Drawing and Disrupting Borders in the Wake of the US-Mexico War

IN THE WINTER OF 1850-51, the United States and Mexican Boundary Commission met in the Mesilla Valley, a fertile floodplain in the northeast corner of the Chihuahuan Desert. Under the Treaty of Guadalupe Hidalgo (which had ended the US-Mexico War), the Boundary Commission had spent the last year and a half laying out the "limits of both Republics." Whenever possible, it had linked these limits to material environments, so in the west it had charted a course from San Diego Bay to the junction of the Colorado and Gila Rivers, and in the east it had followed the twists and turns of the Rio Grande. That winter, though, it needed to invent an invisible line: from the treaty and the attached map, it needed to forge the "Southern Boundary of New Mexico." Because neither of these media captured the Mesilla Valley's true contours, the Boundary Commission devolved into chaos. As winter became spring, however, US Commissioner John Russell Bartlett, Mexican Commissioner Pedro García Conde, and Mexican Surveyor José Salazar Ylarregui agreed that "32°22' north latitude" could serve as the "Southern Boundary's . . . Initial Point." To celebrate this compromise, the three men conducted a "ceremony": first, they "read [a document] aloud in English and in Spanish"; next, they "signed" it, "witnessed" it, and "placed [it] in a bottle with... a fragment of the Washington Monument"; finally, they buried it beneath a small wooden "post."²

By participating in the ceremony, García Conde and Salazar Ylarregui were trying not simply to set the Initial Point but also to stabilize the US side of the Boundary Commission. In two years, the US side had operated under

ABSTRACT This article advances an argument about two "imagined environments"—my term for the frameworks that human groups use to depict and dwell in more-than-human worlds. The first of these imagined environments arose around the US-Mexican Boundary Commission (1849–59): while failing to fulfill its official objective of building physical border monuments, this team of explorers and engineers still made media that helped two settler states conceptualize and control their borderlands. Against this increasingly efficient exploitation of both humans and nonhumans, a second imagined environment persisted in Mescalero Apache pictographs, Chihene Apache performances, and other Apache media. On our precarious planet, this imagined environment can teach us to stop defining ourselves around fixed places and to remain resilient while migrating through shifting spaces. Representations 166. © 2024 The Regents of the University of California. ISSN 0734-6018, electronic ISSN 1533-855X, pages 86–117. All rights reserved. Direct requests for permission to photocopy or reproduce article content to the University of California Press at https://www.ucpress.edu/journals/reprints-permissions. DOI: https://doi.org/10.1525/rep.2024.166.4.86.

four commissioners: Ambrose Sevier (who had died before he could be confirmed), John B. Weller (who had fallen out of favor while working in California), John C. Frémont (who had resigned to pursue his political career), and Bartlett (who had accepted the assignment as a way of advancing his ethnological research). Left without leadership, the US side had suffered a series of setbacks, with Apaches stealing its horses, weevils infesting its food, and "intoxicating mezcal" driving men "insane." That winter, García Conde and Salazar Ylarregui tried to straighten things out—in their earnest terms, they tried to "llenase los deberes que Dios [les] ha[bía] impuesto" (fulfill the duties God had given them).⁴ Ultimately, though, identifying the Initial Point only threw them further off course. For the rest of 1851 and all of 1852, the US side came under fire for ceding the Mesilla Valley, which many US politicians regarded as a key portion of their transcontinental railroad route. Then, in late 1853 and early 1854, the US side took a break from surveying so US diplomats could force their Mexican counterparts to sell the contested land. Finally, in late 1854, the US side reassembled under William H. Emory and, in a fitting conclusion to the whole comedy of errors, endured blinding sun and scorching heat to replace the 32°22' parallel with yet another invisible line.⁵

Because the Boundary Commission could barely agree about the Initial Point—and, indeed, because it could scarcely survive in the Chihuahuan Desert—scholars such as Rachel St. John have linked it to "a long history in which the border would repeatedly reveal the divide between the states' aspirations and their actual power." As these scholars have shown, the Boundary Commission failed to fulfill US and Mexican "aspirations," marking a two-thousand-mile line with only a few dozen monuments. As other scholars are starting to see, however, it still offered many inhabitants of the "states" new perspectives on their shared "border." To quote Bartlett, the Boundary Commission put the "information, obtained with so much toil and expense, in a suitable manner before the people."8 During its six years in the field, it made a variety of media—astronomical and meteorological charts, botanical and zoological sketches, ethnographic and linguistic fieldnotes. When it withdrew to the US Capitol, it filed a formal report—three leatherbound quartos featuring elaborate engravings, state-of-the-art statistics, and fold-out maps. At last, after it adjourned, it became the basis for visual art (especially Seth Eastman's watercolors and Henry Cheever Pratt's oils) and literature (including Salazar Ylarregui's *Datos de los trabajos* [...], Bartlett's Personal Narrative [...], and John C. Cremony's Life Among the Apaches). Of course, the Boundary Commission addressed some of these media to specific bureaucrats, but, for the most part, it circulated them through the public sphere: while Emory printed 11,000 copies of the report and Bartlett and Cremony organized even larger editions of their texts,

Eastman and Pratt curated exhibitions of their art. Therefore, even when the Boundary Commission appeared to lack what today's scholars see as "actual power," it could still influence its own era's "imagined environments," which is my term for the frameworks through which human groups represent, relate to, and reside in their more-than-human worlds.

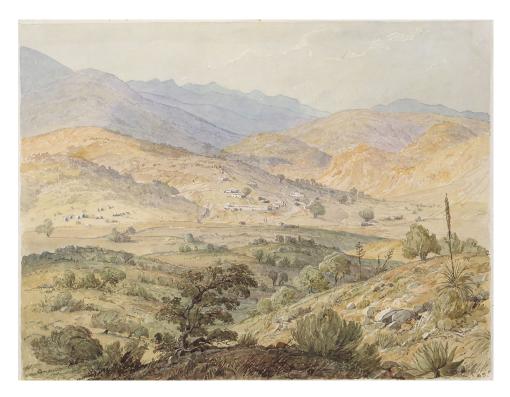


FIGURE 1. Seth Eastman, Santa Rita del Cobra (Copper Mines), Rocky Mts., N.M., 1853. Watercolor with scraping and graphite on paper, 9.4×12.4 in $(24 \times 31.6 \text{ cm})$. Courtesy of the RISD Museum.

In some contexts, *imagined* connotes fantasy or fictionality. But in the wide-ranging scholarship on "imagined communities," "imaginative geographies," and other "social imaginaries," the word denotes an all-too-real process in which independent individuals recognize and reinvent themselves and others as unified groups. ¹⁰ Developing this scholarship, we can think of imagined environments as seemingly natural sensoria that take shape in circulating media—in the Boundary Commission's maps, in Mescalero Apache pictographs, and in all manner of other messages. Infusing the scholarship with insights from ecocriticism and ecomedia studies, we can then add that imagined environments affect not only human identities like gender, race, and

class, but also more-than-human entities from earth and water to plants and animals to chemicals and machines. 11 Through the resulting theoretical lens, we can see that the Boundary Commission made far more than the monuments many scholars regard as its raison d'être. Like other imperial institutions, the Boundary Commission collected thousands of paleontological samples, sketched hundreds of strange species, and "obtain[ed] vocabularies of more than twenty aboriginal languages."12 Unlike all but its most celebrated contemporaries, the Boundary Commission put its findings into the public sphere: to cite a review of one of its exhibitions, it made it possible for those who were "not permitted to behold the actual scenes" to "linger over the graphic representations." 13 At some points, it provided colorful commentary about "horrid tarantula[s]... nesting under one's blankets." ¹⁴ At other points, it confronted its publics with explicit evaluations of "barren waste[s], which [could] never be rendered useful for man or beast." At every point, it immersed its publics in imperceptible—and, for that very reason, influential—sensoria: whether they lived in the US or Mexico, it allowed them to see, hear, smell, touch, and taste the borderlands (figs. 1 and 2).



FIGURE 2. William H. Emory, Report on the United States and Mexican Boundary Survey [...] (Washington, DC, 1857–59), vol. 2, section 2, plate 9.

From its creation in 1849 to its last official publication in 1859, the Boundary Commission tried to link three types of social imaginaries in mutually supportive systems: for instance, when it called Chief Chipota of the Lipan Apaches a "specimen of the wild denizens of the prairie," it used an imagined environment (whose human and nonhuman "specimens" were ripe for study) to keep him out of US and Mexican imagined communities (with urban "denizens") and in a transnational imaginative geography (full of "wild" peoples). ¹⁶ While making such systems, however, the Boundary Commission often found that these social imaginaries functioned

in different ways. For Benedict Anderson, imagined communities are "limited"—they have borders—and "sovereign"—within their borders, states are supreme authorities. For Edward Said, imaginative geographies are based in binaries like West/East or Self/Other. In my interpretation, by contrast, imagined environments are porous: even when saturated with one group's fantasies, they can still contain another group's realities. Additionally, imagined environments are protean: although they sometimes seem essential, they are always evolving. In this particular "prairie," the Boundary Commission had to challenge what it called "erroneous impressions of Indian character." In turn, it had to engage Native imagined environments, in this case negotiating with Chipota to buy back the mules it had lost to other Apaches. For these reasons, it absorbed but never annihilated alternatives: although it invented new ways of seeing "specimens," it could not stop settlers from sharing "impressions," nor stop Chipota from supporting raids. Beyond the borders that seemed to separate imagined communities, and beneath the binaries that sought to segregate imaginative geographies, it left a knotted network of imagined environments.

