turner's Frontier Thesis. Following Powell's lead, Webb argued that the West's water deficiency had shaped a completely different society compared to that of the humid eastern states. Opening his text with a quote from Powell's report in which he claimed that due to aridity, "the industries of the West are necessarily unlike those of the East" and that accordingly "a new phase of Aryan civilization is being developed in the western half of America," Webb placed his own analysis of the Great Plains' history in Powell's tradition (qtd. in Worster, "Legacy" 23). However, Webb took Powell's insight into the arid character of the West one step further by suggesting that the region of the Great Plains had to be considered as a desert. In 1957, Webb expressed his central assumption most pointedly by stating that "the heart of the West is a desert, unqualified and absolute" (qtd. in McGerr, "There" 244-45).

The region Webb referred to as a desert extended from south of Montana, Idaho, and Wyoming, through Nevada, Utah, and Colorado, down to Arizona and New Mexico. A friend of strong imagery, Webb described the desert as a 'gigantic fire' within the region. Like Powell before him, Webb defined twenty inches of average yearly precipitation as the minimum amount of rainfall necessary to grow crops in the accustomed way. As the desert of the West had less than twenty inches of average rainfall, Webb concurred with Powell that traditional, European agriculture could not be maintained in the

region. In reference to Powell's hundredth-meridian marker, Webb argued that the land beyond the ninety-eighth meridian was a land of deficiencies, arid or semi-arid, treeless and flat. In Webb's analysis, it was the Mississippi river that divided the United States in lands of plenty and lands of want: "East of the Mississippi," stated Webb, "civilization stood on three legs—land, water, and timber; west of the Mississippi not one but two of these legs were withdrawn—water and timber—and civilization was left on one leg—land" (qtd. in Cronon, "Narrative" 1355). As already pointed out in chapter I.2, Webb defined the ninety-eighth meridian as an 'institutional fault line,' east of which traditional European modes of agriculture could be maintained, but west of which the lack of rainfall and absence of trees demanded human ingenuity and innovation in order to adapt to the environment. In contrast to Frederick Jackson Turner, Webb described the conquest of the West not as one single process of frontier settlement, but as two very different processes: The first settlement process involved the human adaptation to the humid, forested landscape of the eastern states, the second process involved the adaptation to the dry, treeless, flat environment of the Great Plains.

Although Webb borrowed strongly from Powell, his focus of attention was quite different. Whereas Powell had especially focused on federal infrastructure politics, Webb's analysis was preoccupied with the impact of nature on settler communities. Webb was convinced that the character of nature in the West had left its imprint on western communities: "This land," Webb claimed, "with the unity given it by its three dominant characteristics has from the beginning worked its inexorable effect upon nature's children" (qtd. in Neel, "Place" 107). Water deficiency, Webb argued, forced settlers to devise altogether new technologies and institutions in order to cope with their surroundings; inventions like barbed wire, windmills, and the Colt revolver were all linked to the human attempt to settle the arid plains. Especially the invention of barbed wire illustrated for Webb that aridity had formed a unique culture in the West. Webb pointed out that fences were a fundamental requisite for cattle ranching and accordingly, the lack of wood on the treeless plains proved to be a serious problem for the emerging cattle industry. The invention of barbed wire in 1874 ultimately resolved this problem. "The invention of barbed wire," wrote Webb, "revolutionized land values and opened up to the homesteader the fertile Prairie Plains, now the most valuable agricultural land in the United States" (qtd. in Worster, "Grounds" 250). Similarly, Webb argued that the invention of windmills for pumping water from underground aquifers—the only reliable source of water in a semi-arid environment—had been triggered by plains conditions. Society in the West was different from that in the East, Webb concluded, because the environment was different.

Drawing from Turner's and Powell's ideas, Webb was the first twentieth-century historian to promote the idea that environmental factors—most importantly aridity—had shaped the character of society in the American West. Webb's attention to regional environmental details and local customs can be said to have prefigured the trend towards regionalism in much of Western American historiography in the decades to follow.⁹⁴ As Donald Worster writes, "Webb is where the modern regional history of the American West begins" ("Legacy" 23). Webb believed that regionalism was the key to an adequate understanding of American history as—from an environmental perspective—conditions of life were so radically different in the individual American regions that the cultural development in each had to be studied independently. To study the history of a specific region was thus more rewarding for Webb than to study the development of American society as a whole.⁹⁵ Outlining aridity as the key environmental factor separating the West from the East and arguing that societies had, due to aridity, developed differently in the East and in the West, Webb revived both Turner's and Powell's main arguments and contributed a new regional approach to the historiography of the American West.

Donald Worster's definition of the American West as a hydraulic society borrows from both Powell's and Webb's ideas.⁹⁶ Most basically, Worster concurs with Powell and Webb that aridity is what defines the West most: "The West is, by national standards, terribly dry. Its average precipitation is less than 20 inches a year, less than half that of the East Coast or Europe" ("Freedom" 82). However, Worster's concept of the hydraulic society takes the theory of water in the West one step further. In contrast to Powell's focus on the impact of aridity on farming practices and Webb's preoccupation with individual cultural innovations, Worster develops a general socio-political theory of life in the American West. Worster's concept of the West as a hydraulic society is essentially a *political* theory designed to describe power structures in the American West. Concurring with Powell that irrigation infrastructure and water management are the most basic prerequisites for successfully building a society in the arid West, Worster aims at

⁹⁴ For Webb's analysis of environment's impact on society in the American West, see his essay "Geographical-Historical Concepts in American History," *Annals of the Association of American Geographers* 50 (1960): 85-93. For an assessment of Webb's significance for the historiography of the American West, see Elliott West, "Walter Prescott Webb and the Search for the West," *Writing Western History: Essays on Major Western Historians*, ed. Richard W. Etulain (Albuquerque: U of New Mexico P, 1991): 167-91.

⁹⁵ Webb's definition and interpretation of regionalism was not entirely new, as it had much in common with Turner's theory on the development and function of sections in American history. As Richard White states, "Turner and Webb were united not only by their devotion to the frontier, but by their conviction that regionalism mattered greatly in American history" ("Trashing" 34-35).

⁹⁶ Equally influential for Worster's understanding of the arid West are the writings of Californian writer, historian and Webb-biographer Wallace Stegner, who promoted the idea that aridity is the constituting element of the American West throughout his life. As Stegner put it, "aridity, and aridity alone, makes the various Wests one" ("Living"61).

providing a close analysis of the power dynamics underlying the irrigation and water management apparatus. As Worster believes, irrigation “leads in all cases to communal reorganization, to new patterns of human interaction, to new forms of discipline and authority” (*Rivers* 20). Worster thus argues that irrigation science and technology produce unique social relations to be found only in cultures living in arid climates. “The contemporary ecology-based agricultural historian,” Worster summarizes his position, “finds in irrigation a key formative element, an underlying infrastructure out of which social relations grew” (“Hydraulic” 54-55). Worster’s theory of the hydraulic society thus describes “a social order based on the intensive, large-scale manipulation of water and its products in an arid setting” (*Rivers* 6-7).

As already outlined, the New Western Historians are interested in analyzing power structures in the American West, believing that “concentrations of power have shaped the modern West perhaps more than any other region of the United States” (White, *Misfortune* 395). Central to Worster’s investigation of power structures in the American West is his general theory that concentration of power in the hands of a water-controlling elite is characteristic of all societies living in arid environments. According to Worster, all irrigation societies are characterized by “hierarchy, concentration of wealth and power, rule by expertise, dependency on government and bureaucracy” (“New” 31). Defining the American West as an irrigation society, Worster concludes that a “concentrated power structure emerges out of large-scale water engineering and coordinated irrigation” (“Thinking” 126). Worster’s theory of the hydraulic society can thus be regarded as an adaptation of Horkheimer’s theory that the human desire to control nature results inevitably in the control of humans by other humans. As Worster phrases it, “the domination of nature in the water empire must lead to the domination of some people by others” (“New” 31). Worster believes that the total control of water is characteristic of hydraulic cultures and is thus reflected in the hierarchical layering of such societies. As Hal K. Rothman correctly notes, “Worster sees the centralized control of water in the West as evidence that the region has become a hydraulic society, an oligarchy in which control of water equals dominance of society as a whole” (“Environmental” 2).

Worster’s theory of the hydraulic society is thus a derivative of his general credo that a culture’s attitudes towards nature determine the general character of social relations within this society. “In the process of transforming the earth,” Worster summarizes, “people have also restructured themselves and their social relations” (“Transformation” 1090). For Worster, to study the relationship between humans and nature is not only significant in order to understand the ways in which individual societies have transformed nature, but

because he believes this relationship to be the key for an understanding of any society's socio-political organization. Worster's mode-of-production analysis of the American West can thus be placed within the broader discourse of political philosophies that examine the significance of technology in modern society. In his essay "Water as a Tool of Empire," Worster summarizes the discursive tradition he sees himself in:

My chief intellectual debts are to a brilliant group of philosophers, many of them European, who have probed far more deeply than historians of the West the relationship between modern technology and the social order: for example, C. S. Lewis, E. F. Schumacher, Jacques Ellul, Hannah Arendt, Martin Heidegger, Max Horkheimer, Ivan Illich, Rudolf Bahro, Karl Wittfogel, and Lewis Mumford. They have many differences of argument, but they all agree on the conclusion that the technological domination of nature, which has been the great project everywhere in modern times, leads not simply to freedom and democracy, as the conventional notion of progress teaches, but to the domination of some people over others. (44)

Accordingly, Worster's theory of the hydraulic society has to be understood as a political philosophy in the form of an ecological anthropology.

The anthropological character of Worster's theory is further underscored by his perception of water management as the most archaic form of human domination over nature. Worster believes that whenever and wherever in history humans started controlling and managing the flow of water, an irrigation society with a strong hierarchic order and oligarchic structure developed:

I take this to be the essence of the hydraulic thesis: the domination of nature is an ambition that first appears stark and unchecked in the archaic desert empires, and thereafter the ambition, wherever and whenever it recurs as a compelling cultural idea, is always associated with the domination of some people by other people. ("Hydraulic" 56)

According to Worster's theory of the hydraulic society, the level of water scarcity in any given society correlates with the intensity of human efforts to control water and, simultaneously, with the resulting differences in power and wealth between those who control water and those who do not. For Worster, the society of the arid West represents only the latest—and simultaneously the most impressive—example of a hydraulic society: "The American West," he writes, "is only the latest in a long series of experiments in building an irrigation society" (*Rivers* 20). It is among Worster's ambitions as an environmental historian to show that the American hydraulic experiment to establish a blooming garden in the arid regions of the West ultimately failed.

Apart from Powell and Webb, Worster's theory of the American West as a hydraulic society draws mainly from the work of the German-American historian Karl August Wittfogel (1896 – 1988), who joined Frankfurt's famous *Institut für Sozialforschung* in 1925 and was later associated with the scholars of the Frankfurt School. Drawing from the theories of Karl Marx and Max Weber, Wittfogel specialized in studying modes of production and power structures in Oriental societies. In his examination of Chinese society, *Wirtschaft und Gesellschaft Chinas*, published in 1931, Wittfogel developed his general sociological theory of the hydraulic society. Following Max Weber's idea that China and India were governed by a hydraulic-bureaucratic official-state, Wittfogel combined Weber's theory on the impact of the bureaucratic state on power and knowledge structures with Marx's economic analysis of power and class relations. Throughout history, Wittfogel argued, the regulation and distribution of water had been a major challenge for humankind and Chinese society was one of the great examples of a hydraulic society in human history. Wittfogel illustrated that for centuries, China's capacities to build dams and irrigation systems had been superior to western culture up to the eighteenth century. As China's gigantic irrigation projects depended on the coordination of centralized government and the—often forceful—recruitment of a large quantity of workers, Wittfogel concluded that China's hydraulic society featured power structures characteristic of an oligarchy. Thus analyzing the relationship between ecology, economy, and power, Wittfogel's theory displayed the influence of the Frankfurt School.

Wittfogel further developed his theory of the hydraulic society in *Die orientalische Despotie*, published in 1957, a study on ancient irrigation societies in the arid desert states of the Orient.⁹⁷ Wittfogel analyzed the character of the cultures inhabiting the great river valleys of Mesopotamia, Egypt, India, and China and tried to show that a striking cultural convergence took place in these societies during the four thousand years before Christ. Wittfogel argued that in each of those places, the pressure of population growth triggered the development of an elaborate water storage and irrigation system, including a network of canals and ditches in order to irrigate fields for farming. In these irrigation societies, Wittfogel claimed, the state took on the responsibility to build the necessary large-scale hydraulic infrastructure, thereby simultaneously creating a centralized managerial bureaucracy able to operate this irrigation infrastructure. All of these ancient hydraulic civilizations, Wittfogel argued, produced similar power elites consisting of scientists, engineers and agromanagerial experts specialized in sophisticated water engineering. "Where the scale of water control escalated in the ancient desert world," Worster

⁹⁷ Although Wittfogel focused his analysis on Oriental states, he acknowledged that the hydraulic societies he wrote about were not exclusively located in the Orient nor were all Oriental societies hydraulic societies.

summarizes Wittfogel's argument, "political power came to rest in the hands of an elite, typically a ruling class of bureaucrats" (*Rivers* 22). This power elite was in turn under the absolute control of the country's despotic rulers, who controlled the population by regulating the supply and distribution of water. The control over water, Wittfogel claimed, produced social classes and widespread specialization typical of centralized urban life. Wittfogel concluded that a particularly extreme despotism was typical of the Orient's hydraulic empires and argued that the irrigation empires along the Tigris, the Euphrates, and the Nile were the first complex hierarchical, authoritarian civilizations whose cultures were mainly shaped by the management of water.

By making the management of water the primary focus of historical analysis, Wittfogel's history of Oriental societies had a distinctly environmental core. Believing that the relationship between humans and their natural surroundings was the ultimate relation determining the course of human evolution, Wittfogel can be regarded as an early environmental historian: "Man and his work on one side," Wittfogel declared, "nature and its material on the other—this is the fundamental relation, the eternal natural condition of human life upon which every form of this life, and above all its social form, is dependent" (qtd. in Worster, *Rivers* 27). Clearly, Wittfogel's assumption shows traces of Marx's historical materialism. Like Marx, Wittfogel assumed that the mental state of all human beings was determined by the material reality surrounding them. In contrast to Marx, however, who perceived nature primarily as the material stage on which human history was acted out, Wittfogel regarded nature itself as a force in history. For Wittfogel, humans and nature were in an ongoing relationship of ecological dialectics, constantly shaping and reshaping one other. According to his theory, a society's structure could not be changed unless the environmental base of that society was altered. Hence, Wittfogel regarded nature as the most significant of all historical variables.

Worster's definition of the American West as a hydraulic society is clearly an adaptation of Wittfogel's theories. Originally designed to describe ancient Oriental regimes, Worster revives Wittfogel's theory by applying it to his analysis of present-day capitalist culture in the Western United States. As Worster writes in *Rivers of Empire*, "capitalism has created over the past hundred years a new, distinctive type of hydraulic society, one that demonstrates once more how the domination of nature can lead to the domination of some people over others" (49-50). Clearly, Worster's adaptation of Wittfogel's theory to an environmental interpretation of Western American history is inspired by his general association with the nature-theory of the Frankfurt School. Gerry Kearns summarizes the philosophical roots of Worster's theoretical framework:

[Worster] employs Wittfogel's hydraulic civilization and Horkheimer and Adorno's to define a political economy of science in which decentralized communitarianism has no chance to survive, but yet stands out all the more starkly defined as the utopian alternative to technology gone mad and nature laid to waste. ("Virtuous" 389-90)

Worster's application of Wittfogel's theory thus follows his general intention of demythologizing the glorification of technology in American culture. For Worster, the hydraulic society of the American West illustrates that the technological management of nature produces power centralization instead of a free, democratic society. According to Worster, the American West is today the biggest hydraulic society that ever existed, exceeding in scale even its ancient predecessors in Mesopotamia, Egypt, and China. "For scale of engineering, for wealth produced, the American West had become by the 1980s the greatest hydraulic society ever built in history," Worster claims (*Rivers* 276).

Worster's definition of the American West as the biggest hydraulic society in history implicitly challenges a core American myth that defines the American West as the cradle of American democracy, freedom, and individualism. When Worster writes in the introduction to *Rivers of Empire* that "the West is still supposed, in popular thinking, to be a land of untrammelled freedom," it becomes evident that Worster uses the concept of the hydraulic society to counterbalance this popular notion. Drawing from his theory of the hydraulic society, Worster tries to show that the American West is in contrast "a land of authority and restraint, of class and exploitation, and ultimately of imperial power" (*Rivers* 4). Following suit with both Wittfogel and Horkheimer, Worster is convinced that the strongly hierarchical layering of American society is a result of American culture's belief in the collective, technocratic domination of nature. Especially the society of the arid West, Worster argues, is characterized by a strong belief in the idea of progress through technology. As Worster writes, especially the "desert cultures" of the Great Plains have "promoted the cultish idea of the collective domination of nature" ("New" 31). Hence, Worster concludes that it is the American West that is the least democratic of all American regions.

According to Worster, the various American myths celebrating human domination over nature are synthesized into what he calls the 'irrigation myth.' "The central theme in that myth," Worster writes, "is that the work of redeeming the desert from its sterility is simultaneously a work of self-redemption for humanity" ("Kingdom" 117). Worster describes the common credo informing irrigation philosophy in the United States as follows:

The most glaring irrationality the irrigation engineers faced was in nature itself. No competent earth designer, it was often suggested, would have left over a million square miles of the American land without sufficient rainfall to raise a crop. Aridity was ipso facto a defect, an illness requiring a physician to heal it. A rational nature, a healthy nature, would be a nature of uniform productivity, where there was no waste, no excess, no deficiency, nothing but a steady yield of the useful forever and ever. (*Rivers* 154)

Placed in the context of the irrigation myth, the work of the irrigation engineer thus receives mythical proportions in American culture: Worster argues that the irrigation myth resonates with Christian garden metaphors and is thus ultimately a religious argument justifying the human conquest of nature through technology:

At the very heart of the irrigation myth is an affirmation of technology as a divinely ordained instrument of domination over the natural world. Technology, especially agricultural technology, has come to be invested with an intensely religious potential, as have its products. The myth says that God dwells in machinery—in the water pump, the irrigation dam, all the instruments of desert reclamation. (Worster, “Kingdom” 121)

Worster continues his argument by placing the roots of the irrigation myth in the larger symbolic context of the Judeo-Christian tradition:

This irrigation myth, like the myth of the lone, heroic hunter dressed in buckskin, originates far back in the dim recesses of history; long before it appeared in the American West, it found expression in Mesopotamia, Egypt, and China. But, above all, it has been the Judeo-Christian peoples who have handed it on and on, creating a literary tradition that reaches from the Book of Genesis to the Book of Mormon. Much of the literature of Judaism and Christianity, as well as that of Mormonism, is filled with images of gardens and oases that have been wrested from barren deserts by concerted, righteous human labor. (“Kingdom” 121)

When Worster writes that “the irrigation myth is a story of creating a better social as well as environmental order,” he thus suggests that the motivation behind this new social order is not only economic, but also religious (“Kingdom” 120). Worster’s theory of the hydraulic society thus contradicts his general rejection of the idea that America’s contemporary environmental problems are rooted in the Judeo-Christian value system. Throughout his work, Worster does not solve this theoretical contradiction.

Simultaneously, Worster’s theory of the hydraulic society contradicts Turner’s frontier paradigm, in which settlers’ adaptation to the wilderness is depicted as a process producing more democracy, more individualism, and more freedom. According to Worster’s

hydraulic society model, exactly the opposite is true: The further one goes West on the North American continent and proceeds into the arid regions, the more centralized the power structures become and the less the individual is likely to succeed on his own:

In the American West, the individual voice is, according to popular myth, clear and self-reliant. It has a rough masculine sound, audible above the din, hard-edged, isolate, claiming a large space for itself. The reality is somewhat different. Lone, autonomous individuals could not conquer the desert. The ecological situation demanded group effort. (*Rivers* 130)

Accordingly, Worster claims that the attempt to populate the arid West with a farming society has ultimately produced a “Leviathan in the desert” and thus decisively weakened American democracy (“Hydraulic” 57):

It is a plain fact that only the simplest kinds of scarcity can be overcome without some loss of personal freedom. You cannot maximize abundance without setting up powerful government, agencies, corporations, and other chains of command, other hierarchies of authority, and these endanger democracy and independence as they grow. You cannot have it both ways. (“Freedom” 89-90)

Worster calls the discrepancy between the myth of the American West as a land of freedom and its present-day reality as a hydraulic society the ‘western paradox.’ Worster defines this paradox in analogy to Leo Marx’s concept of the ‘machine in the garden;’ whereas the American West represents on the one hand “the dream of growing up happily in a state of nature,” Americans on the other hand dream “of putting technology to work making the West over into something else” (“Freedom” 85). As Worster claims, a blind faith in the power of technology combined with an unwillingness to accept the limits of nature are at the heart of this American dilemma. The technocratic impulse to remake the desert of the West into a garden, Worster argues, has ultimately destroyed the natural basis upon which the American dream of freedom rested.

In *Rivers of Empire*, Worster undertakes an elaborate effort to examine both the evolution of the hydraulic apparatus as well as its impact on society in the West. As Worster argues, an understanding of the present-day West must acknowledge the decisive role of water politics in the region’s history:

The technological control of water was the basis of a new West. It made possible not only the evolution of a prosperous agriculture but also, to a great

extent, the growth of coastal cities like Los Angeles and San Francisco. It eventually made California the leading state in America, and perhaps the single most influential and powerful area in the world for its size. (*Rivers* 10)

Worster traces the development of the hydraulic apparatus in the American West by outlining a variety of historic examples of irrigation engineering in the region, thereby illustrating the overall cultural and political discourses that informed the institutions and legislative processes shaping the nation's irrigation infrastructure. In this context, Worster recapitulates the positions held by the individual protagonists that shaped the discourse of water and power in the West, from writers and historians like John Steinbeck, Wallace Stegner, Walter Prescott Webb, and John Wesley Powell to politicians such as Francis Newlands and Theodore Roosevelt. It is not my ambition to recapitulate Worster's individual examples of dam engineering and irrigation projects in the American West and to analyze the numbers and figures Worster provides. Rather, I want to further outline Worster's general theory of the role of water and power in the West, thereby illustrating how his concept of the American West as an irrigation society fits into his overall theory of environmental history and American capitalism.

Central to Worster's study of water and power in the West is his belief that the irrigation myth has decisively influenced irrigation politics in the United States well into the twentieth century:

As late as the 1950s, the myth of human redemption through technology was still alive and active in the minds of Americans, western and eastern alike. The West was standing at the dawn of a whole new era of massive reclamation projects, and within a short space of time those projects would bring every major river basin in the West under human domination. In the terms of the irrigation myth, those projects were needed to complete the noble dream of conquest begun in 1847.... The irrigation myth helped give legitimacy to the entire postwar program of intensive, large-scale reclamation. It also gave support to the Federal agencies engaged in that work, notably the Bureau of Reclamation. ("Kingdom" 121)

Worster's *Rivers of Empire* is essentially an analysis of the Bureau of Reclamation's role in American history. Catering to the needs of the West's powerful land- and water-owning elite, the activities of the Bureau of Reclamation represent for Worster the federal water policies as characteristic of power centralization in the hydraulic society. As Worster outlines, the Bureau of Reclamation was created in 1902 and belongs today to the powerful federal bureaucratic land management apparatus, whose various departments and activities are coordinated within the United States Department of the Interior (DOI). Established in 1849, the DOI has today 70,000 employees. Apart from the Bureau of Reclamation, the DOI consists of the Bureau of Indian Affairs, the Bureau of Land Management (created in 1946), the Minerals Management Service

(created in 1982), the National Park Service (created in 1916), the Office of Surface Mining, the U.S. Fish and Wildlife Service (created in 1940), as well as the U.S. Geological Survey (created in 1879). On its Website, the DOI defines its mission “to protect and provide access to our Nation’s natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.”⁹⁸ Among the DOI’s self-proclaimed goals are the protection of the environment and the preservation of the nation’s natural and cultural resources, the provision of recreation for Americans, the management of the natural resources for a healthy environment and strong economy, the contribution of scientific understanding of a changing world and meeting the trust responsibilities to Indian Tribes and Island Communities. According to DOI statistics, the department and its various sections manage 507 million acres of land—one out of every five acres of land—in the U.S., provide the resources of nearly one-third of the nation’s energy and water to 31 million citizens through 824 dams and reservoirs, receive over 450 million visits each year to 388 units of the national park system, 544 wildlife refuges and vast area of multiple use lands. In addition, the DOI maintains relations and works with 562 federally recognized Indian tribes and manages 55.7 million acres of land held in trust by the United States government for the American Indians, Indian tribes, and Alaska Natives. According to Worster, the DOI thus exemplarily underlines a main assumption among contemporary historians of the West, namely that the West is—in contrast to the myth—characterized by the strong presence of federal government and public land ownership. “Perhaps the most distinctive feature of the West, after aridity, is the fact of extensive public ownership of that land, hundreds of millions of acres in all,” Worster writes and outlines, for example, that the federal government owns 33 percent of the state in New Mexico, 64 percent in Utah, and 82 percent in Nevada (“Legacy” 27).

Although the DOI has historically been responsible for making maximum use of the natural resources within the boundaries of the United States, the DOI has in the past years increasingly shifted its image away from an exploiter and towards a protector of natural resources. As the 48th Secretary of the Interior, Gale A. Norton stated on the DOI’s website:

We are committed to building partnerships to encourage conservation and preserve our natural and cultural resources; to bringing innovative approaches to solving land management and water disputes; and to developing energy, including renewable sources of energy, in the most environmentally protective manner. (www.doi.gov)

However, the DOI has recently—arguably under the influence of the current Bush administration—counterbalanced its role of protector of the environment with its role as provider

⁹⁸ This quote as well as the following mission statement is taken from the DOI’s website at www.doi.gov.

of cheap energy for American citizens. On the current website, the following quote can be found under the section “Healthy Lands:”

The Department of Interior’s Healthy Lands Initiative recognizes the need to enhance the availability of affordable oil, gas and other energy sources, while maintaining strong environmental protections and protecting habitat.
(www.doi.gov)

According to Donald Worster, the DOI cannot combine two competing principles, the logic of the capitalist market place with its limitless hunger for cheap energy on the one hand and the protection of nature on the other hand. Rather, the DOI and its individual departments represent for Worster the historically grown, institutionalized centralization of power in American culture, designed solely to effectively manage the country’s natural resources. In contrast to the DOI’s self-portrait, Worster characterizes the DOI mainly as an agency that has more often than not harmed nature by following the American ideal of progress and a resulting positive definition of effective land and resource management through technology as an essential part of human progress. According to Worster, the scars of the DOI’s often misguided environmental policies are still visible in the American landscape today and he thus disagrees with the former Secretary of the Interior’s statement that the DOI, together with the American public, is “achieving healthy lands and thriving communities, a legacy for future generations.”⁹⁹ Rather, Worster claims that the land management policies of the DOI have contributed significantly to the ravaging of American nature and the creation of detrimental, ill-designed land-management practices. As Worster argues in *Rivers of Empire*, the failures and shortcomings of the DOI’s land policies are nowhere more visible than in the history of the Bureau of Reclamation. Responsible for all forms of water management in the West, from irrigation to the production of energy, the Bureau of Reclamation is for Worster the core techno-bureaucratic apparatus determining the character of the hydraulic society of the American West.

In *Rivers of Empire*, Worster illustrates at length the development and the evolution of the history of the Bureau of Reclamation (BoR). As Worster outlines, the BoR has its origins in the National Reclamation Act, which was passed by Congress on June 17, 1902.¹⁰⁰ Also called the Newlands Act, the Reclamation Act was based on a bill introduced to the House of Representatives on January 26, 1901, by Francis Newlands, a congressman from Nevada. Newlands suggested that money from the sale of western public lands should be placed into

⁹⁹ This quote is from the former Secretary of the Interior, Gale A. Norton, and has been taken from a previous version of the DOI’s website at www.doi.gov.

