



Omohundro Institute of
Early American History and Culture
Williamsburg, Virginia

The Politics of Grass: European Expansion, Ecological Change, and Indigenous Power in the Southwest Borderlands

Author(s): Pekka Hämäläinen

Source: *The William and Mary Quarterly*, Vol. 67, No. 2 (April 2010), pp. 173-208

Published by: [Omohundro Institute of Early American History and Culture](#)

Stable URL: <http://www.jstor.org/stable/10.5309/willmaryquar.67.2.173>

Accessed: 31/05/2011 11:49

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=omohundro>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Omohundro Institute of Early American History and Culture is collaborating with JSTOR to digitize, preserve and extend access to *The William and Mary Quarterly*.

<http://www.jstor.org>

The Politics of Grass: European Expansion, Ecological Change, and Indigenous Power in the Southwest Borderlands

Pekka Hämäläinen

THE Europeans who conquered the New World liked to credit their astonishing successes to their god and their own ingenuity, but modern broad-gauge biohistories suggest that all the conquerors often had to do was to show up and somehow stay alive; their microbes did the rest. Arriving with oceangoing ships, steel, and horses, Europeans held a decisive military edge over the Indians, yet the conquest of the Americas would have been neither as fast nor as complete without Europe's biological advantages. The biological thrust of colonization has been recognized since smallpox toppled the Aztecs—the conquistadors knew they were advancing in the wake of infectious diseases even if they spoke of divine rather than epidemiological interventions—but it was not until scholars coined such arresting macrohistorical concepts as the Columbian Exchange and ecological imperialism that biological interpretations entered the mainstream. The result was what might be called a biological turn of American colonial history. Suddenly the conquest of Native America seemed a product not so much of Europe's techno-organizational superiority as of blind biogeographic luck.

Grand, large-scale biohistories have reoriented the story of America's Europeanization, but precisely because they compress complex processes into digestible formulas, they can obscure as much as they reveal. Preoccupied with global patterns, they often distort the realities on the ground, where Europeans did not expand as a monolith and Indians did

Pekka Hämäläinen is an associate professor of history at the University of California, Santa Barbara, and, in 2009–10, a fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University. He wishes to thank Connie Chiang, Elizabeth Fenn, Benjamin Johnson, Matthew Klinge, Samuel Truett, the participants of the 2008 Indigenous Environments conference at Bowdoin College, and the anonymous readers for the *William and Mary Quarterly*.

William and Mary Quarterly, 3d Series, Volume LXVII, Number 2, April 2010

not die in the aggregate. Abstract by design, the big-picture ecohistorical models tend to suffuse history with biological determinism: European colonization becomes a mere corollary of an undeclared biological warfare, and Indians, their immunologically naive bodies but soft fodder for aggressive Old World pathogens, seem naturally selected for dispossession. History is reduced to a Darwinian process where biological encounters inexorably lead to colonial conquests, undisturbed by instances where European biota—animals, plants, pathogens—did not trigger immediate aboriginal decline and where Europeans were not the primary beneficiaries of transoceanic exchanges.¹

Such deterministic, flattening tendencies of macroscale biohistories have come under increasing criticism, or been sidelined, as historians have produced more complex and nuanced narratives that show how indigenous decline in the face of Europe's biological onslaught was neither immediate nor inevitable.² This shift in focus has reconfigured

¹ The biological turn of American colonial history can be traced to the seminal works of Alfred W. Crosby Jr. and William H. McNeill. See Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, Conn., 1972); Crosby, "Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation in America," *William and Mary Quarterly*, 3d ser., 33, no. 2 (April 1976): 289–99; McNeill, *Plagues and Peoples* (New York, 1976); Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (New York, 1986). For other examples of big-picture biohistorical interpretations of Europe's ascent, see for example Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York, 1997); John M. Murrin, "Beneficiaries of Catastrophe: The English Colonies in America," in *The New American History*, ed. Eric Foner (Philadelphia, Pa., 1997), 3–30; Noble David Cook, *Born to Die: Disease and New World Conquest, 1492–1650* (New York, 1998).

² I am thinking here of works such as William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York, 1983); Richard White, *The Roots of Dependency: Subsistence, Environment, and Social Change among the Choctaws, Pawnees, and Navajos* (Lincoln, Neb., 1983); James H. Merrell, "The Indians' New World: The Catawba Experience," *WMQ* 41, no. 4 (October 1984): 537–65; Timothy Silver, *A New Face on the Countryside: Indians, Colonists, and Slaves in the South Atlantic Forests, 1500–1800* (New York, 1990); Elinor G. K. Melville, *A Plague of Sheep: Environmental Consequences of the Conquest of Mexico* (Cambridge, 1994); Colin G. Calloway, *New Worlds for All: Indians, Europeans, and the Remaking of Early America* (Baltimore, 1997); Andrew C. Isenberg, *The Destruction of the Bison: An Environmental History, 1750–1920* (New York, 2000); Virginia DeJohn Anderson, *Creatures of Empire: How Domestic Animals Transformed Early America* (New York, 2004); Paul Kelton, *Epidemics and Enslavement: Biological Catastrophe in the Native Southeast, 1492–1715* (Lincoln, Neb., 2007); Liza Piper and John Sandlos, "A Broken Frontier: Ecological Imperialism in the Canadian North," *Environmental History* 12, no. 4 (October 2007): 759–95; Massimo Livi Bacci, *Conquest: The Destruction of the American Indians*, trans. Carl Ipsen (Cambridge, 2008). For historiographical assessments of macroscale biohistories, see Louis S. Warren, "The Nature of Conquest: Indians, Americans, and Environmental History," in *A Companion to American Indian History*, ed. Philip J. Deloria and Neal Salisbury (Malden, Mass., 2002), 287–306; David S. Jones, "Virgin Soils Revisited," *WMQ* 60, no. 4 (October 2003): 703–42; J. R. McNeill, "Observations on the Nature and Culture of Environmental History," *History and Theory* 42, no. 4 (2003): 5–43. Much of the criticism has fallen

environmental history, but it does not mean that, in efforts to avoid sweeping and deterministic generalizations, historians ought to consign environmental history to local case studies. A nascent historiographical middle ground is emerging that moves among local, regional, continental, and transoceanic perspectives and focuses on the interplay among political, economic, cultural, and biological forces. By blending environmental history, transatlantic history, borderlands history, ethnohistory, and colonial studies, historians question ossified assumptions about the potency of state power, the contours of indigenous agency, the cultural specificity of human-environment relationships, and the arrows of environmental and historical change.³ Just such an approach, applied to the Comanche Indians, a hunter-gatherer group of modest origins, reveals an unforeseen imperial expansion sustained by an equally unexpected ecological undercurrent.

In the eighteenth-century American Southwest and Great Plains, an imposing Comanche imperial structure arose amid European colonial outposts and in an environment that was rapidly being remade by Europe's biological exports. Initially unsettled by European intrusions, Comanches learned to protect their bodies and homelands against dangerous Old

on Alfred W. Crosby Jr.'s *The Columbian Exchange and Ecological Imperialism*, and not always justifiably. As Louis S. Warren observes, it is important to note that Crosby's formulations were often more subtle and sophisticated than those of his followers and popularizers, whose generalizations have tended to truncate and distort his arguments with geographic and/or immunological determinism. See Warren, "Nature of Conquest," 291–93.

³ I am referring to the kind of braided narratives in which several historiographical approaches not just exist in dialogue but dissolve into one another, making it difficult to say where one analytic mode ends and another begins. For major openings toward such narratives in the context of North American colonial and borderlands history, see Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650–1815* (New York, 1991); Stephen Aron, *How the West Was Lost: The Transformation of Kentucky from Daniel Boone to Henry Clay* (Baltimore, 1996); Elliott West, *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado* (Lawrence, Kans., 1998); Gary Clayton Anderson, *The Indian Southwest, 1580–1830: Ethnogenesis and Reinvention* (Norman, Okla., 1999); Theodore Binnema, *Common and Contested Ground: A Human and Environmental History of the Northwestern Plains* (Norman, Okla., 2001); Samuel Truett, *Fugitive Landscapes: The Forgotten History of the U.S.-Mexico Borderlands* (New Haven, Conn., 2006); François Furstenberg, "The Significance of the Trans-Appalachian Frontier in Atlantic History," *American Historical Review* 113, no. 3 (June 2008): 647–77. For a call for narratives that operate on and move between multiple spatial scales, see White, "The Nationalization of Nature," *Journal of American History* 86, no. 3 (December 1999): 976–86. For a call for integrating human agency and various spatial scales into the study of biological exchange, see Ingo Kowarik, "Human Agency in Biological Invasions: Secondary Releases Foster Naturalization and Population Expansion of Alien Plant Species," *Biological Invasions* 5, no. 4 (December 2003): 292–312.

World organisms while adopting what was useful in Europe's export package, and theirs is a story of a domineering indigenous power exploiting European exports to exploit European colonists in a world that was new for all. But to stay in power—to survive their ascendancy—Comanches had to reenvision their relationship with the natural world. They had to forge strategies to offset the ecological burdens of their political and economic expansion and, when those strategies could no longer absorb the burdens of growth in their Great Plains niche, find ways to transport these costs elsewhere. The colonial Southwest and northern Mexico were gradually drawn into the expanding Comanche sphere as raiding domains and ecological safety valves.⁴

The rise of the Comanches thus stemmed less from ecological stability than from instability; their imperial project was prompted and made possible by ecological changes that increasingly resulted from their own actions. Initially, European contact and the introduction of Old World animals, pathogens, and technology spurred Comanches into expansion, but the consequent growth of their economy soon exceeded the existing ecological constraints. The unsustainable growth produced further ecological changes, which in turn triggered another expansionist phase to broaden the resource base. Such feedback cycles of ecological change, periodic vulnerability, and political expansion occurred several times during the century and a half of Comanche expansion and, if not for the post-Civil War intervention of the United States, might have been repeated many times over.

The rise of this Comanche-centric order and its ecological underpinnings illuminate the complex and unexpected ways in which transoceanic exchanges, biological encounters, and human ambition could intertwine to shape power relationships in early America. They form a counternarrative to conventional colonial histories by revealing a world where Indians benefited from Europe's biological expansion, safeguarded their homelands by displacing ecological burdens on colonial realms, and debilitated European imperialism with imperial aspirations of their own. It is a counternarrative that expands the scope of indigenous agency from the social to the biological sphere because it shows how Indians could determine not only the human parameters of colonial encounters but also the ecological ones. As such it is a story that may help bridge the gap that separates the declensionist narratives of American

⁴ This essay draws the idea of a Comanche imperial organization from my 2008 book, emphasizing the ecological dimension of the Comanche political project, a thread that I touched on but did not fully develop. See Pekka Hämäläinen, *The Comanche Empire* (New Haven, Conn., 2008).

Indian environmental history from the works that emphasize the resilience of indigenous polities and cultural forms.⁵ Native survival in colonial America was often a race against ecological degradation and the loss of land and its resources. As the rise of the Comanches shows, however, the outcomes of that contest could remain undetermined for a long time.

LIKE MANY NOW-RENOWNED Native American societies, the Comanches were born out of creative responses to the dangers and opportunities unleashed by European contact. In the seventeenth century, Comanches did not exist as an ethnic entity. Their parent group, the Uto-Aztecanspeaking Shoshones, lived on the central Great Plains of North America, having migrated from the Great Basin in the mid-1500s, when the plains bison proliferated under the cool and wet conditions of the Little Ice Age. Their location deep in the continent's core sheltered the Shoshones from European influences, but eventually that centrality turned their homelands into a confluence of Columbian exchanges. In the late seventeenth century, an unknown disease, possibly smallpox, reached them with devastating results: people died, kinship networks fractured, and the Shoshones split in two. One faction, carrying the name Shoshone with it, gravitated toward the dense bison populations of the northern plains, where they clashed with the expanding Blackfoot Indians, who had access to European weaponry through the Canadian fur trade and eventually pushed the Shoshones west of the Rocky Mountains. The other faction

⁵ The ability of Native Americans to preserve and even enforce their political agendas and cultural conventions in colonial contexts has been a central tenet of the new Indian history, which, since its emergence in the 1970s, has altered how historians view not only American Indian history but also North American history in general. For brief but useful overviews of the new Indian history, see William T. Hagan, "The New Indian History," in *Rethinking American Indian History*, ed. Donald L. Fixico (Albuquerque, N.Mex., 1997), 29–42; Ned Blackhawk, "Look How Far We've Come: How American Indian History Changed the Study of American History in the 1990s," *Organization of American Historians' Magazine of History* 19, no. 6 (November 2005): 13–17. The declensionist tendencies in American Indian environmental history reflect the popularity of the Columbian Exchange and ecological imperialism as conceptual frameworks, which have helped spawn a sweeping and often monochromatic master narrative of Native American decline. Another, less explicit declensionist branch has emerged with studies that challenge the idea of Native Americans as the aboriginal ecologists and emphasize the Indians' ability and willingness to modify their environments, often under commercial impulses and frequently with destructive consequences. The most forceful example of this line of inquiry is Shepard Krech III, *The Ecological Indian: Myth and History* (New York, 1999). For the decline of declensionist interpretations in the larger field of environmental history since the mid-1980s, see Richard White, "Afterword: Environmental History: Watching a Historical Field Mature," *Pacific Historical Review* 70, no. 1 (February 2001): 103–11, esp. 105–6.

pushed hundreds of miles to the south, emerging in New Mexican records as Comanches. Disease may have put these proto-Comanches on the move—Indians often abandoned places infested with dangerous, unexplainable forces—yet it was another biological frontier that pulled them south. In 1680 allied Pueblo Indians banished their Spanish overlords from New Mexico, only to fall victim to escalating raids by surrounding nomads who coveted the horses that the fleeing Spaniards had left behind. The nomads traded a portion of the stolen animals to their allies, propelling the horse frontier deep into the interior where the Comanches encountered it, securing enough beasts to envision the possibilities of the equestrian way of life. Tracing the equine flow back to its source, Comanches arrived in New Mexico's borderlands sometime in the 1690s, just as the Spaniards arrived from the south to recapture the colony.⁶

The first brush with European influence had splintered the Shoshone nation, but out of that national dissolution emerged the most successful colonizing campaign of the early American West: the Comanche conquest of the southern plains. This expansion, like the birth of the Comanche polity, was fueled and framed by the introduction of European horses, pathogens, and technology. In the early eighteenth century, just as the Comanches forced their way in, a renewed wave of European influences washed over the southern plains, engendering a highly competitive political and biological environment in which survival often necessitated violent action.