By tracing two of these imagined environments, this article reconsiders the rise of borders in the wake of the US-Mexico War. With its bestselling books, traveling exhibitions, widely circulating articles, and other media, the Boundary Commission invested more-than-human ecologies with alltoo-human rationality: while eschewing the most preposterous predictions about the US's supposed Manifest Destiny, it laid foundations for what it saw as modest but meaningful economic prosperity. Anxious that Apaches, Comanches, and other mobile Natives might foreclose parts of this future, the Boundary Commission disparaged their cultures and communication practices. But when it transcribed Mescalero Apache pictographs, and when it translated Chihene Apache speeches, it inadvertently illuminated an alternative imagined environment. In both the Boundary Commission's copies and the Apache originals, this imagined environment exposed weaknesses of capitalist economies and found strength in subsistence ecologies. Linking up with other Apache media, it maintained Apache attitudes toward animals (like the horses they rode with incredible skill), minerals (like the gold they refused to remove from the earth), and other nonhumans. More broadly, it defied US and Mexican attempts to produce fixed places, instead modeling Apache methods for migrating across immense spaces. In a decade when the two settler states doubled down on their genocides of Indigenous Peoples—and in a century when these and other societies reinforced many planet-altering processes—this imagined environment helped Apaches move to their own rhythms.

If we listen to the ways these Indigenous rhythms collide with their settler counterparts, we can finally comprehend what may be the Boundary Commission's best-known statement: "en el papel se tira facilmente una línea...pero en el terreno no es lo mismo" (on paper one easily draws a line...but on land it is not the same). 18 As many have suggested, this statement sums up a simple fact: throughout its six years in the field and four years in Washington, DC, the Boundary Commission failed to actualize the all-important "paper" that was the Treaty of Guadalupe Hidalgo. 19 This is true enough, but the statement also reflects two deeper realities: first, that the Boundary Commission's success in making media—its success, in other words, in "draw[ing] line[s]"—changed how US Americans and Mexicans perceived and produced "lands"; and, second, that the resulting rise of extractivism damaged but never destroyed Indigenous Peoples, who sustained themselves in part with their own media—their own "lines." 20 Of all the scholars to study the Boundary Commission, the only one to even gesture toward these twinned realities is Samuel Truett. Embellishing his offhand observation that "hardly a day passed that Bartlett's party did not walk across someone else's map of the world," this article appreciates border cultures in all their complexity.²¹ Reinterpreting the Boundary Commission's archives, it shows how settler states have naturalized their exploitation of humans and nonhumans. Then, recovering Apache media, it argues that Indigenous Peoples have mobilized not only as nations (with imagined communities) or races (in imaginative geographies) but also as people in and of places (created by and creating imagined environments).

The Boundary Commission's Imagined Environment

At the peak of his *Personal Narrative*, John Russell Bartlett poses a provocative question: "[with] the sun glowing fiercely, and [with] the wind hot from the parched earth," he asks, "is this the land which we have purchased, and are to survey and keep at such a cost?" For the next few pages, he remains anxious about "sterile plains" where "the only things that do not seem terror-stricken are the so-called horned frogs." By the end of the chapter, though, he is no longer "disgusted with the ever-recurring sameness" but instead excited about how he can make his country's "purchase" pay off. Through these turns, Bartlett helped hone an imagined environment for the northern edges of the Sonoran and Chihuahuan Deserts as well as the Llano Estacado—that is, the southern half of the New Mexico Territory (which included what is now Arizona) and the western half of Texas. Over the course of the 1850s, the Boundary Commission chronicled Spain and Mexico's failure to take this region from Apaches, Comanches, and other Natives. Despite and in some respects due to this failure, the Boundary Commission enumerated the strategies through which the US would make the region worth "keep[ing]." By chronicling two empires' shortcomings while predicting a third empire's successes, the institution formed a feedback loop: in one move, it acknowledged that New Mexico and West Texas appeared to be "one unbroken waste, barren, wild, and worthless"; then, in another move, it argued that the region could eventually sustain dozens of railroad routes, hundreds of copper mines, and thousands of cattle ranches. With this feedback loop, the Boundary Commission simultaneously articulated and attenuated concerns about a harsh environment and its hostile inhabitants. Balancing palpable risks against potential rewards, it provided its publics with new ways of conceptualizing and controlling distant places and peoples.²²

Across its vast archive, the Boundary Commission represented Apaches and Comanches as "nation[s]" or "race[s]" with "uninterrupted possession of a wide extent of country."23 Yet in his history of Nuevo México and the Great Basin, Ned Blackhawk rejects such sweeping statements. By revealing the "violent shockwaves that engulfed these Indian homelands before their sustained documentation," Blackhawk proves that "precise band names...are often unreliable." If we accept his argument that "hybridity, adaptation, and exchange more clearly characterize these histories than do fixed ethnographic categories," we can begin to understand the living peoples who shaped the Boundary Commission's imagined environment.²⁴ Sometime before the sixteenth century, an array of Athapaskan-speakers moved into the Sonoran Desert, the Chihuahuan Desert, and the Llano Estacado; although they referred to themselves with variations on the word "Ndee" (People), they became known as "Apaches." 25 At the end of the seventeenth century, groups of Uto-Aztecan speakers crossed the Rocky Mountains and entered the Great Plains; while self-identifying as "Numunu" (People), they gained a reputation as "Comanches." 26 It is difficult to grasp the diversity of these two peoples. Even the most problematically partial overview of their political history would differentiate among four Comanche divisions (in his book, Brian DeLay calls them Hois, Kotsotekas, Tenewas, and Yamparikas), at least a dozen Apache groups (here I engage primarily with Mescaleros and Chihenes), and other nations (Navajos are closely related to Apaches, while Kiowas are key allies for Comanches). Likewise, even the most simpleminded study of their environmental practices would feature herding, hunting, foraging, and other activities. As a half-Cuban, half-Anglo settler scholar, I am not the one to make definitive statements about these peoples. But by building on Blackhawk's method, I can at least show how they used violence to contest colonialism.

A century and a half before the Boundary Commission took the field, Apaches and Comanches began practicing two types of violence: on small sneak-attacks, they accumulated wealth by avoiding direct confrontations; on large war campaigns, they accrued honor by risking their lives in combat. In the following decades, Apaches and Comanches further refined their techniques for traveling at top speed (thus, Cremony claimed, "no amount of cold, hunger or thirst seems to [affect them]") and using environments to their advantage (therefore, Cremony added, they hide with "as perfect a knowledge of the assimilation of colors as the most experienced Paris modiste").27 As Apaches and Comanches gained power, Spanish-speaking settlers responded in three ways. For much of the eighteenth century, they relied on a "reciprocal specialization in violence": from presidios they launched formal military campaigns, and in pueblos they used informal self-defense tactics.²⁸ When Vicerov Bernardo de Gálvez published his Instrución para el buen gobierno... (1786), the settlers shifted from aggression to appeasement, so in the Deserts they invited Apaches to live at establecimientos de paz (peace establishments), and on the Llano they catered to Comanches with trading posts.²⁹ Finally, when the Mexican War of Independence (1810-21) destabilized diplomacy, the settlers began pairing older forms of violence with brutal new policies, in some areas placing bounties on Native scalps. During the century and a half in which they developed these strategies, the settlers disagreed on many points, but ultimately they all recognized they were losing what Brian DeLay calls the "War of a Thousand Deserts." In the 1830s and 40s, Apaches and Comanches inflicted thousands of casualties, captured tens of thousands of horses, and pushed Mexico to a breaking point. Then, between 1846 and 1848, US troops completed the conquest.³⁰

By the time the Boundary Commission began its work, therefore, Mexicans were all too familiar with frontier violence; in prominent newspapers, they were not surprised to see "Limites" and "Valle de la Mesilla" (special reports on García Conde's fight for the Initial Point) alongside "Bárbaros" (recurring articles about Apache and Comanche attacks). 31 US Americans, in contrast, were still solidifying first impressions. As DeLay argues, some had reacted to the Texas Revolution (1835–36) by "form[ing] a mental picture of the Mexican north as a place of enormous potential that the Mexicans had patently failed to redeem from independent Indians." Defining the region as a "desert," they had depicted "the dismemberment of Mexico as an act of salvation."32 Yet at the same time, they had set impossible standards for New Mexico and Texas's reconstruction. In the 1850s, when US publics were hoping for victories over Natives, the Boundary Commission felt compelled to clarify that in "no period [had] the incursions been more frequent, or attended with greater atrocities."33 Similarly, while these publics were expecting the "salvation" of "man-made deserts," the Boundary Commission ended up finding fundamental limits to nonhuman environments—temperatures above one hundred degrees,

annual precipitation below ten inches. As prewar predictions gave way to postwar realities, the Boundary Commission struggled to make sense of the borderlands. In some media it likened Natives to animals who "prowl[ed] among the mountains"; elsewhere it reported that yuccas "seemed like bodies of men [so that] many were ready to see an Indian in every resemblance to them."³⁴ Little by little, however, it found a framework for the humans it compared to animals and the plants it associated with people. Little by little, in other words, it shifted away from the old desert discourse and toward a new imagined environment.