¹⁰⁰ At the beginning of the twentieth century, the word ‘reclamation’ was still most commonly used instead of today’s more popular expression ‘irrigation.’ Both terms denote the same activity: reclaiming arid lands for human use by bringing water to them.

an ‘arid land reclamation fund,’ which would in turn be used for constructing irrigation projects designed to water the arid lands of the West. According to Newland’s proposition, the lands in those projects should be sold to individuals in parcels not to exceed 80 acres (changed to 160 acres in the final version of the act), at a price to be determined by the water-development costs and to be reimbursable in ten annual installments. Newland’s idea was to create a revolving fund through these repayments, which would in turn enable the financing of new reclamation projects.

The Reclamation Act thus legally affirmed Newland’s conviction that the winning of the arid West was essentially a matter of funding and financing irrigation projects. Irrigation, Newland and the promoters of the Reclamation Act believed, would reclaim arid lands for human use, thereby not only enabling farming in the West, but also providing the basis for further homesteading. According to the ideology of the day as expressed in the Reclamations Act, reclamation programs would encourage Western settlement, providing homes for thousands of Americans on small family farms. ‘Homemaking’ was thus next to farming the central key word for promoters of irrigation projects, among them most notably President Theodore Roosevelt. The 1902 Reclamation Act thus followed the Jeffersonian ideal of promoting the small, independent farmer as the pillar of American democracy and legally and philosophically confirmed irrigation as one of the central activities of the DOI.

Three weeks after the act had passed Congress, the Secretary of the Interior, Ethan Allen Hitchcock, set up a new division within the U.S. Geological Survey, called the United States Reclamation Service. In accordance with the Reclamation Act, the new Reclamation Service immediately started studying potential water development projects in each western state with federal lands and created its initial funds from revenue created by the selling off of federal lands.¹⁰¹ Between its foundation in 1902 and 1907, the Reclamation Service began about 30 projects in Western states. As the dimensions of the service’s activities became more extensive, the Secretary of the Interior eventually separated the Reclamation Service from the U.S. Geological Survey in 1907 and created an independent bureau within the Department of the Interior. In 1923 the agency was renamed the ‘Bureau of Reclamation.’ The Bureau was put under a commissioner, who presided over a subordinate staff of engineers, project managers, and laboratory technicians. From an initial staff of two-hundred-odd persons it grew to number thousands and became the largest bureaucracy ever assembled in irrigation history.

¹⁰¹ As Texas had no federal lands, it did not become a reclamation state until 1906 when Congress passed a special act including it in the provisions of the Reclamation Act.

Following the renaming of the Bureau of Reclamation and its establishment as a separate unit within the DOI in 1923, the Bureau drastically increased both quantity and scope of irrigation projects in the region. Believing that the uncontrolled flow of water resembled a waste of resource and energy, the BoR began in the 1930s to control floods, supply irrigation water, and generate hydroelectric power. Among the most significant events in the BoR's history is the authorization of the Boulder Canyon Project by Congress in 1928, which provided the legal foundation for the construction of the gigantic Hoover Dam on the Colorado River. Hoover Dam was not only paradigmatically indicating the way for future irrigation projects through its sheer scope, it more generally signified that the flow of large amounts of federal funds towards reclamation in the West was an accepted practice—which is not to deny that the authorization of Hoover Dam had been preceded by a controversial debate about the pros and cons of public power versus private power in the West. As the BoR announces on its website, Hoover Dam is a testimony to the country's ability “to construct monolithic projects in the midst of adverse conditions.” Construction of Hoover Dam lasted less than five years, from April 20, 1931, to March 1, 1936. With a height of 726.4 feet from foundation rock to the roadway on the crest of the dam, a weight of more than 6,600,000 tons, 4,360,000 cubic yards of concrete in the dam, power plant and appurtenant works, a maximum water pressure of 45,000 pounds per square foot at the base of the dam, Hoover Dam was the largest dam of its time when it was finished. From about 1938 until 1948, the Hoover Dam power plant was the largest hydroelectric producer in the world. The American Society of Civil Engineers rates Hoover Dam today as one of America's Seven Modern Civil Engineering Wonders. Through its sheer size, Hoover Dam symbolized the power of the Bureau of Reclamation and signaled that a new era of techno-bureaucratic management of nature had begun in the West. “The building of Hoover Dam,” Worster writes, made the Bureau of Reclamation “the most famous and accomplished desert conqueror in world history” (“Hoover” 72).

More importantly, however, Worster outlines that Hoover Dam—like all dams of similar size built later in America—represent a systemic flaw of the American irrigation society. The public money federal agencies spent on irrigation projects do not benefit society as a whole, Worster claims, but a small elite of private entrepreneurs:

By the time Hoover Dam was completed, the federal government was almost exclusively devoted to providing cheap water to successful white settlers, many of them large agribusinessmen, not to landless or hungry or marginal people. Water development in the American West was primarily for those who had already developed themselves into men of property, efficiency, and productivity. (“Water” 40)

According to Worster, the building of Hoover Dam represents not only the heyday of reclamation construction in the United States, but attests to the BoR's general support of water commodification and the development of a corporate water-owning elite. As Worster outlines in *Rivers of Empire*, the West experienced an era of massive reclamation projects during the 35 years following the end of World War II, which eventually brought many of the region's major river basins under the control of the BoR's—or its clients'—management apparatus. The list of dams established under the BoR's supervision during these decades is impressive. Whether it is Hoover, Grand Coulee, Shasta, Glen Canyon, Teton, Navajo, or Columbia River—each of the irrigation projects associated with these names represents the BoR's proven capability to control and transform nature on the largest scale.¹⁰² For Worster, the sheer size and quantity of federal efforts to control the flow of water in the region underlines the strong ideological undercurrents of irrigation politics in American culture.

As Worster argues, the perception of modern irrigation technology as a logical continuation of the nineteenth-century politics of conquest provides the essential ideological base for the BoR's activities. Following the dogma of the irrigation myth, the Bureau's numerous and often gigantic irrigation projects were mainly understood in American society as necessary steps towards the completion of the conquest of the West that had begun in the middle of the nineteenth century. According to this perception, irrigation becomes an integral aspect of the American mission to turn the wilderness into a garden, thereby establishing a new, democratic society. As Worster points out, irrigation projects, especially the building of dams, are informed in American culture by a strong ideological undercurrent: "The dam represents the blessings of technology, economic development, and modernity" (Worster, "Water" 33). On this ideological level, the irrigation myth provided the legitimization for extensive—and costly—irrigation programs designed to tame and civilize the arid West. "The irrigation myth," Worster notes, "helped give legitimacy to the entire postwar program of intensive, large-scale reclamation. It also gave support to the federal agencies engaged in that work, notably the Bureau of Reclamation" ("Kingdom" 121).

Furthermore, Worster argues that the gigantic reclamation projects are—consciously or not—driven by the Puritan city-upon-a-hill doctrine. According to Worster, the gigantic dams erected by the BoR not only signify America's capacity to dominate nature in the West, but the nation's capacity to dominate the world at large. Worster thus argues that the irrigation of the

¹⁰² Richard White examines the history of dam building along the Columbia River in his environmental history *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995). Unlike Worster, who provides a general theory of water and power in the West in *Rivers of Empire*, White focuses on the reshaping of the Columbia River. As I will argue in more detail in chapter IV, White's study is of interest for my characterization of Worster's work in so far, as it represents a more flexible, postmodern definition of 'nature.'

arid West has to be understood as an expression of nineteenth-century American imperial ambitions. Seen in this light, the irrigation of the arid West becomes part of a larger plan to establish the United States' economic leadership in the world:

Empire in the late nineteenth century meant world economic dominance. The arid lands were to be the instruments of that dominance, and irrigation the methodology. (*Rivers* 150)

Accordingly, Worster claims that irrigation sites are manifestations of American power that signal to the world that Americans are “a people who had risen, through destiny and virtue, to pre-eminent leadership over the entire planet (“Ecstasy” 136). Worster thus outlines that the Bureau's activities did not bring about positive results only, but also environmental degradation, social injustice and an imperialist machismo based on the assumption of technological superiority.¹⁰³ Along these lines, Worster's study of the hydraulic society aims ultimately at counter-characterizing the BoR's history as a story of failure rather than success.

Indeed, despite the BoR's rapid growth in power and influence within the DOI, many of its early projects encountered a variety of problems. Lands included in irrigation projects often turned out to be unsuitable for irrigation and more often than not, land speculation proved to be a significant problem, resulting in poor settlement patterns that did not achieve the desired homesteading-effect. Furthermore, irrigators were often unable to keep the proposed repayment schedules due to high land preparation and facilities construction costs. Where irrigation was provided, settlers often turned out to be inexperienced with irrigation farming and were hence unable to meet the practical demands of farming in the West. Finally, climate and weather conditions in several regions did—despite successful irrigation—only allow the farming of low-profit crops, which in turn led to frequent economic underperformance of farmers.

Most importantly, however, Worster argues that the BoR promoted the development of a strongly hierarchical society, dominated by a water-controlling elite. Based on his theory of the hydraulic society, Worster portrays the Bureau of Reclamation—and similar agencies preceding it on local or state levels—as an institution representing a high degree of knowledge monopolization and concentration of power. Although Worster theorizes in the following paragraph on institutional patterns in hydraulic societies in general, he is clearly referring to the BoR's role in the American West:

¹⁰³ Although Worster does not explicitly mention the race for technological superiority as it played out between the United States and Russia in the realm of space travel, he apparently believes irrigation projects to have been of equal significance for the American psyche during the Cold War decades. Linking of the achievements of American irrigation technology to the nation's self-perception as a world power after World War II, Worster indicates the extent to which he places the BoR's activities in the larger ideological context of the Cold War period.

Typically in arid places water is regarded as too precious and irreplaceable a part of nature to be left long in purely private hands. At some point in its development it usually comes under a public agency, which gains power through the exercise of technical expertise, that is, through the reservoirs, dams, siphons, and canals it lays out and maintains. Such an agency, emerging as a technical elite, grows more and more influential with each elaboration of water control, making itself ever more indispensable and authoritative. Its rule can be challenged, of course, but always it has a formidable defense in its command of special knowledge and in the people's awe of and dependence on that knowledge. (*Rivers* 192)

Accordingly, Worster believes that the BoR, beginning with its establishment under the Newlands Acts, illustrates his theory of power concentration in hydraulic societies:

The subsequent history of the Newlands Act confronted Americans with at least three consequences that they were for a long time unprepared to grasp or to handle: those who could reap the benefits were a much smaller number than anyone had supposed; they had to be organized into tight hierarchical and corporate entities which violated traditional rural culture; and the bureaucracy administering the program had to become adept at social as well as environmental engineering. There was, in other words, an unforeseen price to pay for the national conquest of the arid lands. (*Rivers* 170)

By supporting the development of a capitalist elite, Worster concludes that the BoR failed to promote the prospering of society as a whole. Worster's analysis thus mirrors John Wesley Powell's warning that the establishment of a corporate water elite in the West would in the long run have detrimental effects on American society.

Hence, Worster argues that the significance of the Reclamation Act lies in the emphasis it put on the role of irrigation projects in the development programs for the West and in the central role it assigned to federal government in all future irrigation projects, which in turn promoted corporate enterprise. By way of the Reclamation Act, Worster argues, the federal government's monopoly on the development of water infrastructure was legally established. Officially affirming the federal government's role as the development agency of the American West and entitling it to exclusively manage and develop the country's water resources, the Reclamation Act signifies for Worster an extraordinary legislative consolidation of centralized power structures in the American West. The Reclamation Act, Worster states, "has been the most important single piece of legislation in the history of the West, overshadowing even the Homestead Act in the consequences it has had for the region's life" (*Rivers*, 131). When Worster states that "the West, more than any other American region, was built by state power, state expertise, state technology, and state bureaucracy," he specifically refers to the gigantic water management apparatus of the

Bureau of Reclamation (*Rivers*, 131). In contrast to the rural, self-reliant, individualistic West of the popular imagination, the BoR is for Worster the epitome of the highly modern, centralized, technocratic American West.

Worster sees his negative perspective on the BoR's achievements confirmed by the decline of water projects since the end of the 1960s. With the evolution of the American environmental movement during the 1960s, previously unknown opposition to water development projects in the West evolved and ultimately influenced federal policies. As the awareness for environmentally unsound practices increased in American culture, the powerful water-controlling elite within the BoR increasingly lost its aura as a protector of American nature and accordingly, Worster claims, the last federal authorizations for major construction projects occurred in the late 1960s; from 1976 onwards, no new constructions passed Congress. Worster sees the failure of Teton Dam in 1976, which signified the first major failure of a big reclamation dam, as a paradigmatic landmark event that forced the BoR to reconsider its overall water and security policies. Furthermore, Worster claims that the BoR's loss of power during the past three decades is based on the loss of its overarching mission. Since its foundation, Worster argues, the BoR has essentially been a construction agency, whose mission was to rebuild the West. With this mission achieved, the BoR's reason for existence disappeared, as Worster writes:

Restoring the Corps to the strictly military realm where it belongs, and phasing out the Bureau's presence in the West now that it has finished its mission, is the only practical strategy.... Both agencies were formed for domination, and that purpose, we may hope and have reason to believe, belongs to the American past, not its future. ("Ecstasy" 139)

Arguing that the Bureau of Reclamation differs essentially from such stewardship agencies within the DOI that traditionally have the task to preserve and protect nature, such as the Forest Service, the Park Service and the Bureau of Land Management, Worster concludes that the BoR's water politics have run increasingly out of fashion in an environmentally conscious America.

However, it has to be pointed out that by 1976, all major dam constructions planned by the BoR had been completed and construction thus came to a logic halt. At this point in history, the BoR operated 320 water-storage reservoirs, 344 diversion dams, 14,400 miles of canals, 900 miles of pipelines, 205 miles of tunnels, 34,620 miles of laterals, 145 pumping plants, 50 power plants, and 16,240 circuit miles of transmission lines (Worster, "Hydraulic" 56). In 1978, the Census of Agriculture reported a total of 43,668,834 irrigated acres in the seventeen western states, which at that time equaled

one-tenth of the total number of irrigated acres throughout the world. The top irrigation states were California with 8.6 million irrigated acres, Texas with 7 million, Nebraska with 5.7 million, and Idaho and Colorado with 3.5 million each. Taken by counties, all but one of the top-ten agricultural producers in the nation are in the hydraulic West, and eight of them are in California alone (Worster, “New” 29). These numbers indicate how completely—and, from a mainstream perspective, how successfully—the BoR has remade the river landscape in the American West. As the BoR proudly announces on its website, “the arid West essentially has been reclaimed. The major rivers have been harnessed and facilities are in place or are being completed to meet the most pressing current water demands and those of the immediate future” (www.doi.org).

Considering the BoR’s many achievements, Worster’s claim that the Bureau has harmed the development of American society can be argued from a less environmentally conscious point of view. Not surprisingly, the BoR itself interprets its historic achievements quite in contrast to Worster and argues that it has contributed significantly to the positive development of American society by providing irrigation infrastructure as the precondition for the settlement of the American West. According to the Bureau’s website, the dams, power plants, and canals it constructed since its foundation have led “to homesteading and promoted the economic development of the West.” Inadequate precipitation in the American West required settlers in the American West to use irrigation for agriculture, the BoR comments on its own mission in the historic section of its website. When private initiatives of settlers failed to provide enough water by diverting water from streams and when private and state-sponsored storage and irrigation ventures failed because of lack of money or lack of engineering skill, the BoR claims to have provided the scientific, economic, and political framework to solve the irrigation problem on a grand scale. According to the Bureau’s self-perception, pressure on the federal government had mounted increasingly to undertake storage and irrigation projects prior to the Reclamation Act. As Congress had already invested in America’s infrastructure through subsidies to roads, river navigation, harbors, canals, and railroads, Western farmers demanded their share of support and pressured the federal government to invest in irrigation projects in the West. The National Reclamation Act and the establishment of the BoR can be seen as the federal answer to this pressure. By providing water to millions of farmers and private households throughout the West at affordable prices, one might argue, the BoR successfully completed its public mission.

A look at the BoR’s management figures conveys how difficult the effective management of nature on the grandest scale in an environmentally sound fashion might indeed be. The Bureau of Reclamation is today the largest wholesale water supplier in the U.S., delivering 10

trillion gallons of water to more than 31 million people and providing one out of five farmers with irrigation water for 10 million acres of farm land that produce 60% of the nation's vegetables and 25% of its fruits and nuts. Since its establishment, the BoR has constructed more than 600 dams and reservoirs, including such historic sites as Hoover Dam on the Colorado River and Grand Coulee on the Columbia River. Today, the Bureau manages 457 dams, and its 348 reservoirs have more than 90 million recreation visits annually. Reclamation is also the nation's second largest producer of hydroelectric power and the tenth largest electric utility, generating about 42 billion kilowatt hours serving 6 million homes and nearly a billion dollars in power revenues in a year in its 58 power plants.¹⁰⁴ Nevertheless, due to its overall changed policy and the redirection of its programs and responsibilities, the BoR has substantially reduced its staff levels and budgets but remains a significant federal agency in the West. According to the BoR's self-portrait, the history of federal water management in the American West is a story of success. After having successfully completed its mission, the BoR announces on its website, reclamation underwent major reorganization between 1988 and 1994, when the emphasis in reclamation programs shifted from construction to operation and maintenance of existing facilities. Today, the BoR highlights its positive impact on protecting the environment. Like all of the DOI's land-management organs, the BoR claims that environmental protection is among its top priorities and that its mission is "to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public."¹⁰⁵

Quite in contrast to the BoR's self-portrait, Worster claims that the decline of the Bureau's irrigation activities during the past decades attests to the fact that the environmental policies dominating the Bureau throughout its history were ecologically unsound. For Worster, the inherent logic of the BoR's irrigation machinery represents the American desire to conquer nature via technological means, a state of mind that must ultimately fail as it results in the destruction of nature, the existential basis of human life. The following conclusion from Worster's *Rivers of Empire* is worth being quoted at full length, as it indicates Worster's overall position on irrigation technology in the American West:

Hydraulic technology held out for a long time the illusion that it could bring natural forces under absolute, tight, efficient control, but in truth it multiplied the ways it could work its own demise. Each new project, grander than the last, demanded increasingly intricate supervision, greater managerial sophistication—greater, it sometimes seemed, than people could summon. There was more to go wrong, and it did go wrong, on a scale commensurate with the technology involved. In addition to the problems with the apparatus

¹⁰⁴ All data taken from the BoR's website at www.usbr.gov.

¹⁰⁵ Quote taken from www.usbr.gov.

itself, three sets of environmental vulnerabilities appeared: a water-quantity problem, a decline in water quality under ever more intensive use, and a potentially irreversible degradation of the pristine ecological communities of the West. These were not mere casual or minor nuisances. They were deep systemic problems, growing out of the very program of large-scale, intensifying water control, associated with it wherever it had been pursued in history, and quite possibly without remedy. (*Rivers* 310-11)

According to Worster, another major problem in irrigation societies is salinization, the poisoning of water and soil alike by salt buildup. During the process of salinization, salts and other chemical compounds like calcium carbonate (chalk), zinc sulfate, barium chloride, sodium bicarbonate, various phosphates, nitrates, and hydrates are first dissolved in the irrigation and then concentrate in a second step on the soil. Worster describes the problem of salinization as follows:

Perhaps a more serious, long-range nemesis is the salt poisoning of arable land, which seems to be an inevitable consequence of desert irrigation. This is the problem of soil and water quality degraded through overuse. In regions of scarce rainfall, the earth contains a large amount of unleached salts; pouring water onto fields there brings those salts to the surface and into the river system. Continual stream diversions lead inexorably to poisoning downstream, for as the irrigation water evaporates from reservoirs or transpires from rows of plants, it leaves a whitish residue of salt behind. (“Thinking” 128-29)

As Worster argues in the conclusion of *Rivers of Empire*, salinization “became in the postwar years a worldwide environmental disaster” that also hit the irrigated farmlands of the American West (*Rivers* 320).

Worster diagnoses another threatening development caused by irrigation politics in the exhaustion of underground water reservoirs. As Worster outlines in various essays, the irrigation of the arid West was not only achieved by damming and diverting streams and rivers, but also by tapping into the underground water deposits. Worster’s most prominent example is the Ogallala Aquifer, also known as the High Plains Aquifer, a vast yet shallow underground water table aquifer located beneath the Great Plains which dates back to Pleistocene times and was once “the largest natural storage system of its kind anywhere” (Worster, “Thinking” 127). As Worster outlines in “Climate and History,” pumping of the aquifer began in Texas shortly after World War II and by 1957, over forty thousand pumps delivered water for agriculture on the arid plains; by 1978, Worster continues,

there were about 170,000 wells punched down into the aquifer, and they were annually withdrawing 23 million acre-feet (enough water to cover 23 million

acres one foot deep). The total irrigated acreage amounted that year to 13 million. (“Climate” 63)

According to Worster, American agriculture’s thirst for water grew at such dimensions that farmers were exhausting the aquifer “at ten times its recharge rate, taking out an amount over the rate of replenishment equivalent to the entire Colorado River flow” (*Rivers* 314). Receding at a rate of anywhere between six inches and six feet per year, the Ogallala aquifer will run dry by the first or second decade of this century, Worster predicts.¹⁰⁶ Worster thus argues that such irresponsible use of resources as represented by American water politics will soon forcefully come to an end as resources will run out and as the negative environmental side-effects will be too harsh to be ignored. “Irrigated farming, carried on in so grand a fashion,” Worster writes, “has become an extravagance this nation cannot afford and which many states cannot much longer sustain” (“Thinking” 127).

As I will point out in more detail further on, Worster does not provide detailed thoughts and models on how to change the current capitalist culture of the United States, but rather acts as a nature philosopher, questioning on a general level the human attitudes towards nature that inform Western culture. Nevertheless, Worster is convinced that the hydraulic society of the American West cannot exist without a large federal apparatus that sustains the irrigation system. Hence, Worster believes that downsizing and eventually ending federal subsidies is the key to a change of paradigm in American water politics:

The first specific step toward a new water consciousness is to end all federal subsidies of irrigation projects in the West. The subsidies should not be halted abruptly, but gradually, reversing with care and sensitivity the existing policy that has been in effect nearly a century now. Americans have no reason to fear such a change. The greatest portion of artificially watered acreage in the West raises crops that can be grown more cheaply elsewhere: 37 percent of all federal reclamation land, for example, is used for hay and forage; 21 percent for corn, barley, and wheat; 10 percent for cotton. The United States will hardly starve if we do not subsidize those crops, for farmers in the East will raise them instead, and they can do so in ways far less disturbing ecologically. (“Thinking” 132)

For Worster, the fundamental problem of capitalist societies lies in the fact that government agencies back projects that are financially and environmentally unsustainable. Without this federal mitigation of financial risk and economic loss on local and private levels, the unhealthy

¹⁰⁶ Although the Ogallala aquifer is still receding, Worster’s prognosis has not come true yet. Current data and debate about the fate of the Ogallala and the respective politics can be found in the article by Jeffrey M. Peterson, Thomas L. Marsh and Jeffrey R. Williams, “Conserving the Ogallala Aquifer. Efficiency, Equity, and Moral Motives,” available online at <http://www.choicesmagazine.org/2003-1/2003-1-04.htm>.

and unsustainable farming practices would long ago have collapsed, argues Worster. Influenced by Powell's and Webb's understanding of the arid West and Wittfogel's theory of the hydraulic society, Worster's theory of water and power in the West is essentially a critical investigation of federal water politics as expressed in the history of the Bureau of Reclamation. Complementary to Worster's theory of the United States as a hydraulic society is his theory of the pastoral mode of production, a criticism of American farming practices that Worster mainly develops in the context of his analysis of the Dust Bowl phenomenon of the 1930s. As I will outline in the next chapter, Worster again sees the federal subsidizing of environmentally unsustainable practices as the main problem in American farming.

III.3 The Pastoral Mode of Production:

Donald Worster's Criticism of American Agriculture on the Great Plains

As outlined in the previous chapter, Donald Worster's interpretation of the American West as a hydraulic society is at heart a theory about water monopolization and the resulting power structures in the arid regions of the West. In the following chapter, I will outline the second central aspect of Donald Worster's environmental theory of the American West, the pastoral mode of production. Whereas Worster's concept of the hydraulic mode of production focuses on water management as the prerequisite for farming in the American West, his analysis of the pastoral mode is essentially a criticism of farming and ranching practices in the West. However, as farming and ranching in the American West are fundamentally dependent on irrigation, Worster's definitions of the hydraulic mode and the pastoral mode are deeply intertwined. Worster believes that both modes are complementary aspects of the American capitalist mode of production as it plays out in the American West. To understand American capitalism as it developed in the West, Worster argues, one needs to understand the hydraulic and the pastoral mode of production and the respective cultural practices both modes have promoted in the region. As an environmental historian, Worster is especially interested in illustrating the impact of these specific cultural practices on the environment. "We need to understand," Worster writes, "not only the ecological origins of this mode of production, but also its impact on the land—both on specific ecosystems and on the planet as a whole—and on the land's inhabitants" ("Natural History" 42). Simultaneously, Worster investigates the dominant perceptions of the land that have influenced the pastoral mode of production. Worster points out that in contrast to these popular perceptions, the plains region is characterized by a highly complex and difficult climate:

Despite the seeming monotony of flat, immutable land meeting big, unchanging sky, the plains are in fact the most volatile place on the North American continent. Their complexity lies not in landforms but in climate. Nowhere else do Americans confront such exit of cold and hot or such rapid oscillations around the crucial point that divides wet from dry. ("Climate" 51)

Accordingly, Worster tries to point out the ways in which American farmers have denied the climatic realities of the region and how, as a result, they developed a system of environmentally unsound agricultural practices unsuited for the West's difficult environment.

Worster's analysis of the pastoral mode of production in the American West centers mainly around the investigation of farming and ranching practices in the context of food

production. Worster believes that an understanding of any society's relationship towards nature needs to include an analysis of this society's methods of producing food. Believing that food production and consumption is the primary task of humans in order to sustain life, the evolution of agricultural practices throughout human history is for Worster most significant. In this context, the rise of capitalist large-scale food production represents for Worster a most decisive cultural revolution:

Beginning in the fifteenth century and accelerating in the eighteenth and nineteenth centuries, the structure and dynamics of agroecosystems began to change radically. I believe the capitalist reorganization carried out in those years and beyond in our own time brought as sweeping and as revolutionary a set of land-use changes as did the Neolithic revolution. ("Transformations" 1097)

Accordingly, Worster argues that the examination of food production ought to be a primary task of environmental historians: "If we are to make further progress in understanding the linkages human beings make to nature, developing [an ecological] perspective and applying it to food production must be one of the major activities of the new field" ("Transformations" 1092).

Worster's investigation of food production in the American West is based on Eugene Odum's theory of the ecosystem; for Worster, land used for agricultural purposes is an ecosystem manipulated by humans for the specific purpose of producing food. Worster calls such ecosystems designed for agricultural production 'agroecosystems,' an entity he defines as follows:

An *agroecosystem*...is an ecosystem reorganized for agricultural purposes—a domestic ecosystem. It is a restructuring of the trophic processes in nature, that is, the processes of food and energy flow in the economy of living organisms. Everywhere such a restructuring involves forcing the productive energies in some ecosystem to serve more exclusively a set of conscious purposes often located outside it, namely the feeding and prospering of a group of humans. ("Transformations" 1093)

Worster's definition of the term 'agroecosystem' enhances two popular assumptions of twentieth-century ecology: First, that the observation of energy flow is central to an understanding of any ecosystem and, second, that food production and consumption is the most significant material manifestation of energy flow within ecosystems. In Worster's analysis of the pastoral mode of production, an agroecosystem is defined as the central material entity.