The concurrent arrivals of Comanches and Spaniards in the Southwest ensured that the former would be exposed to a range of European

⁶ For postcontact ethnogenesis and emergence of new Native American societies, see for example Patricia Galloway, *Choctaw Genesis, 1500–1700* (Lincoln, Neb., 1995); Anderson, *Indian Southwest*; Colin G. Calloway, *One Vast Winter Count: The Native American West before Lewis and Clark* (Lincoln, Neb., 2003), 119–63; Kathleen DuVal, *The Native Ground: Indians and Colonists in the Heart of the Continent* (Philadelphia, 2006), 58–69. For early Shoshone history, see Calloway, “Snake Frontiers: The Eastern Shoshones in the Eighteenth Century,” *Annals of Wyoming* 63, no. 3 (Summer 1991): 82–92, esp. 84–85; Dan Flores, “Bison Ecology and Bison Diplomacy: The Southern Plains from 1800 to 1850,” *Journal of American History* 78, no. 2 (September 1991): 465–85, esp. 468. According to Shoshone and Comanche oral traditions, the Comanches broke off from the parent group after a smallpox epidemic and a clash over game. See W. P. Clark, *The Indian Sign Language* (Philadelphia, 1885), 120; Ernest Wallace and E. Adamson Hoebel, *The Comanches: Lords of the South Plains* (Norman, Okla., 1954), 9–10. For Shoshones on the northern plains, see Binnema, *Common and Contested Ground*, 88–94. For the Pueblo Revolt as a catalyst for Plains Indian equestrianism, see Demetri B. Shimkin, “The Introduction of the Horse,” in *The Great Basin*, ed. Warren L. D’Azevedo, vol. 11, *The Handbook of North American Indians*, ed. William C. Sturtevant (Washington, D.C., 1986), 517–24.

exports: not just horses but firearms, steel, and microbes as well. A frontier outpost with few industries and distant from Mexico City, New Mexico relied heavily on external trade, and the returning Spaniards promptly revived the colony's main commercial arteries: the Chihuahua Trail, which siphoned goods from Mexico, and border fairs with nomadic Indians, where everything from guns and germs to meat and slaves was exchanged. Comanches entered this world of possibility and peril cautiously. They forged an alliance with the Utes, another Uto-Aztecan group living in New Mexico's borderlands, and, guided by their new partners, added guns and metal tools to their inventory of European technology. Though embracing Spanish innovations, Comanches kept their distance from Spaniards themselves. They used Spanish horses and guns to raid neighboring Spanish and native communities for livestock and captives and then entered New Mexico's urban centers under temporary truces to barter meat and slaves for corn and horses. Interlaced with violence, such visits were by necessity brief and sporadic cross-border plunges that yielded European technology without extended exposure to European microbes. By the 1710s Comanches were raiding slaves deep on the southern plains, where their probing migration transformed into a sweeping colonization project, at the heart of which was a bitter war of attrition with the formidable Apaches.⁷

Comanches reenvisioned their place in the world because they were reimagining the world itself. When they pushed into the southern plains in search of human merchandise, they plugged themselves into a spiraling energy stream of grass, flesh, and sunlight. Their horses, descendants of desert-bred African Barbs, thrived on the semiarid, grass-matted southern plains, and suddenly everything seemed magnified. The horse entered Comanche society as a hunting and transportation tool; it was a "magic dog" that allowed its owners to tap more efficiently the enormous

⁷ For New Mexico, see Thomas D. Hall, *Social Change in the Southwest, 1350–1880* (Lawrence, Kans., 1989), 95–108; Ross Frank, *From Settler to Citizen: New Mexican Economic Development and the Creation of Vecino Society, 1750–1820* (Berkeley, Calif., 2000), 14–21. For Comanches in the borderlands, see "Opinion of Ensign Xptobal de Torres," Aug. 19, 1719, in *After Coronado: Spanish Exploration Northeast of New Mexico, 1696–1727: Documents from the Archives of Spain, Mexico, and New Mexico*, ed. and trans. Alfred Barnaby Thomas (Norman, Okla., 1935), 104; "Opinion of Ensign Bernardo Casillas," Aug. 19, 1719, *ibid.*, 104–5; "Opinion of Xptobal de la Serna," Aug. 19, 1719, *ibid.*, 105–6; Antonio de Valverde y Cosío to Baltasar de Zúñiga y Guzmán, Marqués de Valero, Nov. 30, 1719, *ibid.*, 141–45; Ned Blackhawk, *Violence over the Land: Indians and Empires in the Early American West* (Cambridge, 2006), 37–42. For the Comanche migration to the southern plains, see "The Diary of Juan de Ulibarri to El Cuartelejo, 1706," in Thomas, *After Coronado*, 59–77, esp. 61–76; "Diary of the Campaign of Governor Antonio de Valverde against the Ute and Comanche Indians, 1719," *ibid.*, 110–33, esp. 110–25.

reservoir of biomass concentrated in the bodies of the millions of bison that inhabited the plains.⁸ But beneath that mechanic advantage lay a more elemental one: horses were a conduit for channeling the sun's energy. Horses converted plant life into immediately available muscle power, saving their masters a crucial step in their endless quest for energy. When Comanches embraced full-time equestrianism, they harnessed, more directly than anyone before, the vast pool of solar energy stored in the plains grasses for human use. So appealing was this new solar economy that Comanches drastically downsized their age-old gathering economy. They stopped actively using some one hundred plants, lost two-thirds of their ethnobotanical lore, and sought exchange relationships with Spaniards, Pueblo and Wichita farmers, and itinerant French traders from Louisiana, who supplied them with two crucial forms of energy their specialized horse-and-bison economy could not generate: human-digestible plant energy and the products of Europe's mineral and chemical economy. By exporting slaves, horses, hides, and meat to regions where such products were scarce, they generated multiple counterflows of guns, metal, maize, squash, and fruit that helped balance their dangerously streamlined economy.⁹

⁸ Alice Marriott and Carol K. Rachlin, *Plains Indian Mythology* (New York, 1975), 90.

⁹ For Spanish horses and the southern plains environment, see Dan Flores, *Horizontal Yellow: Nature and History in the Near Southwest* (Albuquerque, N.Mex., 1999), 82–100. The success of Plains Indian equestrianism was built on an aberration from the expected pattern of ecological imperialism. Most native plants of the Americas had not evolved to coexist with large grazing animals, and when Eurasian animals arrived, the plants were rapidly devoured and replaced by more resilient Old World weeds. On the North American Great Plains, however, grasses had coevolved during several millennia with large, voracious grazing animals—most notably the bison—and therefore proved exceptionally resilient in the face of Europe's faunal invasion. For the adaptation of plains grasses to the bison and heavy grazing, see Isenberg, *Destruction of the Bison*, 22–23. For the advantages of mounted hunting over pedestrian hunting, see John C. Ewers, *The Horse in Blackfoot Indian Culture: With Comparative Material from Other Western Tribes* (Washington, D.C., 1955), 148–70; Calloway, *One Vast Winter Count*, 272–76. For equestrianism and energy exploitation, see Flores, *Caprock Canyonlands: Journeys into the Heart of the Southern Plains* (Austin, Tex., 1990), 83–84; West, *Contested Plains*, 34–54. For Comanche ethnobotany, see Flores, *Journal of American History* 78: 471; Thomas W. Kavanagh, comp. and ed., *Comanche Ethnography: Field Notes of E. Adamson Hoebel, Waldo R. Wedel, Gustav G. Carlson, and Robert H. Lowie* (Lincoln, Neb., 2008), 511–14. Though Comanches stopped actively using plants, they did not discard them entirely. Many native groups kept unused subsistence strategies in their cultural archive and retrieved them in times of crisis and need. For a comparative case among the Karinya Indians of northern South America, see William M. Denevan, "Adaptation, Variation, and Cultural Geography," *Professional Geographer* 35, no. 4 (November 1983): 399–406, esp. 403–4. For early Comanche trade, see Charles L. Kenner, *The Comanchero Frontier: A History of New Mexican–Plains Indian Relations* (1969; repr., Norman, Okla., 1994), 35–40; Pekka Hämäläinen, "The Western

Exchange-oriented equestrianism brought Comanches economic security—and then entangled them in war. The viability of their changing economy rested on their ability to keep horse herds large and market outlets open, a demanding double imperative that put them on a collision course with the semiagricultural Apaches. The Comanche-Apache conflict that gripped the southern plains for a half century became unusually intense by the standards of Indian-Indian warfare because the two groups had developed mutually incompatible ecological strategies. Apaches needed the few river valleys that cut across the southern plains for their irrigated maize fields; both groups needed the high-calorie riparian tall grasses, low-saline water, and shelter to feed and protect their horses; and neither could do without New Mexico's garden products. Struggling to adjust their needs to what was readily available, Comanches seized the southern plains one river valley and one market outlet at a time, elbowing the Apaches to the south and west. They made a bid to monopolize New Mexico's eastern markets by disrupting Apache trade in the colony, which in turn drew Spaniards into the conflict by the late 1710s. Spanish officials intended to fight the war by proxy, using the Apaches to contain the Comanches, but they undermined the effort by refusing to supply their allies with horses and guns, which was the standard Spanish policy with Indians. Comanches razed Apache villages across the grasslands and then embarked on wholesale raiding along the Spanish frontier, pillaging horses, captives, and food and terrorizing the colonists for siding with the Apaches.¹⁰

The wars continued until midcentury, when the Comanches gained the upper hand over both the Apaches and their Spanish allies. Fully mounted, well equipped with European weaponry, and apparently untouched by major epidemics since the late seventeenth century, they

Comanche Trade Center: Rethinking the Plains Indian Trade System," *Western Historical Quarterly* 29, no. 4 (Winter 1998): 487–513, esp. 488–91; Juliana Barr, "From Captives to Slaves: Commodifying Indian Women in the Borderlands," *Journal of American History* 92, no. 1 (June 2005): 19–46, esp. 25–30.

¹⁰ For Comanche-Apache-Spanish wars, see Kenner, *Comanchero Frontier*, 28–34; Hämäläinen, *Comanche Empire*, 29–49. For Apache farming, see Waldo R. Wedel, *Central Plains Prehistory: Holocene Environments and Culture Change in the Republican River Basin* (Lincoln, Neb., 1986), 135–51; Susan C. Vehik, "Cultural Continuity and Discontinuity in the Southern Prairies and Cross Timbers," in *Plains Indians, A.D. 500–1500: The Archaeological Past of Historic Groups*, ed. Karl H. Schlesier (Norman, Okla., 1994), 239–63, esp. 246–63. For the importance of riverine microenvironments for Plains Indian equestrianism, see John H. Moore, *The Cheyenne Nation: A Social and Demographic History* (Lincoln, Neb., 1987), 153–67; James E. Sherow, "Workings of the Geodialectic: High Plains Indians and Their Horses in the Region of the Arkansas Valley, 1800–1870," *Environmental History Review* 16, no. 1 (Summer 1992): 61–84, esp. 70–73, 79; Elliott West, *The Way to the West: Essays on the Central Plains* (Albuquerque, N.Mex., 1995), 19–33.

were growing rapidly in numbers, their population probably nearing fifteen thousand by 1750. Meanwhile the Apaches, especially the Jicarillas, Mescaleros, and Lipans who had gradually moved toward Spanish settlement in New Mexico and Texas, faced the grim side of Columbian encounters. Spanish officials not only denied them European technology but also tried to pressure them to give up hunting and accept Christianity in the Franciscan fold even as other Spaniards conducted unrelenting slave raids into Apache villages. Pinched between the aggressively encroaching Comanche frontier and the aggressively absorptive Spanish frontier, Apaches began retreating to the desert lands near the Rio Grande. Their plains existence came to a crushing end in 1758, when a Comanche-led multitribal coalition of some two thousand mounted warriors armed with French muskets, metal axes, and iron helmets demolished the Spanish mission of Santa Cruz de San Sabá 135 miles north of the Texas frontier. San Sabá had been built specifically to preserve Apache presence on the plains, and now, along with the Apache hopes of surviving on the grasslands, it was gone. By the 1760s all Apache groups had abandoned the plains for the desert lands in southern Texas and New Mexico and northern Chihuahua.¹¹

"The heathen of the north are innumerable and rich," one Spanish official wrote in the aftermath of San Sabá. They "breed horses, handle firearms with the greatest skill, and obtain ample supplies of meat from the animals they call *cíbolos* [buffalo]." Another concluded, "Our destruction seems probable."¹² Such frantic accounts reflect the shock of realization that a new, hostile geopolitical entity, Comanchería, now flanked Spain's far northern frontier, yet they also capture why Spaniards had resisted the Comanchenization of the southern plains in the first place and why, eventually, they failed to do so.