To fully appreciate the significance of this shift, we must look at the longer history of "racial geographies"—María Josefina Saldaña-Portillo's term for the ways settlers have "created space through the careful placing (and displacing) of indigenous subjects in landscape." In the seventeenth and eighteenth centuries, the Spanish Empire and the British Empire put their racial geographies to different purposes: the first converted Indios to Catholicism, the second compelled Indians to sign treaties; one founded multiethnic misiónes, the other forged a militarized frontier. In the nineteenth century, however, Mexico and the US brought their racial geographies into brutal alignment: even as the former abolished racial categories to enfranchise all who acknowledged the state's sovereignty, and even as the latter enlarged the umbrella of whiteness to include Mexicans who disavowed mestizaje, both waged total war against Apaches and Comanches. For Saldaña-Portillo, the key text in this total war was the Treaty of Guadalupe Hidalgo's Article XI, which insisted that the troublemaking tribes would "be under the exclusive control of the [US]" and that their "incursions [into] Mexico... [would] be forcibly restrained." This article was so unenforceable that it was annulled as part of the Gadsden Purchase (1854). Yet, as Saldaña-Portillo shows, it still exemplified the emergence of transnational "economies of death." At the very moment the Boundary Commission began making its imagined environment, Article XI linked Apaches and Comanches to "a fixed idea of barbarism at once spatially inside the national boundaries of both countries, but temporally outside the historical time of nationhood." Materially and metaphorically, it used "Apache and Comanche scalps [to open] the door of advancement for [others] to step into the nation."35

In some of its media, the Boundary Commission entrenched the economies of death: since Cremony saw Apaches as "bloodthirsty," he argued that they "must be subdued by force." Most of the time, though, the Boundary Commission tempered these abstract racial anxieties with concrete spatial calculations in order to endorse "extractivism," which Macarena Gómez-Barris defines as "an economic system that engages in thefts, borrowings, and forced removals, violently reorganizing social life as well as

the land."³⁷ Thus, while the figures who appear in Saldaña-Portillo's study were drawing hard distinctions between settlers and Natives, the Boundary Commission took pragmatic paths through ever-shifting environments. When Article XI was still in effect, it brought some Apaches into conditional compliance not with violence but rather with gifts of livestock and produce.³⁸ Then, after the article was abolished, it avowed that "no amount of force could have kept the Indians from crossing the line to commit depredations."39 By bending the very article that was the linchpin of the racial geographies, the Boundary Commission built a less aggressive but no less destructive imagined environment. Since parts of New Mexico and West Texas seemed as "indefinite to [its] comprehension as...the center of Africa," it focused strictly on the smaller "extractive zones" in which it could predict at least a little success. 40 Although it acknowledged it could not control every last human community, it insisted it would extract profits from three types of nonhuman environments: farms, mines, and railroad routes. Blending grandiloquent discourses of Manifest Destiny with unassuming genres of scientific research, it used idealized versions of these extractive zones to help justify a genocide.

At the base of its imagined environment the Boundary Commission laid railroad tracks. For these infrastructures, Natives threatened not just US and Mexican nationality but also capitalist spatiality. In Arizpe, "no one dared venture into the Alameda" due to their "constant fear of the Apaches." Similarly, in Santa Cruz, "no other provisions could be obtained, so great was the dearth caused by [their] frequent incursions."⁴¹ Finally, in the heart of New Mexico, "communication between any two places... [could not] be ventured upon without absolute danger."42 Amid these spatiotemporal ruptures—amid a "dark[ness]" that encroached on each day and a "danger" that cut off "communication"—the Boundary Commission refined a reassuring rhetoric. Sometimes it advanced extreme arguments, such as, "Apaches are an ill-formed, emaciated, and miserable looking race." But more frequently it claimed to be simply "collect[ing] valuable information on the topography of the country, for the purpose of enabling the public to judge whether or not it is practicable to construct a railway."43 By subordinating images of human identities to "information" on nonhuman environments, the Boundary Commission made infrastructures seem inevitable. While weakening the north-south networks in which Natives resided in the US but raided in Mexico, it strengthened the east-west networks with which capitalists exchanged finished commodities for raw materials; while conscripting bounty hunters with scalping knives, it called attention to surveying tools.

As the Boundary Commission plotted railroad routes, it looked for gold placers, silver veins, and copper deposits. Whereas earlier explorers had hitched their hopes to spectacular discoveries, the Boundary Commission's leaders tried to remain realistic. In New Mexico, they kept "precious metals as much out of view as possible . . . for [they] knew if this mania was once to seize [their] party, it would be attended with the worst consequences." Similarly, while writing their report, they "hope[d] nothing [they] may say [would] induce persons to run off in unprofitable searches." Because these leaders inhibited mineral "mania," they were able to identify "localities where silver mines [could] be worked to advantage," and, in a politicaleconomic register, they were able to explain how the US could obtain "the only commodity in which [it was then] deficient."44 As part of their new ways of seeing and seizing nonhuman environments, the leaders adopted new arguments for dispossessing or destroying human communities. In many media, they paired predictions about prosperous mines with paranoia about Apache attacks: "scattered all over Arizona," Cremony wrote, "are mines of wondrous wealth utterly inapplicable to the uses of mankind so long as that tribe remains unsubdued." They then fused economic prosperity and ethnic cleansing: "would it not have been wise," Cremony queried, to plan "the purification of two immensely rich and extensive Territories in the very heart of the country?" 45 Becoming alchemists of (non)humanity, they used notions about "pure" metals to normalize the killing of "impure" peoples.

While pivoting from the failed dreams of El Dorado to the favorable prospects of industrial mining, the Boundary Commission imagined a modest but meaningful agricultural sector. Wisely, it acknowledged that most of New Mexico and West Texas were "unsuited for agricultural purposes, according to the notion entertained of farming in the eastern States." At the same time, though, it insisted that some places were ideal for some practices, as in the way "the upper valley of the Gila, and the upper valley of the del Norte... [were] eminently adapted to the cultivation of the grape."46 Since it saw so much value in these nonhuman environments, the Boundary Commission was horrified at the high cost of human conflicts, which turned "fertile valleys" back into "wilderness." Unlike the creators of the old desert discourse, it recognized that it would take decades to conclude these conflicts, but, in a scaled-down version of the discourse's signature move, it predicted that "a few years only of peace and safety would be required to make [some of] these beautiful valleys the most charming abodes imaginable." By turning a prewar discourse about the entire region into a postwar framework for specific socioecological niches, the Boundary Commission made it easier for publics to endorse campaigns against Apaches and Comanches. With citations to cutting-edge scientific data, it redefined a brutal war of extermination as a benign search for environmental efficiency.⁴⁷

As it blended its accounts of fertile farms with its arguments about mines and railroads, the Boundary Commission crystallized its imagined environment. Along with the creators of the old desert discourse, it explained why Spain and Mexico had failed to conquer Apachería and Comanchería. In contrast to its counterparts, it admitted that the US was nowhere close to controlling these regions. To solve this perceived problem, the institution replaced the totalizing terms of Manifest Destiny with partial but still profitable approaches to bureaucratic rationality. Instead of promising that every individual prospector would suddenly strike it rich, it predicted that the mining industry as a whole would generate reliable returns. Likewise, instead of boasting that independent farmers could make the desert bloom, it reasoned that professional engineers would preside over slowly growing irrigation districts. With these calm cost-benefit analyses, the Boundary Commission put brakes on the blind rush to settle the Sonoran Desert, the Chihuahuan Desert, and the Llano Estacado. At the same time, though, it accelerated the killing of Apaches and Comanches. Writing simultaneously about space (its "road was said to be infested with Apaches") and race (it never "saw a mild or amiable face"), it defined these peoples as unnatural exceptions to natural order. 48 Then, turning both to vigilante violence (as in Mexico's scalping programs) and the scientific state (the "eight thousand [US] men [who would] effectually subdue the Apache[s]"), it naturalized genocide itself.⁴⁹ In the end, it did not simply sustain "economies of death": it also shaped a deadly imagined environment.

What will it take to face the fact that some lost scalps and heads so that others could acquire lands and waters? Within border studies, we must keep following the "thread of blood" that Ana María Alonso traces from Spanish colonization to the Mexican Revolution, and keep reckoning with the "violence of history" that Karl Jacoby unearths in Anglo, Mexican, Tohono O'odham, and Western Apache archives.⁵⁰ Across the environmental humanities, meanwhile, we must keep exposing the "slow violence" that for Rob Nixon "occurs gradually and out of sight,... that is dispersed across time and space, . . . that is typically not viewed as violence at all."51 If we can combine these approaches, we will be able to perceive how all-too-human violence that we now condemn paved the way for more-than-human environments that we still celebrate—for mines at Bisbee and Morenci, for farms along the Colorado River and the Rio Grande, and for railroads throughout the region. In turn, we will be able to appreciate why human-nonhuman violence still haunts everyday life—why, in a grim gesture toward genocide, a settler sanctuary like the Apache Creek Golf Club would promise that "with a little skill, you'll capture a few birdies, and with Apache Creek's great rates, they won't cost you an arm and a leg in the process!"52 By reckoning with realities past and present, we will be able to adapt one of Anderson's best-known arguments: while we have long known that people have killed and been killed in the name of imagined communities, we will now see that they have done so for their imagined environments. Yet even as

we get closure on this problem, we must remain open to other possibilities: at the very moment that the Boundary Commission created its deadly imagined environment, it came into contact with alternative ways of imagining and inhabiting the borderlands.