Worster's analysis of the American West as the archetypical farming and ranching region of the U.S. focuses on agroecosystems that display the specific characteristics of the capitalist economic system: "American agriculture," writes Worster, "has taken as its first principle the idea that the pursuit of unlimited private property and private gain ought

to decide all questions of plowing, herding, planting, reaping, all rearrangements and manipulations of nature” (“Marriage” 68). Driven by the principle of profit maximization, Worster argues, the capitalist farming system produces agroecosystems that share one defining characteristic: They are in most cases monocultures. “Despite many variations in time and place,” Worster claims, “the capitalist agroecosystem shows one clear tendency over the span of modern history: a movement toward the radical simplification of the natural ecological order in the number of species found in an area and the intricacy of their interconnections” (“Transformations” 1101). As Worster outlines, capitalist agroecosystems are dramatically reduced in their species composition and their complexity of interaction and represent the capitalist drive towards specialization of production, which in turn is intended to guarantee the minimization of management efforts and the maximization of profitability. Worster claims that the radical reduction of species composition for the sake of product maximization within agrarian monocultures is at the heart of the capitalist exploitation of nature. In *Land Use, Environment, and Social Change*, Richard White similarly characterizes the simplification of the original local environments by European settlers tied to market economies as a core environmental process in the history of homesteading, farming, and ranching in the American West:

Under market agriculture, farmers simplified the ecology of the prairies and made both the natural and exotic communities dependent on new forces thousands of miles away. The new plant and animal communities the land supported had relatively few components; they existed only so long as humans labored to protect them. Compared with their predecessors, the communities that the farmers maintained were incredibly precarious, unable to sustain themselves even briefly without man. (74)

Like White, Worster believes that the transformation of the continent’s original environments from balanced, self-sustainable ecosystems into simplified, unsustainable capitalist monocultures is the key process in American environmental history, especially as it was acted out in the arid regions of the American West.

By analyzing the transformation of original environments into capitalist monocultures, Worster again wants to arrive at a socio-political criticism of American culture. As Worster points out, the reality of American farming and ranching in the context of mass production of food through corporate agribusinesses is in sharp opposition to the American ideal of the small-scale, independent farmer. American agribusiness, Worster writes, is “a highly mechanized system of cropping plants and animals, making the earth a vast food factory, controlled by a very small number of multinational corporations and their employees” (*Dust Bowl* 231).

In accordance with his general theory of capitalism, Worster believes that mass-production in agriculture necessarily has a detrimental influence not only on the environment, but on society itself:

When pushed to the extreme as we have pushed it, that market mentality becomes seriously destabilizing to rural communities. It produces a perpetually crisis-ridden farm economy. Worse, it embitters people because it cannot deliver what it says it will: a general contentment and happiness. When the marketplace is made the main idea, it diminishes other values, leads to a degrading of personal independence, social bonds, virtue, and patriotism—for those qualities cannot thrive in an unbridled culture of acquisition, which the mentality of market maximization leads to. (“Good” 88-89)

In analogy to his theory of the hydraulic society, Worster’s theory of the pastoral mode of production is thus not only designed to illustrate transformations of nature in the American West, but more importantly the character of American society as it developed in the context of the capitalist mode of production.

Worster believes that in American capitalist culture, agribusinesses operate according to the belief that cheap food production serves the public interest. The cheaper costs for food are, the capitalist logic goes, the more affluent Americans will become and the more money each American can spend on other goods. Again, Worster traces the idea that American agriculture contributes essentially to the prosperity of the American people back to the celebration of the American farmer as the nation’s democratic stronghold. Linked to this notion is the idea that if American farmers prosper as a group, all of society will profit. As Worster summarizes:

A corollary, and sometimes a rival, to the notion that good farming is farming that makes America richer through mass production, is the belief that farming is successful when it makes farmers as a special group more affluent. A common belief among policy makers is that swelling prosperity down on the farm immeasurably benefits society. (“Good” 87)

This assumption is important for Worster’s further analysis of the pastoral mode of production in the American West. According to Worster, the American pastoral mode of production is rooted in the Jeffersonian idealization of the American farmer as the most precious part of the American nation. In a letter to James Madison in 1785, Jefferson wrote that the “cultivators of the earth are the most valuable citizens. They are the most independent, the most virtuous, and they are tied to their country, and wedded to its liberty and interests, by the most lasting bonds” (qtd. in Raban, *Bad Lands* 37). Worster argues that the Jeffersonian ideal of the small farmer as the economic and democratic pillar of American society is not only a popular American

myth, but has had a very decisive impact on American politics, especially as far as land and water management as well as farming policies are concerned. Worster claims that in American culture, farming is believed to promote the public good to such an extent, that it has been subsidized—directly or indirectly—by tax money like no other business sector. Following his argument brought forth in his theory on the hydraulic mode of production, Worster believes the subsidization of environmentally unsustainable agricultural practices to be a general systemic flaw in the pastoral mode of production.

Examining agriculture in the Great Plains region, Worster traces the idealization of farming back to popular perceptions of the plains throughout the nineteenth century. As Worster outlines, these perceptions oscillated between two simplified images: The Great Plains as a desert and the Great Plains as a garden. Worster believes that Americans often tended to idealize the Great Plains as a fertile garden, a place that was believed to offer prosperity and upward mobility due its geographical vastness and natural abundance. Worster believes that in the popular mind, the Great Plains region thus came to represent the *Ur*-American place where individuals could start over again and prosper by benefiting from the continent's natural abundance. Hence, Worster argues that perception of the Great Plains—and the American West in general—has been preconfigured by the ideology of the American dream, the idea that America is a place of new beginnings and second chances, offering prosperity for those who take initiative and follow their dreams. Worster believes that it is this perception of the West as a land of abundance and opportunity that historically accounts for the region's great attraction: "What the people moving west in covered wagons wanted was a land of unlimited economic opportunity—an abundance of free soil ready for free labor by free men" ("Climate" 57). Worster thus illustrates that the misperception of the American West's geophysical qualities—often willfully promoted by booster propaganda—was historically linked to the impact of the American Dream on the popular imagination.

According to Worster, the perception of the American West as a fertile garden was so popular in nineteenth-century American culture that the real geographic conditions of the West—aridity, vastness, temperature gaps, etc.—were not recognized at all or underestimated in their overall effect on life in the region. From the very beginning, the dominant perception of the West was characterized by an uncritical optimism, Worster points out, and by the late nineteenth century, Americans had adopted the notion that even if the region had deficiencies, faith and technology could turn the Great Plains into the 'Garden of the World.' "If the land was not yet garden-like, able to support all their

traditional crops,” Worster summarizes this optimistic sentiment, “they would make it so with their plows and enterprise. Rain would follow the moldboard plow” (“Climate” 57). For Worster, the ideological misinterpretation of the American West’s true climatic conditions is central to Americans’ relationship to the region. As an environmental historian, Worster wants to outline how the denial of the region’s true geophysical characteristics and Americans’ positivistic faith in progress and technology have shaped the agricultural practices applied in the West and which negative effects these practices had on the environment.

Worster believes that in American environmental history, the transformation of the Great Plains’ ecosystem into capitalist monocultures represents one of the most exemplary and instructive cases of human-induced environmental degradation, based on a lack of understanding of the region’s geophysical conditions. In his environmental history *Dust Bowl: The Southern Plains in the 1930s*, published in 1979, Worster presents his main analysis and criticism of farming practices in the arid West.¹⁰⁷ Worster’s *Dust Bowl* is not only a major study of the Dust Bowl phenomenon of the 1930s, but also an exemplary text of early American environmental historiography.¹⁰⁸

The term ‘Dust Bowl’ denotes a series of severe droughts that hit the region of the Great Plains during the 1930s and resulted in profound damage through wind erosion on more than 100 million acres of farms, blowing nearly one billion tons of dirt as far east as New York and the Atlantic Ocean. According to the definition of the Soil Conservation Service, the Dust Bowl hit a region comprising the western third of Kansas, Southeastern Colorado, the Oklahoma Panhandle, the northern two-thirds of the Texas Panhandle, and northeastern New Mexico. The affected region covered one-third of the Great Plains, close to 100 million acres,

¹⁰⁷ Apart from *Dust Bowl*, my analysis of Worster’s perspective on American agriculture and farming will mainly be based on the following of Worster’s publications: “A Sense of Soil,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 71-83; “Arranging a Marriage: Ecology and Agriculture,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 64-70; “Climate and History. Lessons from the Great Plains,” *Earth, Air, Fire, Water. Humanistic Studies of the Environment*, ed. Jill Ker Conway, Kenneth Keniston, and Leo Marx (Amherst: U of Massachusetts P, 1999): 51-77; “Cowboy Ecology,” *Under Western Skies: Nature and History in the American West* (New York / Oxford: Oxford UP, 1992): 34-52; “Grassland Follies: Agricultural Capitalism on the Plains,” *Under Western Skies: Nature and History in the American West* (New York / Oxford: Oxford UP, 1992): 93-105. A good starting point for a critical introduction to Worster’s position on the Dust Bowl and on American agriculture in general is also William Cronon’s essay “A Place for Stories: Nature, History, and Narrative,” *The Journal of American History* 78.4 (1992): 1347-76.

¹⁰⁸ Throughout this chapter, I will only concentrate on Donald Worster’s assessment of the Dust Bowl phenomenon. For further reference on the Dust Bowl, the following publications are good starting points: Paul Bonnifield, *The Dust Bowl: Men, Dirt, and Depression* (Albuquerque: U of New Mexico P, 1978); Geoff Cunfer, “Causes of the Dust Bowl,” *Past Time, Past Place: GIS for History*, ed. Anne Kelly Knowles (Redlands, CA: ESRI Press, 2002): 93-104; James N. Gregory, *American Exodus: The Dust Bowl Migration and Okie Culture in California* (New York: Oxford UP, 1989); Douglas Robert Hurt, *An Agricultural and Social History of the Dust Bowl* (Chicago: Nelson-Hall, 1981); Brad Lookingbill, *Dust Bowl USA: Depression America and the Ecological Imagination, 1929-1941* (Athens: Ohio UP, 2001).

500 miles by 300 miles. The droughts first hit in the eastern part of the country in 1930 and moved westward from there. In April 1933, weather stations on the Great Plains reported 179 storms of blowing dust, raging over fields where plows had destroyed the native vegetation and drought had killed young crops. In May of 1934, great dust storms spread from the Dust Bowl area. The drought was the worst ever in U.S. history, covering more than 75 percent of the country and severely affecting 27 states. A gigantic storm carried dirt from Montana and Wyoming all the way to Georgia and New York and dropped 12 million pounds on Chicago en route. In December of 1934, the Yearbook of Agriculture announced that “approximately 35 million acres of formerly cultivated land have essentially been destroyed for crop production.... 100 million acres now in crops have lost all or most of the topsoil; 125 million acres of land now in crops are rapidly losing topsoil” (<http://www.pbs.org/wgbh/amex/dustbowl/>). In 1935, the Dust Bowl reached as far as the cotton belt of West Texas and on the so-called Black Sunday of April 14, the worst black blizzard of the Dust Bowl occurred, causing extensive damage. On April 27, Congress declared soil erosion ‘a national menace’ and established the Soil Conservation Service in the Department of Agriculture (formerly the Soil Erosion Service in the U.S. Department of Interior), which eventually developed an extensive conservation program under the direction of Hugh H. Bennett, designed to retain topsoil and to prevent irreparable damage to the land.

At a meeting in Pueblo, Colorado, in December of the same year, experts estimated that 850,000,000 tons of topsoil had been blown off the southern plains throughout the course of the year. In 1938, the droughts had moved northeastward, making Kansas the most extensively affected state. By 1939 the serious blow area within the bowl had shrunk to about one-fifth its original size; it increased again to 22 million acres in 1940, until it finally disappeared in the forties. Altogether, 408 tons of dirt were blown away from the average acre during the Dust Bowl. 1938 was the year recording the peak wind erosion: 10 million acres had lost at least the upper five inches of topsoil and another 13.5 million acres had lost at least two and a half inches.

In general, the Dust Bowl is today remembered as a drought—or a series of droughts—that covered virtually the entire Great Plains for almost the entire decade of the 1930s. In the popular mind, the Dust Bowl years are especially remembered as a catastrophe for American farmers, whose crops were severely damaged by deficient rainfall, high temperatures, insect infestations and the dust storms that accompanied the Dust Bowl phenomenon. Accordingly, the term ‘Dust Bowl’ also refers to an agricultural depression, triggered by an environmental catastrophe. The almost complete collapse of agriculture on the Great Plains during the Dust Bowl years contributed further to the downward spiral of the American economy during the

Great Depression. Thus, the ecologic disaster of the Dust Bowl is often placed into the larger context of the nation's economic crisis of the 1930s. Bankruptcy of farms and the resulting mass-exodus of the so-called 'Ookies' from the affected regions on the Plains is thus most frequently listed along with other non-agricultural hardships such as bank-closures, business losses, and mass unemployment characteristic of the Dirty Decade. Whatever the relationship between the ecological and the economic disaster of the 1930s may be, it is undoubtedly true that the ecological disaster was further amplified by the implosion of the American economy.

In his reading of the Dust Bowl phenomenon, Donald Worster traces the root causes of the ecological crisis back to American capitalism. For Worster, the Dust Bowl is essentially the result of decades of unsound farming practices on the Great Plains as promoted by capitalist agriculture:

The Dust Bowl like the Depression with which it coincided, like the long heritage of soil erosion going back to Jefferson's time and before, was largely the outcome of an economic culture. That culture had turned a continent into wealth, had created vast fortunes, had made American agriculture more of a business than a way of life, had taken immense chances with fragile environments, and had left many bills to be paid by the next generation. ("Sense" 75)

Although Worster acknowledges climate factors such as drought and wind as central aspects in the Dust Bowl catastrophe, he is convinced that the soil erosion reached such catastrophic dimensions because farmers had ignored the general climatic and geophysical nature of the plains in the first place. Hence, Worster believes that it was not climate that ruined the American farmer but rather the American farmer who corrupted the plains environment, thereby eventually ruining himself. "The 'dirty thirties,'" Worster writes, "were primarily the work of man, not nature.... Natural factors did not make the storms—they merely made them possible" (*Dust* 13).

As Worster outlines, the Dust Bowl accentuated the economic hardships of the Great Depression and sent social ripples throughout the country. When the drought and dust storms showed no signs of letting up, many people abandoned their land. Many were forced to leave the plains when they lost their land in bank foreclosures. In total, one-quarter of the population in the region affected by the droughts left, packing everything they owned into their cars and trucks, and headed west toward California. Although overall three out of four farmers stayed on their land, the mass exodus depleted the population drastically in certain areas. In the rural area outside Boise City, Oklahoma, the population dropped by forty percent, with 1,642 small farmers and their families pulling up stakes. The Dust Bowl exodus was the largest migration in

American history. By 1940, 2.5 million people had moved out of the plains states. As Donald Worster summarizes, California was the number one destination among migrants:

It was California, however, that had long been the American ideal of Paradise, and now all it cost to get there, if you had a car, was \$10 for gas and a bit of food. In a single fifteen-month period, 86,546 destitute migrants went to the Golden State, slightly more than had migrated there in the two years following the discovery of gold in 1849.... It was unmistakably one of the most spectacular migrations in American history: almost 300,000 poor people entering the state by automobile alone in the second half of the decade. California was the destination for two out of every five migrants across state lines in the nation over this period, and its population consequently showed the greatest gain of any state—a 1.1 million net increase from migration, rich and poor, adding almost 20 per cent to the 1930 population. (*Dust* 50)

Although the migrants were to the greatest extent fellow Americans, they were not welcome at their destinations and often met hostile resistance by the local population. Especially in California, migrants' hopes for a new, better life clashed severely with the harsh reality. The chief of the Los Angeles Police Department went so far as to send 125 policemen to act as bouncers at the state border, turning away undesired 'immigrants.' Called 'the bum brigade' by the press, the LAPD posse became the object of a lawsuit by the American Civil Liberties Union and was recalled only when the use of city funds for this work was questioned. Those migrants who made it across the state border did not find the desired relief. These newcomers were often in direct competition for jobs with longer-established residents, which created conflict between the groups. In addition, because of poverty and high unemployment, migrants added to local relief efforts, sometimes overburdening relief and health agencies.

The social clash between migrants and local Californians became most visible when former farm owners suddenly found themselves as farmhands, performing unskilled labor on Californian corporate farms. In California, migrant farmers often met completely new ways of mass-production farming. In contrast to the traditional family-owned farm on the plains, many farms in California were corporate-owned and hence larger and more modernized than those of the southern plains. Worster quotes from John Steinbeck's *The Grapes of Wrath*, a fictional memorial to the Dust Bowl experience published in 1939, to illustrate the condition of Dust Bowl migrants in search for a better life in California. With no transition, Steinbeck writes, migrant farming families jumped

from the old agrarian, self-containing farm where nearly everything used was raised or manufactured, to a system of agriculture so industrialized that the man who plants a crop does not often see, let

alone harvest, the fruit of his planting, where the migrant has no contact with the growing cycle. (qtd. in Worster, *Dust* 55-56)

In addition, many Californian crops were unfamiliar to migrants, who saw themselves confronted with fruit, nuts and vegetables instead of fields of wheat.

Some 40 percent of migrant farmers wound up in the San Joaquin Valley, picking grapes and cotton. They took up the work of Mexican migrant workers, 120,000 of whom were repatriated during the 1930s. Life for migrant workers was hard. They were paid by the quantity of fruit and cotton picked, with earnings ranging from 75 cents to \$1.25 a day. Out of that, they had to pay 25 cents a day to rent a tarpaper shack with no floor or plumbing. In larger ranches, they often had to buy their groceries from a high-priced company store. As roadside camps of poverty-stricken migrants proliferated, growers pressured sheriffs to break them up. Groups of vigilantes beat up migrants, accusing them of being communists, and burned their shacks to the ground. To help the migrants, Roosevelt's Farm Security Administration built 13 camps, each temporarily housing 300 families in tents built on wooden platforms. The camps were self-governing communities, and families had to work for their room and board. When migrants reached California and found that most of the farmland was tied up in large corporate farms, many gave up farming. They set up residence near larger cities in shacktowns—called Little Oklahomas or Okieville—on open lots local landowners divided into tiny subplots and sold cheaply, for \$5 down and \$3 in monthly installments. They built their houses from scavenged scraps, and lived without plumbing and electricity. Polluted water and a lack of trash and waste facilities led to outbreaks of typhoid, malaria, smallpox and tuberculosis. Over the years, they replaced their shacks with real houses, sending their children to local schools and becoming part of the communities; however, they continued to face discrimination when looking for work and were called 'Okies' and 'Arkies' by the locals, regardless of where they came from. Accordingly, Worster characterizes the migrant 'exodusters' not as victims of a catastrophe inflicted by nature, but as victims of an exploitative agricultural system, whose one-crop specialization and tractor plowing had resulted in tremendous soil abuse on the plains, which Worster interprets in turn as the precondition for the dust storms.

For Worster, the Dust Bowl represents a landmark in the history of American agriculture: First of all it symbolizes the collapse of the farming system on the Great Plains and at the same time the clash between the old, rural way of family farming and modern, industrialized corporate farming. As Worster writes, the Dust Bowl represents in American cultural history "the final destruction of the old Jeffersonian ideal of agrarian harmony with nature: a relationship that would nurture the land while drawing from it an enduring, widely shared security and independence for rural folk" (*Dust* 45). Apart from the ecologic disaster, especially the social

disaster manifesting itself in the thousands of migrants roaming the land are historical indicators for Worster that the Dust Bowl's ultimate lesson is "that man's relation with the earth had gone awry" (*Dust* 45). Arguing that the Dust Bowl represents "the most severe environmental catastrophe in the entire history of the white man on this continent," Worster's *Dust Bowl* is at heart a blatant criticism of the American capitalist ethos and, more generally, a criticism of core American values, which he believes to be responsible for the environmental catastrophe:

The ultimate meaning of the dust storms in the 1930s was that America as a whole, not just the plains, was badly out of balance with its natural environment. Unbounded optimism about the future, careless disregard of nature's limits and uncertainties, uncritical faith in Providence, devotion to self-aggrandizement—all these were national as well as regional characteristics. (*Dust Bowl* 43)

Accordingly, Worster interprets the Dust Bowl as a catastrophe rooted in capitalist culture: "The dirty thirties were largely the outcome of a well-established, long-maturing economic culture, that of agricultural capitalism" ("Grasslands" 98).

More specifically, Worster argues in *Dust Bowl* that the economic crisis of the 1930s and the environmental crisis represented by the Dust Bowl have to be understood as interrelated events:

That the thirties were a time of great crisis in American, indeed, in world capitalism has long been an obvious fact. The Dust Bowl, I believe, was part of that same crisis. It came about because the expansionary energy of the United States had finally encountered a volatile, marginal land, destroying the delicate ecological balance that had evolved there. We speak of farmers and plows on the plains and the damage they did, but the language is inadequate. What brought them to the region was a social system, a set of values, an economic order. There is no word that so fully sums up those elements as 'capitalism.' (*Dust* 5)

As already outlined, Worster believes that American capitalism is characterized by a pronounced optimism regarding the human capacity to transform nature. Throughout the history of homesteading on the Great Plains, this optimism has translated into a complete disregard of the harsh environmental conditions on the plains and inadequate farming practices, argues Worster.

Indeed, many of the land use patterns and methods of cultivation employed in the region can be traced back to the early settlement of the plains in the nineteenth century, when information about the region's climate was hardly available. Although several expeditions had

explored the region—among them John Wesley Powell’s famous expedition into the Grand Canyon—, little scientific knowledge regarding the region’s agricultural potential was available during the first decades of settlement on the plains. Furthermore, results of explorations and expeditions that went into government reports were not readily available to the general public and farmers more often than not employed farming techniques that were known to them from the more humid climates of the East Coast states and Europe. Accordingly, lack of proper information on climate conditions combined with outright disinformation provided by booster propaganda often resulted in cultivation practices that were unsuited for the Great Plains.

As Worster points out, misleading information about the agricultural potential of the plains was provided by the boosters, who hoped to promote settlement of the plains by putting forth glowing accounts of agricultural opportunity in the region. One of the most influential and exemplary publications promoting the potential of farming in the West to the average American was Hardy W. Campbell’s *Campbell’s Soil Culture Manual*, published in several editions between 1902 and 1912.¹⁰⁹ In his manual, Campbell promoted a system of scientific farming for semi-arid lands and promoted the American West as a region that, through technological progress and industry, would provide opportunity and the good life for many:

Looking far into the future one may see this region dotted with fine farms, with countless herds of blooded animals grazing, with school houses in every township, with branch lines of railroads, with electric interurban trolley lines running in a thousand directions, with telephone systems innumerable, with rural mail routes reaching to every door. It is coming just as sure as the coming of another century. The key has been found and the door to the riches has been unlocked. (qtd. in Raban, *Bad* 32)

This key to new riches, Campbell believed, was to be small-scale farming and the small farmer was to succeed on the plains by using Campbell’s progressive, scientific farming techniques. For Campbell, scientific farming was thus the tool to shape a Jeffersonian society in the West. As Campbell put it: “Better farming means better farm homes, happier farm families, better citizenship, more nearly the ideal simple life” (qtd. in Raban, *Bad* 33).

Campbell believed that the West’s aridity could be overcome by a special technique of working the soil, so-called ‘dry farming.’ Based on the conservationist ethic, Campbell’s method focused on eliminating the unnecessary waste of natural resources and on conserving soil moisture. Campbell promised that by applying the dry-farming method, farmers would be able to overcome the West’s aridity. In a 1909 edition of the text, the optimism promoted by

¹⁰⁹ My reference to Hardy W. Campbell’s *Manual* has been inspired by Jonathan Raban’s *Bad Land*, especially Chapter 2, pages 18 to 50. Raban uses quotes from Campbell’s publication to illustrate the impact booster literature had on perceptions of the West in American culture at the beginning of the twentieth century.

Campbell's manual is expressed in one of the final chapters, listing evidence and eye-witness accounts for the success of Campbell's method:

Mr. Campbell, without irrigation, can make crops grow on hundreds of thousands of semi-arid square miles of 'desert' that otherwise would be fruitless and flowerless except for the wild growths, sparse and unprofitable, indigenous to such land and climate. In the natural habitat of the cactus, he grows wheat, corn, and vegetables. Between the Missouri river and the mountains, 'dry farmin' has become a phase of hope. (289)¹¹⁰

As Worster outlines throughout his work, such optimism towards the human capacity to overcome nature's limits is characteristic of American culture. In *Dust Bowl*, Worster illustrates how more and more homesteaders, inspired by booster propaganda, continued to move out West in search of opportunity, embracing the widespread idea that the climate of the Great Plains was changing in response to human settlement. According to this ideology, which was already well established in American culture throughout the second half of the nineteenth century, rain would 'follow the plough.'¹¹¹ As long-term studies of the plains' climate reveal, the earliest settlements in the plains region occurred during a wet cycle and accordingly, the first crops planted by settlers flourished, encouraging them to believe in their ability to overcome the adverse natural conditions. Although repeated droughts brought about great challenges for settlers and local authorities, the recurrence of periods of plentiful rainfall delayed the recognition of the need for changes in cultivation and land use practices.

In *Dust Bowl*, Worster primarily writes against the American optimism that nature's limits can be overcome through human ingenuity and technology and that the arid West can be turned into a fertile garden. Accordingly, Worster characterizes the failure of American agriculture on the plains during the 1930s as a direct consequence of such booster propaganda. "The most incredible fact of the dirty thirties," Worster writes, "was the tenacity of bourgeois optimism and its imperviousness to all warnings" (*Dust* 28). William Cronon concurs with Worster's assessment and argues that "the Dust Bowl had occurred because people had been telling themselves the wrong stories and had tried to inscribe that story—the frontier—on a landscape incapable of supporting it" ("Place" 1360). As Worster outlines, booster optimism and a widespread denial in American culture regarding the natural limits of

¹¹⁰ This quote is taken from the 1909 edition of Campbell's text available at <http://www.archive.org/details/campbellsoilcul00camprich>

¹¹¹ The idea that the environment would react to human action is paradigmatically reflected on a political level in the Timber Culture Act of 1873. The act stated that anyone who would plant 2.5 acres of trees and tend them for eight years could receive 40 acres of free land. The motivation behind the act was the belief that if settlers planted trees they would be encouraging rainfall. By 1890, this idea was finally abandoned.

the Great Plains environment resulted in vehement land abuse in the two decades before the Dust Bowl occurred.

The most severe form of land abuse on the plains during the 1910s and 1920s was the so-called Great Plow-up. The outbreak of World War I and the cut-off of grain shipments from Russia through the Turks turned the United States practically overnight into the largest producer and exporter of wheat in the world. The general belief in Washington was that wheat would be a decisive factor in winning the war by feeding the allied forces. In accordance with this doctrine and the surge of wheat demand, Kansas, Colorado, Nebraska, Oklahoma, and Texas expanded their wheat lands by 13.5 million acres in the years between 1914 and 1919, mainly by plowing up 11 million acres of native grass. With the aid of new farming instruments like the disc plough, American farmers ploughed up millions of acres in the shortest time, thereby destroying the natural grass vegetation which held the fine soil in place and protected it from wind erosion. The wheat crops quickly exhausted the top soil and the remaining grass-covered lands were often overgrazed by cattle and sheep herds and thus stripped of their cover. After the end of World War I, the Great Plow-up continued and reached a new climax during the prosperous 1920s.