¹¹ For the Comanche population, see "Declaration of Pedro Satren," Mar. 5, 1750, in Charles Wilson Hackett, ed., *Pichardo's Treatise on the Limits of Texas and Louisiana . . .* (Austin, Tex., 1941), 3: 317. Satren reported that the camps along the Upper Arkansas Valley alone could muster two thousand warriors, to which number should be added women, children, and the elderly. For Spain's Apache policy, see Juan Domingo de Bustamante to Juan de Acuña y Manrique, Marqués de Casa Fuerte, Jan. 10, 1724, in Thomas, *After Coronado*, 201–3; "Reply of the Fiscal," Apr. 2, 1724, *ibid.*, 203–5; Juan de Oliván Revollo to Casa Fuerte, July 12, 1724, *ibid.*, 205–8; Juliana Barr, *Peace Came in the Form of a Woman: Indians and Spaniards in the Texas Borderlands* (Chapel Hill, N.C., 2007), 159–75. For the battle of Santa Cruz de San Sabá, see Robert S. Weddle, *The San Sabá Mission: Spanish Pivot in Texas* (1964; repr., College Station, Tex., 1999).

¹² Diego Ortiz Parrilla to the Marqués de las Amarillas, Apr. 8, 1758, in Lesley Byrd Simpson, ed., *The San Sabá Papers: A Documentary Account of the Founding and Destruction of San Sabá Mission*, trans. Paul D. Nathan (1959; repr., Dallas, Tex., 2000), 131–40 ("heathen of the north," 137); Manuel de la Piscina to the viceroy, Mar. 24, 1758, *ibid.*, 35–36 ("Our destruction," 35).

Spaniards defied the Comanches because they abhorred what they embodied. The Comanche ascent turned interior North America into a nomads' realm and yanked it beyond Spain's imperial grip. The Spanish colonial machine was fine-tuned to subjugate sedentary indigenous societies, and it failed time and again to advance on nomadic frontiers, where native societies were too mobile and diffuse for colonists to latch onto them. In New Mexico and Texas, moreover, Spaniards faced nomadic Comanches who had stripped the colonists of nearly all their technological advantages. The success of Spanish colonialism hinged on its agents' ability to prevent nonsedentary natives from accessing European weaponry, but in the far north Spaniards clashed with Comanches who rode Spanish animals to pillage Spanish animals, pierced coats of mail with iron-tipped arrows, and killed from the safety of distance with state-of-the-art flintlock muskets. Guns and metal weapons in Comanche hands shocked the colonists, yet it was horses, and the way the Comanches used them to make war, that tipped the balance of power in the Spaniards' disfavor. Comanches never engaged in pitched battles if they could avoid it and eschewed large cavalry tactics for small hit-and-run attacks, thus neutralizing the Spaniards' crucial advantage over Native Americans—their ability and willingness to pin down enemies and kill them en masse. The contest over military dominance in the Southwest borderlands would be determined piecemeal, in incessant small-scale skirmishes rather than in climactic battles, which gave the Comanches an enduring advantage.¹³

AFTER THE APACHE DISPLACEMENT in the 1750s and 1760s, the Comanches possessed some one-quarter million miles of grassland steppe, the largest indigenous domain in North America. By standard script the conquest of the southern plains should have been the zenith of their ascent because eighteenth-century North America was a world of incremental expansions and regional, not imperial, regimes. But their expansion would continue, though in an altered form: fueled more by a sense of vulnerability than of invincibility, it grew increasingly imperial in substance and scale.

The mid-eighteenth-century Comanches had experienced an astounding ascent, but as their territorial expansion slowed down, the factors that had made them so powerful began to render them vulnerable. Comanchería's massive size sustained a rapid economic growth, yet its

¹³ For the often insurmountable difficulties that Spanish colonists had with nomads across the Americas, see David J. Weber, *Bárbaros: Spaniards and Their Savages in the Age of Enlightenment* (New Haven, Conn., 2005).

vastness also left the Comanches exposed: their homeland was encircled by dozens of native powers, several of them clamoring for its immense natural resources, some harboring deep resentment for having been marginalized. This vulnerability was compounded by the fragility of the Comanche power complex, which was spatially spectacular but structurally shallow. Comanches raided the length of Spain's far northern frontier yet possessed political and commercial connections with only some of their many neighbors. They occupied vast space but lacked the dense political arrangements that solidify conquests into regimes.

Another key advantage that over time turned into a liability was Comanches' willingness to rearrange their existence around foreign innovations. Their expansion was propelled by a steady, partially coerced inflow of horses, guns, metal, and carbohydrates, and its culmination brought a somber realization: to retain what they had seized, Comanches needed unhindered access to imported food and technology. And because territorial expansion had engendered a population explosion, their needs were now vastly magnified: by 1780, there may have been more than forty thousand Comanches needing corn, vegetables, fruit, metal objects, and guns to prepare and preserve their food, balance their diets, and protect their borders.¹⁴

The problem was that Comanchería, a geopolitical backwater, was also a commercial frontier. Major long-distance trade routes still skirted or ended on its borders, forcing Comanches to search for commercial openings in the surrounding urban centers. It was a dispiriting proposition. Comanches had to pay high prices for manufactured goods in the gateway villages of the Wichitas, who controlled the flow of goods to and from the Mississippi Valley and carefully rationed the spread of guns, powder, and ammunition into Comanche hands. In New Mexico Comanches conducted business under the controlling gaze of Spanish officials, who strove to curb the spread of guns, iron weapons, mares, and other strategically sensitive commodities among nomadic Indians

¹⁴ I have pieced together the Comanche population estimate from several partial contemporary estimates that each focus on one segment of Comanchería. See J. Gaignard, "Journal of an Expedition up the Red River, 1773-1774," in Herbert Eugene Bolton, ed., *Athanase de Mézières and the Louisiana-Texas Frontier, 1768-1780* (Cleveland, Ohio, 1914), 2: 83-100, esp. 2: 94; Francisco Xavier Ortiz to Juan Bautista de Anza, May 20, 1786, in Alfred Barnaby Thomas, ed. and trans., *Forgotten Frontiers: A Study of the Spanish Indian Policy of Don Juan Bautista de Anza, Governor of New Mexico, 1777-1787, From the Original Documents in the Archives of Spain, Mexico, and New Mexico* (Norman, Okla., 1932), 321-24, esp. 323; "List of Comanches who Came to Make Peace in New Mexico, 1786," *ibid.*, 325-27; Elizabeth A. H. John, ed., Adán Benavides Jr., trans., "Inside the Comanchería, 1785: The Diary of Pedro Vial and Francisco Xavier Chaves," *Southwestern Historical Quarterly* 98, no. 1 (July 1994): 27-56, esp. 38, 49.

or, alternatively, tried to sell alcohol and easily breakable long-barreled muskets in the hopes of rendering them economically dependent and militarily impotent, the first step in an ambitious Bourbon scheme of turning the roving Comanches into sedentary Spaniards.¹⁵

The trade journeys to border fairs were also biologically hazardous, exposing Comanches to the teeming microbe pools of densely packed trading villages. The extent of this danger dawned on them in the early 1780s, when a continent-wide smallpox epidemic ravaged eastern Comanchería. The pox scourged New Orleans in the winter of 1779–80 and then traveled westward along the Red River channel, lodging in a cluster of Wichita villages, where a visiting Comanche convoy probably contracted it. The eastern Comanches lost four thousand people, two-thirds of their total population, a staggering death toll that suggests that generations had passed without exposure to the virus. Such was the devastation that eastern Comanches stopped raiding, accepted a treaty with Spanish Texas, and for years lived peacefully in the borderlands.¹⁶

Out of Comanches' efforts to protect their lives, land, and autonomy sprang the second stage of their ascent. Secluded and vulnerable in their new homeland, they designed and improvised in the late eighteenth and early nineteenth centuries a series of geopolitical arrangements that molded the bordering regions—New Mexico, Texas, and northern Mexico—into a configuration that could sustain their fragile existence. Coordinating the broad outlines of their foreign policy in large multi-divisional meetings, they extended their sphere of influence across the Southwest and deep into Mexico, raiding, trading, and collecting tribute over a vast realm. They stretched their trading network and cultural

¹⁵ For the Wichita trade gateway and the Comanches, see Athanase de Mézières to Juan María Vicencio, Barón de Ripperdá, July 4, 1772, in Bolton, *Athanase de Mézières*, 1: 284–306, esp. 1: 297–303; Gagnard, "Journal of an Expedition," *ibid.*, 2: 88–90, 95; Teodoro de Croix to José de Gálvez, Sept. 23, 1778, *ibid.*, 2: 220–24, esp. 2: 222–23; Elizabeth Ann Harper, "The Taovayas Indians in Frontier Trade and Diplomacy, 1719–1768," *Chronicles of Oklahoma* 31, no. 3 (Autumn 1953): 268–89. For Comanche trade in New Mexico, see Francisco Marín del Valle, Bando, Nov. 26, 1754, in ser. 2, Provincial Records, Spanish Archives of New Mexico, 8: 1191–96, New Mexico State Records Center and Archives, Santa Fe; "Instruction of Don Thomas Vélez Cachupín, 1754," in Alfred Barnaby Thomas, ed., *The Plains Indians and New Mexico, 1751–1778: A Collection of Documents Illustrative of the History of the Eastern Frontier of New Mexico* (Albuquerque, N.Mex., 1940), 129–43, esp. 133–34. For alcohol and long-barreled guns, see Bernardo de Gálvez, *Instructions for Governing the Interior Provinces of New Spain 1786*, ed. and trans. Donald E. Worcester (Berkeley, Calif., 1951), 47–49. For Bourbon Indian policy in the Southwest, see David J. Weber, *The Spanish Frontier in North America* (New Haven, Conn., 1992), 227–34.

¹⁶ For the epidemic and its aftermath, see Elizabeth A. Fenn, *Pox Americana: The Great Smallpox Epidemic of 1775–82* (New York, 2001), 146–66, 211–15; John and Benavides, *Southwestern Historical Quarterly* 98: 49.

sway across the North American interior and absorbed guns, metal, food, and people from all directions. And yet they made little effort to establish formal rule over other societies, which signals a great deal about the underlying impulses of their expansion. Comanches did not seek to expand Comanchería beyond its grasslands cradle—nomadism precluded that—but rather to render it militarily impregnable, economically prosperous, and biologically secure. They aimed to make key resources readily available through diplomacy, coercion, and cooption without extending direct political control over others, and their stunning success in doing so added an imperial dimension to their dominance.

ONCE AGAIN, the horse was the catalyst. If the prospects and exigencies of equestrianism had powered Comanches' territorial conquest, their postterritorial ascent rested on their ability to use horse wealth to connect, pacify, and manipulate adjacent societies. As the lords of the southern plains, Comanches had enviable access to the rich animal reservoirs in the Spanish Southwest, an advantage they exploited to the full. They alternately purchased and plundered horses from Texas and New Mexico, accumulating reserves of tens of thousands of tradable surplus animals, which was enough to pull most of the Plains Indians into their commercial orbit, to support several variously successful indigenous horse cultures on the continental grasslands, to equip New Orleans and other eastern colonial centers with draft animals, and to support the westward expansion of America's settlement frontier in the Deep South.¹⁷

In return for supplying a good portion of the continent with equine power, Comanches won access to several colonial and indigenous markets and two vital imports: guns and food. The southern plains Comanches had invaded were a blind spot in early American gun trade: New Mexico and Texas were relatively poor in gun technology, and Spaniards always loathed selling firearms to Indians. The far-flung Comanche trade network reversed that. By importing firearms through native middlemen from French Louisiana, British Canada, and the United States, Comanches accumulated a critical mass of guns, powder, and bullets. They soon surpassed Spanish colonists in firepower, thus further accelerating their ascent on the competitive technological ladder that rested on

¹⁷ For the Comanche trade system, see Pekka Hämäläinen, "The Rise and Fall of Plains Indian Horse Cultures," *Journal of American History* 90, no. 3 (December 2003): 833–62, esp. 837–39; Dan Flores, "Bringing Home All the Pretty Horses: The Horse Trade and the Early American West, 1775–1825," *Montana: The Magazine of Western History* 58, no. 2 (Summer 2008): 3–21, esp. 13–21.