An Apache Imagined Environment

Over the course of the 1850s, the Boundary Commission became increasingly contemptuous of Indigenous media: at a "favorite camping place of the Indians" it ridiculed pictographs as "rude attempts in the artistic line," and at another site it dismissed petroglyphs as "unmeaning figures" of no "historical value." 53 For the rest of the nineteenth century and most of the twentieth century, US and Mexican institutions continued to claim that Indigenous media were inferior to settler media. In recent decades, however, many scholars have rejected this racist parochialism. Whether they have worked in the southern hemisphere (on Andean khipu or Amazonian shamanism) or the northern hemisphere (on Anishinaabe pictographs or Haudenosaunee wampum), and whether they have studied traditional textualities (such as Mayan glyphs or Marquesan tattoos) or hybrid print cultures (like the Algonquian Bible or *Cherokee Phoenix*), these scholars have revealed an array of worldmaking powers. Reaching back to the precolonial period, they have shown how Indigenous media serve dozens of distinct purposes, from sustaining spiritual beliefs to recording economic transactions. Then, advancing up to the present, they have demonstrated that Indigenous media can "signal-jam the dominant, apparently natural social semantics of gender, race, kinship, life, world, humanity, and identity."54 By casting light across the archives of the Americas, these scholars have made it easier to see other sides to the Deserts and the Llano. In the very era that US settlers incorporated these places into New Mexico and Texas, Mescalero Apaches and Chihene Apaches completed many pictographs and performances. If we consider how these media moved into, out of, and around the Boundary Commission's media, we can glimpse an Apache imagined environment.

To begin, look at Bartlett's sketch of the Hueco Tanks (fig. 3). Formed out of magma that cooled some thirty million years ago, the Tanks are two-hundred-foot rockpiles that punctuate the semiarid scrubland east of El Paso. Because they contain dozens of the concave depressions that some Spanish speakers call "huecos," the Tanks can store rainfall and snowmelt throughout all but the driest summers. In the last ten thousand years, the Tanks have nourished a variety of Native communities, and, in November 1850 and March 1851, they provided members of the Boundary Commission



FIGURE 3. John Russell Bartlett, *Pass in Hueco Mountains*, 1851. Pencil on paper, 9.6 x 13.1 in (24.4 x 33.3 cm). Courtesy of the John Carter Brown Library. In John Russell Bartlett's *Personal Narrative of Explorations and Incidents* [...], 2 vols. (New York, 1854), this image appears as a lithograph (1:133).

with a break from the arguments about the Initial Point. During these two visits, Bartlett explored the "cavern-like recesses which seem[ed] to have been the abode of Indians." Additionally, he studied the "circular holes in the solid granite . . . [they] used as mortars for pounding their corn." Above all, he scrutinized the rocks that were "covered with rude paintings and sculptures, representing men, animals, birds, snakes, and fantastic figures." To his disappointment, he saw that some of these pictographs and petroglyphs "had been partly defaced to make room for more recent devices." But since the Tanks are home to three hundred panels with three thousand images, he managed to find many "about which there [could] be no doubt as to the origin." On the last day of his last visit, he "copied a portion of these figures," and, in his *Personal Narrative*, he used these copies to "show the character of the figures, and the taste of the designers" (fig. 4). ⁵⁵

In his texts and images of the Hueco Tanks, Bartlett tried to develop an emerging dialogue between "ethnology and empire": by calling pictographs "rude figures" and petroglyphs "mere peckings," he tried to construct a Native past that would slip silently into the settler present. ⁵⁶ At a few

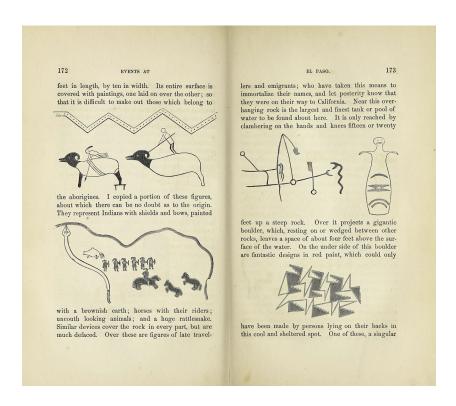


FIGURE 4. John Russell Bartlett, *Personal Narrative of Explorations and Incidents* [...] (New York, 1854), 1:172–73.

points, Bartlett was able to show how Indigenous communication practices could become uncommunicative—how their colors could fade, how their lines could blur, and how their symbols could inspire conflicting interpretations. For the most part, though, Bartlett ended up proving that these practices still tell specific stories about specific peoples. By copying the "fantastic designs" that later scholars located on the Hueco Tanks' North Mountain (fig. 4, bottom right), he revived the Archaic Red Monochrome Style that was popular with the region's hunting and foraging peoples between 1000 BCE and 1 CE. Similarly, by adapting the anthropomorphic line drawings that later scholars traced to the East Mountain (fig. 4, top right), he recirculated the Jornada Style that prevailed among the area's agriculturalists in the twelfth, thirteenth, and fourteenth centuries. Finally, by transcribing the "Indians with shields and bows," the "horses with their riders," and the "huge rattlesnake" that later scholars found on the North Mountain (fig. 4, bottom left), he paid homage to the Mescalero Apaches who controlled the oases in the eighteenth and nineteenth centuries.⁵⁷

With these three sets of verbal and visual remediations, Bartlett acknowledged the entanglements among settlers, Natives, and their environments: while claiming US territory, he felt compelled to copy Mescalero Apache pictography (figs. 5 and 6). To invoke Birgit Brander Rasmussen, he cultivated "textual and cultural inter-animation and reciprocity." While trying to write an epitaph for those he saw as a "fast disappearing red race," he became an amanuensis for the Native authors of a particular place. ⁵⁹

If we want to learn how this "reciprocity" relied on and reaffirmed an Apache imagined environment, we must adopt the pan-Apache principle that Nicholas Laluk calls "respect." As both a member of the White Mountain Apache Tribe and an archaeologist at UC Berkeley, Laluk lays out a range of respectful behaviors, from participating in community conversations to avoiding sacred sites. Although these behaviors may seem simple, Laluk explains how they reinforce "sovereignty-based understandings," "practices that are created, maintained, and driven by tribal communities."60 Following Laluk, we must thwart the academic tendency toward all-or-nothing argumentation-e.g., "I know Mescalero Apaches did this and not that"—and instead practice open-ended description—e.g., "I think they may have done one of two things." In turn, we must stop idealizing completion—e.g., "let me tell you *everything* about these eighteenth-century pictographs"—so we can start cultivating connections—e.g., "let me show you some of the things they share with nineteenth- and twentieth-century oral histories."61 Through such shifts, we will be able to see past stereotypes that try to reduce Apaches to their acts of armed resistance. As an alternative, we will be able to find much richer repertoires for perceiving and producing more-than-human worlds. For during the decades that the US and Mexico hoped to pin Natives down to fixed places, this imagined environment helped Apaches live in, on, and with fluctuating spaces.

The Mescalero Apache originals that inspired Bartlett's copies are extreme examples of "ecomedia." Like the nature photographs, wildlife films, and other avowedly environmentalist media that catalyzed this term's creation, the pictographs hinge on human-nonhuman relations: around a spectacularly large snake, they show people riding horses, hunting buffalo, and feeding dogs. While acting as ecomedia in this traditional sense, the pictographs take on the term's expanded meaning: to invoke Hester Blum, they highlight how "the environment and forms of communicative media are mutually constituted—and mutually in flux." Composed of clay and gypsum, the pictographs blur the figure-ground boundary so crucial to Euro-American aesthetics. In space, they shift in relation to the rocks, so as the dog hides near the hearth, the snake slithers up the slope. Across time, they endure elements both all-too-human (the Michaels and Melindas who have inscribed their names in charcoal and paint) and more-than-human (the dust



FIGURES 5 and 6. Hueco Tanks Site N17, which inspired Bartlett's engraving (fig. 4, bottom left) as well as Forrest Kirkland's painting (fig. 8, top). Photographs by author.





FIGURE 7. Hueco Tanks Site E6. Photograph by author.

and wind that have eroded even this sheltered spot), changing every hour of every day (making my carefully crafted photos obsolete). Through these forms of "flux," the pictographs materialize Apache survival strategies, shining brightest where the rocks are darkest from fires used to roast mescal crowns, the dietary staple that gave Mescaleros their Spanish-language exonym. At the same time, the pictographs participate in the Hueco Tanks ecology, so, whereas the panel that Bartlett copied shows specific animal species, other panels cultivate more abstract connections. In one of these panels (fig. 7), people move to the rhythms of creatures big and small; beneath yet another slithering snake, they move as confidently as the audads who climb cliffs, and as swiftly as the dirt daubers who fly out of crevices.