In the thirteen southwestern Kansas counties alone, the crop acres were increased from two million in 1925 to three million acres in 1930. The plowing of ever-larger plots of land was often not mainly a matter of sheer greed, but a means of economic survival. Low crop prices and high costs for new machinery such as listers and disc ploughs—which were mostly bought on credit—forced farmers to cultivate more land in order to meet their required payments. Since most of the best farming areas were already being used, farmers increasingly turned to submarginal lands, which were even more vulnerable to soil erosion and nutrient leaching than the average acre of farm land on the plains. By using these areas, farmers were increasing the likelihood of crop failures, which in turn increased their vulnerability to drought. Taken together, reductions in soil conservation measures, new expensive farming technologies, and the encroachment onto poorer lands made the farming community more vulnerable to wind erosion, soil moisture depletion, depleted soil nutrients, drought and economic failure. Altogether, American farmers tore up the natural grass vegetation on 5,260,00 acres in the southern Plains. For Worster, the Great Plow-up paradigmatically expresses the capitalist relation Americans had developed to the natural environment of the Great Plains. “Essentially,” Worster writes, “the great plow-up was the work of a generation of aggressive entrepreneurs, imbued with the values and world view of American agricultural capitalism” (“Grasslands” 101).

The agricultural practices developed on the basis of this world view essentially contributed to the Dust Bowl catastrophe, Worster explains in *Dust Bowl*: “The storms were

mainly the result of stripping the landscape of its natural vegetation to such an extent that there was no defense against the dry winds, no sod to hold the sandy or powdery dirt. The sod had been destroyed to make farms to grow wheat to get cash” (13). When the worst dust storms hit the plains in 1935, 33 million acres had been stripped from their native vegetation and lay exposed and vulnerable to the winds. Worster thus concludes that “there can hardly be any doubt now that the destruction by plow of the grass cover on vulnerable lands—semiarid lands where the soil is loose and the horizon flat and open to winds—has been the leading reason for the devastating scale of dust storms in the twentieth century” (“Grassland” 96).

As already outlined, the ecological disaster on the plains coincided with the economic crisis that came to be known as the Great Depression. On Black Tuesday, October 29, 1929, the stock market crashed, triggering the worst economic collapse in the history of the modern industrial world. It spread from the United States to the rest of the world, lasting from the end of 1929 until the early 1940s. With banks failing and businesses closing, more than 15 million Americans (one-quarter of the workforce) became unemployed. As the result of the Great Depression and a record wheat crop in 1931, crop prices dropped even under the lowest prices of the 1920s, forcing farmers to cultivate even more acreage and to produce more crops in order to meet their farm and equipment payments. In this strained economic situation, the droughts hitting the plains on the 1930s further dramatized the crisis of agriculture on the plains. Great Plains farmers were hit hardest by the economic and ecologic disruptions and were forced to seek government assistance. A 1937 bulletin by the Works Progress Administration reported that 21% of all rural families in the Great Plains were receiving federal emergency relief.¹¹² However, even with government help, many farmers could not maintain their operations and were forced to leave their land. Some voluntarily deeded their farms to creditors, others faced foreclosure by banks, and still others had to leave temporarily to search for work to provide for their families. In fact, at the peak of farm transfers between 1933 and 1934, nearly 1 in 10 farms changed possession, with half of those being involuntary (from a combination of the depression and drought).

In the context of America’s economic crisis, Franklin Delano Roosevelt was elected President with a landslide victory in 1932, promising a ‘New Deal’ for the American people. Roosevelt’s New Deal program presented an unprecedented number of reforms intended to mitigate and solve the catastrophic effects of the Great Depression. Like no other president before him, Roosevelt promoted the idea of the welfare state and legitimized “a notion of

¹¹² Compare I. Link, T. J. Woofter, Jr., and C. C. Taylor. *Research Bulletin: Relief and Rehabilitation in the Drought Area*. Washington, D.C.: Works Progress Administration, 1937.

government that used its power and resources to protect people from getting trampled in the competitive jungle of free enterprise—the aged, the unemployed, the migrant workers” (Worster, *Dust* 154). Roosevelt’s New Deal was thus in stark contrast to the prevailing ideals that had dominated American culture throughout the Roaring Twenties. Whereas American society celebrated personal ambition throughout the prosperous 1920s and believed that individual failure was the result of lack of hard work, the Roosevelt administration introduced a completely new paradigm. In contrast to his predecessor Herbert Hoover, Roosevelt believed in the federal government’s social responsibility and advocated federal help and intervention for the benefit of society’s weak members. New Dealers translated their empathy for the disadvantaged and their opposition against business monopolies into a broad move toward government regulation of the economy. Federal responsibility to care for those in need as well as federal regulation of the economy became the most basic principles of Roosevelt’s administration. By promoting ‘big government,’ New Deal politics changed the relationship between Americans and their government lastingly.

Within the first one hundred days in office, Roosevelt passed a variety of bills designed to relieve poverty, to reduce unemployment, and to promote economic recovery through congress. As his first measure, Roosevelt declared a four-day bank holiday, during which Congress drafted the Emergency Banking Bill of 1933. Roosevelt succeeded in stabilizing the banking system by restoring the public faith in the banking industry, which was now backed-up by the federal government. As a second step, Roosevelt invented programs that put unemployed Americans back to work. Most prominent among these programs were the Civil Conservation Corps (CCC) and the Works Progress Administration (WPA). The CCC, one of the New Deal’s most successful programs, sent 3 million single men from age 17 to 23 to the nation’s forests to dig ditches, build reservoirs and plant trees. The men, all volunteers, were paid \$30 a month, with two thirds being sent home. The WPA, Roosevelt’s major work relief program, gave work to more than 8.5 million, mostly in infrastructure programs designed to build bridges, roads, public buildings, parks and airports. In addition, the National Industrial Recovery Act (NIRA) and the National Recovery Administration (NRA) were designed to address unemployment by regulating the number of hours worked per week and banning child labor. The Federal Emergency Relief Administration (FERA), created in 1933, gave \$3 billion to states for work relief programs. In 1934 alone, Congress initiated relief action adding up to over \$525 million.

As agriculture was among the economic sectors hit hardest by the depression and as the ideal of the independent American farmer as the pillar of American society gave special symbolic importance to the status of the farmers, agriculture became one of the most important concerns of New Deal politics. In special programs, the New Deal administration

targeted the agricultural crisis on the Great Plains. The strongest federal effort to help farmers on the plains was the Agricultural Adjustment Act (AAA) of 1933, which regulated subsidization of farmers for reducing crops and provided loans for farmers facing bankruptcy. After relative farm incomes had been falling for decades, the AAA included the reworking of existing programs for agrarian relief, which had been demanded for decades. The most important initiative promoted by the AAA was the provision for crop reductions, which was intended to raise prices for farm commodities. Producers of seven basic commodities—corn, cotton, dairy products, hogs, rice, tobacco, and wheat—would now agree on production limits for their crops. The government would then, through the AAA, tell individual farmers how much they should plant and would pay them subsidies for leaving some of their land idle. A tax on food processing would provide the funds for the new payments. Farm prices were to be subsidized up to the point of parity. The AAA was the first program on such a scale on behalf of the troubled agricultural economy, and it established an important and long-lasting federal role in the planning within the entire agricultural sector of the economy.

Worster has a critical perspective on New Deal politics, especially on the AAA. As Worster argues in *Dust Bowl*, New Deal politics as expressed in the AAA did not solve the problems at hand and did not result in a general questioning of American agricultural practices. “The AAA approach,” Worster writes, “whether right or wrong in what it attempted, fell far short of success. It did not improve the lot of the large number of poor, marginal farmers, nor did it control effectively the big, well-capitalized growers” (*Dust* 158). Although the AAA promoted a reasonable reduction of crop production, Worster argues that it did not succeed in altering the basic nature of farming on the plains. Rather, Worster claims, the AAA was often used by farmers to receive financial aid from the federal government to sustain their old farming practices. Believing that the Dust Bowl was the result of environmentally unsustainable farming practices, the AAA represents for Worster a well-intended, but ill-adapted program enabling farmers to continue the pastoral mode of production on the plains. In principle, Worster believes that the federal subsidies provided through the AAA sustained the agricultural system that had triggered the Dust Bowl in the first place. As Worster writes, “the AAA above all was a source of money” (*Dust* 156). Accordingly, Worster concludes that the measures taken by the New Deal administration to solve the environmental problem of the Dust Bowl did not address the core problem of the human-nature relationship in American culture.

Worster acknowledges that New Deal politics initially addressed crucial environmental issues, especially a new set of ethics for the human-nature relationship. New Deal politicians were the first to outright attack American frontier optimism and claimed that settlers had been far too optimistic in their assessment of the plains’ agricultural potential and had failed to

acknowledge drought as a permanent fact of life on the plains. Accordingly, the crucial assumption voiced by New Dealers was that the ecological problems on the plains were a product of human action—and thus a product of a human value system. This value system, New Dealers believed, was best summarized by the terms of the competitive system of laissez-faire capitalism, and this economic system, New Deal politicians reasoned, was detrimental to nature.

The critical stance of the New Deal administration towards the environmental degradation caused by American farming was expressed in the government report of Lewis Cecil Gray, *The Future of the Great Plains*, submitted to the administration in 1936.¹¹³ Gray—economist, leading agricultural historian and the first chief of the Division of Land Economics of the U. S. Department of Agriculture—composed the report as head of a committee assembled by President Roosevelt with the specific purpose of studying the root causes of the Dust Bowl phenomenon. Gray provided an explanation of what he took to be the cultural roots behind the Dust Bowl phenomenon. “No other study,” Worster characterizes the scope of Gray’s report, “collected as much social and economic information about rural communities or understood so clearly and fully the root causes of the Dust Bowl disaster” (“Climate” 61). Gray primarily identified settlers’ attitudes of mind as the underlying cause of the Dust Bowl disaster. “All of the attitudes identified,” Worster summarizes Gray’s findings, “were those found at the heart of the expansionary, free-enterprise culture” (*Dust* 194). Most notably, Gray argued that the American idea that nature was an entity to be conquered was rooted in frontier ideology and mainly responsible for the ecologic plight on the plains. “It is an inherent characteristic of pioneering settlement,” Gray wrote, “to assume that Nature is something of which to take advantage and to exploit; that Nature can be shaped at will to man’s convenience” (qtd. in Worster, “Climate” 61).

Gray made a further point by arguing that it was a common misperception that resources in the West were abundant and inexhaustible. Again, Gray linked this misperception to pioneer ideology, which had promoted the human domination of nature’s resources rather than the human adaptation to nature’s limits. The most crucial misperception among American farmers, Gray argued, was that the West’s aridity could be permanently overcome through irrigation technology. “The current popular emphasis on new supplies of water...by which irrigation farming may widely replace dry farming, rests on hopes inevitably doomed to disappointment.... Sound water-mindedness will recognize the basic facts of nature which man is powerless to alter” (qtd. in Worster, “Climate” 62). Finally, Gray enumerated several characteristics of the American capitalist ethos that he

¹¹³ Gray’s report was published as *The Future of the Great Plains: Report of the Great Plains Committee* (Washington: Government Printing Office, 1936).

believed to be detrimental to nature, among them a pronounced belief in individualism and private ownership and a strong trust in the growth-capacity of markets and speculative commercialism. Accordingly, Gray concluded that to overcome the ecologic and economic problems posed by the Dust Bowl phenomenon, Americans had to accept the West's natural limits and had to revise their capitalist, utilitarian reduction of nature as a resource to be exploited and commodified. "The remedy," Worster summarizes the conclusion of Gray's report, "would have to involve a pronounced shift away from that economic order" (*Dust* 195). "It is our ways, not Nature's, which can be changed," Gray phrased his most general conclusion (qtd. in Worster, "Climate" 61).

For Worster, the Dust Bowl crisis and Gray's government report are significant in so far as both challenged the human-nature relationship inherent in the capitalist economic system. Worster believes that Gray's report exemplifies the general change of paradigm promoted by New Deal politics, which was characterized by a new land ethic designed to protect the integrity of nature against the excesses of an unrestrained capitalist order. Worster summarizes the New Deal ethic as follows:

It was an ethic devoted to stability, order, and continuity, as well as to equity and commonwealth—all values lost or jeopardized by the restless entrepreneur.... Henceforth, each generation was to leave the earth in as good shape as it had found it, or in even better shape: that, in short, was the cultural imperative emerging in the troubled 1930s. ("Sense" 75)

Worster enumerates several New Deal measures representing the new conservation ethic advocated by the Roosevelt administration.

The first New Deal measure dedicated to protecting nature was the Taylor Grazing Act of 1934, which protected lands from exploitation through individual entrepreneurship by setting them aside in the public domain. Following the conservation politics of Gifford Pinchot and Theodore Roosevelt, the Taylor Grazing Act declared the majority of unappropriated grasslands in the American West—approximately 80 million acres—as part of the public domain, thereby closing these lands to further settlement. Named after Congressman Edward Taylor, the Taylor Grazing Act represents the first federal effort to regulate grazing on federal public lands by establishing grazing districts and a permit system to manage livestock grazing in the districts. The protected acreage was to function as a grazing resource, which was to be managed by local livestock ranchers, who were in turn organized in districts supervised by the Department of the Interior. Thus, the land set aside was to be protected from overstocking and overgrazing as well as from homesteading and farming in order to retain its natural vegetation.

The Taylor Grazing Act was a significant federal effort designed to protect the grasslands of the West from overuse through private business and to establish federal control over the unappropriated public domain in the West. As a lesson learned from the dust storms, New Deal politicians understood that the natural vegetation of the plains was of utmost importance as a protection against wind and water erosion of the soil. Accordingly, the Taylor Grazing Act was designed

to stop injury to the public grazing lands by preventing overgrazing and soil deterioration, to provide for their order, use, improvement, and development, [and] to stabilize the livestock industry dependent upon the public range. (qtd. in Worster, "Cowboy" 44)

To enforce the act, the Roosevelt administration founded the National Grazing Service, which set up a system of leasing public lands to livestock ranchers. As part of the Department of the Interior, the National Grazing Service—later to be renamed into the Bureau of Land Management—thus supervised ranchers through a leasing system that together with the Forest Service, which administers grazing leases within the national forest system—encompassed by far the largest part of the rural West. The Taylor Grazing Act thus represents one of the severest restrictions of private enterprise and private land use in the American West.

Not surprisingly, Donald Worster is generally in favor of such restrictions to private entrepreneurship; for him, the Taylor Grazing Act is especially significant as it tried to break with established ranching traditions. For Worster, ranching is next to farming the second essential element of the American pastoral mode of production. Worster argues that ranching on the Great Plains—just like farming—has promoted the spreading of monocultures, thereby interrupting the carefully balanced ecologic order of the plains. Worster is convinced that ranching severely interfered with the plains environment by commodifying the land and reducing it to its grazing function. Ranching on the Great Plains was from the beginning a business sector, Worster points out, conforming to the rules of the capitalist market place:

The ranch was unmistakably a modern capitalist institution. It took form in the marginal environments of the New World, where heretofore there had been only a few domesticated animals. It specialized in raising exotic cattle and other animals to sell in the marketplace, furnishing meat, hides, and wool to the growing metropolises of the East and to Europe. Livestock became a form of capital in this innovative system, capital that was made to earn a profit and increase itself many times over without limit. But the animals were only one part of the capital—a mere mechanism for

processing the more essential capital, the western grasslands, into a form suitable for human consumption. (“Grasslands” 41)

According to Worster, the first quarter-century of livestock ranching on the plains from 1865 to 1890 was a disaster, as ranchers used the public land for grazing without proper federal legislation. “The range belonged to no one,” Worster summarizes the common attitude, “therefore, it belonged to everyone. The first individuals to arrive simply appropriated what they wanted and, without legal title, began to take off the grass” (“Grasslands” 41).

The result of unregulated grazing was overgrazing, which in the 1880s—in combination with exceptionally harsh winters—led to mass starvation of livestock, the “greatest loss of animal life in the entire history of pastoralism” (Worster, “Grasslands” 41). As a result of the apparent federal mismanagement, ranchers demanded the privatization of the public domain:

Privatizing the range, it was argued, would give the western grazer a real incentive to manage the land better and avoid the kind of irresponsible free-for-all of the 1880s. With a fee simple title in hand, he would be more likely to invest in long-term improvements, especially fencing.... There would be less erosion, depletion, and weedy invasion. Under a program of privatization the range would yield a higher economic return while simultaneously remaining a more healthy and productive environment. (Worster, “Grasslands” 42)

However, a dissenting opinion was voiced by those who feared the transfer of the public domain into the hands of private entrepreneurship. “The great western pastures,” Worster summarizes the argument used against privatization, “had been acquired at the price of considerable blood and money by the federal government on behalf of all the American people, and they should stay public. Since almost everything else had been disposed of into private hands, these lands were all that was left of a public heritage” (“Grasslands” 42). In general, the debate around the public domain in the context of ranching in the American West is divided between these two opposing fractions, those in favor of privatization of the public lands and those demanding federal protection of the public domain. For my analysis of Worster’s assessment of the pastoral mode of production, it is merely important to note that Worster is against the privatization of the public domain, as he believes that without federal protection, private business will exploit the environment of the Great Plains beyond its natural limits. Accordingly, Worster interprets the Taylor Grazing Act of the New Deal period as a paradigmatic

piece of federal legislation favoring the protection of public lands over the interests of private entrepreneurship.

Only one year after the Taylor Grazing Act, the New Deal administration initiated the Soil Erosion Act, which passed Congress in April of 1935. As Donald Worster writes, the Soil Erosion Act represents “the first effort in the United States to establish a nationwide, comprehensive program to preserve the very earth on which farming and rural life depend” (“Sense” 71). The act identified soil erosion as “a menace to the national welfare” and advocated scientific research and action in order to stop “the wastage of soil and moisture resources on farm, grazing, and forest lands” (qtd. in Worster, “Soil” 71). In order to prevent erosion, the act initiated federal action on private as well as public lands. The measures advocated by the act even included the federal acquisition of private properties where land misuse was feared. As had been the case with the Taylor Grazing Act, the Roosevelt administration established a new agency within the Department of Agriculture, the Soil Conservation Service (SCS), in order to support the measures promoted by the Soil Erosion Act.¹¹⁴

Following the establishment of the SCS, a number of federal conservation programs were created to rehabilitate the plains environment. The programs were mainly intended to change the basic farming methods on the plains in order to reduce their destructive impact on the soil. Among the most popular measures were seeding areas with grass, rotating crops, the use of strip and contour plowing, as well as the planting of so-called ‘shelter belts,’ rows of trees to break the wind. If the lands treated were in private hands, the federal agencies more often than not paid farmers in order to put the new farming techniques into practice. By 1938, the extensive re-plowing of land into furrows, the planting of trees in shelterbelts, and other conservation methods had resulted in a 65 percent reduction in the amount of soil blowing. However, ultimate relief only came to the Dust Bowl when rain came back to the affected regions in the fall of 1939.

The decline of the drought cycle at the end of the 1930s almost coincided with the outbreak of World War II. By 1941, most regions that had been affected by the droughts were receiving near-normal rainfalls. Simultaneously, the outbreak of the war resulted in the increased production in the war industries and the greatly increased demand in wheat. As a result, the war alleviated many of the social and economic problems of the Dirty Decade and helped the United States to gradually pull out of the depression. With rain returning to the plains and a worldwide exploding market for wheat, the plains once again became the world’s wheat factory. In this context, federal government shifted its funds and priorities away from drought-

¹¹⁴ The Soil Conservation Service is today called the Natural Resources Conservation Service.

related programs. In addition, men that had been working in any of the New Deal work programs had to join the armed forces or contribute otherwise to the war effort. As a result, the various federal conservation programs initiated during the 1930s were significantly reduced throughout the 1940s. In addition, the average American shifted his focus away from conservation measures once rain had returned to the plains and the lessons of the Dust Bowl slowly faded from memory. Eventually, many of the inappropriate farming and grazing practices attacked throughout the 1930s were continued or taken up again in the period following the war years.

Accordingly, Worster concludes that New Deal politics ultimately failed to fundamentally alter or question the logic of capitalism in general, the human-nature relationship in American culture more specifically, or, most importantly, Americans understanding of the natural limits of the American West:

Nothing in any of the federal activities altered much the system of non-resident tenure, factory-like monoculture, and market speculation that had dominated the country. Not only did it fail to induce these changes, the emerging welfare state actually prevented their occurring. In the main it propped up an agricultural economy that had proved itself to be socially and ecologically erosive. (*Dust* 163)

Worster sees the failure of New Deal politics mainly rooted in their embracement of conservation ethics as articulated by the progressive conservation movement in the United States of the late nineteenth and early twentieth century. Representatives of the conservation movement, among them most prominently President Theodore Roosevelt and Gifford Bryce Pinchot, from 1905 to 1910 the first Chief of the United States Forest Service, tried to protect pristine nature from the destructive commercial assault on nature characteristic of the frontier era. Although conservationism advocated the protection of nature from excessive exploitation, it nevertheless accepted the overall framework of the capitalist economy. As Carolyn Merchant correctly notes, “conservation was rooted in an ethic of human stewardship over creation while nevertheless supporting the growth of trade and commerce central to the mainstream Recovery Narrative” (*Reinventing* 86). Accordingly, conservationists like Roosevelt and Pinchot were not against the commodification of nature as such, but rather against the unreasonable waste of natural resources. As Alfred Crosby points out, “the old conservationists wanted to assure the conservation of resources for future use, that is, the harvesting rather than the mining of nature” (Crosby, “Past” 1186).

The wise use of nature promoted by conservationists thus involved a scientific, managerial relationship with the environment, which was supposed to guarantee the most

effective way of dealing with nature. As biologist Michael Soulé points out, conservation politics are thus always based on a strong bureaucratic apparatus and the expertise of a diversified knowledge elite:

Conservation policy is made by bureaucrats, technocrats, planners, development specialists, lawyers, and economists. Their views often determine how governments decide to manage wildlands and biodiversity, or if they should be managed at all. These professionals are employed by governments, by international development agencies, by large environmental and conservation organizations, and by the World Bank. (“Social” 161)

The conservationist idea that nature has to be efficiently managed with the help of science and technology in order to prevent unnecessary waste of resources did thus not surface during the economic and ecological crisis of the 1930s, but developed in the period between the end of the nineteenth century and World War II. Samuel Hays describes the evolution of conservation politics in American culture as follows:

Prior to World War II, when the term ‘environment’ was hardly used, the dominant theme in conservation emphasized physical resources, their more efficient use and development. The range of emphasis evolved from water and forests in the late nineteenth and early twentieth centuries, to grass and soils and game in the 1930s. In all these fields of endeavor there was a common concern for the loss of physical productivity represented by waste. The threat to the future which that ‘misuse’ implied could be corrected through ‘sound’ or efficient management. Hence in each field there arose a management system which emphasized a balancing of immediate in favor of more long-run production, the co-ordination of factors of production under central management schemes for the greatest efficiency. (“Conservation” 102)

Accordingly, conservation did not primarily aim at protecting or preserving nature, but promoted, on the contrary, the efficient use of natural resources.

Worster sees the conservationist scientific, managerial relationship reflected in New Deal politics. As Worster writes in “Climate and History:”

New Deal Conservation came dressed in the dark suits and eyeglasses of academic experts. It was nothing if not rational, unsentimental, and technically proficient. Among its proponents in Washington, who were typically from social-science fields, especially land or agricultural economics, scientific intelligence was where conservation must begin. Their own approach to protecting the land was to create new institutions for America that would represent society’s interest: public planning was their main hope, application of those plans in a free-market economy was their unresolved difficulty. (198)

Worster thus argues that New Dealers believed in salvation through scientific and technological manipulation of the land whereas the only true way to change agricultural practices on the plains would have been to teach Americans a new set of ethics outside of the logic of capitalism. “Their reforms,” Worster judges the efforts of the New Deal politicians, “were all in method, while their motives conformed to those of commercial agriculture” (*Dust* 211).

In this sense, New Deal politics were in a certain respect a continuation of the country politics embraced by President Theodore Roosevelt, who’s Commission on Country Life declared in a government-funded report in 1909 that the average American farmer’s individualism and self-reliance was an obstacle to the financial and social betterment of society. “Self reliance being the essence of his nature,” the report stated, the American farmer “does not at once feel the need of cooperation for business purposes or of close association for social objects” (qtd. in Raban, *Land* 163). As a result, the first Roosevelt administration concluded that “it was government’s responsibility to socialize and educate the farmer.... Rural state and federal agencies needed to be strengthened in order to subdue the crew of tousle-headed individualists working the land” (Raban, *Land* 163). The Roosevelt administration, who had previously lured homesteaders to the West by promising them the fulfillment of their individualistic dreams, now thought that the only way to control the large numbers of self-reliant farmers was supervision by government agents and the institutions they represented.

Along the same lines, the New Deal administration believed that the proper response to farmers’ naivety was government interventionism, strong government action planned by scientific experts. “Plainspeople, for all their energy, courage, and love of the land,” William Cronon describes the perspective of New Dealers, “were incapable of solving their own problems without help. They had made such a mess of their environment that only disinterested outsiders, offering the enlightened perspective of scientific management, could save them from their own folly” (“Place” 1361). At the same time, almost all New Deal programs were based on the belief that an increased deficit spending was needed to overcome the economic and social problems at hand. Roosevelt’s belief in deficit spending was in part inspired by Frederick Jackson Turner’s idea that it was the closing of the frontier that explained the stagnation of economic growth and the subsequent collapse of the US economy.¹¹⁵ Deficit spending was thus seen as a way to compensate for the loss of frontier opportunities. As President Roosevelt stated in 1932:

¹¹⁵ Turner does not explicitly predict an economic crisis triggered by the closing of the frontier in the Frontier Thesis itself. However, in his 1910 presidential address before the American Historical Association headlined “Social Forces in American History,” Turner demands increased government action in order to protect the public domain from corporate exploitation and to thereby safeguard the character of American society as described in “The Significance of the Frontier in American History.”

A glance at the situation today only too clearly indicates that equality of opportunity as we have known it no longer exists.... Our last frontier has long been reached.... There is no safety valve.... All this calls for a re-appraisal of values.... Our task now...is...the soberer less dramatic business of administering resources,...of distributing wealth and products more equitably. The day of enlightened administration has come.
(qtd. in Nash, *Creating* 41-42)

Accordingly, Worster claims that the conservationist approach of New Deal policy makers was at the bottom line progressive, characterized by the same optimism that had always determined Americans' relationship towards nature. With the help of science and technology, Worster summarizes the overall framework of the Roosevelt administration's land politics, the apparent agricultural mismanagement on the plains could be overcome:

The agronomists, like the ecologists, were optimists about the power of reason to rule over human affairs on the plains. They were even more confident than the scientists were of their ability to work with commercial farming. (*Dust* 225)

New Dealers thus not only believed that the Dust Bowl could have been prevented if only farmers had been better educated as to how to successfully farm in an arid climate, but were convinced that the scientific supervision and management of plains agriculture would in the long run result in the adaptation of American farming to the arid conditions of the West.

As outlined in the previous chapter, Worster is deeply critical of the idea that federal bureaucracy is suited to implement a healthier, more sustainable relationship towards nature in American culture. As William Cronon writes, Worster believes that "the refusal to recognize natural limits is one of the defining characteristics of a capitalist ethos and economy" and accordingly, Worster doubts that federal land politics in capitalist societies can escape the economic mandate of profit maximization and the resulting exploitive relationship to the land ("Place" 1363). Because New Deal politics did not fundamentally challenge the capitalist ethos, Worster assesses the conservation program of the New Deal era as a failure:

Agricultural conservation of the New Deal era was, on balance, a failure in the Great Plains. Neither the federal land-use planners nor the ecologists made a lasting impact on the region. The agronomists and soil technicians, although they were more successful in getting their version of conservation translated into action, were ultimately ineffectual, too.... But all the same, the agronomists' success in reforming the plains was, to put it in the best light, partial, and, to put it in the most critical light, self-defeating.... They

offered farmers a technological panacea for ecological destructiveness, when the root issue was motivation and values—a deeply entrenched economic ethos. The return of dust-bowl conditions in the 1950s demonstrated, or should have demonstrated, the inability of a technical assistance program by itself to reform the old ethos. And that program was, in the end, by far the major legacy of New Deal conservation. (*Dust* 229)

For Worster, New Deal politics essentially represents the principal idea of the progressive era, namely that a scientific-technocratic management apparatus in the hands of federal government would be the ultimate answer to the environmental challenges of the American West. Worster, in contrast, suggests that the cause of the Dust Bowl was rooted in the booster mentality of the homesteading farmers and that only a change of paradigm in American culture towards a less materialistic understanding of nature could solve the environmental problems at hand.