Columbian exchanges, and the technological balance of power in the borderlands remained tilted in their favor well into the nineteenth century.¹⁸

If the bustling trading empire furnished the Comanches with the necessary technology to dominate the Southwest, it also helped them support the necessary numbers to do so. With a steady inflow of corn, beans, squash, sunflower seeds, and even baked bread from neighboring farming societies, they built a diet that many modern nutritionists would consider almost ideal: moderate or high in protein, iron, and vitamin B-12; moderate in complex carbohydrates; and low in saturated fat, cholesterol, and sodium. This nutritional success had a cultural component. A kin-based moral economy permeated the closely knit Comanche society, obliging families to pool resources with others. This social injunction to share ensured that a portion of the food trade reached every individual body, thus underwriting a steady community-wide demographic development.¹⁹

For European microbes, moreover, the Comanche trade network was a thoroughly frustrating entity. Such was its drawing power that

¹⁸ For guns in Comanchería, see Domingo Cabello y Robles, Responses Given by the Governor of the Province of Texas to Questions Put to Him by the Lord Commander General of the Interior [Provinces] in an Official Letter of the 27th of January Concerning Various Conditions of the Eastern Comanches, Apr. 30, 1786, in General Manuscript Series, 1717–1836, Béxar Archives, 17: 418, University of Texas, Austin; Pedro Tamarón y Romeral, *Bishop Tamarón's Visitation of New Mexico, 1760*, ed. Eleanor B. Adams (Albuquerque, N.Mex., 1954), 58; Francisco Atanasio Dominguez, *The Missions of New Mexico, 1776: A Description by Fray Francisco Atanasio Dominguez, with Other Contemporary Documents*, trans. and ed. Adams and Fray Angelico Chavez (Albuquerque, N.Mex., 1956), 252; "Description of the Kingdom of New Mexico," in Nicolas de Lafora, *The Frontiers of New Spain: Nicolas de Lafora's Description, 1766–1768*, ed. and trans. Lawrence Kinnaird (Berkeley, Calif., 1958), 93–95, esp. 93; "Description of the New Kingdom of the Philippines or Province of Texas," *ibid.*, 184–86, esp. 185; Jean Louis Berlandier, *The Indians of Texas in 1830*, ed. John C. Ewers, trans. Patricia Reading Leclercq (Washington, D.C., 1969), 119.

¹⁹ For the Comanche diet, see Hämäläinen, *Western Historical Quarterly* 29: 492–96; M. J. Marchello et al., "Nutrient Composition of Bison Fed Concentrate Diets," *Journal of Food Composition and Analysis* 11, no. 3 (September 1998): 231–39; Joseph M. Prince and Richard H. Steckel, "Nutritional Success on the Great Plains: Nineteenth-Century Equestrian Nomads," *Journal of Interdisciplinary History* 33, no. 3 (Winter 2003): 353–84, esp. 363–64. For generosity as a social imperative, see Robert S. Neighbors, "The Na-Ü-Ni, or Comanches of Texas; Their Traits and Beliefs, and Their Divisions and Intertribal Relations," in *The Indian Papers of Texas and the Southwest, 1825–1916*, ed. Dorman H. Winfrey and James M. Day (Austin, Tex., 1966), 3: 347–57, esp. 3: 357; Berlandier, *Indians of Texas in 1830*, 64; Sarah Ann Horn, "Narrative of the Captivity of Mrs. Horn," in *Comanche Bondage: Beale's Settlement and Sarah Ann Horn's Narrative*, ed. Carol Coke Rister (Lincoln, Neb., 1980), 190; Niyah, July 7, 1933, in Kavanagh, *Comanche Ethnography*, 81.

Comanches, one of history's most mobile societies, largely stopped traveling for trade. Instead of visiting surrounding, germ-filled urban centers for commerce, they simply waited in their camps deep in Comanchería for foreign trade convoys to arrive, an immeasurable advantage in the new post-Columbian disease environment. Comanchería was vast and, because the sick rarely traveled far, the visiting trading parties that made the distance were consistently healthy. And Comanches did not simply rely on geography for protection. Comanche chiefs carefully inspected visitors for signs of disease before admitting them and banned the ones whose words or form failed to convince. But even if microbes managed to sneak in, their chances to jump hosts were limited among the scattered nomads who, once infected, immediately sought "the emptiest, most deserted places they can find, abandoning the sick along the way and changing their camp each time one of them dies."²⁰ Ultimately, then, Comanches' success in keeping their numbers up in a new disease environment was a matter of geopolitical power. By dominating social life in the Southwest borderlands, Comanches were able to control to a large degree the infiltration of harmful exotics, including people and their microbes, into their homelands, thus creating an inauspicious environment for European diseases to spread. It appears that smallpox reached epidemic levels only four times in Comanchería before the mid-1840s—a strikingly small number given its geopolitical centrality and numerous commercial ties—and the well-nourished Comanches quickly rebounded after each outbreak. The Comanche population hovered from twenty to thirty thousand until the mid-nineteenth century, making them by far the most populous indigenous society in the colonial Southwest.²¹

²⁰ Berlandier, *Indians of Texas in 1830*, 84–85 (quotation, 85).

²¹ For disease prevention measures, see John and Benavides, *Southwestern Historical Quarterly* 98: 37; Fernando de la Concha to Jacobo Ugarte y Loyola, June 26, 1788, in Alfred B. Thomas, ed. and trans., "San Carlos: A Comanche Pueblo on the Arkansas River 1787: A Study in Comanche History and Spanish Indian Policy," *Colorado Magazine* 6, no. 3 (May 1929): 79–91, esp. 90. For epidemics, see John C. Ewers, "The Influence of Epidemics on the Indian Populations and Cultures of Texas," *Plains Anthropologist* 18, no. 60 (May 1973): 104–15; James Mooney, *Calendar History of the Kiowa Indians* (1898; repr., Washington, D.C., 1979), 168, 172–73. For the Comanche population, see David Dickson to Henry Clay, July 1, 1827, in Record Group 59, General Records of the Department of the State, T153, Despatches from United States Consuls in Texas, 1825–44, National Archives Microfilm Publication, reel 1 (no frame number), National Archives and Records Administration, Washington, D.C.; Report of G. W. Bonnell, repr. in 30th Cong., 1st sess., S. Rpt. 171: 42; José Francisco Ruíz, "Comanches; Customs and Characteristics," in *The Papers of Mirabeau Buonaparte Lamar*, ed. Charles Adams Gulerick Jr. and Winnie Allen (Austin, Tex., 1924), 4: 221–23, esp. 4: 221; J. C. Clopper, "Journal [1828]," in Jack Jackson, ed., *Texas by Terán: The Diary Kept by General Manuel de Mier y Terán on His 1828 Inspection of Texas*, trans. John Wheat (Austin, Tex., 2000), 25. Paul Kelton revises the traditional narrative of the

Prosperous, populous, and connected, Comanchería emerged by the dawn of the nineteenth century as the kinetic center of the lower mid-continent, a seat of power that possessed a strong political, economic, and cultural hold over the surrounding native and European societies. It was a startling power asymmetry that flowed—through human agency—from a compelling environmental asymmetry. On the Great Plains north of Comanchería, winters became increasingly longer and growing seasons shorter, thwarting animal husbandry. Living in one of the world's great natural equine habitats, the ecologically privileged Comanches could maintain large horse herds with relative ease and export surplus animals to perennial deficit regions, where their native customers grew increasingly dependent on Comanchería's commercial services. By controlling the south-to-north flow of animal wealth in mid-America, Comanches held the key to the economic and military success of numerous societies, a position of daunting geographic power that transformed into seductive soft power. Dazzled by Comanchería's dynamic horse culture and dwarfed by its economic reach, native societies across the plains attached themselves to the Comanche orbit as political allies, making Comanchería one of the most tranquil places in early America. They mimicked Comanche customs, learned Comanche language, and accepted Comanche norms of proper behavior, turning economic dependency into cultural intimacy. Eventually, many immigrated to Comanchería, enticed by its material wealth and political security, and became, in contemporary language, the "subordinates" or "vassals" of the Comanches, who "teach them their own martial habits and help to improve their condition," "finally amalgamating them into their nation."²²

Columbian Exchange and ecological imperialism by showing how in the early Southeast colonialism paved the way for disease rather than vice versa. European colonialism in general and the Indian slave trade in particular, he argues, created favorable conditions for European microbes to travel and kill. See Kelton, *Epidemics and Enslavement*. This insight about the relationship between power and disease can be applied to the Comanche case. The argument that a good nutritional status may have reduced Comanche losses to Eurasian disease meshes well with David S. Jones's notion that "the fates of individual [native] populations depended on contingent factors of their physical, economic, social, and political environments. It could well be that the epidemics among American Indians, despite their unusual severity, were caused by the same forces of poverty, social stress, and environmental vulnerability that cause epidemics in all other times and places." See Jones, *WMQ* 60: 705. John Brooke makes a parallel suggestion by observing that "the post-Columbian epidemics need to be seen as long-term processes rather than sudden events." See Brooke, "Ecology," in *A Companion to Colonial America*, ed. Daniel Vickers (Malden, Mass., 2003), 49.

²² "Delegation from the Comanche Nation to the Mexican Congress," in Malcolm D. McLean, comp. and ed., *Papers Concerning Robertson's Colony in Texas* (Austin, Tex., 1977), 4: 427–30 ("subordinates," 4: 428); Josiah Gregg, *Commerce of the Prairies*, ed. Max L. Moorhead (Norman, Okla., 1954), 437 ("vassals"); Manuel

Indigenous America, according to Jared Diamond's influential formulation, was a world hamstrung by the hemisphere's pronounced south-north orientation, which slowed down the diffusion of innovations among societies and hindered the kind of cross-cultural fertilization that spawned craft specialization, metallurgy, agricultural empires, and other evolutionary milestones in the latitudinally tilted Eurasia.²³ The story of the horse's reintroduction to native North America belies Diamond's assumptions about such macrogeographic constriction. Horses returned to the Americas by way of the Caribbean; from there, they spread to the Mexican tropics, the desert Southwest, and the wintry northern Great Plains, crossing one latitudinal gradient after another and facing daunting ecological obstacles at each juncture. And yet the horse frontier completed its twenty-five-hundred-mile northbound journey in roughly two centuries, leaving numerous distinctive and dynamic native equestrian cultures in its wake. At the center of this process—which so manifestly challenges the reductionistic views of the cultural possibilities of indigenous America—were the Comanches, who occupied a crucial transitional space in the hemispheric equine flow, channeling it from southern abundance toward northern need.

It was on this macrodynamic that Comanche history, and, by extension, a large segment of early American history, turned. Viewed from the north and east, Comanchería was a massive trade pump that siphoned Eurasian livestock into North American trade arteries, growing increasingly wealthy and powerful from the arrangement. Facing the Spanish colonies in the south and west, Comanches displayed a different variation of indigenous imperialism, one embedded in coercion and exploitation. The two facets were linked. To maintain their commercial hegemony,

de Mier y Terán to Guadalupe Victoria, Mar. 28, 1828, in Jackson, *Texas by Terán*, 27–39 (“teach them,” 30); José María Sánchez, “A Trip to Texas in 1828,” trans. Carlos E. Castañeda, *Southwestern Historical Quarterly* 29, no. 4 (April 1926): 249–88 (“finally amalgamating them,” 263). For the ecological underpinnings of horse trade, see Alan J. Osborn, “Ecological Aspects of Equestrian Adaptations in Aboriginal North America,” *American Anthropologist* 85, no. 3 (September 1983): 563–91; West, *Contested Plains*, 70–71; Isenberg, *Destruction of the Bison*, 46; Hämläinen, *Comanche Empire*, 70–71, 167–70, 241. For cultural borrowing from and ethnic incorporation into Comanchería, see R. B. Marcy, *Thirty Years of Army Life on the Border* (New York, 1866), 89; Thomas J. Farnham, *Travels in the Great Western Prairies, the Anahuac and Rocky Mountains, and in the Oregon Territory*, vols. 28–29, *Early Western Travels, 1748–1846*, ed. Reuben Gold Thwaites (Cleveland, Ohio, 1906), 28: 151; Berlandier, *Indians of Texas in 1830*, 109–10, 122; Anderson, *Indian Southwest*, 224–26. Comanche oral histories also shed light on the incorporation process. According to one history, other Indians “frequently snuck into the [Comanche] camp to give themselves up. They came from some poor tribe where there wasn’t enough food.” See Post Oak Jim, July 24, 1933, in Kavanagh, *Comanche Ethnography*, 232–41 (quotation, 240).