Yet even as the pictographs remain rooted in this socioecological niche, they also circulate among a wider variety of readers. "Pictography," Edgar Garcia argues, "is not a dead language, lying flat in archival tombs"; instead, "those tombs have always been cenotaphs, empty signifiers for a signifying system... unnatural in its ability to continuously redefine the nature of its world." Across the Americas, pictographs have manifested their flexibility in many ways: most concretely, they have been "performance prompts for individuals who know what sound and sense each image is meant to elicit"; more abstractly, they have been "vehicles of poetic indeterminacy and contextual metamorphosis."63 At the Hueco Tanks, the Mescalero Apache pictographs have been especially adept at moving in and out of communicative contexts. Since the late eighteenth century, these pictographs have elicited embodied experiences from authors and audiences—from men resting after hunts, or from women grinding corn. Since the mid-nineteenth century, the pictographs have inspired visual interpretations, such as Bartlett's engravings, A. T. Jackson's photos, Forrest Kirkland's watercolors (fig. 8), and Evelyn Billo and Robert Mark's digital database. Finally, since the early twentieth century, the pictographs have animated anthropological debates, for while some panels have been read either as "Mountain Spirit Dances" or "victory

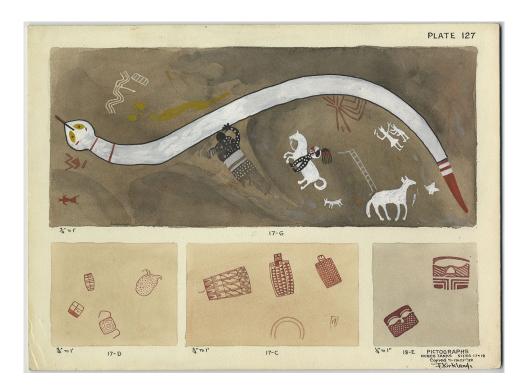


FIGURE 8. Forrest Kirkland, *Hueco Tanks Sites N17 and 18/41EP2*, 1939. Watercolor on paper, 11 x 15 in (28 x 38 cm). Courtesy of the Texas Archaeological Research Laboratory. In Kirkland and W. W. Newcomb Jr.'s *The Rock Art of Texas Indians* (Austin, 1967), this image appears as a photograph (187).

celebration rites," others have been linked to both "individuals engaged in sexual acts" and "figures holding shields or guns." Because they have traveled through these and other communicative contexts, the pictographs have been able to sustain environmental values. To be sure, these values are most meaningful to today's Mescalero Apaches, whose privacy we need to respect in Laluk's sense of this term. But no matter one's social position, and no matter one's level of comprehension, these values are valuable.

In their many remediations, the Mescalero Apache pictographs depict the Deserts and the Llano in their full diversity. Produced in a period when settlers coveted these environments for their gold, the pictographs make no mention of the mineral: instead, to quote Nednhi Apache elder Ace Daklugie, they conserve a culture that is "permitted to pick [gold] up from the surface of Mother Earth, but not to grovel in her body for it." By shunning the singular symbol of extractivism, the pictographs draw on and develop "submerged perspectives"; in Gómez-Barris's words, they insist on

"epistemological autonomy," illuminate "less perceivable worlds," and replace "mere resistance [with] the more layered terrain of potential." 66 In some panels, the pictographs use snakes, suns, and other symbols to reflect on the water that attracted people to the Tanks.⁶⁷ In other panels, they delineate the mule deer and bighorn sheep that provided people with food, or the mulberry and chokecherry trees that could become weapons. In almost every panel, they portray the horses that kept people moving. Unlike Comanches and Kiowas, Apaches never became full-time equestrians, but, along with their northern neighbors, they used horses to speed up hunting and raiding. To highlight how horses reshaped the social practice of violence, the pictographs pair human forms with bows and shields. In Bartlett's engravings, they seem to send the armed figures into full-frontal assaults, yet at the Tanks they allow protagonists to escape into their environments. In places where white pigment fades into dark stone, they even prefigure Chihene Apache elder James Kaywaykla's claim that "we were essentially a mountain people...[so] when closely pursued we killed our horses and scaled cliffs no enemy could climb."68

Since they show so many ways of moving through and/or disappearing into environments, the Mescalero Apache pictographs attain what Audra Simpson calls an "interrupted and interruptive capacity" to stretch "across the borders of settler states." Like the Kahnawà:ke Mohawk practices at the heart of Simpson's interdisciplinary scholarship, the pictographs demonstrate that "'refusal' is a political alternative to 'recognition,' the much sought-after and presumed 'good' of multicultural politics." ⁶⁹Yet when they depict spearmen celebrating victories, they do not simply disrupt imagined communities (of the US, or of Mexico) and imaginative geographies (of whites, or of mestizas/os): in Simpson's sense of the word, they also interrupt imagined environments (of all settlers who tried to turn subsistence ecologies into capitalist economies). Throughout the eighteenth and nineteenth centuries, Apaches epitomized Simpson's point that "sovereignty may exist within sovereignty"—indeed, to quote Cremony, "the country over which [they held] mastership...[was] nearly as extensive as all the States which border on the Atlantic and the Gulf of Mexico put together."⁷⁰ Even at the height of their powers, though, Apaches never tried to take complete control of their rivals: on raids, Kaywaykla recalled, they "took care to leave enough horses so that Mexicans could raise more for [them]." Precisely because they attenuated the totalizing terms of nationality and ethnicity, Apaches were able to cultivate agile approaches to ecology: to build on Kaywaykla's claim, they could treat US and Mexican settlements as renewable resources. Of course, they often faced accusations of "stealing," but with the wry wit that Simpson also sees among Mohawks, Apaches turned these accusations on their head. "Great and mysterious are the ways

of civilization," Kaywaykla thus remarked, for "he who steals millions is a hero [or in] high political office, but he who steals a chicken to satisfy his hunger is sent to the penitentiary."⁷¹

Whereas Kaywaykla draws comedic contrasts between "high political office" and lowly "chicken" thieves, the pictographs advance serious arguments about reciprocal relations in the Deserts and the Llano. In their original versions, they make it clear that these nonhuman environments support human communities: quite literally, they turn clay and gypsum into men and women. In later remediations, they prove that human-nonhuman networks take many shapes: where Bartlett's engravings send six footmen to catch two horses (fig. 4, bottom left), Kirkland's watercolors show a solitary horseman approaching the sinuous snake (fig. 8). Because they pay such close attention to reciprocal relations, the Mescalero Apache pictographs resemble the Western Apache language, which in Keith H. Basso's account "view[s] the landscape as...an ever-vigilant ally in the efforts of individuals and whole communities to maintain a set of standards for social living that is uniquely and distinctly their own."⁷² This resemblance is far from perfect: the pictographs are imprinted on rocks and in books, whereas the language is spoken by Annie Peaches and Nick Thompson (to name two of Basso's collaborators); the former can be studied through close reading, whereas the latter requires ethnographic and linguistic fieldwork (to identify Basso's methods). Nevertheless, if we follow Matt Cohen in "dissolving orality and literacy into a continuous topography," we will be able to situate the Mescalero Apache pictographs, the Western Apache language, and other Apache communication practices in connected but not coterminous imagined environments.⁷³ Since the Western Apache language does not appear in the Boundary Commission's archives, we will need to focus on Chihene Apache speech acts: despite linguistic, cultural, and political differences, these speech acts wield a similar worldmaking power.

When the Boundary Commission left the Hueco Tanks for the last time, it traveled 165 miles northwest to the Santa Rita Copper Mines (fig. 1). Although they were "uncommonly rich," these mines had lain dormant for decades, for, as Cremony recalled, they had become "the great head-quarters of...the most famous Apache warrior and statesman." Known to Athapaskan-speaking friends as "Kan-da-zis Tlishishen" and to Spanish-speaking enemies as "Mangas Coloradas," this "statesman" had grown up among the Bedonkohe Apaches but then become the leader of the Chihene Apaches. In the 1840s, he led successful campaigns against Chihuahua, Nuevo México, and Sonora, and in 1851 he asserted his authority over the Copper Mines. Materially, Mangas Coloradas forced the Boundary Commission to furnish a steady stream of "presents"—a "frock coat lined with scarlet and ornamented with gilt" for him, and "shirts, cotton cloth, beads,

and other articles" for his followers.⁷⁵ Ideologically, he compelled settlers to recognize the limits of their sovereignty. When he learned that the Treaty of Guadalupe Hidalgo forbade him from enslaving Mexicans, he still insisted on trading two boys at full price. Then, when he heard that US laws were being extended to the New Mexico Territory, he still managed to subject an Anglo murderer to Apache justice.⁷⁶ Through these events, Mangas Coloradas turned the Boundary Commission into a stable source of clothing, food, and information. While sustaining this material economy, he also sustained an imagined environment that was strong enough to take over Bartlett's and Cremony's books.