Placed in the larger discourse of Western American historiography, Worster's interpretation of the Dust Bowl contradicts especially the arguments brought forth by James C. Malin in a series of three essays in 1946. In the essays, Malin argued that the Dust Bowl erosion had been caused by a series of severe droughts, which were not abnormal when seen in the context of long-term climatic developments in the plains region. For Malin, the dust storms were "part of the economy of nature and...not in themselves necessarily abnormal" (qtd. in Worster, "Grasslands" 95). According to Malin's interpretation, farmers had not so much caused the ecologic catastrophe, but were rather the victims of the natural conditions on the plains. Furthermore, following Theodore Roosevelt's skeptical attitude towards the negative impact of pioneer ideals on Western society, Malin argued that homesteaders' pioneering culture was unprepared for the environmental limitations of the Great Plains environment. "As newcomers," Worster summarizes Malin's perspective on the plains' farmers, "they did not understand what their environmental limits were nor have the techniques to overcome them ("Grassland" 97). Strongly opposed to government regulation and supervision, Malin was convinced that farmers would do better if only they understood the natural limits of the environment. Although Malin acknowledged the natural limits of the plains, he nevertheless believed that through ingenuity and persistence these limits could eventually be overcome.

Worster agrees with Malin that cycles of droughts were a regular, normal climatic phenomenon on the plains. "Droughts are an inevitable fact of life on the plains," Worster writes, "an extreme one occurring roughly every twenty years, and milder ones every three or four" (*Dust* 12). However, Worster believes that Malin was wrong in two major points: The Dust Bowl was not only a natural phenomenon, nor was it

the premature pioneering culture that had contributed to the storms; rather, Worster argues, it was the culture of unchecked private entrepreneurship that had essentially contributed to the environmental disaster. Worster argues that federal government, driven by its ambition to settle the West, had promoted the idea of private entrepreneurship to such an extent that the production of wealth had become the overarching principle in the region. Worster thus claims in contrast to Malin that the Dust Bowl was mainly rooted in the capitalist mentality, not the environment itself. “Entrepreneurialism was part and parcel of the social ideal of economic individualism,” Worster describes the booster mentality that characterized homesteading in the West and concludes that “it deliberately made, with no end of paradox, the pursuit of private wealth into a social ethic” (“Grassland” 101).

Nowhere in his work does Worster provide any detailed program or solution on how to overcome capitalism and its apparent mismanagement of natural resources. Worster is not a political or economic theorist interested in providing models for the reorganization of American capitalism at large; rather, Worster is an environmental philosopher concerned with questioning and changing the principal values informing American culture, especially American attitudes towards nature. Worster believes that before individual environmental practices of American capitalist culture can be changed, a more general revision of the values informing this culture needs to take place; Worster claims that this is especially true for life in the arid regions of the West:

What is needed is a fundamentally new approach to the challenge of how to extract a farm living from the hydrological cycle, both in humid and in arid regions. That requires vision more than technique: a way of perceiving, a set of mental images, an ethic controlling agricultural policy and practice. (“Thinking” 131)

The most basic idea that needs to be challenged in Western culture, Worster argues, is the “unquestioned conquest of nature in the name of material progress” (“Water” 52). Furthermore, Worster believes that between the two opposing options of either placing the land in the hands of a federal bureaucracy or placing it in the hands of private entrepreneurs, the best solutions would be a form of communitarian, public ownership of the land:

The safest strategy over the long run appears to be one that opens decisions about using the range to as many people as possible. The most stable systems of grazing have been those in which the experience, knowledge, and moral pressure of a whole community guided the individual grazer. (“Cowboy” 51)

Worster remains rather vague on how such communitarian ownership and management of the land could be achieved and structured, especially in the context of a capitalist framework.

Clearly, however, Worster's position is inspired by John Wesley Powell's communitarian irrigation model. As outlined, Powell was convinced that the solution to aridity was to be found in irrigation districts, which resembled a conglomerate of individual farms, combined and supervised in a community district. According to Powell, irrigation districts managed by farming communities prevented on the one hand monopolies of large corporate farms and on the other hand the centralization of power in federal agencies. Powell's irrigation model thus suggested that the only solution to the West's aridity lay in community and cooperation. As Larry McMurtry correctly notes, Powell was convinced that "collective stewardship of the earth was possible.... If there was cooperation, if there was sharing, then some of the arid lands could be watered and sustainable settlement made possible" ("Powell" 102). Although Worster disagrees with Powell's belief in science and technology as the means to achieve an ideal irrigation society, he nevertheless agrees with him on the overall idea that communitarian stewardship of the land, based on the general acceptance of humankind's dependence on the order of nature, could work as an antidote to the capitalist ethos.

In his essay "Good Farming and the Public Good," Worster presents a list of criteria he believes sustainable farming should be measured by. According to Worster, good farming is farming that "makes people healthier," that "promotes a more just society," and that "preserves the earth and its network of life" (92-93). At the end of the essay Worster concludes that throughout the twentieth century, American capitalist farming has mostly failed to meet any of the three criteria listed above. In contrast to the peaceful image of the American West as the garden of the world and the small farmer as the cornerstone of American democracy, Worster believes that American agriculture is in reality an aggressive business. "American agriculture," Worster writes, "pushed by market forces and armed with unprecedented technology, has increasingly become a violent enterprise ("Good" 93). In contrast to the romantic image of America as nature's nation, Worster characterizes the true relationship of American culture with nature as expressed in the hydraulic and the pastoral mode of production of American capitalism as destructive. "The completely laissez-faire economy, the system in which private property is regarded as a moral absolute and individual greed is allowed to go unchecked, has amply demonstrated its destructive energies," Worster writes ("Cowboy" 51). Although

Worster is against the public funding of American agriculture through federal agencies, I believe he is at the same time in favor of controlling private enterprise through federal legislation. At least, Worster is in favor of setting limits to capitalist culture; and who, one might ask on a pragmatic level, could enforce such restrictions better than federal government? As I will argue in the conclusion, Worster remains vague on how the capitalist ethos might be restricted or how public opinion might be influenced towards embracing a healthier relationship towards nature.

Worster's overall conclusion regarding the Dust Bowl experience is that despite the catastrophe, agribusiness in the West continued to follow its capitalist, large-scale course of food production in the decades to follow. Worster is convinced that this system will eventually collapse once the water resources stored in the underground aquifers run out or federal subsidies are cut:

The Great Plains, which we once prophesied would be the garden of the world, is still our most failure-prone agricultural region, as it has been throughout the twentieth century. Take away the underground water reserve of the High Plains aquifer, and the area would lose a considerable portion of its farm economy. Take away federal relief and price supports, and it would lose even more. The exhaustion of the aquifer within another half-century is now pretty certain, and the drying up of federal monies is more and more a distinct possibility. ("Marriage" 66)

If Americans continue to disregard nature's limits, Worster claims, it is only a matter of time until agriculture in the Great Plains region will be confronted by the next environmental disaster. As Worster concludes in *Dust Bowl*:

American agriculture, however, persists in believing that it can ignore ecological truths, that it can live and plow and prosper without restraint. Already we have forgotten the debacle and the discipline of the 1930s. If we believe that we can repeat all the old mistakes of overexpansion and escape the consequences, we are heading, as surely as we were in the roaring twenties, for Dust Bowl IV. (239)

Accordingly, Worster's assessment of American capitalism as undertaken in his study of the Dust Bowl is one of dark forebodings.

As I tried to outline in my analysis of Worster's definition of the hydraulic and the pastoral mode of production, Worster's environmental histories of the American West are in fact critical studies on American capitalism. As such, they are narratives of decline, predicting the "rise and fall of capitalism," as William Cronon comments ("Place" 1636). An assessment of Worster's work as an environmental historian of the American West thus necessarily involves an

analysis of his understanding of capitalism, which I tried to provide throughout this chapter. Worster's environmental reading of American capitalism, in turn, is based on a very specific definition of 'nature,' which I will outline in the following final chapter of this dissertation.

*“We ought to be helping people find again
the coherence, pattern, and integrity of nature,
to help locate the realm of nature
into which we can once more put our human history.”*

Donald Worster
“Seeing Beyond Culture”

IV. The Order of Nature: Problematizing Donald Worster's Concept of 'Nature' in the Context of Postmodernism and Ecology

In order to complete my analysis of Donald Worster's work, I want to take a closer look at Worster's definition of 'nature' as it is expressed in his environmental histories. I argue that Worster's concept of 'nature' is strikingly at odds with contemporary ecological theory as well as postmodern discourse theory, as it presupposes that 'nature' is a stable point of reference against which human transformations of the environment can be measured. Whereas postmodern theory has drawn attention to the social, linguistic constructedness of the concepts we employ to make sense of the world and has challenged the idea that objective, permanent truths exist in nature or elsewhere, Donald Worster's environmental histories are written with the conviction that 'nature' is not just a word self-referentially representing our ideas about 'nature,' but a complex order existing outside and independent of the realm of human signification. Similarly, Worster is convinced that the writing of history is not simply the subjective 'emplotment' of historical data, as postmodern scholars would have it; rather, Worster believes in the capacity of the environmental historian to explain the degradation of nature by examining the detrimental impact humans have on the environment. Accordingly, 'nature' works in Worster's environmental histories as a material referent which gives structure to the very discourse it is an object of, thereby counterbalancing the postmodern notion of the constructedness of all historical knowledge. Based on his central belief that the human dependence on nature is the most existential fact of human life, Worster considers the postmodern preoccupation with semantics at best a matter of wrong priorities, especially against the backdrop of industrial capitalism's unprecedented degradation of the environment throughout the second half of the twentieth century. Hence, Worster is not primarily interested in semantic definitions of what 'nature' actually is and where the boundaries between nature and culture begin or end, as he believes such theoretical reasoning to be a futile undertaking considering the planet's current environmental predicament; for Worster, nature is simply "the world we have not in any primary sense created" ("Doing" 292-293). Before I will outline Worster's concept of 'nature' in more detail, I will first recapitulate the main paradigms of postmodernism.

Most generally, postmodern discourse can be considered as the critical confrontation of late Western capitalist culture with its Enlightenment heritage. Throughout its evolution as a major school of thought during the second half of the twentieth century, postmodernism attacked a number of core values and concepts of Western culture, all of which are arguably rooted in the European Enlightenment project. Postmodern philosophers especially questioned Enlightenment's celebration of 'progress' and the notion that science and technology would

continually advance human society. As French philosopher Jean-François Lyotard paradigmatically put it in “Defining the Postmodern:” “One can note a sort of decay in the confidence placed by the two last centuries in the idea of progress. The idea of progress as possible, probable or necessary was rooted in the certainty that the development of the arts, technology, knowledge and liberty would be profitable to mankind as a whole” (6). The erosion of Western culture’s faith in progress, science and technology was especially propelled by the atrocities of World War II, which shattered the self-perception of western culture at large.

Against this backdrop, postmodern philosophers started to question Enlightenment’s most sacred heritage, the concept of the human subject, the belief in its capacity to decipher the ways of the world and to move society forward through the power of reason. “The perceiving subject,” Linda Hutcheon summarizes the postmodern definition of the human subject, “is no longer assumed to be a coherent, meaning-generating entity” (“Beginning” 252). According to postmodern theory, the human individual was not the rational, objective observer and producer of stable, semantic systems, but was itself a social construct, a cultural product of the Western mind. Postmodernism thus understood the human subject as determined by language’s fixed semantic categories and questioned its capacity to observe the world in objective terms. Hence, postmodernism defines the subject as predetermined by a myriad of cultural discourses and thus not as the master of signification, but its slave. Questioned in its central meaning-generating functions, the free, rational human subject of Enlightenment evaporates. “The individual, the great invention of Western humanism,” Louis Menand correctly notes, became “in this view, an abstraction... our identity, our subjectness, like everything else, is a function of relation” (“Modernity” 313).

While contesting the coherent, rational subject, postmodernism simultaneously advocated a general questioning of any totalizing or homogenizing system—be it semantic, economic, political or other. Especially a profound distrust towards the mimetic functions of language, a questioning of its capacity to discover and represent any fixed, stable, and lasting truths in the material world around us, became the trademark of postmodern theory. In his famous essay “Structure, Sign, and Play in the Discourse of the Human Sciences,” French philosopher Jacques Derrida argued in 1966 that as human beings, our mimetic capacities are always limited by a language system that functions as a historical *a priori*. Whatever truth we might try to state about the world around us, Derrida suggested, language always predetermines what we perceive and how we perceive it. The function of language as described by Derrida is thus characterized by its limiting rather than its liberating capacities. “We cannot utter a single destructive proposition which not already slipped in the form, the logic, and the implicit

postulations of precisely what it seeks to contest,” Derrida wrote (“Structure” 226). Accordingly, Derrida’s understanding of language was profoundly at odds with the idealist legacy of Humanism.

More to the point, Derrida’s theory especially questioned structuralism’s concept of language as a stable semantic system determined by the relationship between signifier and signified. Whereas structuralism defined semantic signification as a function of stable relations between representations of referents and maintained that individual semantic units derive their value and significance by their relational place in the overall structure of language, Derrida suggested that the generation of meaning in language was endlessly deferred due to language’s relational character. According to Derrida, meaning in language was not generated by a fixed semantic relationship between signifier and signified, but rather by a ‘free play of signifiers.’ The idea that privileged, semantic centers do not exist in language represent a crucial shift of paradigm in Western culture, as Derrida argues:

This moment was that in which language invaded the universal problematic; that in which, in the absence of a center or origin, everything became discourse...that is to say, when everything became a system where the central signified, the original or transcendental signified, is never absolutely present outside a system of differences. The absence of the transcendental signified extends the domain and the interplay of signification *ad infinitum*. (“Structure” 225)

According to Derrida’s perception of language as a system of floating signifiers in which signification is endlessly deferred, there is no position outside of or uninfluenced by language’s relational character.

Deconstruction as coined by Derrida thus promoted a new language paradigm that assumed that “meaning is always a question of relationships: of words within sentences; of sentences within texts; of texts within discourse and its contexts” (Russel, “Context” 296). The crucial consequence of Derrida’s language theory is that there is no point that exists outside of the textual system from which the generation of meaning within the system itself could be altered or controlled and that there is in turn no *real* outside of the language system that language can represent in any direct way. What follows is, as Katherine N. Hayles writes,

that we can never know whether a representation is true, in the sense that it is congruent with reality, because we have no exterior place to stand from which we can see reality as such. Hence we can never compare representations to reality, only to one another. (“Searching” 58)

Undermining language’s very capacity to adequately define and describe reality, deconstruction stressed the immaterial representation of reality through language over material reality. Especially in the humanities, the desire to grasp the ‘real’ or ‘natural’ was increasingly substituted by a new focus on the mimetic (dis)function of language.

Jean-François Lyotard further contributed to the postmodern understanding of language as a self-referential system. In *The Postmodern Condition: A Report on Knowledge*, Lyotard diagnosed in 1984 that “the narrative function is losing its functors, its great hero, its great dangers, its great voyages, its great goal” (72). Whereas modernism had been characterized by the belief in the grand religious, scientific, or economic master narratives, Lyotard argued, the postmodern crisis of language had triggered a general distrust towards such overarching hermeneutic systems of signification and had fostered an “incredulity toward metanarratives” (*Knowledge* 72). The master narratives of Western civilization such as Enlightenment, Humanisms, Liberalism, and Christianity were no longer perceived as universal truths, Lyotard pointed out, but as temporary fictions, narratives shaped and legitimized by particular interests within existing power structures. In this context, the moral absolutes contained in the old master narratives of Western culture were perceived as relics of a strongly hierarchical, ideological past and were substituted by a strong sense of distrust towards all hermeneutical systems.

Accordingly, production of knowledge is perceived in postmodern theory as an act of arbitrary semantic construction, an artificial effort to create a feeling of contingency where in reality there is only the assembled composition of ideology-driven teleologies. As Bernd Engler writes:

The postmodern distrust of the ‘master-narratives’ of our culture finally unmasks all modes of signification as arbitrary acts by which we re-inscribe our personal patterns of world-making and our cultural ideologies back into reality. But as a result we are constantly reminded of the fact that our hope to master the unfamiliar is a vain illusion. (“Dismemberment” 33)

Simultaneously, postmodernism’s critical investigation of the mimetic functions of language led to a more general questioning of the existence of the ‘real,’ which Gerald Graff summarizes as follows:

There is, then, no such thing as a ‘real’ object outside language, no ‘nature’ or ‘real life’ outside the literary text, no real text behind the critical interpretation, and no real persons or institutions behind the multiplicity of messages human beings produce. Everything is swallowed up in an infinite regress of textuality. (“Myth” 78)

Ironically, while poststructuralist theory undermined the mimetic capacity of language, the essay production theorizing the state of language simultaneously skyrocketed in humanities departments, especially throughout the 1980s and 1990s.

Poststructural language theory had a crucial impact on the social sciences. Derrida's concept that there was no privileged semantic center in language systems was applied by sociologists to develop new models of society. The emerging new social sciences of the 1960s and 1970s questioned the unchallenged position of the white, ruling elite and pushed the issues of minority groups to center stage. As race, class, and gender emerged as new sociological categories against the backdrop of the social movements of the 1970s, a new focus towards what had formerly been thought of as the margins of society became manifest. The following paragraph by Linda Hutcheon illustrates the impact of Derrida's language theory on sociology:

The center no longer completely holds; from the decentered perspective, the "marginal" and the ex-centric (be it in race, gender or ethnicity) take on new significance in the light of the implied recognition that our culture is not really the homogeneous monolith (i.e. male, white, Western) we might have assumed. ("Beginning" 252)

If neither language, nor society had an authorizing center, if cultural structures were not natural, but constructed, as Derrida suggested, the question remained what held language and society together? Louis Menand summarizes the destabilizing impact of deconstruction on traditional understanding of relatively closed semantic systems as follows:

What deconstruction suggested was that although cultures take the form of structures—languages, kinship systems, gender roles, social and economic hierarchies, sexual norms, belief systems—there is nothing *natural* about these structures, since there is no transcendental point around which they are organized and no extra-representational reality to which they refer. ("Modernity" 311)

Michel Foucault ultimately took Derrida's philosophy one step further by arguing that it was power that held the various, free-floating systems of cultural relations together and that it was hence the relationship between power and knowledge production that determined the course of society.

Foucault tried to show that power reified cultural systems through discursive functions in such a way that the order within the individual cultures appears as natural. In order to reveal the constructedness of cultural orders, Foucault studied power relations within society as they were manifest in its discursive practices. For Foucault, culture was a web of discourses, which functioned in accordance with specific rules dictated by the ruling regimes of power. Foucault's great agenda was to uncover the ways in which specific discourses produced knowledge and notions of 'truth' that correspond with the given power structures. As Foucault writes in "Truth and Power:"

It is a question of what *governs* statements, and the way in which they *govern* each other so as to constitute a set of propositions which are scientifically acceptable, and hence capable of being verified or falsified by scientific procedures. In short, there is a problem of the regime, the politics of scientific statement. At this level it's not so much a matter of knowing what external power imposes itself on sciences, as of what effects of power circulate among scientific statements, what constitutes, as it were, their internal regime of power, and how and why at certain moments that regime undergoes a global modification. (54-55)

Under the impact of Foucault's theories, the self-reflexive examination of discursive practices became a great trend in postmodern art, literature, and philosophy in the 1980s and 1990s. A self-reflexive investigation of all socially determined patterns of cognition, reasoning, expression, and action became the primary focus of humanity departments, which perceived "meaning as a system, culture as a web of discourses, individual identity as a product of social codes of behavior" (Russel, "Context" 296).

Foucault's theories had a decisive impact on the understanding of 'nature' in Western culture. Whereas 'nature' or the 'laws of nature' had formerly been understood to refer to the 'natural' order and origin of things, Foucault argued that these supposedly eternal, inherent truths in nature were in fact only temporary products of scientific discourses. "'Nature' is an object of knowledge studied by subjects who gain knowledge," Katherine Hayles summarizes the impact of Foucault's theories on an emerging new understanding of 'nature' in Western culture ("Searching" 57). The 'truths' of nature discovered by scientific discourses, Foucault suggested, were creations of power elites—bureaucratic, academic, or other—who regulated and formulated the ruling principles of the leading discourses of the time. Under the impact of Foucault's theories, 'nature' was thus no longer understood to refer to some unbiased truths, but rather as a powerful discursive category that divided the material world along politically motivated categories of 'natural' and 'unnatural,' 'normal' and 'abnormal,' or 'sane' and 'insane.'¹¹⁶

The proclaimed collapse of authentic hermeneutic centers and the understanding of society as a layer of co-existing discourses resulted in a questioning of all categories previously considered as 'natural,' most importantly sex and race, which were now understood to be arbitrary constructions of 'otherness,' products of cultural signification

¹¹⁶ Foucault was especially interested in examining the genesis of categories such as 'normal' and 'abnormal' or 'sane' and 'insane' patterns of behavior in the scientific discourses of western civilization. In *Madness and Civilization*, published in 1961, Foucault examined the categorization of 'madness' from the medieval ages to the eighteenth century; in *The Birth of the Clinic: An Archaeology of Medical Perception*, published in 1963, he traced the discursive and institutional development of the medical profession. In his three-volume study on *The History of Sexuality*, published in 1984 shortly before his death, Foucault examined the function of 'sexuality' as an analytic category of power as well as the development of a science of sexuality and the simultaneous establishment of what Foucault called 'biopower' in western culture.

legitimized by a ruling power elite determined to defend the status quo. In this context, nature's material reality itself was questioned. Concepts such as 'environment' or 'nature' were now assumed to be constructs that corresponded less with any graspable, objective reality, but with the specific interests and presuppositions of the observer. With the simultaneous advancements of the life and techno sciences, most spectacularly exemplified by the decoding of the human genome and the progress made in the field of genetic engineering, the dividing lines between the natural and the cultural, the naturally grown and the artificially constructed organism became increasingly blurred. "The certainty of what counts as nature—a source of insight and promise of innocence—is undermined, probably fatally," Donna Haraway, professor and chair of the History of Consciousness Program at the University of California at Santa Cruz, comments on the impact of the life and techno sciences on the changing notions of 'nature' in Western culture ("Cyborg" 152-53).

Like Foucault, Haraway claims that 'nature' is always a product of scientific discourses and denies that any definite differentiation between nature and culture is possible at all, as nature is only accessible via the mediation of discourse:

No natural object-world speaks its metaphor-free and story-free truth through the sober objectivity of culture-free and so universal science. Biology is also not a discourse that reaches back into the mists of time, to Aristotle or beyond. It is, rather, a complex web of practices that emerged over the last two hundred years or so, mainly in what gets called the West, in the midst of major inventions and reworkings of categories of nation, family, type, civility, species, sex, humanity, nature, and, race. ("Universal" 323)

In coherence with Lyotard's assessment that postmodernism is characterized by an incredulity towards meta or master narratives, Haraway similarly sees the erosion of the dividing line between nature and culture as a paradigmatic expression of postmodern culture at large. "The transcendent authorization of interpretation is lost, and with it the ontology grounding 'Western' epistemology," she diagnoses ("Cyborg" 153). While postmodern discourse generally questions the accessibility of nature's 'true nature,' Haraway claims that technological advancements, especially in the realm of genetic engineering, have added further stimulus to the decline of traditional concepts of 'nature' as a fixed entity. Haraway does not interpret this development as a threat, but as a potentially liberating development within Western culture. According to Haraway, cyber-technology and the resulting blurring of the traditional conceptual oppositions between humans, animals, and machines contains a great emancipatory potential, as it challenges

the essentialist ideology of the pre-postmodern era with its dogmatic truths and rigid value systems.

Haraway's positive assessment of the breakdown of the nature-culture divide can be considered as a paradigmatic expression of a general tendency in postmodern culture to celebrate the erosion of the 'real,' 'natural,' or 'material' as a liberating cultural development. "There is a postmodern reaction," Paul Shephard correctly notes, "that welcomes the disappearance of the dichotomy between the natural and the artificial and indeed all dichotomies" ("Virtually" 38). The following statement by Kate Soper is worth being quoted in full length, as it tellingly summarizes this development:

The current concern is less with finding and fixing the criteria for drawing clear demarcations between human, animal, and machine and more with winning acceptance to the idea that these borders are, or are fast becoming, more blurred than we previously thought. Very often, moreover, claims to this effect come with a suggestion that these hybrid forms and fusions are a positive development: that it is ecologically progressive and/or humanly emancipatory to break down these conceptual barriers and commit ourselves to less rigid, fuzzier modes of thinking. So much is this the case that one is often given to believe that merely to have pointed to a muddying of the conceptual waters is to have advanced some new, post-humanist form of enlightenment. In some cases, too, the argument is explicitly pitted against a romantic reverence for the intrinsic value or 'otherness' of nature. Instead of seeking ecological salvation by overcoming human alienation, this neo-anti-romanticism invites us to view the route to eco-redemption as proceeding via some kind of conceptual meltdown. ("Humans" 85)

If Foucault and Haraway represent the neo-anti-romantic discourse on 'nature,' environmental historians like Donald Worster have to be associated with the material, anti-postmodern—if you will romantic—definition of nature.

In the context of postmodernism, nature is today often no longer perceived as an independent reality out there, but as a complex entity we refer to via abstraction and which we increasingly reorganize into spheres of culture. Especially in the context of climate change, some scholars have suggested that in the modern industrialized nations, culture has permeated nature to such an extent that the distinction between the two has become impossible. A paradigmatic expression of such sentiments can be found in Bill McKibben's *The End of Nature*, in which McKibben argues that climate changes triggered by carbon dioxides and CFCs have a global impact on nature through global warming and that through such global, human-induced weather changes nature has become manmade and artificial everywhere on the planet. According to McKibben, then, nature as the conceptual opposite of culture has stopped to exist due to the global human impact on the environment: "We have ended the thing that has, at

least in modern times, defined nature for us—its separation from human society” (qtd. in Worster, “Country” 244). As McKibben argues, the cultural permeation of nature is all-encompassing in the twentieth century; the world has become a total product of culture.

Especially in climatology, chaos theory has added further stimulus to the emergence of a completely new understanding of nature. Although relativity theory and quantum mechanics have already fundamentally challenged Newtonian physics in the mechanistic sciences, chaos theory further undermines traditional definitions of nature as linear systems of structure and order in the discourse of the natural sciences—especially in physics, biology, and astronomy. Carolyn Merchant summarizes the relationship between chaos theory and Newtonian Physics as follows:

Chaos theory and complexity theory suggest that only the unusual domain of mechanistic science can be described by linear differential equations. The usual—that is, the domain of everyday occurrences, such as the weather, turbulence, the shapes of coastlines, and the arrhythmic fibrillations of the human heart—cannot be so easily described. The world is more complex than we know or indeed can ever know. The comfortable predictability of the linear slips away into the uncertainty of the indeterminate—into discordant harmonies and disorderly order. (*Recovering* 212)

In contrast to the every-day meaning of the term ‘chaos,’ which usually refers to complete disorder, systems that exhibit mathematical chaos are, according to chaos theory, deterministic and thus display some form of order. However, chaos theory maintains that complex systems—such as the earth’s climate—are difficult to predict due to their sensitivity to small changes. The cumulative effect of these small changes as well as the indefinite number of possibilities of their potential timing make it difficult or nearly impossible to predict future conditions with a high degree of certainty, chaos theorists argue. “Chaos theory,” Carolyn Merchant notes, “reveals patterns of complexity that lead to a greater understanding of global behaviors, but militate against overreliance on the simple predictions of linear differential equations” (*Reinventing* 212).