²³ Diamond, *Guns, Germs, and Steel*, 176–91.

Comanches needed secure access to Spanish animal reserves, which in turn made it necessary for them to have a particular kind of New Mexico and Texas on their borders: militarily weak, politically submissive, yet economically viable. This imperative explains why scholars find the Comanches raiding across the Southwest, decade after decade, for domesticated, ready-to-sell horses even while parleying, trading, and collecting gifts under the threat of violence at certain frontier outposts. Comanches, in other words, blended organized pillaging, tribute extraction, and coerced exchange into a complex economy of violence that eventually reduced much of the Spanish far north to an exploited periphery. Broad geopolitical concerns also explain why the Comanches, a polity of strong divisional identities, composed more centralized political institutions—consensus-driven grand councils, elected head chiefs, massive interdivisional meetings—that gave them enough internal cohesion to orchestrate their complex external ambitions; their practice of shifting among raiding, trading, and tribute collecting may seem haphazard, but it was underwritten by a shared understanding of who were the allies of the Comanche nation and who were legitimate targets for violence. And finally, the new geopolitical order explains why there are two interlinked streams of anxiety-ridden reports emanating from the Spanish Southwest, one tracing how the Comanches grew increasingly unified and formidable—“They agree among themselves perfectly . . . their interests are common, and they share a common destiny,” ran a typical account—and the other detailing how the Comanches’ composite foreign policy gradually fragmented Spain’s already disjointed northern frontier after its own image.²⁴ Eastern New Mexico, Spanish officials feared, was being corrupted by the long shadow of Comanche influence, its citizens gravitating toward Comanchería’s markets and prestige, desiring to live “in a complete liberty, *in imitation of the wild tribes which they see nearby*,” even as the rest of the Spanish frontier was being subjected to wholesale Comanche raiding.²⁵ By the 1810s Comanches were treating the Spanish Southwest like a colonial possession: “The Comanches have made themselves so redoubtable to the Spaniards that the governors of the different provinces of the frontiers have found it necessary to treat separately with them. Often they are at war with one province and at peace with another; and returning, loaded with spoil, from massacring and pillaging the frontiers of one province, driving before them horses and frequently even prisoners whom they have

²⁴ Donald E. Worcester, ed. and trans., “Notes and Documents: Advice on Governing New Mexico, 1794,” *New Mexico Historical Review* 24, no. 3 (July 1949): 236–54 (quotation, 238).

²⁵ *Ibid.*, 244.

made, they come into another to receive presents, taking only the precaution of leaving a part of the spoil, above all the prisoners, at some distance from the establishments.”²⁶

THIS CONTEMPORARY ACCOUNT ALLUDES TO a larger truth: Comanche power politics were turning the colonial Southwest inside out. Comanchería was emerging as a domineering core with vast extractive hinterlands, tributary relationships, sweeping economic influence, and ethnic diversity, whereas the Spaniards in New Mexico and Texas felt increasingly victimized, their imperial realm rapidly splitting into smaller segments, each tied to Comanchería by various combinations of coercion, co-option, exploitation, and dependency. Comanches bent others to their will because they wanted what most hegemonic people want—security, prosperity, respect—but to fully understand their expansionist drive historians must move closer to the ground and examine the politics of grass. For all the geopolitical, economic, and cultural incentives, the overriding impulse that pushed the Comanches to expand was a need to maximize grasslands holdings on which their survival and their power ultimately rested.

Grass mattered so much because Comanches had become pastoralists. During the eighteenth century, they converted their foraging economy

²⁶ Alfred B. Thomas, ed., “Anonymous Description of New Mexico, 1818,” *Southwestern Historical Quarterly* 33, no. 1 (July 1929): 50–74 (quotation, 62). For political centralization and sense of unity among the Comanches, see John and Benavides, *Southwestern Historical Quarterly* 98: 38–44; Pedro Garrido y Duran, “An Account of the Events which Have Occurred in the Provinces of New Mexico Concerning Peace Conceded to the Comanche Nation and Their Reconciliation with the Utes, since November 17 of Last Year and July 15 of the Current,” in Thomas, *Forgotten Frontiers*, 294–321, esp. 321; David G. Burnet, “David G. Burnet’s Letters Describing the Comanche Indians with an Introduction by Ernest Wallace,” *West Texas Historical Association Year Book* 30 (October 1954): 115–40, esp. 125; Neighbors, “Na-Ü-Ni, or Comanches of Texas,” 349–50; Berlandier, *Indians of Texas in 1830*, 69–70, 73; José Francisco Ruíz, *Report on the Indian Tribes of Texas in 1828*, ed. John C. Ewers, trans. Georgette Dorn (New Haven, Conn., 1972), 10–11; Elizabeth A. H. John, ed., John Wheat, trans., “Views from a Desk in Chihuahua: Manuel Merino’s Report on Apaches and Neighboring Nations, ca. 1804,” *Southwestern Historical Quarterly* 95, no. 2 (July 1991): 135–75, esp. 170. See also Thomas W. Kavanagh, *Comanche Political History: An Ethnohistorical Perspective, 1706–1875* (Lincoln, Neb., 1996), 1–62; Morris W. Foster, *Being Comanche: A Social History of an American Indian Community* (Tucson, Ariz., 1991), 1–30. The Comanche policy of alternate raiding and trading stemmed from a worldview in which theft, trade, and sharing blended into one another on a broad continuum of reciprocity, baffling and enraging the Spaniards who were used to stricter categorizations of human behavior. See for example Richard White, “Animals and Enterprise,” in *The Oxford History of the American West*, ed. Clyde A. Milner II, Carol A. O’Connor, and Martha A. Sandweiss (New York, 1994), 237–73, esp. 240.

into a hybrid economy of hunting and herding, thereby entering an uncharted realm of economic possibilities and ecological constraints. Comanchería, a luscious patchwork of buffalo, grama, and bluestem grasses, hardly seems a setting where animal herders would feel confined, but the impression of limitless natural bounty conceals a volatile environment whose gifts were at once abundant and unpredictable. The seemingly bottomless forage supply of normal years dwindled as much as 90 percent during dry spells that frequently scourged the southern plains. When the rains failed, grasses went underground, storing nutrients in their sprawling root structures and beyond animals' reach. Pastures also fluctuated seasonally as dry winter currents suppressed the rains, leaving grasses starved and stunted. During those nutritional crunches, there was not enough grass to go around for all. The main rivals were horses and bison, two ecologically incompatible species with an 80 percent dietary overlap and nearly identical survival strategies. Both beasts responded to dry spells by gravitating toward the drought-tolerant buffalo and grama grasses, which produced aboveground growth even under the driest of conditions, and both needed the cottonwood groves, perennial streams, and sheltering bluffs of low-altitude river valleys to survive the winters. But select animal habitats were becoming scarce in the pastoral Comanchería. Pushed by their horses' voracious appetites, Comanches turned one prime grazing niche after another into a herding range, locking the two species on which their way of life depended in a draining struggle for survival.²⁷

Viewed abstractly, the late-eighteenth-century Comanches were heading toward an ecological impasse out of which there were two immediate paths, both of them bad. Comanches could have continued their delicate balancing between herd maximization and overgrazing within the existing material parameters, yet that ran the risk of ruining their nutritional mainstay. They also could have curbed the size of their domesticated herds—or, alternatively, their own numbers—to alleviate the pressure on the bison, but that would have undercut their commercial pull and military power, rendering them vulnerable to colonial and indigenous rivals. Turn-of-the-century geopolitics must have made economic downscaling seem all the more treacherous. The new United

²⁷ For grasses, droughts, horses, and bison ecology, see Flores, *Journal of American History* 78: 481; Sherow, *Environmental History Review* 16: 69–70; West, *Way to the West*, 21–22. For an illuminating analysis of the ecological instability of the Great Plains that partly draws from chaos theory, see Isenberg, *Destruction of the Bison*. Symmes C. Oliver has argued that the more arid southern plains had a considerably lower carrying capacity than the rest of the Great Plains. See Oliver, *Ecology and Cultural Continuity as Contributing Factors in the Social Organization of the Plains Indians* (Berkeley, Calif., 1962), 1–90, esp. 72–74.

States was starting to extend its political and commercial tentacles west of the Mississippi Valley, fueling rivalries among Indians over access to its vast markets while instilling anxiety across the Southwest with its palpable expansionist zeal.²⁸ And so, instead of adjusting to existing ecological limits, Comanches crafted, in stages and over several decades, a multilayered land-use strategy that rested on creative exploitation of not only Comanchería's resources but also those of the neighboring regions. It was a strategy that would eventually extend the Comanche resource base deep into Mexico, yet it began as a simple bid to preserve what was readily available at home.

The new resource strategy revolved around a complex annual cycle of activities that helped allocate life's essentials for prey and domesticated animals. Like the bison, Comanches shifted in winters toward the riverine lowlands and their life-sustaining offerings of tall grasses, timber, water, and shelter. For more than four months, they led a largely sedentary life, moving their villages up and down the bottomlands only when grasses failed or camp refuse became unmanageable. They dwelled close enough to the buffalo to conduct small-scale hunts but far enough to secure their horses foraging areas not already exhausted by bison. It was a delicate balancing act—too much pressure scared off the bison, too little risked starvation—and Comanches struggled to adjust to the constraints. They consumed horse, mule, deer, elk, antelope, and dried bison meat when the buffalo herds appeared strained, and they prohibited foreign visitors from hunting in Comanchería, giving them meat instead. Some of their ecological strategies were less deliberate. Like most Plains Indians, they conducted periodic border excursions to keep out enemy hunters, thus spawning extensive buffer zones, no-man's-lands that doubled as animal preserves, on their borders.²⁹

²⁸ For early U.S. influence in the Southwest, see J. Villasana Haggard, "The Neutral Ground between Louisiana and Texas, 1806–1821," *Louisiana Historical Quarterly* 28, no. 2 (April 1945): 1084–89; Dan L. Flores, ed., *Journal of an Indian Trader: Anthony Glass and the Texas Trading Frontier, 1790–1810* (College Station, Tex., 1985), 10–18; Weber, *Spanish Frontier in North America*, 292–96; F. Todd Smith, *The Wichita Indians: Traders of Texas and the Southern Plains, 1540–1845* (College Station, Tex., 2000), 89–90.

²⁹ For this description of the Comanche annual cycle, I draw from the following sources: Ortiz to Anza, May 20, 1786, in Thomas, *Forgotten Frontiers*, 321–24, esp. 322–23; Grant Foreman, ed., *Adventure on Red River: Report on the Exploration of the Headwaters of the Red River by Captain Randolph B. Marcy and Captain G. B. McClellan* (Norman, Okla., 1937), 141–42, 175; Elliott Coues, ed., *The Journal of Jacob Fowler, Narrating an Adventure from Arkansas through the Indian Territory, Oklahoma, Kansas, Colorado, and New Mexico, the Sources of Rio Grande del Norte, 1821–22* (1898; repr., Minneapolis, Minn., 1965), 59, 62; Pedro Vial, "Diary, Bexar to Santa Fe, October 4, 1786, to May 26, 1787," in *Pedro Vial and the Roads to Santa Fe*, ed. Noel M. Loomis and Abraham P. Nasatir (Norman, Okla., 1967), 268–87, esp.