As autobiographical texts rooted in institutional contexts, the *Personal Narrative* and *Life Among the Apaches* shift between several "speech genres": when they allude to "documents [that] are important for a clear understanding of [a] question," they "append them . . . in the form of notes," and, when they discuss other Boundary Commission business, they devolve into lists of surveyors, engineers, botanists, geologists, astronomers, cartographers, and more. The Because they pay such close attention to speech genres, it is remarkable that both the *Personal Narrative* and *Life Among the Apaches* make Mangas Coloradas the most prominent voice in two dramatic dialogues—it is remarkable, in other words, that both texts have Chihene Apache speech acts flowing through and filling up dozens of US American pages. Of course, the texts try to use the dialogues to "maintain a stance of neutral objectivity that might unify the joint prerogatives of ethnology and nationhood." But in the final analysis, they deploy the dramatic dialogues much as they do other "documents":

Mangus Colorado.— Why did you take our captives from us?

Commissioner.—Your captives came to us and demanded our protection.

Mangus Colorado.— You came to our country. You were well received by us. Your lives, your property, your animals, were safe. You passed by ones, by twos, and by threes, through our country.... We believed your assurances of friendship, and we trusted them. Why did you take our captives from us?⁷⁹

Although they were spoken in Spanish and printed in English, these words still rely on and reaffirm Athapaskan linguistic practices—and, by extension, an Apache imagined environment. Echoing with the sounds of hunting, foraging, raiding, and trading, they replace the steady settler gaze with a ricocheting Indigenous ruckus. Unadorned and unmediated, they fight not only for Apache sovereignty (the politically insistent "our captives," "our country") but also for Apache style (the rhetorically flamboyant "by ones, by twos, and by threes"). At the thresholds of multiple media ecologies, they hit like arrows to the heart (again, "why did you take our captives from us?").

If it seems like a stretch to say that Anglophone writing was shaped by Athapaskan speaking, you need only consider Geronimo, His Own Story: The Autobiography of a Great Patriot Warrior (1906). Like Mangas Coloradas's speech, Geronimo's "story" evolved in several communicative contexts: first, the leader spoke in Chiricahua-Mescalero; next, his nephew translated to English; finally, an Anglo bureaucrat put pen to paper. As it coursed through these contexts, the story synced with the US imagined community, and so, in a signed statement, Geromino "dedicate[d]" it to "Theodore Roosevelt." At the same time, the story drifted toward a white imaginative geography, with the bureaucrat boasting about augmenting the "general store of information regarding vanishing types."80 Even as the story reaffirmed settler social imaginaries, however, it reasserted Apache imagined environments. In the opening chapter, Geronimo sets a striking scene: "in the beginning," he says, "the world was covered with darkness." Into this void, he thrusts "all manner of beasts," from "lions, tigers, [and] wolves" to "beavers, rabbits, [and] squirrels" to a "dragon [who] could not be killed." To complete this collective, he explains that while the first humans could not elude the dragon, later ones survived "in a deep cave." Following them aboveground, he describes how a boy destroyed the dragon in an archery contest and then watched as the beast's body tumbled "down four precipices [and] into a cañon." At this pivotal point, he lingers on the ways the "lightning flashed, [the] thunder rolled, and the rain poured." He concludes by recognizing the reciprocal relations between a human community and its nonhuman environment: "this boy's name was Apache. Usen [a word that could be translated as 'God'] taught him how to prepare herbs for medicine, how to hunt, and how to fight. He was the first chief of the Indians and wore the eagle's feathers as the sign of justice, wisdom, and power. To him, and to his people, as they were created, Usen gave homes in the land of the West."81

Even in Anglophone prose, Geronimo wielded Athapaskan power: rather than simply telling "his own story," he circulated a collective history, and rather than "beginning" with Adam and Eve, he returned to his Apache ancestors. As Anita Huizar-Hernández demonstrates, Geronimo thus developed a "direct challenge" to the US doctrine of "terra nullius." Additionally, he showed that Apaches belonged in Apachería, a land where "the bones of [the] dragon may still be found." Finally, he made it clear that they could not stay "on Comanche and Kiowa lands," for while those were "suited to the Indians who originally inhabited [them]," they caused Apaches to "decrease." With these provocative points about the bonds among people and places, Geronimo effected the total transformation of settler speech genres. Much as Mangas Coloradas claimed Mexican "captives" and tested US "friendship," Geronimo maintained an Apache imagined environment.

Imagined Environments Amid and Against the "Logic of Elimination"

To anyone with even the slightest awareness of US and Mexican settler colonialisms, it will come as no surprise that Mangas Coloradas did not end up having the last word. In 1863, the Chihene Apache leader agreed to meet with US counterparts, but, while traveling under a white flag of peace, he was tortured to death. As the rest of his body began to decompose in an unmarked grave, his head was boiled "in a big black kettle"; ultimately, it was shipped to Orson Squire Fowler, a phrenologist who pronounced it "the shortest and broadest human skull [he had] ever seen." In ways only an Apache could appreciate, each step of this desecration was more disgusting than the last: according to Kaywaykla, "the killing of an unarmed man who has gone to an enemy under truce was an incomprehensible act, but infinitely worse was the mutilation of his body [since] most Apaches believe that the body will go through eternity in the condition in which it leaves the earth."

The murder of Mangas Coloradas punctuates one of this article's main points: although the Boundary Commission did not build many physical monuments, it still made an influential imagined environment. Throughout its six years in the field and four years in the US Capitol, the Boundary Commission provided its publics with some sorely needed modesty: rather than all-or-nothing anxieties about Manifest Destiny, it gave them the hard facts of bureaucratic rationality, and rather than fantasies of instantaneous riches, it promoted the slow and steady development of resources. At every point, though, the Boundary Commission articulated these modest proposals in a sinister, Swiftian register, for, by replacing familiar forms of nationalism and racism with early variants of wise-use environmentalism, it helped two settler states exploit Native nations. In the end, therefore, the institution used its analyses of more-than-human ecologies to reinforce settler colonialism's all-too-human tendencies. Linking up with what Patrick Wolfe has famously termed a "logic of elimination," it drove both the "dissolution of native societies" and the "[creation of] a new colonial society on the expropriated land base."86

Desecrated even after death, Mangas Coloradas epitomizes these and other problems. But when he turns Bartlett's businesslike book into a Bakhtinian carnival, the Chihene Apache leader also reconstitutes a range of possibilities. While his speech acts challenge US and Mexican sovereignties, and while the pictographs pierce through Anglophone and Hispanophone epistemologies, other Apache media sustain an array of socially specific survival strategies. To be sure, the resulting imagined environment is part of what we conveniently call the past: in the 1850s, 60s, and

70s, it emboldened men like Geronimo and women like Lozen to wage war on capitalist economies, while energizing the many Apaches who administered subsistence ecologies; then, in the 1880s, 1890s, and 1900s, it helped adults bear brutal conditions at Fort Marion and Fort Sill and helped children conserve their cultures at the Carlisle Indian School. Even as this imagined environment recedes into the past, however, it also persists in the present: depicting the borderlands in their full diversity, interrupting borders with multimedia flexibility, it invites both Apaches and non-Apaches to move against settler societies. As a human approach to understanding and using nonhuman networks, it transcends its supposed "elimination."

Tangling with and tearing against its US and Mexican counterparts, this Apache imagined environment thus complicates some of the most prominent claims about settler colonialism. By way of conclusion, we might consider how such claims look in light of a statue the state of Oklahoma commissioned from Bedonkohe Apache and Chihene Apache sculptor Allan Houser (fig. 9).87 In some respects, As Long as the Waters Flow (1988) materializes the logic of elimination: cast in bronze, it connects with the copper mines that have despoiled Apachería, and, standing at the State Capitol, it legitimates the laws that turned Indian Territory into Oklahoma. At the same time, though, As Long as the Waters Flow proves yet again that Indigenous Peoples have not been and will not be eliminated. In its very existence, the statue concretizes Apache communities, for Houser's father not only fought alongside Geronimo but also descended from Mangas Coloradas. With its title, the statue uses an Apache sense of humor, ironically invoking President Jackson's promise that Cherokees and others would "possess" the "Indian Territory" for "as long as grass grows or water runs." Finally, with its flowing forms, the statue affirms Apache aesthetics: using more-than-human elements, such as the sun that shines brilliantly on the blackened bronze, it opposes all-too-human adversaries, like the white limestone symbol of state power that looks oddly dull by comparison.

Indeed, while Houser is most famous for his engagements with Euro-American modernism, he may be even more remarkable for his commitment to Apache aesthetics. In *Dance of the Mountain Spirits I* and *II* (1989), he depicts the same ceremonies as the Mescalero Apaches who lived at the Hueco Tanks (fig. 7). In *Mountain Echoes* (1986), he honors the Chihene Apache leader who challenged the Boundary Commission, "visualiz[ing] the memory or spirit of Mangas Coloradas." At last, in *As Long as the Waters Flow*, he builds on the Bedonkohe Apache leader who eluded the entire US Army, sculpting one of the "eagle feathers" that Geronimo placed at the beginning of his autobiography. ⁸⁹ When this feather shines in the sun, it



FIGURE 9. Allan Houser, As Long as the Waters Flow. Created in 1988 and installed in 1989. Bronze, 173 x 56 in (440 x 142 cm). Photograph by Matt Bernstein. Used with permission.

pulls your eyes up the statue. Past the rough base and the sturdy boots, past the sweeping skirt and the stately blanket, and finally past the long braids and the four-layered necklace, your eyes meet the woman's. There, if you look carefully, you can see the Apache imagined environment. Throughout Houser's six-decade career—and, more broadly, throughout the Apaches' centuries-long defense of their homelands—this Indigenous imagined environment has moved beneath and beyond its settler counterparts. With its help, we may yet learn to stop orienting ourselves strictly in sedentary societies, and to remain resilient while moving through rapidly shifting ecologies. We may yet learn, in other words, the types of flexibility and mobility we will need if we are to survive on our increasingly precarious planet.