Chaos theory has especially been in high demand within the discourse of climatology throughout the past two decades. As climate change became increasingly a subject of both scientific and public debate in the context of global warming, meteorologists perceived climate as innately chaotic and believed that climate patterns were “nonlinear, stochastic, and dependent on too many variables to locate simple order in them—the simple order that the old science of meteorology expected” (Worster, “Climate” 60). Additionally fueled by the questioning of classical mechanics at the atomic level in quantum physics, relativity theory, and through Heisenberg’s uncertainty principle, chaos became increasingly recognized as

the principal pattern in nature. Simultaneously, earlier ecological models that had portrayed a progressive, self-equilibrating nature that tended towards order and stability were no longer believed to be accurate. “The widely accepted notion that, without human interference, ecosystems reached a climax state, in which the species arranged themselves in the proper numbers, proportions, and relationships,” Patricia Nelson Limerick describes the change of paradigm, “has yielded to a picture of nature always in change and flux (“Mission” 176). Under the impact of chaos theory, ecologists thus assumed that nature lacked determinable direction, stability, or predictability and was perceived as “fundamentally erratic, discontinuous, and unpredictable...full of seemingly random events that elude our models of how things are supposed to work” (Worster, “Chaos” 167).

Like postmodernism, chaos theory has a fundamental impact on our understanding of nature and challenges especially environmental historians by defining ‘disturbance’ as the norm in nature and by questioning ‘nature’ as a stable referent against which to measure human transformations of the environment. “The appearance of chaos as an actor in science and history fundamentally destabilizes the very concept of nature as a standard or referent,” Carolyn Merchant notes, and Mart A. Stewart concludes that ecologists today “can no longer provide the sure model of nature against which historians can measure human impact” (“Environment” 356-57). Hence, environmental historians lose one of their most important methodological and rhetoric devices. As William Cronon states, chaos theory questions

the familiar modern habit of appealing to nonhuman nature as the objective measure against which human uses of nature should be judged. Recognizing the dynamism of the natural world, in short, challenges one of the most important foundations of popular environmental thought. (*Uncommon* 26)

Whereas environmental historians of the 1970s and 1980s mostly characterized nature as the victim of human manipulation, humans were frequently perceived to be the victims of a chaotic, unpredictable nature throughout the 1990s. Carolyn Merchant summarizes this trend as follows:

The new approaches disrupted the idea of a balance of nature that humans could destroy but also restore. Humanity was not the only major disturber of a prehuman ecosystem. Natural disturbances, such as tornadoes, hurricanes, fires, and earthquakes could in an instant wipe out an old-growth forest, demolish a meadow, or redirect the meander of a river. Humanity was less culprit and more victim; nature more violent and less passive. Environmental history moved away from assigning all destructive change to humans and toward chance and contingency in nature. (*Reinventing* 6)

Chaos theory can thus be said to trivialize the human impact on nature. Many scientists who wish to downplay human responsibility for climate change, for example, find good arguments in chaos theory to sustain their reasoning. Climate, it has often been argued throughout recent years, has not only experienced many dramatic changes throughout the planet's history, it is at the same time too chaotic and erratic in its behavior for humans to draw any final conclusions regarding humanity's potential responsibility for effects such as global warming. The most paradigmatic example for such reasoning has been the non-recognition and rejection of the Kyoto Protocol by the United States, based on the argument that the depletion of the ozone layer and the resulting warming of global climate cannot scientifically be proven to be the result of human behavior.

Not surprisingly, Donald Worster is critical of postmodern theory and recent trends in ecological theory. For Worster, postmodern preoccupations with semantics are at best a matter of wrong priorities, especially against the backdrop of industrial capitalism's unprecedented degradation of the environment throughout the second half of the twentieth century. Worster is not interested in semantic definitions of what 'nature' actually is and where the boundaries between nature and culture begin or end, as he believes such theoretical reasoning to be a futile undertaking considering the planet's current environmental predicament. Be it postmodern concerns with semantics, discourse theory's analysis of the interplay between production of knowledge and power, or the contemporary blurring of the categories 'nature' and 'culture' in the life sciences: Worster's work as an environmental historian depends on the assumption that 'nature' is not merely a human invention, but an independent fact larger than human life.

Donald Worster's reluctance to answer the postmodern challenges and his rejection of new ecological models has made him appear decidedly outdated during the 1990s. While postmodernism proclaimed the dissolution of meaning in the material world by questioning language's hermeneutic capacities, Worster continued to defend the existence and the significance of the material world, especially as encountered in the order of nature. In opposition to such trendy proclamations as the 'death of nature,' the 'end of history,' or the 'death of the author,' which came to represent the postmodern focus on semantics, Worster continued to argue that nature indeed has a material reality, an independent order that can be grasped and described by the human mind. More importantly, Worster argued that the environmental historian had a moral commitment to document and analyze the history of environmental transformation in the context of accelerating environmental degradation in modern society. It is thus characteristic for Worster that he neither questions the material order of nature, nor the environmental historian's capacity to detect and describe this order. Unlike

many of his colleagues, Worster is not troubled by the fact that in describing ‘reality,’ historians have to make subjective choices based on values and morals. Rather, Worster believes that the commitment to moral standards is at the heart of his work as an environmental historian, especially in times when the order of nature is increasingly threatened and destabilized by human influence. Acknowledging the simple truth that humankind’s future is existentially linked to its non-human environment, Worster considers the postmodern preoccupation with semantics and authorship as paradigmatic expression of a vain, self-centered culture.

The debate among environmental historians regarding the proper definition of ‘nature’ became especially heated during the late 1980s and the 1990s. While the environmental history gathered renewed momentum in the United States in the context of the New Western History’s efforts to reinterpret U. S. history, postmodern discourse simultaneously undermined the very basis many environmental historians built their narratives on. In this context, a dispute arose among environmental historians regarding the general definition of the field’s central analytic category ‘nature.’ The general question of how to distinguish between the ‘natural’ and the ‘cultural’ and how to assess the impact of culture on nature became the subject of a controversial debate. Donald Worster summarizes the nature of this debate as follows:

We [environmental historians] disagree over whether the natural world constitutes any kind of order or pattern that we can know and, if it does, over whether that order can be apprehended by means of science or not. We debate what is “natural” and what is not, what is “cultural” in the landscape and what is not, whether Indians in the precontact period “managed” the whole environment or only some small part of it, how much was wilderness and how much was the white pioneer’s mythology or fetish. We have divergent opinions over the extent to which nature influences human affairs, some taking up a position of limited environmental determinism, others insisting that culture determines all.
(*Wealth* viii)

The debate regarding the status of nature in environmental history was—and is—aligned between two opposing poles, a positivistic position and a constructionist position. As Leo Marx suggests, the positivistic positions assumes that

reliable, unmediated knowledge of ‘nature’ or the ‘environment’ is obtainable by means of direct sense perception and that it may then simply be added to the cumulative findings of science.... Nature, environment, and the world are a transparently accessible domain of incontrovertible fact.
 (“Environmentalism” 4)

According to the positivistic position, nature does indeed possess an intelligible order that can be—and has to be—differentiated from the various orders of culture. In contrast, the constructionist position answers the postmodern challenge by assuming that ‘nature’ is an arbitrary category whose meaning is determined by culturally constructed narratives, which are in turn the products of particular historical contexts, cultures, and social groups. According to this perception, nature has no fixed, intrinsic order, but changing, culturally attributed meanings. “The notion of the ‘environment,’ or ‘nature,’ as transhuman reality disappears, replaced by a variety of interpretative lenses,” Leo Marx summarizes the essence of the constructionist position (“Environmentalism 4-5). Following the postmodern paradigm, constructionists believe that ‘nature’ receives its meaning primarily through scientific discourses, which are in turn perceived not as expressions of superior knowledge, but as temporary cultural products of selective, cognitive perception. Accordingly, the main task for constructionist is “to understand, analyze, and deconstruct discourse about nature and our environmental dilemma, and in the process to challenge the illusion that we have access to the ostensibly ‘real,’ knowable environment” (Marx, “Environmentalism” 5).

Worster generally opposes the relativism promoted by the constructionist point of view and, in contrast to the postmodern emphasis on semantics, stresses the material reality of nature. Whereas postmodernism understands the world as a gigantic simulacrum, which disguises the real behind a myriad of cultural layers, Worster argues that “no landscape is completely cultural; all landscapes are the result of *interactions* between nature and culture” (“Seeing” 1144). More to the point, Worster argues that postmodernism’s focus on semantics and discourse ultimately works to disguise and cover up the material reality of the world. Furthermore, Worster is convinced that postmodernism’s questioning of all hermeneutic systems has led to an “excess of relativism,” a general decline of values, and a distinct sense of nihilism in Western culture (“Seeing” 1145). Worster resents the postmodern distrust towards value systems and abhors the nihilism he believes to be promoted by postmodern discourse. “The foremost philosophical challenge of this age,” Worster writes, “is to escape the state of nihilism, relativism, and confusion that modernistic history, and modernistic everything else, have left us in” (“Seeing” 1146). As an environmental historian, Worster sees the constructionist challenge of postmodernism as a threat, as it undermines his self-definition as an environmental historian. “Carried far enough, the philosophy of historical relativism teaches us that we must even try to free ourselves from current value judgments and write dispassionately the history of our obsession with history,” Worster writes about the impact of postmodernism on the practice of writing history (“Disorder” 75). Worster’s work is thus ultimately about preserving values, about the belief in the human capacity to make choices.

Accordingly, Worster is critical of the postmodern questioning of material reality, especially the order of nature:

We are forced to admit that nature is something more complicated, tenacious, and subtly ordered than our languages or analyses can pin down.... It is apparent that there are patterns, processes, events, and beings in the landscape that we did not invent or set in motion. We must admit that our brains cannot claim credit for their existence. ("Country" 245)

Quite in contrast to both postmodern theory as well as chaos theory, Worster is convinced that there is indeed an order to be found in nature:

One of humankind's oldest intuitions is that the realm of nature has an objective, independent order and coherence; that we are to some extent a part of that order, to some extent out of it and opposed to it; that in any case we ought to respect it. For me that intuition is basically an acceptance of the unconscious, unplanned, unsuperintended wisdom of evolution. ("Seeing" 1146)

Worster is aware, of course, that from a scientific point of view, it is not sufficient to proclaim the order of nature, but that it needs to be proven. As an environmental historian, Worster places his faith in the ability of the science of ecology to illustrate an orderly, coherent nature:

The science of ecology still reveals a realm beyond our human economies, and beyond the work we do in them, a realm that has been described as a vast, elaborate, complex 'economy of nature,' an organized realm that is working energetically and skillfully to satisfy the needs of all living things, creating what might be called the indispensable 'values' of existence. Without the smooth functioning of that greater economy, without those values that are brought into being by a hardworking nature, no group of people could survive for an hour, and the making of history would come to an abrupt end. ("Transformation" 1093)

As I already pointed out, environmental history has to be understood as a hybrid discipline, drawing on the one hand from the methodology of history, on the other hand from the science of ecology. To understand Worster's concept of 'nature,' one thus needs to understand the basic ecological models Worster draws from as an environmental historian.

Under the impression of the historization of nature in the theories of Charles Darwin, ecology emerged as the scientific study of natural history during the late nineteenth century. German biologist and Darwinist Ernst Haeckel coined the term 'oecologie' in 1866, which first appeared in the English language in 1873. However, it was not before the 1890s that ecology achieved a vague status as an academic discipline, studying the distribution and abundance of living organism, their habitats, and the interactions between the organisms and their

environment. Objects of study were thus from the beginning not only living organisms, but also abiotic elements observed through climate and geology. As James C. Malin wrote in “Ecology and History” in 1950, “both history and ecology may be defined as the study of organisms in all their relations, living together, the differences between plant, animal, and human ecology or history being primarily a matter of emphasis” (295). Following the literal meaning of the term’s Greek etymological roots, ‘ecology’ was from the beginning used with a holistic meaning, referring to concepts of nature based on ideas of communities, systems, and wholes.¹¹⁷ As Worster explains, ecology’s purpose was from the beginning “nothing less than to explain the interrelations of all plants and all animals in their environments” (*Dust* 199). This holistic agenda defined the first half-century of ecological theory, which by 1950 had developed into a full-grown academic discipline with professional journals, societies, graduate programs, and ruling doctrines. I argue that Worster’s concept of the ‘economy of nature’ as a system governed by ‘patterns’ and ‘coherence’ is informed by these older ecological theories that dominated the first half of the twentieth century. Especially the model of nature provided by ecologists Frederick Clements and Eugene P. Odum, who portrayed nature as a system tending towards stability and order, have had a decisive influence on Worster’s understanding of nature.¹¹⁸

The writing of American ecologist Frederick Clements centered around two interrelated themes, the dynamics of ecological succession in the plant community and the organismic character of the plant formation, which he formulated in two major publications, *The Development and Structure of Vegetation* and *Plant Succession: An Analysis of the Development of Vegetation*. Based on his studies on vegetation patterns on the Nebraskan prairies, Clements developed a dynamic ecological model that was concerned primarily with vegetation patterns, especially the phenomenon of ‘successional development’ in plant communities. Intrigued by the Darwinian concept of flux in nature and cycles of evolution in

¹¹⁷ The etymological root of the term ‘ecology’ is ‘oikos,’ the Greek word for house.

¹¹⁸ For Worster’s take on ecological theory, see especially his publications “Doing Environmental History,” *The Ends of the Earth: Perspectives on Modern Environmental History*, ed. Donald Worster (New York: Cambridge UP, 1988): 289-307; “Nature and the Disorder of History,” *Reinventing Nature? Responses to Postmodern Deconstruction*, ed. Michael E. Soulé and Gary Lease (Washington: Island Press, 1995): 47-63; “Nature as Natural History: An Essay on Theory and Method,” *Pacific Historical Review* 53 (1984): 1-19; *Nature’s Economy: A History of Ecological Ideas*, 1977, 2nd ed. (Cambridge: Cambridge UP, 1994); “Restoring a Natural Order,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 171-83; “The Ecology of Order and Chaos,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 156-70; “The Nature We Have Lost,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 1-15; “The Shaky Ground of Sustainable Development,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 142-55; “The Vulnerable Earth: Toward a Planetary History,” *The Ends of the Earth: Perspectives on Modern Environmental History*, ed. Donald Worster (New York: Cambridge UP, 1988): 3-20; “The Wealth of Nature,” *The Wealth of Nature: Environmental History and the Ecological Imagination* (New York: Oxford UP, 1993): 203-19.

the landscape, Clements tried to show how vegetation zones evolved from a 'pioneering stage' with few organisms and little complexity to a 'climax stage' with maximum complexity and a stable, self-replicating community. At the climax stage, Clements argued, the composition of plants and animals exists in a perfect balance with the environment. This state of balance, the so-called 'steady state,' is in theory maintained by the community until it is thrown off balance by outside forces or invaded by new organisms. If a community is disturbed by outside forces such as floods, fire, logging, or over-grazing, Clements argued, it recovers its original species composition once the disturbance ceases. Clements called this process 'succession.'

According to Clements' model, organic nature resembles a gigantic organism, which he calls 'superorganism' or 'associations.' Within superorganisms, Clements believed, all individual parts tended to work in cooperation to sustain the greater whole. "The ecological ideal," Clements wrote, is one of "wholeness, of organs working in unison within a great organism" (qtd. in Worster, *Dust* 204). The main idea promoted by Clements' theory was that communities tend towards a state of enduring equilibrium and can reproduce their original composition after a disturbance in a process of succession. According to Clements' model, natural communities functioned like automatic mechanisms, running smoothly in a set rhythm until disturbed by external forces. Nature was thus understood as a variety of cooperating organisms in a community of interdependent parts. "If we look at a landscape through Clements' eyes," Michael G. Barbour summarizes, "we see a simple, harmonious patchwork pattern" ("Ecological" 235).

The second major influence on Worster's concept of nature is, I argue, the theory of the 'ecosystem' as provided by Eugene P. Odum. Whereas ecologists of the first half of the twentieth century had mainly observed nature as botanists and had studied vegetation patterns, nature was by the 1940s perceived as a system in which energy and nutrients flowed through a physical or thermodynamic system. New keywords and concepts like 'energy flow,' 'trophic levels,' and 'ecosystems' appeared in the leading journals of the time. Simultaneously, the comparison of biotic communities with living organisms was criticized for being a too monolithic and too teleological approach. In this context, a new concept emerged that was from now on to dominate the discourse of ecology: the 'ecosystem.' English ecologists Arthur Tansley first defined the term 'ecosystem' in 1935 as a unit formed by the interaction of coexisting organisms with their nonliving environment.¹¹⁹ Unlike Clements, Tansley believed that the term 'community' was ill-suited for describing units in nature, as it

¹¹⁹ Apparently, Tansley's colleague Roy Clapham had first used the term in 1930. It was Tansley, however, who first defined the term scientifically.

strongly evoked human categories of social behavior. Similarly, Tansley rejected Clements' focus on biology and botany and focused instead on the physical aspects within the ecosystem by describing the flow of chemicals and energy within the system. As Donald Worster writes, "the notion of the ecosystem was founded on the assumption that the entire universe is firmly structured into complex physical interactions and that science can make sense of that structuring only by selecting small ordered pieces of it to study and describe" ("Restoring" 175). The term 'ecosystem' thus reflected the new impact physics had on the science of ecology.

Eugene P. Odum's publication of the *Fundamentals of Ecology* in 1953 made the concept of the ecosystem popular and signified the beginning of a new era in ecology, in which nature was now increasingly perceived to be composed of ecosystems in which energy flows in orderly fashion through the food chain. The overall direction of the ecosystem was measured through the flow of energy within the ecosystem, which in turn determined the trophic structure, biotic diversity, and the material cycles within the system. Ecosystems, Odum claimed, aimed at "achieving as large and diverse an organic structure as is possible within the limits set by the available energy input and the prevailing physical conditions of existence" (qtd. in Worster, "Chaos" 159-60). Interconnected by the global flux of energy, nature consisted for Odum as a great network of ecosystems of varying sizes. Ecosystems, Odum wrote in *Fundamentals of Ecology*,

are of the most various kinds and sizes. They form one category of the multitudinous physical systems of the universe, which range from the universe as a whole down to the atom. The whole method of science...is to isolate systems mentally for the purposes of study...the systems we isolate mentally are not only included as parts of larger ones, but they also overlap, interlock and interact with one another. (qtd. in Worster, "Restoring" 175)

Within this global network of ecosystems, Odum claimed, the individual ecosystem encompassed all organisms in a given area as they interacted with their physical environment. "One might define an ecosystem as the collective entity of plants and animals interacting with one another and the nonliving (abiotic) environment in a given place," Donald Worster summarizes Odum's overall concept ("Transformations" 1092).

Within the individual ecosystem, Odum argued, organisms evolved from an initial stage of competition to a state of cooperation and symbiosis. As the ecosystem advances, Odum believed, it eventually reaches a point of homeostasis at which it has accumulated enough biomass to spend its energy not on further accumulation, but only

on the protection from outside disturbances. Accordingly, Odum claimed that there were two different stages of ecosystems: the ‘developmental stage’ and the ‘mature stage.’ The forces of nature, Odum believed, generally moved ecosystems from the first to the latter stage. Hence, ecosystems as defined by Odum tended to move towards a form of no-growth economy, a state similar to Clements’ concept of climax equilibrium. Just like Clements, Odum believed that ecosystems developed in general in an orderly direction towards a state of maximum diversity and complexity. As Donald Worster states, the overall process in Odum’s ecosystem “was orderly, reasonably directional, and predictable, and it culminated in stability” (“Disorder” 70).

As I argue, the concepts of nature as orderly structures developing in linear fashion towards a steady or climax state are much more attractive to Worster than newer ecological paradigms highlighting the chaotic, fragmentary aspects in natural systems. Worster’s mode-of-production analyses of the American West are focused on outlining the detrimental effect of capitalism on the environment. To do so, Worster needs to rely on concepts of ‘nature’ as provided by Clements and Odum that maintain that environmental disturbances can be measured against some theoretically stable, objective point of reference, such as the climax or steady state of ecosystems. According to such theories, the human impact on nature can be measured by the degree to which it prevents natural communities from reaching their climax state or the extent to which it disturbs an ideal state of balance in nature.

Especially during the formative years of the environmental movement, the idea that nature—without human disturbance—tends to some form of balance was widely accepted. Simultaneously, however, a new keyword surfaced in ecology during the 1970s that most fundamentally challenged the notion of equilibrium in nature: ‘disturbance.’ During the heyday of Odum’s ecosystem paradigm, ‘disturbance’ was hardly a relevant scientific category in ecology at all. According to Odum, disturbances occurred in ecosystems only to be absorbed and corrected by the ecosystem. Disturbance in ecosystems, Odum believed, was an accident, order was the norm. During the 1970s, however, scientists showed a great awareness for disturbances in nature. Paleoecologists, especially paleobotanists, who collected core samples from peat bogs and tried to reconstruct ancient environments through pollen analysis, now suddenly found disturbance to be the norm in nature’s history, not the exception. With the help of new technologies, scientists now studied climatic changes over long periods of time and arrived at a completely new understanding of the notion of ‘disturbance’ in nature. Worster summarizes this trend as follows:

Looking backward in time to the Ice Age and before, scientists are discovering plenty of disorder and upheaval in nature. Abstracted from time, the critics say, ecosystems may have a reassuring look of permanence; but out there in the real, the historical, world, they are more perturbed than imperturbable, more changing than not. (“Doing” 297)

Only on an abstract, theoretical level, ecologists now argued, can ecosystems be said to appear as permanent systems tending towards order. According to this new understanding of nature, the human impact on nature was only one among the many natural disruptions nature had experienced throughout history. Richard White summarizes this sentiment as follows:

Even without human intervention, natural populations fluctuate over time. Climatic shifts, often dramatic, expand the possibilities for some species and limit others. Nature is not always in balance; catastrophes occur, and species disappear, sometimes by the thousands. (*Misfortune* 213)

According to such thinking, disturbance—whether in the form of fires, droughts, hurricanes, tornadoes, volcanic eruptions, or deadly microorganisms—is a regular phenomenon to be found everywhere in the history of nature.

With the publication of S. T. A. Pickett’s and P. S. White’s collection of essays in 1985, *The Ecology of Natural Disturbance and Patch Dynamics*, the new post-Odum paradigm was given expression in provocative form. The significance of disturbances in nature had been overlooked by Odum and his followers, Pickett and White claimed, as the analytic focus had been on sustaining the notion that nature tended towards equilibrium. “The majority of both theoretical and empirical work,” Pickett and White wrote, “has been dominated by an equilibrium perspective” (qtd. in Worster, “Chaos” 164). The principal assumption expressed in all essays contained in the volume was that Clements’ climax state and Odum’s mature state were human constructs that did not exist in nature. Instead of perceiving the world as a gigantic web of interlocked ecosystems tending towards equilibrium, the new paradigm claimed that nature was composed of ‘patches’ and no patch formation was ever stable or permanent, all were in constant flux, continually reassembling and reorganizing themselves. “Nature,” Worster summarizes the impact of Pickett and White, “should be regarded as a landscape of patches of all sizes, textures, and colors, changing continually through time and space, responding to an unceasing barrage of perturbations” (“Nature” 75). The image of patches of nature in constant flux, subject to external disturbances, thus replaced Odum’s concept of nature as a network of ecosystems tending towards equilibrium.

Worster's main problem throughout the 1990s has been his reluctance to come to terms with the postmodern challenge and the erosion of the old ecological models of static ecosystems on which his environmental narratives had been based. With the old ecological models of Odum and Clements discredited among environmental historians, Worster's work seemed outdated. As the New Western History came to controversial public attention, Worster's environmental histories, by then probably more noted than in the one and a half decades before, seemed at the same time very outdated, not only from the point of view of postmodern discourse theory, but also from an ecological perspective. Michael E. Soulé tellingly summarizes the status quo in ecological thinking that had been established by the time the frenzy about the New Western History brought renewed attention to Donald Worster's work:

In a sense, the science of ecology has been hoist on its own petard by maintaining, as many did during the middle of this century, that natural communities tend toward equilibrium. Current ecological thinking argues that nature at the level of local biotic assemblages has never been homeostatic. Therefore, any serious attempt to define the original state of a community or ecosystem leads to a logical and scientific maze. The principle of balance has been replaced with the principle of gradation—a continuum of degrees of human disturbance. (“Siege” 143)

Although Worster defends the old ecological models most of the time, it is crucial to note that he acknowledges the change of paradigm in ecological theory. In “Nature and the Disorder of History,” Worster states the following:

We no longer have nature in some timeless state of perfection, nor revelation nor authority, to depend on. From that changing past, and from it only, we must somehow draw, with the aid of imperfect reason, what we value and defend. (“Disorder” 82)

This short paragraph is very instructive for understanding Worster's answer to the scientific and academic challenges outlined above. If all notions of stability, be it in nature, language, or any other complex system, have evaporated under the impact of contemporary scientific paradigms, Worster seems to suggest, then you might as well make up your mind and pick out that scientific model or concept which most closely represents your personal value system and best serves your needs to express this value system. Worster's critical stance towards postmodern theory is thus not a naïve, value-conservative rejection of scientific challenges; quite on the contrary, I argue that Worster is well aware that he is positioned in

a semantic war over meaning and he enters that struggle well prepared to defend what he cherishes most: nature.

In this sense, the challenges posed by postmodernism are for Worster not only of a scientific nature, but profoundly political. When Michael E. Soulé writes that “it is apparent that the myths of postmodernism are politically potent, and to treat them as if they were merely quaint, academic curiosities would be a mistake,” I believe he adequately summarizes Worster position on the matter at hand (“Social” 159). Worster follows Fredric Jameson’s argument that postmodernism is a paradigmatic expression of the cultural logic of late capitalism. According to Jameson, postmodernism has to be understood as a systemic modification of capitalism—and the true master narrative of late capitalism itself. “Every position on postmodernism in culture—whether apologia or stigmatization—,” Jameson writes, “is also at one and the same time, and necessarily, an implicitly or explicitly political stance on the nature of capitalism today” (*Postmodernism* 3). Just as the development of capitalism throughout the twentieth century has been dominated by the United States, Jameson reasons, the rise of the postmodern discourse throughout the second half of the twentieth century has to be understood as an expression of American cultural hegemony:

This whole global, yet American, postmodern culture is the internal and superstructural expression of a whole new wave of American military and economic domination throughout the world: in this sense, as throughout class history, the underside of culture is blood, torture, death, and terror. (*Postmodernism* 5)

As Jameson suggests, the brutal reality of the material world persists regardless of the postmodern obsession with text and discourse. More to the point, Jameson argues that postmodern discourse disguises the reality of the material world and thus has to be considered as the ideological master narrative of late capitalist culture. Jameson thus claims that the postmodern world has become a gigantic simulacrum in which the ‘real’ or the ‘natural’ has become disguised behind a myriad of cultural layers. If, as Worster believes, postmodernism is indeed the paradigmatic expression of late-capitalist culture, it logically follows that nature is not only threatened on a material level by the capitalist modes of production, but also on the discursive level by postmodernism. To quote Michael E. Soulé again, who tellingly summarizes this double-threat of nature:

Living nature—the native species of plants and animals in their native settings—is under two kinds of siege; one is overt, the other covert. The overt siege is physical; it is carried out by increasing multitudes of human beings equipped and accompanied by bulldozers, chainsaws, plows, and

livestock. The covert assault is ideological and therefore social; it serves to justify, where useful, the physical assault. A principal tool of the social assault is deconstruction. ("Social" 137)

Worster is acutely aware of the social siege of nature and fights back by reiterating his belief in the order and value of nature.