Comanches did not reenter the nomadic phase until late spring, when short grasses sprouted on the highlands. Large winter villages broke into numerous small bands to maximize grazing areas, and Comanchería transformed into a pastoral beehive, where dozens of scattered bands moved constantly, seeking fresh forage to bulk up their horses and carefully synchronizing their movements to avoid overlapping grazing areas. As in winters Comanches kept their horses and the bison segregated. Rather than tracking bison at close range, they trailed them from a distance. The bison moved frequently but not far, and the mobile Comanche hunters could easily reach them even without shadowing the herds at all times. The horse-rich Comanches could also transport large quantities of dried meat and take lengthy breaks between hunts, which lessened the disturbance to the bison. It is commonly thought that the main advantage of horses for the plains nomads was that they allowed hunters to follow the bison more closely. For Comanches, however, the opposite was true: equestrianism encouraged them to hunt less frequently and keep farther away from their prey, which in turn lessened the pressure on the bison ecology. Indeed Comanches conducted extended communal hunts only twice a year: in early summer when the bison amassed for the rut, and in late fall just before the retreat into winter camps “when the buffalo were fat” and their hides “good and thick.”³⁰ During only those two occasions, Comanches actually lived by the stereotype of buffalo Indians, their

279–81; Francisco Amangual, “Diary of Francisco Amangual from San Antonio to Santa Fe, March 30–May 19, 1808,” *ibid.*, 459–534, esp. 467–508; Berlandier, *Indians of Texas in 1830*, 43, 45–46, 67 n. 67; James Hobbs, *Wild Life in the Far West: Personal Adventures of a Border Mountain Man . . .* (1873; repr., Glorieta, N.Mex., 1969), 35–38; Daniel J. Gelo, “‘Comanche Land and Ever Has Been’: A Native Geography of the Nineteenth-Century Comanchería,” *Southwestern Historical Quarterly* 103, no. 3 (January 2000): 273–307, esp. 279–82, 297, 302–3; Gerald Betty, *Comanche Society: Before the Reservation* (College Station, Tex., 2002), 68–70, 90; Post Oak Jim, July 13, 1933, in Kavanagh, *Comanche Ethnography*, 152–64, esp. 162. For the consumption of horse, mule, deer, elk, and antelope meat, see John W. Whitfield to Charles E. Mix, Jan. 5, 1856, in Record Group 75, Records of the Bureau of Indian Affairs, M234, Letters Received by the Office of Indian Affairs, Upper Arkansas Agency, National Archives Microfilm Publication, 878: 104–5; Mattie Austin Hatcher, trans., “Texas in 1820,” *Southwestern Historical Quarterly* 23, no. 1 (July 1919): 47–68, esp. 54; Victor Tixier, *Tixier’s Travels on the Osage Prairies*, ed. John Francis McDermott, trans. Albert J. Salvan (Norman, Okla., 1940), 266; Wallace and Hoebel, *Comanches*, 67–68; Neighbors, “Na-Ū-Ni, or Comanches of Texas,” 356; Ruíz, *Report on Indian Tribes of Texas*, 8. For buffer zones, see Henry Dodge, Journal of the March of a Detachment of Dragoons, under the Command of Colonel Dodge, during the Summer of 1835, 24th Cong., 1st sess., H. Doc. 181: 18; Berlandier, *Indians of Texas in 1830*, 67 n. 67; West, *Way to the West*, 61–62.

³⁰ Niyah, July 7, 1933, in Kavanagh, *Comanche Ethnography*, 79–91 (quotations, 81).

men hunting day after day, their women fervently butchering carcasses and tanning hides, and their vast commercial horse herds—for once not the center of attention—leisurely grazing on lush grasses under the watchful eyes of captive boys.

The distinctive annual cycle was a complex adaptation that helped ease the ecological contradictions at the heart of the new Comanche economy that married subsistence hunting to intensive market-driven pastoralism. But Comanches changed not just the way they used the land; they changed the land itself. The pastoral Comanchería was an anthropogenic landscape that had been altered biologically to meet the needs of expanding animal husbandry. Comanches burned patches of grass to encourage new growth for forage, harvested massive amounts of cottonwood for supplemental winter fodder, and turned vast sections of riverine habitats into veritable equine sanctuaries by crowding out other animal species. And yet, in the end, such adaptations could carry them only so far. Sometime in the late eighteenth century, the pastoral growth reached a threshold at which Comanches had to either reduce their herding economy or find ways to channel its ecological burdens out of Comanchería. The first alternative was all but unthinkable—not only the nation's collective power but also its members' personal status depended on horse wealth—and so Comanches embraced the latter option, with momentous repercussions for themselves and the peoples around them.³¹

ONE EARLY EXPERIMENT with ecological cost management involved transhumance, seasonal movement of people and their livestock to new pastures. In the 1770s, apparently prompted by an exceptionally intense drought, Comanches began migrating between lowland plains valleys in winters and cool mountain pastures in summers. These vertical migrations moved a portion of Comanche horse herds—along with the accompanying ecological burdens of animal foraging—from Comanchería to Spanish borderlands in New Mexico and Ute territory in the Colorado plateau. In 1776 one Spanish observer learned that during the warm sea-

³¹ For Comanchería's pastoral modification, see for example A. W. Whipple, Report of Explorations for a Railway Route, Near the Thirty-fifth Parallel of North Latitude, from the Mississippi River to the Pacific Ocean, 1853–54, 33d Cong., 2d sess., S. Ex. Doc. 78: 34–35; Foreman, *Adventure on Red River*, 60–61, 141–42; Burnet, *West Texas Historical Association Year Book* 30: 124; Coues, *Journal of Jacob Fowler*, 59–65; George E. Hyde, *Life of George Bent: Written from His Letters*, ed. Savoie Lottinville (Norman, Okla., 1968), 37, 42. For the links between horse ownership and social status, see James F. Brooks, *Captives and Cousins: Slavery, Kinship, and Community in the Southwest Borderlands* (Chapel Hill, N.C., 2002), 174–80.

sons Comanches regularly brought “a thousand or more animals” to the uplands of the Sangre de Cristo Range and pastured them in a large swampy area near Taos pueblo where “there is no lack of fodder.”³² In that same year, Spanish explorers found several Comanche villages between the Rockies and the Green River deep in the Colorado plateau. Separated from Comanchería proper by hundreds of miles of meadows and forested mountains, these villages appear to have been migratory communities that moved seasonally between the plains and the highlands, relieving the foraging pressure on the drought-ridden Comanchería by channeling some of that pressure elsewhere. Regardless of destination the westbound migrations coincided with violent raids—in New Mexico on Spanish outposts and in the plateau on the Utes, whose alliance with the Comanches had unraveled—underscoring the extent to which grass had become a political object.³³

Episodically expanding Comanchería beyond its plains base, seasonal transborder migrations remained a vital drought-combating strategy into the late nineteenth century, but they were not enough to stabilize Comanchería’s burgeoning pastoral economy. Around 1800 the growing horse herds began to cut deep into Comanchería’s increased carrying capacity even under normal climatic conditions, forcing Comanches to expand their archive of land-use strategies. They found a solution, undoubtedly through trial and error, in an age-old borderlands institution that at first glance has little to do with ecological management: frontier raiding. Comanche pillaging in New Mexico and Texas had begun as a market-driven enterprise that funneled Spanish horses into Comanche trading arteries, and this commercial thrust remained central as long as the Comanches raided in the Southwest. As the raids escalated in the early nineteenth century, however, they increasingly came to double as an environmental strategy that helped transfer the biological costs of animal herding from Comanchería to its neighboring regions.³⁴

³² Domínguez, *Missions of New Mexico*, III.

³³ For Comanche expansion into the Colorado plateau, see Garrido y Duran, “Account of the Events,” in Thomas, *Forgotten Frontiers*, 294–95; Francisco Atanasio Domínguez to Isidro Murillo, Nov. 25, 1776, in Domínguez, *Missions of New Mexico*, 286–89; Fray Angelico Chavez, trans., Ted J. Warner, ed., *The Domínguez-Escalante Journal: Their Expedition through Colorado, Utah, Arizona, and New Mexico in 1776* (Salt Lake City, Utah, 1995), 144–45. On Comanche raids in New Mexico, see Frank, *From Settler to Citizen*, 34–38. For the collapse of the Comanche-Ute alliance, see Blackhawk, *Violence over the Land*, 53–55.

³⁴ Sherow, *Environmental History Review* 16: 75–76; Pekka Hämäläinen, “The First Phase of Destruction: Killing the Southern Plains Buffalo, 1790–1840,” *Great Plains Quarterly* 21, no. 2 (Spring 2001): 101–14. Gary Clayton Anderson has argued that the southern plains bison population may have dropped as much as 50 percent from 1780 to 1820. See Anderson, *Indian Southwest*, 252. Organized borderland raiding in the Southwest dates back at least to the early second millennium, and it

By pillaging colonial settlements for domesticated horses, Comanches implemented an unequal division of labor and ecological exchange in the borderlands. They focused on the high-profit activities of livestock raiding and trading and, through border raiding, forced New Mexican and Texan settlers to absorb the bulk of the labor and ecological costs of animal husbandry. Settlers invested enormous amounts of energy, grass, and grain in raising horses, only to repeatedly lose significant portions of their herds to Comanche raiders who, in a sense, used the twin colonies as an animal factory and an ecological relief valve. When Comanches raided New Mexico and Texas for horses, they appropriated not only marketable animals but also foreign natural resources to conserve their own. With each pilfered horse, they got more than the animal itself. They also extracted the years of labor and the millions of calories that went into bringing that animal to maturity, all of which meant crucial savings of human and natural resources in Comanchería.³⁵

Raiding thus served to externalize the environmental costs of market-oriented pastoralism, an advantage Comanches amplified by keeping separate clusters of animals for different economic and cultural purposes. As one contemporary discovered, they “could scarcely be induced to sell” their domestically raised animals, which had been trained for various tasks from pulling travois to bison hunting and which, through selective breeding, became something quite different—smaller, swifter, sturdier—from their Spanish forebears.³⁶ (Comanches so concretely made horses their own that their folklore sometimes regards horses not as a by-product of European expansion but as native to the Americas.) The stolen animals, in contrast, were promptly channeled into trading circuits. Thoroughly commodified, they were often sold within weeks or

served primarily as a way of ensuring that the circulation of material goods continued even when the preferred channel, trade, was unavailable due to environmental reversals or political instability. See Katherine A. Spielmann, “Interaction among Nonhierarchical Societies,” in *Farmers, Hunters, and Colonists: Interaction between the Southwest and the Southern Plains*, ed. Spielmann (Tucson, Ariz., 1991), 1–17, esp. 7–13; Spielmann, *Interdependence in the Prehistoric Southwest: An Ecological Analysis of Plains-Pueblo Interaction* (New York, 1991).

³⁵ In an influential study, Andrew C. Isenberg has written: “by abandoning their ecological safety nets and embracing the emerging Euroamerican market, the plains nomads bound their fate to the Euroamerican economic and ecological complex.” See Isenberg, *Destruction of the Bison*, 62. This choice rendered the plains nomads dependent on Euro-American wealth and vulnerable to ecological changes, and ultimately proved their undoing. Comanches, too, streamlined their economy around horses and bison and embraced the Euro-American market, but theirs was in many ways an exceptional trajectory. They may have become dependent on the Euro-American economic and ecological complex, yet they also aggressively remolded that complex to meet the needs of their perilously specialized existence.

³⁶ *Telegraph and Texas Register*, June 16, 1838.

months of being pilfered—Comanches raided and traded almost year-round, constantly shifting between the two activities—which meant that they left a relatively light ecological hoofprint on Comanchería's natural setting.³⁷

Partly an economic institution, partly an ecological one, Comanche raiding evolved into a carefully calibrated industry that defies the enduring stereotypes of opportunistic, revenge-fueled Native American frontier pillaging. When raiding in New Mexico and Texas, Comanches seldom killed people or exhausted entire areas of horses; a typical Comanche attack left the settlers alive and with enough animals to continue viable livestock production. Indeed, given the Comanches' overwhelming military might, the striking feature about their raiding is not how many but how few settlements they cleared of animals and how long they were able to keep at it. And perhaps because the raids rarely brought death or utter devastation, targeted populations, too, adapted to it in a kind of deflated, numb resignation. Throughout his tenure as the governor of Spanish Texas, Antonio María Martínez recorded "daily" raids matter-of-factly, his tone becoming desperate only when parts of the province did not have livestock for Indians to plunder. "[A] large body of Indians . . . is going to fall momentarily upon this vicinity," he reported in the summer of 1817, "now for no other purpose than the destruction of people because there is not a single horse or cow left."³⁸

Martínez's anguished report anticipated a dramatic change: the focus of Comanche raiding was about to shift deep into Mexico. By the time Spanish rule yielded to Mexico in 1821, generations of unremitting raiding had finally crippled the Texas ranching economy, making it difficult for Comanches to conduct profitable raids in the colony. From the

³⁷ Foreman, *Adventure on Red River*, 158; Gregg, *Commerce of the Prairies*, 435; Richard Irving Dodge, *Our Wild Indians: Thirty-Three Years' Personal Experience among the Red Men of the Great West* (1882; repr., New York, 1959), 341–42; Niyah, July 7, 1933, in Kavanagh, *Comanche Ethnography*, 79–91, esp. 81; Post Oak Jim, July 13, 1933, *ibid.*, 152–64, esp. 161; Howard White Wolf, July 31, 1933, *ibid.*, 288–94, esp. 291–92; unidentified consultant [undated], *ibid.*, 469–77, esp. 472.