Notes

For thoughtful responses to this research, I am grateful to colleagues at Stanford University, Vanderbilt University, and Columbia University, as well as to participants in the Association for the Study of Literature and Environment Biennial Conference (2021), the American Studies Association Annual Meeting

- (2022), and the UC Indigenous Borderlands Symposium (2023). For answering questions about the Boundary Commission archives and/or the Mescalero Apache pictographs, I am indebted to Val Andrews, Margaret Berrier, Evelyn Billo, Robert Mark, George Miles, Lindsay Montgomery, Kim Nusco, Erin Shook, and John Welch. Finally, for accompanying me on my first visit to the Hueco Tanks, I would like to thank Hannah Overton, Elizabeth Parra, and Tim Roberts.
- 1. Treaty of Guadalupe Hidalgo, 2 February 1848, Perfected Treaties, 1778–1945; General Records of the United States Government, Record Group 11.
- 2. To reconstruct this "ceremony," I began with John Russell Bartlett, *Personal Narrative of Explorations and Incidents* [...] *Connected with the United States and Mexican Boundary Commission* [...], 2 vols. (New York, 1854), 1:151–52, 200–211, 340–48. Next, I turned to the "Official Journal," series 3, vol. 9, John Russell Bartlett Papers, John Carter Brown Library; hereafter abbreviated JRB. Finally, I analyzed a similar event that took place near the Pacific Ocean in October 1849 before being preserved in the "Notes on Scientific Observations [...]," box 12, folder 133, William Hemsley Emory Papers, Beinecke Rare Book and Manuscript Library; hereafter abbreviated WHE.
- 3. William H. Emory, Report on the United States and Mexican Boundary Survey [...], 3 vols. (Washington, DC, 1857–59), 1:12.
- 4. José Salazar Ylarregui, Datos de los trabajos astronómicos y topográficos [...] (Mexico City, 1850), iii.
- 5. The arguments over the Initial Point loom large in Bartlett, *Personal Narrative*, Emory, *Report*; and the scholarship cited in notes 6–9.
- 6. While the quotation comes from Rachel St. John, Line in the Sand: A History of the Western U.S.-Mexico Border (Princeton, 2012), 14, it reflects a consensus that runs through Harry P. Hewitt, "The Mexican Commission and Its Survey of the Rio Grande River Boundary, 1850–1854," Southwestern Historical Quarterly 94, no. 4 (1991): 555–80; Paula Rebert, La Gran Línea: Mapping the United States-Mexico Boundary, 1849–1857 (Austin, 2001); Joseph Richard Werne, The Imaginary Line: A History of the United States and Mexican Boundary Survey, 1848–1857 (Fort Worth, 2007); and other scholarship.
- 7. By deemphasizing physical monuments and describing imagined environments, I am building on Deborah Carley Emory, "Running the Line: Men, Maps, Science, and Art of the United States and Mexico Boundary Survey, 1849–1856," New Mexico Historical Review 75, no. 2 (2000): 221–65; Robin Kelsey, Archive Style: Photographs and Illustrations for U.S. Surveys, 1850–1890 (Berkeley, 2007), 21–74; Amy S. Greenberg, "Domesticating the Border: Manifest Destiny and the 'Comforts of Life' in the U.S.-Mexico Boundary Commission and Gadsden Purchase, 1848–1854," in Land of Necessity: Consumer Culture in the United States-Mexico Borderlands, ed. Alexis McCrossen (Durham, NC, 2009), 83–112; and Robert Lawrence Gunn, Ethnology and Empire: Languages, Literature and the Making of the North American Borderlands (New York, 2015), 145–76. But whereas Kelsey analyzes Arthur Schott's drawings, and Greenberg and Gunn scrutinize Bartlett's writings, I am ranging across all of the Boundary Commission's archives—and, in the process, showing how they tangled with and tore against an array of Apache media.
- 8. Bartlett, *Personal Narrative*, 1:xi. This is far from the only passage about publicity; indeed, the book's first sentence is about Bartlett "submitting to the public an account of [his] explorations" (1:iii).

- 9. William Emory's care for the printing process is exemplified by his "Notes [...] relating to the printing of the report and the engraving of plates," box 12, folder 136, WHE. Bartlett's wide reception is apparent across his "Scrapbook," series 3, vol. 11, JRB, while Cremony's popularity is clear thanks to coverage in *Overland Monthly, American Literary Gazette and Publishers Circular*, and elsewhere. Finally, Eastman's and Pratt's artistic ambitions endure in Robert V. Hine, *Bartlett's West: Drawing the Mexican Boundary* (New Haven, 1968); Dawn Hall, ed., *Drawing the Borderline: Artist-Explorers of the U.S.-Mexico Boundary Survey* (Albuquerque, 1996); and associated exhibitions.
- 10. Cornelius Castoriadis, *The Imaginary Institution of Society*, trans. Kathleen Blamey (Cambridge, MA, 1998); Edward Said, *Orientalism* (New York, 1978); and Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London, 1983).
- 11. To blend ecocriticsm and ecomedia studies, I work with Hester Blum, *The News at the Ends of the Earth: The Print Culture of Polar Exploration* (Durham, NC, 2019); Rahul Mukherjee, *Radiant Infrastructures: Media, Environment, and Cultures of Uncertainty* (Durham, NC, 2020); and Cajetan Iheka, *African Ecomedia: Network Forms, Planetary Politics* (Durham, NC, 2021). At the same time, I extend the emerging scholarship on Native nonprint media, which I detail in note 54.
- 12. Bartlett, *Personal Narrative*, 1:vi. While much of the natural history appears in Emory's *Report*, an even wider range remains in his "Notes [...]," box 12, folder 133, WHE.
- 13. Sigma, "Works of Art," *Boston Evening Transcript*, 5 December 1855. On this mysterious journalist, see Gray Sweeney, "Drawing Borders: Art and the Cultural Politics of the US-Mexico Boundary Survey," in *Drawing the Borderline*, 66. For other articles by and about the Boundary Commission, start with "Clippings," box 12, folder 138, WHE.
- 14. Bartlett, Personal Narrative, 2:556.
- 15. Ibid., 1:139.
- 16. Ibid., 1:78.
- 17. John C. Cremony, Life Among the Apaches (San Francisco, 1868), 310.
- 18. Originating in Salazar Ylarregui, *Datos*, 36, this statement is an epigraph in St. John, *Line in the Sand*, 12, and a common quotation in journalism about the border.
- 19. See Rebert, Gran Línea; Werne, Imaginary Line; and St. John, Line.
- 20. With the first of these points, I am developing scholarship such as Hall, ed., *Drawing the Borderline*; Emory, "Running the Line"; Kelsey, *Archive Style*; Greenberg, "Domesticating the Border"; and Gunn, *Ethnology and Empire*. With the second point, I am setting out in an entirely new direction.
- 21. Samuel Truett, Fugitive Landscapes: The Forgotten History of the US-Mexico Borderlands (New Haven, 2008), 14. While recognizing the existence of Indigenous "maps," Truett does not reckon with their emergence in Indigenous media.
- 22. Bartlett, Personal Narrative, 1:247–48.
- 23. Ibid., 2:384–90.
- 24. Ned Blackhawk, Violence over the Land: Indians and Empires in the Early American West (Cambridge, MA, 2006), 8.
- 25. For Apache perspectives on these events, see Eve Ball, *In the Days of Victorio: Recollections of a Warm Springs Apache* (Tucson, 1970) and *Indeh: An Apache Odyssey* (Norman, 1981), plus Sherry Robinson, *Apache Voices: Their Stories of Survival as Told to Eve Ball* (Albuquerque, 2000). In the scholarship, good starting points