In contrast to Worster, Cronon and White are much more open to postmodernism's critical stance towards stable value systems and accept the general idea that "values don't have foundations and things don't have essences, since the existence of values and things is always and only a function of the sign system, the language used to talk about them" (Menand, "Modernity" 312). William Cronon transfers this postmodern distrust towards value systems to environmental history when he states that "however passionately we may care about the nonhuman world, however much we may believe in its innate worth, our historical narratives, even those about the nonhuman world, remain focused on a human struggle over values ("Place" 1370). As Cronon points out, the central value informing Worster's work as an environmental historian is a profound antipathy against capitalism. In *Dust Bowl*, Cronon argues, "the chief agent of the story is not 'the pioneers' or 'civilization' or 'man;' it is capitalism. The plot leads from the origins of that economic system, through a series of crises, toward the future environmental cataclysm when the system will finally collapse" ("Place" 1363). Cronon thus outlines that Worster's environmental histories are always narratives illustrating environmental decline caused by capitalism. What Cronon ultimately suggests is that the narrative structures of Worster's environmental histories are predetermined by his ambition to outline environmental destruction as the result of capitalist greed.

William Cronon and Richard White are critical of Worster's narratives of environmental decline and promote a much more self-reflexive way of writing history. Especially William Cronon has argued against Worster's concept of 'history' and 'nature' in *Uncommon Ground: Toward Reinventing Nature*. "We must never forget," Cronon reminds environmental historians like Worster, "that these stories are *ours*, not nature's. The natural world does not organize itself into parables. Only people do that, because this is our peculiarly human method for making the world make sense" (*Uncommon* 50). Cronon thus stresses the point that environmental historians, like all historians, do not observe the world objectively. Rather, environmental historians inscribe their interpretation of nature in environmental narratives in ways that correspond to the respective historian's value system. Accordingly, Cronon argues that environmental historians like Worster arrange the 'facts' they find in nature in accordance with the environmental agenda they want to promote.

Like all historians, we configure the events of the past into causal sequences—stories that order and simplify those events to give them new meanings. We do so because narrative is the chief literary form that tries to find meaning in an overwhelmingly crowded and disordered chronological reality. When we choose a plot to order our environmental histories, we give them a unity that neither nature nor the past possesses so clearly. In so doing, we move well beyond nature into the intensely human realm of value. (“Place” 1348)

Cronon thus reminds us of the narrative character of all historiographies and stresses the role of the historian as the moral center of his narrative.

Similarly, Richard White points out that all narratives, especially historical narratives, are characterized by the human desire to present stories with an ending and a closing, to arrive at a final conclusion, which is ultimately an impulse to project a moral value judgment on the material world:

Narrativity, certainly in factual storytelling and probably in fictional storytelling as well, is intimately related to, if not a function of, the impulse to moralize reality, that is, to identify it with the social system that is the source of any morality that we can imagine. (“Value” 18)

As Richard White argues, the disposition of the human individual as a story-telling creature predisposes historians to produce moral narratives: “The demand for closure in the historical story is a demand, I suggest, for moral meaning, a demand that sequences of real events be assessed as to their significance as elements of a *moral* drama” (“Value” 24).

Both Cronon and White thus point out that the various concepts of ‘nature’ used by environmental historians are necessarily based on moral categories and value judgments. As they claim, the concepts of ‘nature’ used by environmental historians like Worster are often aligned with the desire to tell a moral story about the—regrettable and avoidable—human-inflicted environmental decline of our planet. Unlike Worster, Cronon and White thus embrace not only a more postmodern concept of nature, but also a postmodern concept of history, which Linda Hutcheon summarizes as follows:

What the postmodern writing of both history and literature has taught us is that both history and fiction are discourses, that both constitute systems of signification by which we make sense of the past.... In other words, the meaning and shape are not *in the events*, but *in the systems* which make those events into historical facts. (“Problematizing” 367)

The postmodern concept of history embraced by Cronon and White draws especially from the work of historian Hayden White. In *Metahistory*, published in 1973, White argued that all

historical narratives are subjective abstractions, as they are based on a subjective selection of historical ‘facts’ and the ‘emplotment’ of these facts in a narrative framework chosen by the historian. Whether historical ‘facts’ are then ordered within the narrative framework of a tragedy or a heroic tale is up to the historian, White argues, and historical narratives are thus closer to fiction than the traditional image of the historian as an unbiased, objective observer allowed. “The important point is that most historical sequences can be emplotted in a number of different ways so as to provide different interpretations of those events and to endow them with different meanings,” White outlines his position (“Artifact” 48). Hayden White argued that the self-reflexive awareness of the postmodern historian would ultimately serve as a remedy against ideology:

It may be observed that if historians were to recognize the fictive element in their narratives, this would not mean the degradation of historiography to the status of ideology or propaganda. In fact, this recognition would serve as a potent antidote to the tendency of historians to become captive of ideological preconceptions, which they do not recognize as such but honor as “correct” perception of “the way things really are.” By drawing historiography nearer to its origins in literary sensibility, we should be able to identify the ideological, because it is the fictive element in our own discourse. (“Historical” 61)

The postmodern examination of the historian’s role as narrator, situated in a specific time in history in a specific cultural background, is thus supposed to work as an antidote to ideological master narratives. The postmodern theorizing of historical practice thus assumes that, as in language itself, there is no stable meaning in history. According to such thinking, all historical narratives are per definition historically biased and thus share, as Hayden White argues, more aspects with their fictional counterparts than the traditional separation between literature/fiction and history/truth allows.

Donald Worster is well aware that the writing of history is a subjective outlook on the past. “Writing history is, to be sure, always an act of distortion, imposing on the past the experience and outlook of the present,” he writes in *The Wealth of Nature* (vii). Worster thus knows that every historian is a product of his time and that the values and concepts dominating that particular point in time are necessarily reflected in the historian’s narrative. The following paragraph is worth being quoted in full length, as it exemplarily indicates that Worster is not as naïvely anti-postmodern as his critics sometimes suggest:

Words like ecosystem, niche, competitive exclusion, biomass, energy flow, plate tectonics, chaos are all just that—words—and must be appreciated as such. We may hope they indicate facts, but we can only be absolutely sure that

they are words, and as words they are only representations of facts. That in itself is a point worth pausing over and considering in depth. Every science that the environmental historian approaches presents him or her with a language, and that language is filled, like any of the world's languages, with metaphors, figures of speech, hidden structures, even world-views-in short, it is filled with culture. The environmental historian wants to learn that language, no matter how uncouth it may seem at first, and use it to improve his understanding of the human past. But as a historian, trained in the modes of thought common to the humanities, where language itself is an important object of analysis, he must insist that the words of the scientist not go unexamined. They are themselves worthy of attention as expressions of culture, which is to say, they are expressions of ethical beliefs. We cannot take science out of its culture, out of the realm of meaning, value, and ethics. ("Paths" 26)

Nevertheless, Worster does not believe in the glorification of the objective, unbiased historian who wants to get outside the self-reflexive framework of postmodern theory ("Paths" 24). Rather, Worster interprets his role as a historian as that of a teacher and the lesson Worster wants to teach his audience is that nature, however you may define it, is something precious, if only because our well-being fundamentally depends on it. It is characteristic of Donald Worster's philosophy as an environmental historian that he believes that the lessons we need to learn can be found in nature itself:

I have reason to believe that the patterns of nature both do and ought to set a course for our lives—not the only course, or the only possible course, but a reasonably clear course that wise societies have followed in the past, foolish ones have scorned. ("Seeing" 1145)

Worster thus believes that nature works according to principles that humans ought to respect and consult for guidance in postmodern, nihilistic times. Without such reliable value standards as can be found in nature, Worster believes, our lives are lost "in a confused, relativistic morass" ("Seeing" 1145).

Accordingly, Worster claims that his colleagues Cronon and White, who embrace a more postmodern concept of nature, are lost in an "excess of relativism" ("Seeing" 1145). Worster is opposed to joining the postmodern doubting of all stable systems, as he believes that exactly the opposite is needed to stop environmental degradation, namely a positive consensus in society about the value of nature and the humble position of humans on planet earth. For Worster, it is one of the primary duties of environmental historians to strengthen this awareness:

Much of our history writing has been devoid of any respect for nature precisely because historians are temperamentally and philosophically inclined to see change instead of stability in the world and to elevate human cleverness over evolutionary wisdom. Environmental history is for me an exception to that tendency and therefore of considerable philosophical significance to the profession.... We ought to be helping people find again the coherence, pattern, and integrity of nature, to help locate the realm of nature into which we can once more put our human history. (“Seeing” 1147)

As I tried to show throughout this dissertation, Worster is convinced that nature functions according to observable mechanisms and that—although ecological theories change over time—there are lasting structures in nature. Basing his concept of ‘nature’ as an entity governed by lasting principals at the heart of his environmental histories and backing this concept of nature through ecological models, Worster tries to give his historiographies a scientific grounding that is ultimately intended to work against the historical relativism promoted by postmodernism. Worster is convinced that historical relativism is detrimental to the overall cause of the environmental historian to draw awareness to the human corruption of nature, as it advocates arbitrary, non-binding concepts of nature:

[Historical relativism] can only lead either to complete cynicism or to the acceptance of any set of ideas or any environment that humans have created as legitimate. Disneyland, by the theory of historical relativism, is as legitimate as Yellowstone National Park, a wheat field is as legitimate as a prairie, a megalopolis of thirty million people is as legitimate as a village. Each is the product of history and therefore stands equal to its opposite. Each has its own logic to be penetrated and understood, but any logic, like any set of beliefs or institutions appearing over time, must appear to the consistent relativist to be as good as any other. (“Nature” 78)

Worster, in contrast, needs a firm concept of ‘nature’ against which to measure human corruption. “As an environmental historian,” Worster acknowledges his subjective agenda, “I am supposed to be looking for a story of change to tell” (“Disorder” 65-66). Thus, Worster’s environmental histories are indeed informed by a moral—if you will ideological—agenda and are not unbiased, objective observations of the past. It is this moral agenda to protect the world from further environmental degradation that also determines Worster’s concept of ‘nature.’

However, although Worster acknowledges that his concept of ‘nature’ is problematic from a postmodern point of view, he is simultaneously deeply convinced that firm beliefs and principles are not only essential for the historian, but for humans in general in order to make informed decisions about how to shape the future. The following paragraph, taken from Worster’s introduction to the *Wealth of Nature*, offers a good final

summary of Worster's position as an environmental historian as well as his general outlook on the world:

I realize, for instance, that at times I express a strong sense of, and respect for, the order of nature while at other times admitting that order is a troubled idea, one that even scientists, our traditional guides in the matter, seem to be losing a grip on. In this postmodernist, poststructuralist age, when all that has seemed solid melts into the air, this is a familiar dilemma; however, it will not be resolved by yielding to complete historical relativism. Historians, impressed by the variability of human ideas over time, are wont to take that way out, leading the public off into the deserts of relativism and leaving them stranded there with no map, no waterhole, no sense of direction, no way out. (ix)

Worster is convinced that the anything-goes-mentality of late capitalism is a most dangerous threat to the integrity of nature—and thus to humankind itself. The only way to prevent further environmental decline, Worster believes, is to turn away from postmodern relativism and to advocate instead a general acceptance of the idea that binding moral standards might be ideologically biased, but are at the same time the only reliable source to guide our actions as human beings.

If global warming is indeed happening at the rate and the extent scientists are warning us today, Worster's discontent with semantic debates over what 'nature' actually is seems reasonable. As Paul Shepard points out, "the principal task today is not to single out nature by some exclusive definition, but to include and appreciate it among the real and eloquent things and practices that are threatened by the hypertrophic overlay of hyperreality" ("Virtually" 41). Seen in the light of our current environmental predicament, I believe Worster's environmental histories and the underlying concept of 'nature' are anything but old-fashioned. Rather, Worster's insistence that humans ought to respect the order of nature and ought to protect it from our excessive material greed is, I believe, more up-to-date than ever before. I do not wish to discredit the achievements of postmodernism and applaud Worster's at times admittedly old-fashioned, pro-environmental, anti-capitalist stance. Undoubtedly, postmodern discourse theory has fundamentally shaped and enriched our understanding of the workings of language, knowledge production, and power in society, to outline just some obvious achievements. However, I want to stress a point John Barth has made in "The Literature of Replenishment:"

If the modernists, carrying the torch of romanticism, taught us that linearity, rationality, consciousness, cause and effect, naïve illusionism, transparent language, innocent anecdote, and middle-class moral conventions are not the whole story, then from the perspectives of these closing decades of our century

we may appreciate that the contraries of those things are not the whole story either. Disjunction, simultaneity, irrationalism, anti-illusionism, self-reflexive mess, medium-as-message, political olympianism, and a moral pluralism approaching moral entropy—these are not the whole story either. (203)

For Donald Worster, the postmodern relativism is definitely not the whole story. As Worster believes, historical relativism “can only lead either to complete cynicism or to the acceptance of any set of ideas or any environment that humans have created as legitimate” (“Nature” 78). Based upon a firm belief in values, Worster thus promotes the human capacity to make moral choices.

As I tried to show, Worster is convinced that the wellbeing of human society depends on binding moral standards, most importantly the understanding that ‘nature’ is a real entity existing independently of human signification and is as such worth being protected from human corruption. Without the global recognition that nature has an intrinsic order, Worster warns, humans will not only endanger the stability of all natural systems, but their own existence. In this context, the historical relativism promoted by postmodern discourse theory is for Worster almost a “degenerate worldview” (“Nature” 78). “The theory of historical relativism frees us from dogma but offers no firm guidance to belief,” Worster summarizes his position (“Nature” 78). According to Worster, the most important moral standard humans need to accept in order to survive the twenty-first century is that nature is fragile, that its resources have limits and that it is ultimately valuable to us beyond the capitalist definition of nature as resource. Nature, Worster reminds us, is not something external to us to be exploited for our private gain, but something we are a part of and existentially linked to. As the material reality of nature invades our postmodern concepts of the world in the form of floods, droughts, storms, and fires caused by climate change, Worster stresses the need to agree on binding principles upon which we built our efforts to protect nature from human corruption. For without such principles, there will be no way we can teach our children the value of nature, regardless whether these values are in nature itself or merely in our minds.

*“Nature, it should be clear, has limits;
they are neither inflexible nor are they constant, but they do exist.”*

Donald Worster

Dust Bowl

V. Conclusion

As I tried to show throughout this dissertation, no other academic discourse has focused as strongly on Americans' relationship towards nature than Western American historiography. Frederick Jackson Turner's essay "The Significance of the Frontier in American History" must be considered as the founding text of this most significant discursive tradition in American intellectual history. As Turner correctly noted, it is the nature imagery associated with the American West that most strongly shaped American self-perception. Americans, Turner was undoubtedly right in pointing out, have a special relationship to the natural grandeur of their continent and this relationship greatly determines American culture to this day. Turner's achievement, I argued in chapter I, lies not so much in the overall innovative character of his essay, but rather in its synthetic qualities. Synthesizing a wide range of popular icons, tropes, and symbols with scientific theories borrowed from contemporary biology, geography, and cartography into one coherent narrative, Turner was the first to argue in a coherent, rhetorically convincing, partly scientific and partly literary manner that the American West was of utmost importance for the development of the American nation. Portraying the 'wilderness' of the American West as the birthplace of American national identity, Turner elevated the West as the most significant of all American regions. Had the trans-Appalachian West barely played a role within the American historical profession before the breakthrough of the Frontier Thesis, Turner initiated a fundamental change of course in American history writing by putting the West in the center of the field's discourse. As Richard W. Etulain correctly summarizes, "Turner's thesis helped reorient American historical writing, providing a new way to define American identity and laying out a fresh method by which to interpret the frontier and the American West" ("Exceptional" 4). Turner promoted his role as innovator in American history, just as he promoted the success of the Frontier Thesis; he was convinced that before he had drawn attention to the significance of the American West, the history of the nation had not been adequately interpreted: "The story of the peopling of America has not yet been written. We do not understand ourselves," he stated in 1897 ("History" 27). His work, Turner thus commented on his own achievement, "whether good or bad...can only be correctly judged by noting what American historians and teachers of history...were doing when I began" (qtd. in Bogue, "Reconsidered" 200).

According to today's standards, Turner was obviously not a model historian and his subsequent success underlines more his capacities as an orator than his capacities as a historian in our contemporary definition of the term. Turner blended scientific and literary techniques,

omitted crucial historical facts in his version of the West—most importantly the genocide of the native population—and, considering the overall scope of his career, had an unimpressive publishing record. Nevertheless, Turner influenced his generation of historians like no other historian before or after him and a balanced assessment of Turner’s achievement as a historian must acknowledge that Turner was a product of his time and that his work can only be fairly measured against the standards of his days, not ours. Placed next to his contemporaries, Turner was not exceptionally racist or chauvinist. Simultaneously, his techniques as a historian, especially his blending of methodologies borrowed from geography, cartography, and biology have to be considered thought leadership at the time.

Although Turner’s thesis was increasingly criticized and revised in the decades following his death in 1932, the leading historians of Western American historiography all followed Turner in the central assumption that the American West was a most significant factor in American history and that the role of the environment had to be given special attention when examining the impact of the region on the overall course of the nation. As I outlined in chapter 1.2, leading historians like Walter Prescott Webb, James C. Malin, and Earl Pomeroy all approached the American West from a strictly environmental perspective. Although each of these historians focused on regional characteristics that Turner had omitted, most notably the West’s aridity, Webb, Malin, and Pomeroy all followed the trail of environmental determinism that Turner had blazed.

Although Turner’s status remained almost unrivaled until the 1960s, his paradigm was nevertheless from the beginning criticized by historians. As I pointed out, Gerald D. Nash provides a superb overview over 100 years of Turner reception in *Creating the West*. However, it was not until the late 1960s and the 1970s that Turner revisionism became a widespread trend among American historians. In the context of the highly politicized 1970s with its various counter-cultural movements—most importantly the New Left, Students for a Democratic Society, Betty Friedan and the second wave of American feminism, and the black liberation movement as represented by the Black Panther Party—Turner’s version of American history appeared decidedly too white, too male, and too pro status quo. As new categories like race, class, and gender were introduced by the new sociological approaches in American history departments, the relevance of Turner’s frontier paradigm continuously declined until the late 1980s—and with it the relevance of Western American historiography as such. The impact of the cultural revolutions of the 1960s and 1970s on the American historical profession in general and on Western American historiography more specifically can thus hardly be overestimated.

As I pointed out in chapter I.3, the discourse that eventually contributed to the revival of Western American historiography during the late 1980s—environmental history—also emerged during the 1970s. In the context of increasing environmental degradation, the ‘environment’ appeared next to race, class, and gender as a new analytic focus of American historians, who now often embraced a distinctly anti-capitalist, anti-progressive stance. While American environmental history surfaced as a new academic discipline and highlighted the negative impact of American culture on the continent’s environment, the American West simultaneously received new attention. Exhibiting the facts of human transformation most impressively, the American West became a most rewarding field of study for American environmental historians. I thus outlined in chapter I.3 that the emergence and evolution of American environmental history fundamentally contributed to the revival of Western American historiography during the late 1980s and early 1990s.

In this sense, the emergence of the New Western History can be considered a logical result of the revisionist tendencies underway in humanities departments from the 1970s onwards. Focusing its revisionism of the American West mainly on categories such as race, class, gender, and—most importantly—the environment, the New Western History attested and confirmed the fundamental changes that had been taking place within history departments in the prior years. “By the 1980s,” Patricia Nelson Limerick correctly summarizes the discursive framework of the New Western History, “the field of western American history was ripe for a major change” (“What” 84). Accordingly, the New Western History did not emerge unexpectedly, but was rather an outgrowth of the revisionist stance that had dominated academic discourse ever since the 1970s.

Critics have argued that the New Western Historians’ negative perspective on the nation’s past shows traces of the political agenda of the New Left of the 1960s and 1970s. As I tried to show, the New Western Historians are not as homogenous a group as such assessments suggest and—although the political orientation of the leading historians might well be left of center—I believe that the generalizing assessments of the New Western Historians are problematic. Nevertheless, it is undoubtedly true that the protagonists of the New Western History started their academic careers during the 1970s and were influenced by the discursive trends of this period. Accordingly, the general anti-imperial, anti-capitalist attitude that makes up much of the New Western History might indeed be traced back to the political stance of the New Left. The New Western Historians’ strong focus on issues of race, class, and gender is equally indebted to the new sociologies that emerged during the 1970s. And, as I have tried to show, the strong environmental focus of the New Western Historians evolved out of

environmental history as it emerged as a new academic discipline during the 1970s. A number of critics have thus rightly suggested that the formation of New Western History during the late 1980s was not an entirely new phenomenon, nor were the individual insights and methodologies promoted by the New Western Historians exceptionally innovative; rather, the New Western History has to be understood as an aggregation of revisionist perspectives of the American West that had been expressed during the previous two decades and before. In this sense, the New Western History is on a most general level a summary and conglomerate of the revisionist tendencies that had shaped Western American historiography during the second half of the twentieth century.

Hence, critics are right to point out that the New Western History is not as new or innovative as some of its protagonists suggested; it is equally true that the revolutionary and self-congratulatory tone of the New Western Historians is at times annoying. However, the harsh criticism voiced against the New Western Historians by, among others, scholars like Gerald D. Nash and writer Larry McMurtry seems at least unbalanced, at times even unfair. As I tried to show, the New Western Historians cannot be reduced to simple-minded Turner-bashing and it is not true that they only cite one another and ignore antecedents; nor are the New Western Historians a homogenous group of scholars promoting a one-sided negative interpretation of the nation's past. Although it is undoubtedly true that the New Western Historians agree on a variety of issues, I argue that the individual scholars associated with the New Western History have different areas of expertise and, where the areas of expertise overlap, often competing notions as how to approach and interpret the West's past. As an example, I illustrated the competing methodological definitions of 'nature' between William Cronon and Richard White on the one hand and Donald Worster on the other hand and their differing assessments of postmodern theory's relevance for environmental history. For anyone who follows the controversy between Cronon, White, and Worster, it will be difficult to maintain the stereotype of the New Western Historians as a homogenous group of scholars supporting and quoting only one another. It is equally not true that the New Western Historians ignore and do not give credit to preceding scholarship. Worster, I illustrated as an example, traces his own theory on water and power in the West back to a variety of scholars, from Walter Prescott Webb and John Wesley Powell to Karl Wittfogel and the scholars of the Frankfurt School.

In summary, it can be said that whereas some of the paradigmatic essays of the New Western Historians were too self-congratulatory in tone and one-sided in perspective, much of the harsh criticism voiced against the New Western Historians was equally

unbalanced and, more importantly, uninformed. Regardless of its actual newness or innovative character: I believe the New Western History is significant in the overall course of Western American historiography in so far as it combined the results of revisionist studies of the American West of the past two or three decades and revived the interest in the American West, both in the public as well as within academia.

In preparing the conclusion for this dissertation, I asked Professor Worster via e-mail whether he would be willing to do an online interview, to which he kindly agreed.¹²⁰ In the interview, I asked Worster the following question:

Looking back upon the heated debate about the New Western History at the beginning of the 1990s, how would you describe that phase in Western American historiography today and how would you assess the impact of the New Western History on the overall course of the field?

Donald Worster answered as follows:

I believe it was a very exciting time for the American West, as the NWH drew many new faces and talents to think about the region. Where western American history had been nearly dead, and was disappearing from many university programs, it came roaring back. The old and tired establishment in the field was naturally resentful, since their work and ideas were being called inadequate. But it had to be done if the field was to be restored to health and vigor. Predictably, those who were part of the old and comfortable past argued that there was “nothing original” here or, conversely, that the new western historians were all radicals (they couldn’t decide whether fascists or communists) or publicity seekers. To be sure, good books were written about the West before the 1990s, although they were generally written by non-academic historians like Wallace Stegner, Bernard DeVoto, Henry Nash Smith, or Richard Slotkin. So the 90s challenge was necessary, disruptive, unpopular in some places, and important. Ten years later, however, I fear that the upheaval did not go far enough. We are slipping back into a state of narrow questions and too cautious answers. (Unpublished interview)

I agree with Worster that the New Western History represents a most significant chapter in Western American historiography and I believe that the debate about the actual newness of this form of revisionism actually missed the true task at hand, namely to assess in detail the works of the individual scholars that promoted the New Western History, to outline the general themes and insights provided by these scholars and to ultimately place their individual as well as their combined efforts in the long tradition of both popular and academic thinking about the American West. I argue that the New Western History cannot be properly assessed by merely evaluating the paradigmatic, admittedly at times

¹²⁰ Donald Worster agreed to my quoting from the online interview. As the interview is unpublished, I will quote excerpts from the interview as “Unpublished interview.” The complete interview can be provided upon request.

one-sided and provocative essays published in and around the *Trails* volume; rather, the complete work of each individual historian associated with the New Western History has to be taken into account in order to arrive at a true understanding of the New Western History and its meaning for the overall discourse of Western American History.

In order to further outline the true scope of the New Western History, I provided a paradigmatic, in-depth reading of Donald Worster's work in the second half of the dissertation. Using Worster as a point in case, I tried to illustrate how strongly contemporary revisionist approaches to the American West are based on an environmental focus. I argued that New Western History is more often than not environmental history and that to understand the true dynamics within the New Western History, one needs to take a closer look at the scope, agenda, theory, and methodology of environmental history. I claimed that it was the formation of environmental history as a new academic discipline during the 1970s and its increasing impact on Western American History that to a great extent accounts for the revival of the field during the late 1980s. The surfacing of the New Western History is thus essentially linked to the development of American environmental history and no historian illustrates this intertwined development better than Donald Worster. As I outlined, Worster was involved in both the formation of American environmental history and in the formation of the New Western History and his work is thus the most promising object of analysis if one wants to understand the development of Western American historiography during the past three decades.

I started my analysis of Worster's work by outlining his general criticism of capitalist culture, more specifically American capitalism. I showed that Worster is convinced that the capitalist ethos and the economy of nature are two opposing principles that cannot be harmonized. "For Worster," William Cronon appropriately summarizes, "the refusal to recognize natural limits is one of the defining characteristics of a capitalist ethos and economy" ("Place" 1363). To protect the integrity of the physical world, Worster believes, one has to challenge and change the general logic of capitalism, most importantly the glorification of private wealth and economic growth and the underlying concept of 'nature' as a resource to be exploited to these ends. Drawing from the political theories of the Frankfurt School, Worster argues that the capitalist reduction of nature to a resource fueling economic growth not only existentially harms the environment, but moreover leads to inequality in human society itself. For Worster, the only way to overcome both environmental destruction as well as inequality in human society is to change our relationship with nature, which in turn depends on our changed attitude towards materialism. "The only deep solution open to us is to begin transcending our

fundamental world-view—creating a post-materialist view of ourselves and the natural world, a view that summons back some of the lost wisdom of the past but does not depend on a return to old discarded creeds,” Donald Worster summarizes his position and continues to specify human greed as the core problem of materialist, capitalist culture:

All consumption beyond a level of modest sufficiency is pathological in both a personal and an ecological sense; like any kind of gluttony it deserves pity, not approval. I mean the view that greed is always a vice, not a virtue, that unlimited economic growth or ‘development’ has become a fanatical drive against the earth. (*Wealth* 218-19)

Based on the rejection of capitalism’s celebration of consumption and private gain, Worster specifically questions American culture’s glorification of private property and entrepreneurship. For Worster, American capitalism represents the most aggressive form of capitalism to date and American culture is thus for him the most environmentally destructive culture on earth.

As I outlined, Worster’s criticism of American culture’s faith in the capitalist ethos encompasses a general rejection of the modern faith in technology and progress. According to Worster, the principal desire to control nature through technology is the main systemic flaw that will eventually lead to the downfall of Western culture. “Trying to control nature through technology is never a fully adequate or long-term approach to successful adaptation,” Worster points out and maintains that it is the modern faith in limitless economic growth through technological advance that is ultimately responsible for the environmental crisis we are witnessing today.