³⁸ Antonio Martínez to Joaquín de Arredondo, June 24, 1818, in Virginia H. Taylor, ed., *The Letters of Antonio Martínez, Last Spanish Governor of Texas, 1817–1822* (Austin, Tex., 1957), 146 ("daily"); Martínez to Arredondo, June 28, 1817, *ibid.*, 15 ("large body of Indians"). Systematic Comanche raiding in Texas began in the 1750s and continued, with only a short respite in the late 1780s, into the 1820s; yet it was not until the 1810s that the colony started to become depleted of horses and collapse into poverty. For Texas in the 1810s, see Arredondo to Benito de Armiñán, Jan. 31, 1814, in General Manuscript Series, 1717–1836, Bexar Archives, 53; Armiñán to Arredondo, Apr. 16, 1814, *ibid.*, 53; 726–27; Anonymous to Arredondo, May 22, 1814, *ibid.*, 53; 924–25; Arredondo to Armiñán, June 29, 30, 1814, *ibid.*, 53; 1027–36; Armiñán to Arredondo, Aug. 1, 15, 1814, *ibid.*, 54; 87–90, 122–23.

mid-1820s, moreover, Texas was flooded by well-armed Anglo-American settlers, whose presence in the colony made raiding a risky proposition. New Mexico, too, lost its appeal to Comanche raiders. Mexican officials attached the province to Comanchería through a thinly veiled tribute relationship that shielded it from violence, and New Mexicans specialized increasingly in sheepherding, having less than one thousand horses in the late 1820s. Needing a new source of horses to keep their market-oriented economy running, Comanches pushed below the Rio Grande in such intensity that several northern Mexican departments organized their meager resources for war.³⁹

Mexico yielded not only horses but also the laborers to manage them, and most Comanche raiding parties brought home human captives as well as animals. The escalation of captive raiding was fueled by an unexpected demographic crisis: smallpox, a relatively rare scourge in Comanchería, erupted there in three epidemics from 1799 to 1816, prompting Comanches to absorb new people into their diminished communities. Scouring northern Mexico for human loot, they transformed themselves into large-scale slaveholders in roughly a generation. By the 1830s the slave component of their population probably exceeded 10 percent. Comanches put special value on young boys and female captives, who could be put to work as horse herders and hide tanners. Many captive women were eventually married into Comanche families, and they became wives and mothers whose children were recognized as members of the Comanche nation. Slaves thus boosted the Comanche population, yet their bodies also carried a hidden gift. Studies suggest that Native Americans were so vulnerable to Old World diseases not because their immune systems were weaker but because they were strikingly homogenous: once adapted to their relatively uniform immune systems, infections may have taken a greater toll than in more heterogeneous populations. Since Comanches drew most of their slaves from a different gene pool—a large portion of them were mestizos—the slavery-marriage-motherhood continuum may have given their communities some measure of protection through immune system diversity.⁴⁰

³⁹ For Texas and Mexico, see Antonio Narvona, "Report of the Cattle and Caballada Found in the Territory of New Mexico," Apr. 8, 1827, in H. Bailey Carroll and J. Villasana Haggard, trans., *Three New Mexico Chronicles: The Exposición of Don Pedro Bautista Pino 1812; the Ojeada of Lic. Antonio Barreiro 1832; and the Additions by Don José Agustín de Escudero, 1849* (Albuquerque, N.Mex., 1942), 43; Hämäläinen, *Comanche Empire*, 190–219. For Mexican responses, see Brian DeLay, *War of a Thousand Deserts: Indian Raids and the U.S.-Mexican War* (New Haven, Conn., 2008), 100–109, 145–64.

⁴⁰ For the slave component, see Hyde, *Life of George Bent*, 69; George Archibald McCall, *New Mexico in 1850: A Military View*, ed. Robert W. Frazer (Norman, Okla., 1968), 103; Berlandier, *Indians of Texas in 1830*, 76; Ruíz, *Report on Indian Tribes of*

Pushing against a weak, factious, and distracted Mexican state, Comanche raiding below the Rio Grande quickly morphed into a big business. By the 1830s Comanches were making “continual inroads upon the whole eastern frontier of Mexico, from Chihuahua to the coast; driving off immense numbers of horses and mules, and killing the citizens they may encounter, or making them prisoners.”⁴¹ The agents of the newly independent Texas Republic supplied Comanche raiding parties free passage on their way south and ready markets for stolen livestock on their way back, thus becoming active sponsors of the Comanche expansion. Soon the Comanches commanded a raiding network that webbed seven Mexican departments, dipping deep into the tropics. Their war bands often returned home with thousands of captured animals, riding the massive herds on trails that at times bulged into two-mile-wide highways. It was as if Mexico was being reduced to an extension of Comanchería. Equestrianism had allowed Comanches to compress time and space—to bring Mexico and its resources closer—and such was the magnitude of their operations that contemporaries started to speak of northern Mexico as a raiding hinterland. “Comanche[s],” one Texas official stated in 1837, “[are] the natural enemies of the Mexicans whom they contemptuously discriminate their *stockkeepers* and out of which nation they procure slaves.”⁴² “They declare,” another observer wrote, “that they only spare the whole nation [of Mexicans] from destruction because they answer to supply them with horses.”⁴³

Contemporaries understood that the expansion below the Rio Grande was first and last an economic endeavor that sustained the vast Comanche trading empire north of the great river. The plains-based

Texas, 9; “Delegation from the Comanche Nation to the Mexican Congress,” in McLean, *Papers Concerning Robertson’s Colony in Texas*, 4: 428. For slavery in Comanchería, see Brooks, *Captives and Cousins*, 180–93. For the homogeneity of native immune systems and its possible effect on disease mortality rates, see Fenn, *Pox Americana*, 26–27.

⁴¹ Gregg, *Commerce of the Prairies*, 436.

⁴² “Report of Standing Committee on Indian Affairs,” Oct. 12, 1837, in Winfrey and Day, *Indian Papers of Texas*, 1: 22–28 (quotations, 1: 24).

⁴³ Andrew Forest Muir, ed., *Texas in 1837: An Anonymous, Contemporary Narrative* (1958; repr., Austin, Tex., 1988), 110 (quotations). For the escalation of Comanche raiding in Mexico, see Ralph A. Smith, “Indians in American-Mexican Relations before the War of 1846,” *Hispanic American Historical Review* 43, no. 1 (February 1963): 34–64, esp. 35–36, 40–42, 49; Isidro Vizcaya Canales, *IncurSIONES de indios al noreste en el México independiente (1821–1885)* (Monterrey, Mexico, 1995), 10–20; Martha Rodríguez García, *La guerra entre bárbaros y civilizados: El exterminio del nómada en Coahuila, 1840–1880* (Saltillo, Mexico, 1998), 111–29; Brooks, *Captives and Cousins*, 265–68; Brian DeLay, “Independent Indians and the U.S.-Mexican War,” *American Historical Review* 112, no. 1 (February 2007): 35–68, esp. 40–44; Hämäläinen, *Comanche Empire*, 220–32.

commercial network, its limbs reaching toward the Canadian plains and the U.S. South, formed with the Mexican raiding hinterland the economic foundation of a transregional power complex that kept numerous peoples on the Comanche orbit through overlapping bonds of violence, exchange, extortion, and dependency. What has been less clear is that the push into Mexico was also a biological necessity. During the first third of the nineteenth century, Comanches experienced three momentous changes that boosted their political and economic might while placing unforeseen pressure on their natural resources. Possibly prompted by the 1799–1816 smallpox epidemics, they incorporated several Arapahoe and Wichita bands and the entire Kiowa and Naishan nations into their increasingly multiethnic realm, where newcomers exchanged varying degrees of their autonomy for access to Comanchería's wealth and safety. Then, diffusing potential conflict with commerce, Comanches forged exchange relationships with the encroaching immigrant tribes of Indian Territory—the Cherokees, Chickasaws, Choctaws, Creeks, and others—who began conducting regular trade journeys into Comanchería, subsisting on its bison as they traversed it. Finally, spurred by the establishment of Bent's Fort and other Anglo-American trading posts on their borders, Comanches embarked on a mass-scale production of bison hides, converting their commissary into an animal of enterprise. It was not long before Comanchería's bison started to show signs of overexploitation. Strains started to appear in the 1810s, and by the 1830s the herds had become visibly diminished.⁴⁴

The Mexico-bound incursions were, in part, a response to the bison's troubles. War bands brought back massive numbers of horses that were promptly exchanged for food and manufactured goods at Anglo-American posts or, increasingly, eaten. Early-nineteenth-century Comanches consumed increasing amounts of horseflesh—some sources call it their favorite food—which reduced pressure on the bison. But if large-scale raiding helped the bison by furnishing an alternative food source, it also helped by simply carrying humans away. The deeper into Mexico the Comanches pushed, the longer they stayed there, and the larger their war bands, the less human pressure there was on Comanchería's distressed bison. As the burden on Comanchería's bison ecology increased, so did the size and frequency of Comanche raiding expeditions,

⁴⁴ For contemporary views of Comanche raiding, see for example Foreman, *Adventure on Red River*, 173; Smith, *Hispanic American Historical Review* 43: 46. For ethnic incorporation, exchange relationships, and bison hide production, see DeLay, *War of a Thousand Deserts*, 100–109; Hämäläinen, *Comanche Empire*, 152–56, 172–75. For the decline of bison numbers, see Rupert Norval Richardson, *The Comanche Barrier to South Plains Settlement: A Century and a Half of Savage Resistance to the Advancing Frontier* (Glendale, Calif., 1933), 173–74; Burnet, *West Texas Historical Association Year Book* 30: 136.

which in the 1840s routinely featured hundreds of warriors. Pushing deep into Durango, Zacatecas, and San Luis Potosí, the massive war bands spent months on foreign soil, living off the land while sacking ranches, villages, towns, and mining communities. They butchered cattle, pigs, sheep, and goats for food across the countryside and extracted gifts of meat and bread in urban centers. They let their oversize horse herds forage on the abundant grama grasses of the Mexican plateau, where killing frosts came rarely, and they took their herds to graze in the dampish mountain forests of Coahuila and Nuevo León. After successful raids they sometimes allowed their animals to feed on Mexican grain stores. Their war trails and campsites were littered with animal bones, rotting carcasses, trampled fields, and drained food caches, all markers of a new environmental strategy that allowed them to displace environmental loads to the south to sustain their power far in the north.⁴⁵

Strategy? Such an argument for intentionality might seem anachronistic, registering as too Western, too openly in conflict with accepted truths about indigenous environmental ethics that are embedded in a spiritual matrix, but that is not necessarily the case. There is, first of all, the sheer scale of Comanche operations to consider. In the course of the 1830s, Comanche raids into Mexico escalated into cyclical migrations. War bands started to travel with entire families and stay below the Rio Grande for months and sometimes years. The Bolsón de Mapimí, a vast mountain-nestled desert plateau in the heart of northern Mexico and the chief crossroads of Comanche war trails, began to take the shape of a permanent, self-sustaining settlement colony. The Bolsón was a neo-Comanchería in the making, a transformed territory where Comanches lived as they did in Comanchería proper, hunting game and gathering wild plants for subsistence and slowly migrating from one camping ground to another. They lined their favorite Bolsón campsites with parapets and crowded river bottoms with their massive herds, and their horses scarred the landscape with their hooves, pervading the region

⁴⁵ For the consumption of horseflesh, see Foreman, *Adventure on Red River*, 175; William Bollaert, *William Bollaert's Texas*, ed. W. Eugene Hollon and Ruth Lapham Butler (Norman, Okla., 1956), 361; Hyde, *Life of George Bent*, 37; George Catlin, *Letters and Notes on the Manners, Customs, and Conditions of the North American Indians, Written during Eight Years' Travel (1832–1839) amongst the Wildest Tribes of Indians in North America* (1844; repr., New York, 1973), 2: 53–63, esp. 2: 59. For the escalation of Comanche raiding and its economic and ecological toll on northern Mexico, see Ralph Adam Smith, “The Comanche Bridge between Oklahoma and Mexico, 1843–1844,” *Chronicles of Oklahoma* 39, no. 1 (Spring 1961): 52–69, esp. 56–68; T. N. Campbell and William T. Field, “Identification of Comanche Raiding Trails in Trans-Pecos West,” *West Texas Historical Association Year Book* 44 (1968): 128–44; Rodríguez, *La guerra entre bárbaros y civilizados*, 148–55; Martha Rodríguez García, “Los tratados de paz en la guerra entre ‘bárbaros’ y ‘civilizados’ (Coahuila 1840–1880),” *Historia y Geografía* 10 (January–June 1998): 67–90, esp. 73–77; DeLay, *War of a Thousand Deserts*, 61–62, 128–29, 317–18, 320–40.

with an aura of a colonized landscape. "In the fall and winter season," one American visitor wrote, "their home is . . . in the *Bolson de Mapimi*, a vast basin shut in by high mountains at the west. Here they enjoy uninterrupted possession of a wide extent of country, whence they make their sallies into the heart of Mexico."⁴⁶

All these developments—the hundreds-strong war bands, the multi-seasonal expeditions, the Bolsón colony—appear excessive for the purposes of livestock raiding, suggesting that another motive was involved. That motive, it seems, was ecological: the massive invasion of foreign territories helped stabilize Comanchería's battered bison ecology that was collapsing under the weight of an imperial economy. Yet listing the ecological benefits of large-scale long-distance raiding only suggests causality; it does not reveal intention. To access Comanche motives, it is necessary to have Comanche words. In 1872 at Fort Sill Agency in Indian Territory, U.S. government agents met with prominent Comanche chiefs, trying to convince them to become farmers and give up hunting and raiding. When told that the bison would soon disappear—the United States' industrial assault on the herds was already under way—a Comanche speaker retorted that "there were yet millions of buffalo, and there was no danger on that hand." But "lest they might fail," he continued, "they, the Comanches, had determined to hunt buffalo only next winter, then they would allow them to breed a year or two without molestation, and they would rely on Texas cattle for subsistence meantime."⁴⁷ This startling declaration laid bare the dual character of Comanche imperialism that had dominated the history of the American Southwest for more than a century: it was a geopolitical

⁴⁶ John Russell Bartlett, *Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora, and Chihuahua, Connected with the United States and Mexican Boundary Commission, during the Years 1850, '51, '52, and '53* (New York, 1854), 2: 386 (quotations). For the escalating raids and the Bolsón de Mapimí, see Foreman, *Adventure on Red River*, 159–60; Maurice Garland Fulton, ed., *Diary and Letters of Josiah Gregg: Excursions in Mexico and California, 1847–1850* (Norman, Okla., 1944), 2: 151–52; Smith, *Chronicles of Oklahoma* 39: 56, 59–60; Smith, *Borderlander: The Life of James Kirker, 1793–1862* (Norman, Okla., 1999), 106–8. I am using "war band" here advisedly to emphasize the point that Comanches did not think or operate as a monolith. Each Comanche band, usually consisting of two to three hundred people, composed its ecological strategies individually, responding to distinctive local circumstances. The broad contours of Comanche foreign policy were negotiated in large divisional and interdivisional meetings, but local bands were allowed to maneuver freely within the agreed parameters. For an illuminating contemporary account, see Neighbors, "Na-Ū-Ni, or Comanches of Texas," 347–57.

⁴⁷ Enoch Hoag, "Report of the Condition of Indian Affairs in the Indian Territory," [Lawrence, Kans.] *Tribune*, Aug. 27, 1872, in John B. Garrett Papers, 1853–1961, Haverford College Libraries, Special Collections, Haverford, Pa. The document is signed by Cyrus Beede, Superintendent Hoag's chief clerk, who represented the Indian Bureau at the meeting.

endeavor of projecting power outward and a biological endeavor of dispatching environmental burdens of expansion elsewhere.⁴⁸

AN ECONOMIC COLOSSUS resting on a relatively delicate ecological foundation, the Comanche power complex was an inherently unstable entity. Comanches' massive horse herds, the source and symbol of their power, also rendered them vulnerable to ecological damage and external aggression. With a collective horse wealth of some one hundred fifty thousand animals, Comanches trod an ecological tightrope throughout their imperial ascendancy in the early nineteenth century. The vast domesticated herds competed with bison for grass and water, as too did the horses of many other native groups that had won access to Comanchería as junior allies and trading partners. Hundreds of thousands of feral horses also demanded their share of the contested resources, further narrowing Comanchería's ecological parameters, and Comanches themselves slaughtered hundreds of thousands of bison each year for subsistence and exchange, killing disproportionate numbers of young, reproductive cows for their tender meat and supple hides. Comanches managed to head off the looming implosion by shifting environmental costs to adjacent regions, but the onset of a twenty-year dry spell in the mid-1840s brought on a full-scale crisis, then collapse.⁴⁹

Comanches responded to the drought predictably—the dry decades witnessed some of their largest raids into Mexico, and several of their bands relocated permanently below the Rio Grande—but it was not enough to thwart crisis. Even with many of their bands in Mexico, Comanches and their horses crowded Comanchería's few riparian habitats where forage and water remained available, denying the bison access to the life-sustaining drought refuges. Half of Comanchería's seven million bison may have perished, leaving the Comanches reeling. Famine left them exposed to disease, and they were struck by cholera in 1849 and smallpox in 1848, 1851, and 1861. By the early 1860s, the Comanches had

⁴⁸ One important study has stressed vengeance—along with desire for prestige and material acquisitiveness—as a key motivational force, arguing that the Comanches who pushed into Mexico with such destructive force were propelled by a culturally conditioned need to avenge the deaths of their kin at Mexican hands. See DeLay, *War of a Thousand Deserts*, 114–38. Though vengefulness and raw individual ambition undoubtedly played a role in Comanche expansion, I suggest that the phenomenon can properly be understood only in a broad ecological context.

⁴⁹ For Comanche horse wealth, see Hämäläinen, *Comanche Empire*, 240. For feral horses, see Flores, *Montana: The Magazine of Western History* 58: 12–13. For Comanche market hunting, see Whitfield to Mix, Jan. 5, 1856, in RG 75, Records of the Bureau of Indian Affairs, M234, Letters Received by the Office of Indian Affairs, Upper Arkansas Agency, National Archives Microfilm Publication, 878: 104; Niyah, July 7, 1933, in Kavanagh, *Comanche Ethnography*, 79–91, esp. 84; Flores, *Journal of American History* 78: 479–80.

lost more than half their numbers and, with that, their power to command. They surrendered their raiding domains, gave up tribute extraction, and witnessed their commercial pull dissipate to almost nothing.⁵⁰

Yet it was not inevitable that this crisis would lead to collapse. Comanches had repeatedly recovered from drought- and disease-induced crises during their imperial tenure, and they may well have done so this time as well. Indeed, as the drought passed in the mid-1860s, Comanches resumed large-scale raiding, their war bands ranging across debilitated, post-Civil War Texas, stealing livestock, taking captives, and subsisting on stolen cattle. The Comanches of the late 1860s seemed to have found a new ecological balance in their home territory, and they were becoming a domineering force in the borderlands once again.⁵¹

And then it ended, not because large biohistorical dynamics had suddenly turned against them but because a new player entered the scene. The United States had extended its southwestern boundary to the Rio Grande in the Mexican-American War, boxing in the Comanches, whose devastating raids across Mexico had inadvertently helped the Americans win the war, yet the expansionist republic did not become a major disruptive force in Comanche history until the late 1860s. For nearly two decades after the Mexican-American War, the U.S. pressure on Comanchería came in pieces—in the form of overland trails, new military forts at the Texas frontier, and Anglo-Texan settlers—but the end of the Civil War brought the deluge: agribusiness, ranching industry, and railroads ushered in a new order of free-labor capitalism in which there was no place for independent slave-raiding Indians. In 1871 the U.S. Army launched a total war in Comanchería, targeting horses, bison, and food caches as much as people. Still a shadow of their former imperial selves, the recovering Comanches were powerless against the onslaught, and their last, half-starved bands moved to Indian Territory in 1875.⁵²

THE COMANCHE CASE may have been exceptional in degree—no other Native American society seems to have managed to exert such concen-

⁵⁰ For raids, see J. Fred Rippy, "The Indians of the Southwest in the Diplomacy of the United States and Mexico, 1848–1853," *Hispanic American Historical Review* 2, no. 3 (August 1919): 363–96, esp. 384–90; Ralph A. Smith, "The Comanches' Foreign War: Fighting Head Hunters in the Tropics," *Great Plains Journal* 24–25 (1985–86): 21–44, esp. 31–41; Kavanagh, *Comanche Political History*, 328–31; Kevin Mulroy, *The Seminole Freedmen: A History* (Norman, Okla., 2007), 68. For the drought and its effect on bison ecology, see West, *Way to the West*, 79–83; Isenberg, *Destruction of the Bison*, 109–10; Kevin Sweeney, "Thirsting for War, Hungering for Peace: Drought, Bison Migrations, and Native Peoples on the Southern Plains, 1845–1859," *Journal of the West* 41, no. 3 (Summer 2002): 71–78, esp. 71–75. For the epidemics and the disintegration of Comanche power, see Hämäläinen, *Comanche Empire*, 299–313.

⁵¹ For the revival of Comanche power, see Hämäläinen, *Comanche Empire*, 313–32.

⁵² For the final dispossession of the Comanches, see T. R. Fehrenbach, *Comanches: The Destruction of a People* (New York, 1974), 365–545; Gary Clayton Anderson, *The*

trated and long-lasting dominance at colonial frontiers—but not in kind. If scholars resist romanticizing Indians as nonpolitical and protoenvironmental actors, historicize indigenous ecological practices, and work from the local up to reconstruct large patterns, Comanche-like exceptions are likely to appear across the hemisphere. What, for instance, was the logic of ecological imperialism in seventeenth-century Chile, where Araucanian Indians used Spanish horses and iron weapons to check Spanish colonialism, built a thriving exchange economy on pilfered Spanish livestock, and came to command a vast territory amid Spanish outposts? Or what of the biohistorical dynamics in the heart of South America, where the Chiriguano incorporated equestrianism into what remained an agricultural way of life, grew vastly in numbers, collected tribute at Spanish frontiers, and, as late as the mid-nineteenth century, enlarged their territories at the expense of the new republics? And then there are the Iroquois, who did not become equestrian, lived adjacent to one of North America's deadliest disease environments, and yet emerged as the dominant power in the early colonial northeast. Historians have written exhaustively about the Iroquois' internal solidarity, diplomatic skills, and martial spirit, but did their success have an ecological dimension?⁵³

These examples are just some historical junctures where it may be necessary to envision alternative narratives of the macroscale biohistories, and one way to access such narratives is to embrace analytic frameworks that integrate political and environmental history, avoid reading indigenous demise and environmental degradation back in time, and move flexibly between scales to reveal how large abstract forces of European expansion pushed against human agency on the ground. Works in this

Conquest of Texas: Ethnic Cleansing in the Promised Land, 1820–1875 (Norman, Okla., 2005), 345–59. For the complex connections between Comanche raiding and the Mexican-American War, see DeLay, *War of a Thousand Deserts*, 253–96.

⁵³ In some ways the obvious parallel of the Comanche case is the Lakota expansion on the nineteenth-century northern Great Plains, which, like the Comanche ascent, was powered by horses, guns, and other European exports. Unlike Comanches, however, Lakotas did not extend their authority across Euro-colonial realms; the northern Great Plains they dominated were still a largely indigenous world. For the Lakota expansion, see Richard White, "The Winning of the West: The Expansion of the Western Sioux in the Eighteenth and Nineteenth Centuries," *Journal of American History* 65, no. 2 (Summer 1978): 319–43; James O. Gump, *The Dust Rose like Smoke: The Subjugation of the Zulu and the Sioux* (Lincoln, Neb., 1994). For suggestive discussions of the Araucanians and Chiriguano, see Erick D. Langer, "The Eastern Andean Frontier (Bolivia and Argentina) and Latin American Frontiers: Comparative Contexts (19th and 20th Centuries)," *Americas* 59, no. 1 (July 2002): 33–63; Weber, *Bárbaros*, 54–71. Daniel K. Richter made an intriguing suggestion about the links between the Iroquois' creative adaptations to European invasions and their inland location, but his insight still awaits systematic examination. See Richter, *The Ordeal of the Longhouse: The Peoples of the Iroquois League in the Era of European Colonization* (Chapel Hill, N.C., 1992), 2–3.

vein have already started to appear, produced, most notably, by scholars who argue that the connection between Old World pathogens and indigenous decline was more complicated than has been assumed. The epidemiological outcomes of European contact varied widely, these scholars insist, depending on the character of colonial institutions and the condition of indigenous societies at contact: politically powerful and economically self-reliant native groups were likely to be less vulnerable to microbial inroads.⁵⁴ These openings are significant, but there is a need for more nuanced narratives still, stories that lay bare just how complex and unpredictable the links among human agency, ecological change, political power, time, and place could become in colonial worlds.

This story of the Comanches offers one example of how scholars might conceive such narratives. Comanches did not face Europe's political and biological expansion from a position of strength but from one of relative weakness, and their path to power was a convoluted one; there was little in their precontact situation to suggest their postcontact ascendancy. The Comanches who came to dominate the Southwest borderlands did not simply encounter Europe's political and biological frontiers in the right place at the right time. To become dominant, they had to move from the continent's center toward European outposts at its margins, and they had to devise an array of new strategies that allowed them to exploit, propagate, reconfigure, and channel European biota and technology in ways that served their interests at the expense of those of their European and native rivals. The Comanche empire came into existence because a multitude of historical and biological forces joined together—due to environmental conditions and the specific dynamics of European colonialism, and through Comanche actions—to realign power relationships in a fluid borderland world where nature, culture, and history interlocked and curved. Comanches did not categorize their environment or actions into abstract political and biological structures—theirs was a more holistic worldview—yet that should not prevent scholars from identifying such structures behind their expansion. The eighteenth- and early-nineteenth-century Southwest was a world of many powerful structures, but one of the most compelling of them, one whose force few in the region could escape, was the imperial ascendancy of the Comanches who rose to power with the momentum of ecological change on their side.

⁵⁴ See in particular Linda A. Newson, "Highland-Lowland Contrasts in the Impact of Old World Diseases in Early Colonial Ecuador," *Social Science and Medicine* 36, no. 9 (May 1993): 1187–95; Stephen J. Kunitz, *Disease and Social Diversity: The European Impact on the Health of Non-Europeans* (New York, 1994); David S. Jones, *Rationalizing Epidemics: Meanings and Uses of American Indian Mortality since 1600* (Cambridge, Mass., 2004); Kelton, *Epidemics and Enslavement*.