In my opinion, there is a consensus forming within the debate about climate change that the solution to environmental degradation caused by capitalism can only be provided by capitalism itself. According to such sentiments, it is the invention of new, environmentally sound technologies and products driven by the capitalist market place that will help us to get a grip on climate change. Many scholars studying climate change thus argue today that it is technological innovation enabling more efficient and less environmentally harmful use of energy that will help us prevent the downward-spiral of global warming. If one agrees, there seems to be no way out of the current environmental predicament without innovation driven by the capitalist market place. In my interview, I asked Worster what he thinks about such reasoning, to which he replied the following:

My view is that capitalism, like technology, makes a good servant but a bad master. Of course we need new sources of energy (renewable solar sources, we can hope), and entrepreneurs have an important role in developing them. But it was, all the same, capitalism as a new cultural logic that, more than anything else, got us into the modern environmental crisis, through its idealization of greed, its celebration of individualism, its obsession with endless growth, its search for technological panaceas, and its runaway inventiveness.... No capitalist or market logic can give us a solution to global warming or the extinction of species. It might come up with a solution to problems of scarcity, but that is not the environmental problem we face. We have more oil than we can safely burn. So it is only government that is capable of addressing this problem and providing guidance, or restraint, to the market. (Unpublished interview)

As this quote reveals, Worster is not naively demanding the abolition of capitalism. Rather, Worster advocates strong government regulation of private enterprise as the only antidote against capitalist excesses. This is astonishing in so far, as Donald Worster develops a highly critical attitude towards federal government throughout his environmental histories of the American West. As I tried to outline in my analysis of Worster's mode-of-production theory, Worster repeatedly blames federal government for the ruthless exploitation of the American West's natural resources. Hence, his expressed trust in governmental regulation is at least noteworthy given his overall criticism of federal government in the U. S.

In my analysis of Worster's definition of the hydraulic and the pastoral mode of production, I outlined that Worster is highly critical of federal government's role throughout American history. Worster believes that in the U.S., federal government has mainly promoted private entrepreneurship and the ruthless exploitation of the continent's natural resources in accordance with the capitalist faith in progress and accumulation of wealth. According to Worster, federal government has more often promoted private entrepreneurship than restricted it and his analysis of both the hydraulic and the pastoral mode of production are meant to illustrate this thesis. Worster argues that federal government has not so much checked and shaped the development of American capitalism, but rather stimulated its unhindered growth, which resulted, as Worster believed, in the rapid production of a large amount of wealth in the shortest period of time unparalleled in human history, but also in the most radical environmental transformation of a whole continent, equally unrivaled in history. The fact that Worster does not describe this process as a heroic achievement, but rather as a historic failure to build a better, environmentally sustainable society, is undoubtedly characteristic of Worster's perspective.

Several scholars of the New Western History, most prominently William Cronon and Richard White, have repeatedly criticized Worster's portrayal of American environmental history as a narrative of environmental decline and tragedy. Both Cronon and White point out that Worster's definition of capitalism is rather vague, at least simplified, and that his reduction of American history to a narrative of failure is a too narrow description of the American past. As William Cronon comments on Worster's concept of capitalism:

The phenomenon called capitalism—if it really is the singular thing its label suggests—has been so complicated and hydra-headed that no single analysis or narrative is likely to encompass it. Even if we can recognize certain imperatives that seem to flow from the logic of the capitalist market place, their implications in different cultural and environmental contexts are so complex that a metanarrative concentrating only on exploitation and despoliation is unlikely to do them full justice. (“Modes” 1130)

Richard White similarly comments on Worster's approach:

In selecting the transformative capacity of capitalism as his central theme, Worster isolates a process of undeniable importance and power, but the theme also serves to simplify environmental analysis much as capitalist agriculture has simplified farmers' fields. (“Environmental“ 1113)

Indeed, Worster's concept of capitalism and his description of the capitalist modes of production seem superficial and at times even antiquarian. Especially Worster's mode-of-production theory of capitalism can hardly be considered an adequate economic analysis of the structures that determine economies today, be it in the United States or elsewhere. Undoubtedly, Worster's efforts to outline aridity and, in turn, water management as a central economic—and thus social—factor in the American West is noteworthy, but his mode-of-production theory is still too shallow—in terms of its analytic understanding of how modern economies function—to count as an all-encompassing theory of American capitalism. “Mode of production,” William Cronon correctly comments, “can all too easily become a jargon term that conveys the illusion of rigor while obscuring more than it reveals” (“Modes” 1126).

Apart from Worster's overall weakness in theorizing economic structures, it simultaneously has to be acknowledged that Worster's main environmental histories like *Dust Bowl* or *Rivers of Empire* were published during the late 1970s and mid-1980s, the period before the global economy as we know it today came into existence. Accordingly, the capitalism Worster describes in his work is not the digital, globalized capitalism determined by electronic cash flows, global corporate players, hedge funds, and private equity firms; rather,

Worster describes an industrial, pre-postmodern form of capitalism. This outdated description of a technocratic-industrial complex reminds one at times of the depictions of capitalism found in the work of American social realism of the 1930s and 1940s, most prominently John Steinbeck's *The Grapes of Wrath*. In summary, then, Worster's examination of the American West as a hydraulic and a pastoral society is too narrow in its definition of capitalism and too shallow in terms of its theoretical foundations as to count as a relevant theory of American capitalism. I argue that neither the theories of Karl Wittfogel nor those of Adorno or Horkheimer suffice to understand today's global market economy; as much as Worster is an outstanding environmental historian, one has to acknowledge that he is not an expert in economic theory and this lack of convincing economic analysis is the central weakness of his work.

The shallowness of Worster's capitalist criticism is especially illustrated by the fact that Worster addresses nowhere how, in detail, an alternative society with a more sustainable way of life could be organized. Throughout his work, Worster argues vehemently against the capitalist ethos and criticizes the Western faith in technology as a means to control nature to our advantage, but he does not answer the question how we could transform society on a global scale in order to prevent further environmental destruction. Hence, I agree with Gerry Kearns who states that Worster's work "is based on an unhelpful demonization of technology and a poorly explored vision of an alternative plausible present that we might conceivably inhabit" ("Virtuous" 380).

In my opinion, the only realistic methods to combat climate change are not to be found outside of capitalism and technological progress, but rather within the existing system. However critical one's attitude towards the global economic structure might be: I believe it is at the same time the only structure that can solve the current environmental predicament. It is not technology in general that is to be condemned, but rather the kind of technologies we use, how we use them and to which ends. More efficient, energy-saving technologies—the whole range of renewable energies from solar and wind power to hydro-technology for cars, to name just the most obvious—will undoubtedly be the key to a more sustainable way of life in the decades to come. And like it or not, it will be the capitalist market place that will drive these technological innovations. It is for this reason that the phrase 'sustainability' has recently become a trendy keyword in capitalist culture, especially in the various economic discourses associated with the capital markets. Investment funds are increasingly marketing funds that are investing in 'green' companies and these alternative investments are sought-after products of private and institutional investors. Undoubtedly, neither the products nor the investments are merely designed to save the world, but follow the capitalist ideal to save or make money. However, I

believe the simple fact that such products exist and that there is a market for such products indicates potential mechanisms within capitalist culture that might lead us into a more sustainable future.

Simultaneously, politicians and economists alike increasingly acknowledge that climate change poses a serious threat to the global economy and the stability of capital markets. The destabilizing potential of climate change as a new risk factor to be considered in the overall global economic architecture was given paradigmatic expression in “The Stern Review on the Economics of Climate Change,” a 700-page report released on 30 October 2006 by economist Nicholas Stern for the British government. Stern concluded that one percent of the global gross domestic product needs to be invested annually to fight climate change and to avoid the global gross domestic product to drop by up to twenty percent. Stern’s report thus suggested that climate change has to be considered a powerful variable in the global economy, a variable that if neglected could result in serious economic and social disruptions. By stressing the drastic economic relevance of climate change, the Stern Report signifies a change of paradigm in so far, as it takes efforts to combat climate change out of the green activist corner and gives them instead the legitimacy of an economic risk-management necessity.

Initiatives promoting sustainable investments like the The Carbon Disclosure Project (CDP) further underline the economic arguments brought forth by the Stern Report. On its website, the CDP describes itself as

an independent not-for-profit organisation aiming to create a lasting relationship between shareholders and corporations regarding the implications for shareholder value and commercial operations presented by climate change. Its goal is to facilitate a dialogue, supported by quality information, from which a rational response to climate change will emerge. (<http://www.cdproject.net/>)

Following this aim, the CDP provides a coordinating secretariat for institutional investors, who have a combined \$41 trillion of assets under management. On behalf of these institutional investors, the CDP acquires and provides information on the business risks and opportunities presented by climate change and greenhouse gas emissions data from the world’s largest companies, a total of 2,400 companies in 2007. As the activities of the CDP indicate, institutional investors are increasingly interested in investing their money in companies with a solid corporate responsibility strategy, as they are aware that climate change is a great risk for the stability of the capital markets. According to this logic, companies promoting environmentally unsound practices are viewed as a risk to the system and an increasing number of institutional investors are actively contributing to reducing this risk through their investment policies.

In my opinion, the Stern Report and The Carbon Disclosure Project paradigmatically illustrate that the capitalist system very well acknowledges its detrimental impact on the environment and can develop effective products and strategies to decrease environmental destruction. Undoubtedly, there is much to be done yet and just as there are initiatives promoting sustainable development at the one end of the scale, there are a myriad of companies, hedge funds, private and institutional investors at the other end of the scale that merely follow the logic of shareholder value and focus on the profit to be made today, not on the price that has to be paid for it in environmental terms tomorrow. Nevertheless, I believe that the only way to combat climate change is from within the capitalist system, among other things by increasing awareness and promoting environmental education, by changing consumer behavior, by supporting initiatives like the Carbon Disclosure Project or companies, investors, or politicians who credibly promote the idea of sustainable development within the capitalist system.

As public opinion increasingly acknowledges the reality of climate change and the threat it poses to social, political, and economic stability, politicians and business leaders alike will try to present themselves as environmentally responsible, if only because their political or economic success will depend on them doing so. Examples illustrating this tendency are plenty: The popularity of Californian Governor Arnold Schwarzenegger is based on his pro-environmental politics, German Chancellor Angela Merkel put climate change on the top of her agenda while Germany was presiding over the EU Council in the first half of 2007 and she was touring the rest of world during the summer of 2007 to further promote her environmental agenda; and even U.S. President George W. Bush, Jr. has recently acknowledged—quite in contrast to earlier positions maintained by his administration—that climate change might indeed be caused by humans and agreed at the G8 meeting in Heiligendamm, Germany, that the U.S. will support initiatives to fight climate change. Although Bush's statements remain vague as to how and to what extent the U.S. will promote measures against global warming, his somewhat changed position indicates the new status of environmental issues in American public opinion. As if to confirm my statements above, Al Gore is awarded the Nobel Peace Prize for his initiative to combat climate change, which is, undoubtedly, also a political message sent by the Nobel Prize committee.

On the business side, advertising campaigns and other marketing efforts of companies from a wide variety of business sectors like energy, aviation, and automotive indicate how important a 'green image' in today's consumer culture is. Advertisements stressing the 'green,' environmentally responsible character of companies are to be found everywhere these days. These campaigns might not tell us something about the true character of the company, but they tell us something about changed consumer behavior and the great respect companies have for a

growing environmental awareness of its potential customers. Although the sincerity and credibility of motives of politicians and business leaders alike is not always to be trusted, I still believe that the new public awareness for environmental issues is an opinion-building, democratic force to be reckoned with. And as systemic adaptations concerning environmental policies must be democratically legitimized, the only realistic options to fight climate change must be found within the system itself—public opinion and the power of the consumer. However pressing an issue global warming might be: All actions against climate change must rest on democratic principles and processes and can thus only be achieved from within capitalism, as capitalism and democracy are essentially linked entities.

Not surprisingly, Donald Worster is critical whether fundamental changes in environmental philosophy and practice can be achieved from within the system. He is especially pessimistic about the compatibility of the notion of ‘sustainability’ and capitalism. In my interview, I asked Worster the following question: “You wrote critically about the notion of ‘sustainability’ in capitalism. Do you still maintain this perspective on the notion of sustainable development?” Here is Donald Worster’s reply:

The best that can be said about the slogan “sustainable development” is that it is an empty phrase waiting for people to define it. One could say the same thing about “justice.” Everybody has a definition of justice, and (perhaps surprisingly to people on the left) there is no fixed or widely accepted meaning. Yet the word is useful, I suppose, for generating debate and steering conversations. So it may be with “sustainable development.” But I don’t still find any clear consensus on what it means. Nor do I think those who throw the phrase around really show much deeper moral engagement with the non-human world. They are not green enough for me. (Unpublished interview)

As this quote illustrates, Worster is skeptical of the true motives of politicians and corporate business leaders alike who promote sustainable development. Undoubtedly, Worster’s skepticism is reasonable and respectable. On the other hand, Worster’s skepticism does not help finding an answer as how to change environmental politics in Western culture. As I tried to illustrate in my analysis of Worster’s mode-of-production theory, Worster indicates on the one hand that he is against the public funding of an environmentally unsound American agriculture as practiced in the arid West, at the same time, however, he is pro government action when it comes to controlling private enterprise. Accordingly, Worster’s position on the role of government regarding environmental protection is not clear. On the one hand, Worster’s work as an environmental historian focuses on outlining how government in the U.S. failed to promote and implement sustainable environmental practices in American agriculture and water management and how

federal policies more often than not supported the interest of private enterprise; on the other hand, Worster repeatedly states that public organs are the only remedy against the excesses of private business. On the one hand, Worster argues vehemently against the practices of the various departments within the Department of the Interior—I outlined his position on the Bureau of Reclamation and its water management policies—, on the other hand Worster argues that the public domain in the West should remain in the hands of the people—which is in the hand of government. As a result, it is difficult to pin down how exactly Worster thinks environmental protection can best be achieved.

In his essay “Private, Public, Personal: Americans and the Land,” Worster proposes that an Amendment to the Constitution might be an appropriate way to enforce the protection of nature. In American history, Worster writes, amending the Constitution

has often promoted dramatic changes in our social behavior, as the civil rights movement, which has drawn heavily on the Fourteenth Amendment for authority, demonstrates. The same might be true of a Constitution that spoke outright of our obligations as citizens to the land we own and inhabit. It will declare that all the lands of these United States belong in a final sense to all the people and that present occupants have the use of them for their fruits only. It will demand that any use of the land not leave any lasting impairment, or diminish its beauty, or endanger public health. That new document will affirm, in the spirit of Aldo Leopold, that all forms of life, nonhuman and human alike, are henceforth to be considered as citizens dwelling together in this great and virtuous republic. That is a Constitution I sense is coming. (“Private” 111)

Amendments of constitutions can, of course, only be based on political processes, which in turn depend on democratic majorities. Although Worster rightly criticizes that “most decisions made about the land today are not made by the people as a whole, or any approximation of them, but by a small elite who may or may not represent the public interest,” he does not explain how this pattern might be broken, how democratic majorities might be achieved, or how public awareness for environmental issues might be shaped so that federal politics and legislation might ultimately be influenced (“Legacy” 28-29). Considering Worster’s strong environmental ethos and his profound belief in didacticism, his vagueness regarding the issue of public education is at times astonishing. Although Worster stresses the importance of environmental history for our overall understanding of the human-nature relationship, he nevertheless does not show how environmental concerns might be brought to the attention of a broader public. Obviously, the scientific discourses of environmental historians only reach the

smallest fraction of society and to change environmental practices in Western culture to the extent envisioned by Worster, a broader basis of society needs to be addressed.

Worster, I argue, does not provide his readers with a clear suggestion how such an environmental education of a broader public might be achieved. Personally, I believe that credible role models promoting and fighting for environmentally sound practices in the highest levels of politics and business are necessary to achieve this aim. Germany's Chancellor Merkel might be a good example of how political leaders can function as role models and influence the perception of environmental issues in the public. And even in the United States, politicians like Arnold Schwarzenegger have to be credited for their strong pro-environmental position, as their efforts undoubtedly contribute to change the overall discourse concerning environmental issues in society.

As the majority of Donald Worster's environmental histories and essays on the subject were published long before the current media hype about climate change surfaced, I asked Worster how he sees the current awareness for environmental issues in American society. My question to Worster was phrased as follows:

Al Gore's *Inconvenient Truth* reached a record audience for a documentary in the United States, Arnold Schwarzenegger enjoys—even in Europe—the image of a model type “green conservative,” and even President Bush is signaling a change of paradigm in American politics regarding the exploitation of natural resources. Do you think that we can speak of a “greening of America,” as the *Economist* recently suggested? Is there a change of paradigm taking place in American culture, driven by some profound insights into the fragility of nature, or is the current increase in environmental awareness only driven by the media and will subside again as the public becomes bored about news of environmental disaster?

Here is Donald Worster's answer:

The *Economist* is sometimes prone to shallow analysis and ideological solutions, offering “the market” as a utopian cure-all for every ailment. A lot of U.S. opinion shows the same shallowness and wishful thinking. So don't believe magazine headlines. If “greening” means merely buying carbon offsets every time one gets on an airplane or buying a Lexus hybrid, then the shade of green is so light as to be invisible. We face the challenge of reinventing the material foundations of modern civilization and the cultural foundations as well. This is going to take more time than the magazines realize. A truly “green society,” I believe, is one in which nature becomes more than a ruthlessly exploited or even prudently managed “economic resource,” more than raw material to satisfy unlimited appetites. Nature comes to have a higher, post-consumer value—a value in and for itself. (Unpublished interview)

As this statement again illustrates, Worster is very skeptical, to say the least, of the potential of the capitalist market place as a driver of sustainable politics. More importantly, Worster

questions the ‘greening’ of American society—or of Western society in general—that is currently often proclaimed in the media. For Worster, the changing awareness in society regarding environmental issues is neither as profound nor as widespread as the media wants to make us believe. Undoubtedly, Worster is right in so far as that neither our efforts to actively protect the environment nor our sacrifices in terms of giving up essential aspects of our Western consumer culture amount to the total efforts needed to prevent the negative side-effects of environmental degradation forecast by the Stern Report and others.

What, then, is the specific value and strength of Worster’s approach? I believe that the weakness of Worster’s approach outlined above, namely his generalizations regarding capitalism and his strong belief in principal, moral positions, is at the same time his very strength. Worster’s environmental histories are not exceptional in their rational analysis and explanation of the economic principles of capitalism, but rather in their promotion of a sensual, emotional approach to nature. According to Worster, this emotional understanding of nature’s complexity and, in romantic terms, sublime beauty should serve as the primary basis for a moral understanding of nature as an entity to be cherished, respected, and ultimately protected. The following paragraph from *Dust Bowl* illustrates the extent to which Worster favors a sensual over a rational approach to nature:

Man’s adaptation to nature is never merely a matter of technical understanding and inventiveness. If it were, then the most highly advanced cultures in terms of science and machinery would also be the most well fitted to their environments. In fact, those cultures are among the least well adapted in the world; their prowess encourages a disregard of natural limits more than the qualities of respect and restraint do. Living within the ecological order requires knowledge, of course, and appropriate technology, but more important is the capacity to feel deeply the contours of that order and one’s part in it. When both the identity of self and of community become indistinguishable from that of the land and its fabric of life, adaptation follows almost instinctively, like a pronghorn moving through sagebrush. Houses and fields, tools and traditions, grow out of the earth with all the fitness of grass; they belong in their place as surely as any part of nature does. This is genuine adaptation, and it implies much more than shallow managerial skill. It comes from having a sense of place, which is at once a perception of what makes a piece of land function as it does and a feeling of belonging to and sharing in its uniqueness. (164)

I argue that this passage illustrates that Worster, despite the fact that he blends a variety of biologic, ecologic, sociologic, and economic theories and discourses in his environmental histories, is at heart convinced that we can only rediscover the wealth and value of nature if we understand it emotionally, not rationally.

Worster believes that an emotional, sensual approach to nature will more likely generate the respect for nature that is needed in order to promote environmental protection on a global scale. Respect for nature, Worster is convinced, must be based on the awareness that we, as human beings, are not superior to nature, but an integral part of the greater economy of nature. Our existential dependence on the ways of nature, Worster suggests, can better be seen or felt rather than being explained. At least, Worster argues that this general respect for the forces of nature needs to exist on an emotional level before it can be translated in the active protection of nature via rational means. For Worster, the greatest illusion of Western culture is the idea that humans are superior to nature or are able to control nature one hundred percent via rational means. As Worster puts it, “human domination over nature is quite simply an illusion, a passing dream by a naive species” (“Hoover” 78). According to Worster, the cultural heritage of the enlightenment project represented in the idea of human superiority over nature will shortly enter history as one of the great misconceptions of western culture. Worster predicts that as western capitalist culture changes the natural environment to humankind’s disadvantage at an increasing pace and on a global scale, the archaic respect for the forces of nature will soon be revitalized in the human community:

We may be entering a new phase of history, a time when we begin to rediscover...the traditional teaching that power must entail restraint and responsibility, the ancient awareness that we are interdependent with all of nature and that our sense of community must take in the whole of creation. (“Vulnerable” 20)

Worster implies that compared to ancient cultures, contemporary Western societies are not organized intelligently, as their value systems are not configured in ways fit to ensure a sustainable relationship with nature—and thus endanger the existence of these societies as such. The development of a sustainable relationship with nature, however, is the principal task for human society if it wants to safeguard its future, as Worster knows: “The human economy requires for its long-term success that its architects acknowledge their dependence on the greater economy of nature, preserving its health and respecting its benefits” (“Wealth” 217). Or, as Aldo Leopold once put it: “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise” (“Land” 224-25).

For Worster, the promotion of greater environmental awareness among the world’s cultures and the establishment of a more sustainable relationship with nature on a global scale is ultimately a question of values. As I tried to illustrate in chapter IV, Worster is opposed to the

postmodern theorizing of nature, as he sees in postmodernism a relativist discourse that is in direct opposition to the firm value system Worster wants to promote. The values needed to protect nature from further human-induced environmental corruption are, as Worster believes, on the one hand in contradiction with the relativism promoted by postmodernism and, on the other hand, in contradiction with the values traditionally promoted by capitalism and the capitalist market place. Worster thus concludes that “ecological harmony is a nonmarket value that takes a collective will to achieve” (“Thinking” 133). I already pointed out that Worster does not outline in detail how exactly such a collective change of mind might be achieved. In his essay “Private, Public, Personal: Americans and the Land,” however, Worster reverses Adorno’s and Horkheimer’s dictum by suggesting that if the human domination over nature results in the domination of humans over humans, a more democratic, egalitarian society will eventually result in a healthier relationship between humans and the environment:

Before people can be expected to think cooperatively about their place in nature, they must first be trained in the habits of thinking cooperatively about the society in which they live. I submit that means they must live in a country where most of the land is held under some form of communal ownership or control, not only the forests, mountains, and deserts of the American West, but the farms and ranches, the water-ways and woodlots all over the place. That land need not be put wholly into federal hands; a more localized, decentralized kind of communal ownership and management might be pursued instead, including ownership by non-profit land trusts and environmental organizations. (110)

Translated to American culture, Worster’s proposal implies that core American values such as private property and enterprise, upward mobility, and self reliance ought to be replaced by a more communitarian set of values:

A genuine democracy, in which a true freedom for the individual and the community thrives, requires a different, less domineering attitude toward the natural world—a culture where greed and appetite are restrained by reason, virtue, and modesty (all of which, by the way, are great Jeffersonian values). (“Water” 44)

As I tried to point out throughout this dissertation, Worster’s work as an environmental historian thus ultimately questions the very core of American culture, the central myths that explain who and what Americans are as a people. Arguing that most of American culture’s core values and myths center around a wide variety of nature concepts and imagery, Worster follows in the footsteps of the first generation of American Studies scholars like Henry Nash Smith, Leo Marx, or Perry Miller who investigated the impact

of the 'wilderness' concept, pastoral ideals, and, more broadly, the concept of America as 'nature's nation' on the self-understanding of the American people. The pastoral idealizations of American culture—represented in the Marlboro Man, Turner's pioneer in the wilderness, the American cowboy or, more general, the concept of Americans as a people born in the American forest—are, as Worster argues, in the end only masking the true character of American society. As far as Americans' relationship with nature is concerned, Worster points out, the pastoral ideal is ideological in so far as it disguises a truly exploitive, unhealthy relationship towards nature and sells it as harmonious and virtuous. It is thus Worster's great mission to reveal what he takes to be the true nature of the human-nature relationship in American culture:

Our cowboy-rancher somehow has come to stand for the ideal of free enterprise and for the institution of private property. Historians need to take all those images and ideals seriously—more seriously than they have but historians must also reveal what our celebration of pastoral freedom has produced on the land and in society. ("Cowboy" 52)

Worster's work as an environmental historian of the American West is thus not only located in the discursive tradition of Western American historiography, but more generally in the great tradition of American myth criticism.

In this sense, the revision of Western American history promoted by Donald Worster and the New Western Historians might indeed be called ideological, as some critics have done, for the narratives provided by the New Western Historians are often counter-ideologies to the ideologies traditionally informing American culture. From my perspective, it is thus important to acknowledge that the New Western History is not merely the latest chapter in Western American historiography, but simultaneously an important chapter in that strand of American myth criticism that examines concepts of 'nature' in American culture. Hence, the New Western History represents more than merely a critical revision of Frederick Jackson Turner and the Old Western History. Rather, the New Western History paradigmatically illustrates the decisive role environmental history has played in the academic analysis of American culture since the 1970s. Using 'nature' as an analytic category to challenge the ways we perceive both culture and nature, New Western Historians like Donald Worster, Richard White, or William Cronon have contributed greatly to a better understanding of American culture. In doing so, these environmental historians have also greatly added significance to the overall discourse of the humanities, for, as Leo Marx correctly points out, "a humanistic training that neglects environmental issues sets the humanities

at the margins, rather than at the center of modern concerns” (“Environmentalism” 28). In times when economic issues on the one hand and environmental issues on the other hand determine our lives on a global scale, I believe it is the responsibility of the humanities to develop an economic as well as an environmental awareness and expertise. In this sense, Donald Worster has been a true visionary throughout his career—regardless of the fact that the theoretical foundations of his work can be considered outdated in many respects.

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ABOUT THE AUTHOR

Mark Schiffhauer began his academic career in October 1992 at Frankfurt's Goethe-University, where he studied German Literature and American Studies for four semesters until Juli 1994. Early on in his studies, he developed a special interest in the literature of the American West. Throughout his undergraduate studies, Mark Schiffhauer focused especially on the work of Californian writer John Steinbeck. After transferring to Philipps-University at Marburg in October 1994, Mark Schiffhauer was awarded a scholarship by the German Academic Exchange Service (DAAD) in February 1995. Within the framework of the DAAD's North-America program, he spent the academic year from September 1995 to June 1996 at the University of California at Santa Cruz to research the work of John Steinbeck.

After his return to Philipps-University in October 1996, Mark Schiffhauer joined the staff of the American Studies department as a student assistant, supporting Professor Volker Bischoff in the department's organizational and academic affairs. He wrote his Magister thesis on Wallace Stegner's *Angle of Repose (The Revision of the Frontier Myth in Wallace Stegner's Angle of Repose)* and graduated with honors ("Mit Auszeichnung") from Marburg University in January 1999.

In April 1999, Mark joined Germany's leading agency for financial communication, Maleki Group, in Frankfurt am Main. In the spring of 2003, Mark Schiffhauer started working on a dissertation on American environmental history and concepts of 'nature' in Western American History, which he completed within five years while still working with Maleki Group. The dissertation *From Wilderness to Environment: The Role of 'Nature' in Western American History from Frederick Jackson Turner to Donald Worster and the New Western Historians* was accepted by the Philipps-University Marburg in February 2008.

Since January 2005, Mark Schiffhauer has been a member of Maleki Group's Management Board. In this function, he has initiated international conferences on Corporate Responsibility and Sustainable Development, including high-ranking speakers from politics, business and academia. He is also project manager of the Frankfurt EURO FINANCE WEEK, the largest meeting point of the finance and insurance industry in Europe with 550 speakers and 10,000 visitors from 60 nations.

Mark lives together with his wife Katja and daughter Paulina in Frankfurt am Main.