- include Keith H. Basso, Wisdom Sits in Places: Landscape and Language Among the Western Apache (Albuquerque, 1996); Karl Jacoby, Shadows at Dawn: An Apache Massacre and the Violence of History (New York, 2008); Matthew Babcock, Apache Adaptation to Hispanic Rule (Cambridge, 2018); and Paul Conrad, The Apache Diaspora: Four Centuries of Displacement and Survival (Philadelphia, 2021).
- 26. For background on Comanches, see Brian DeLay, War of a Thousand Deserts: Indian Raids and the U.S.-Mexican War (New Haven, 2009); Pekka Hämäläinen, The Comanche Empire (New Haven, 2009); and Francis Joseph Attocknie, The Life of Ten Bears: Comanche Historical Narratives, ed. Thomas W. Kavanagh (Lincoln, 2016).
- 27. Cremony, Life, 33, 189.
- 28. Ana María Alonso, Thread of Blood: Colonialism, Revolution, and Gender on Mexico's Northern Frontier (Tucson, 1995), 30. Other sources on eighteenth-century Spanish violence include Daniel Nugent, Spent Cartridges of Revolution: An Anthropological History of Namiquipa, Chihuahua (Chicago, 1993); and David Weber, Bárbaros: Spaniards and Their Savages in the Age of Enlightenment (New Haven, 2006).
- 29. On the *establecimientos de paz*, the definitive study is Babcock, *Apache Adaptation*. On Comanche diplomacy and trade, one excellent source is Hämäläinen, *Comanche Empire*. Finally, on the Spanish Empire's attempts to work peacefully with independent Indians, the best book is Weber, *Bárbaros*.
- 30. For the argument that Native violence paved the path for the US invasion, see DeLay, *War of a Thousand Deserts*.
- 31. While these specific juxtapositions are from *El Universal: Periódico Independiente*, 10 September 1852 and 28 May 1853, similar ones saturate the archives of the 1850s.
- 32. DeLay, *War of a Thousand Deserts*, 227, xv–xvi, xvii. An exhaustive study of Native-settler relations through the US-Mexico War, this book does not have space to describe what I see as the decline of the old desert discourse in the 1850s.
- 33. Bartlett, Personal Narrative, 2:385.
- 34. Ibid., 1:433-34, 100-101.
- 35. María Josefina Saldaña-Portillo, *Indian Given: Racial Geographies Across Mexico and the United States* (Durham, NC, 2016), 7, 136, 110, 132. For details on "economies of death" through the US Civil War, see Blackhawk, *Violence.* For genocide against Apaches after the war, start with Jacoby, *Shadows*; and Janne Lahti, *Wars for Empire: Apaches, the United States, and the Southwest Borderlands* (Norman, 2017).
- 36. Cremony, *Life*, 316–20.
- 37. Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham, NC, 2017), xvii.
- 38. Bartlett, Personal Narrative, 1:309–18; Cremony, Life, 59–66.
- 39. Emory, Report, 1:51.
- 40. Cremony, Life, 12; Gómez-Barris, Extractive Zone.
- 41. Bartlett, Personal Narrative, 1:285, 406.
- 42. Cremony, Life, 196.
- 43. Bartlett, Personal Narrative, 1:327, xi.
- 44. Emory, Report, 1:94, 95, 46.
- 45. Cremony, Life, 196, 319.
- 46. Emory, Report, 1:49.
- 47. Bartlett, *Personal Narrative*, 2:386, 1:275–76.
- 48. Ibid., 1:412, 327.

- 49. Cremony, Life, 316.
- 50. Alonso, Thread of Blood; Jacoby, Shadows.
- 51. Rob Nixon, Slow Violence and the Environmentalism of the Poor (Cambridge, MA, 2011), 2.
- 52. As of March 2024, this sentence appeared on www.apachecreekgolf.com, while the fairways, clubhouses, and everything else were in Apache Junction, Arizona. Sprawling east of Phoenix and sucking water from the Colorado River, the town is 80 percent non-Latinx white.
- 53. Emory, *Report*, 1:76; Bartlett, *Personal Narrative*, 2:206. While I have not been able to locate the "camping place," I have learned that the supposedly "unmeaning figures" are now part of Arizona's Painted Rock Petroglyph Site. Today, regular visitors include Akimel O'odham, Tohono O'odham, and other descendent communities who appreciate the petroglyphs' true "value."
- 54. Edgar Garcia, Signs of the Americas: A Poetics of Pictography, Hieroglyphs, and Khipu (Chicago, 2020), 20. Like Garcia, I build on a lineage that includes Matt Cohen, The Networked Wilderness: Communicating in Early New England (Minneapolis, 2009); Birgit Brander Rasmussen, Queequeg's Coffin: Indigenous Literacies and Early American Literature (Durham, NC, 2012); and Matt Cohen and Jeffrey Glover, eds., Colonial Mediascapes: Sensory Worlds of the Early Americas (Lincoln, NE, 2014). This lineage got its start by equating Indigenous media to settler writing systems, but it can now evaluate these media on their own terms. Continuing the shift from "writing" (the key term up through Rasmussen's book) to "signs" (which animates Garcia's study), I hope my use of "media" (echoing Cohen and Glover's) can connect this lineage to counterparts on Indigenous alphabetic writing (like Robert Warrior, The People and the Word: Reading Native Nonfiction [Minneapolis, 2006]), comparative Indigenous cultures (such as Chadwick Allen, Trans-Indigenous: Methodologies for Global Native Literary Studies [Minneapolis, 2012]), and archaeology (particularly Nicholas C. Laluk, "Changing How Archaeology Is Done in Native American Contexts: An Ndee (Apache) Case Study," Journal of Social Archaeology 21, no. 1 [2021]: 53–73).
- 55. While these quotations come from Bartlett, *Personal Narrative*, 1:131–34, 169–75, similar sentiments appear in his "Personal Journal," series 3, vol. 10, JRB. To contextualize Bartlett, I began by reading texts such as A. T. Jackson, *Picture-Writing of Texas Indians* (Austin, 1938); Forrest Kirkland and W. W. Newcomb, Jr., *The Rock Art of Texas Indians* (Austin, 1967); Kay Sutherland, *Rock Paintings at Hueco Tanks State Historic Site* (Austin, 1995); and Margaret Howard et al., *10,000 Years at Hueco Tanks State Park and Historic Site, El Paso County, Texas* (Austin, 2010). In spring 2021, I continued my research by corresponding with Tim Roberts and Elizabeth Parra of the Texas Parks and Wildlife Department, as well as with Robert Mark, Evelyn Billo, and Margaret Berrier of Rupestrian CyberServices. Finally, in June 2021, I toured the Tanks with Roberts, Parra, and my friend Hannah Overton.
- 56. On this dialogue, see Gunn, Ethnology and Empire.
- 57. Bartlett, *Personal Narrative*, 1:172–73. For matching printed pages to painted stones, I am indebted to Howard et al., *Hueco Tanks*, 27–120, 196–98, 199–203, and 204–6. In this text, both the pages and the stones are associated with titles first assigned in Kirkland and Newcomb, *Rock Art*: thus, Bartlett is said to have "camped near rock imagery site N17G and sketched those pictographs, as well as images at rock imagery sites N17, W21 (?), SE23, and SE24" (51; see also 89).
- 58. Rasmussen, Queequeg's Coffin, 32.
- 59. Bartlett, Personal Narrative, 1:vi.

- 60. Laluk, "Archaeology," 54.
- 61. Even if you espouse all the arguments about the limits of oral history, and even if you insist on the medium specificity of pictography, you will come to appreciate why I enrich this chapter with the wise words of Ace Daklugie, James Kaywaykla, and other Apache elders. Since they lived through anti-US Wars, Apache incarceration, and other events, they can flesh out the occasionally opaque pictographs.
- 62. Blum, News, 29.
- 63. Garcia, Signs, xv, 11, 12.
- 64. Howard et al., Hueco Tanks, 205.
- 65. Daklugie, quoted in Ball, Indeh, 10.
- 66. Gómez-Barris, Extractive Zone, xv.
- 67. Howard et al., Hueco Tanks, 205.
- 68. Kaywaykla, quoted in Ball, Days, 75.
- 69. Audra Simpson, Mohawk Interruptus: Political Life Across the Borders of Settler States (Durham, NC, 2014), 33, 10, 11.
- 70. Cremony, *Life*, 141.
- 71. Kaywaykla, quoted in Ball, *Days*, 12, 27. On the ways that Apaches turned towns into "a vast chain of supply stores," see Lahti, *Wars*, 30.
- 72. Basso, Wisdom, 63.
- 73. Cohen, Networked Wilderness, 25.
- 74. Cremony, *Life*, 30. To describe the summer at the Santa Rita Copper Mines, I drew on Bartlett, *Personal Narrative*, 1:300–39; and Cremony, *Life*, 23–72. For alternative accounts of this summer, see St. John, *Line*, 32–34; and Gunn, *Ethnology and Empire*, 164–76.
- 75. Bartlett, *Personal Narrative*, 1:320, 302. For more on his many names and many campaigns, see Edwin R. Sweeney, *Mangas Coloradas: Chief of the Chiricahua Apaches* (Norman, 1998).
- 76. On these two events, see Bartlett, Personal Narrative, 1:312–17, 334–39.
- 77. Bartlett, *Personal Narrative*, 1:342; Mikhail Bakhtin, *Speech Genres and Other Late Essays*, trans. Vern W. McGee, ed. Caryl Emerson and Michael Holquist (Austin, 1986).
- 78. Gunn, *Ethnology and Empire*, 166. Because he is advancing an argument about Bartlett's specific situation, Gunn does not note that Cremony reproduced the dramatic dialogues in his later text. See Cremony, *Life*, 13–14, 25.
- 79. Bartlett, *Personal Narrative*, 1:312. The dramatic dialogues appear in Bartlett, *Personal Narrative*, 1:312–17, 334–39; and Cremony, *Life*, 61–72.
- 80. S. M. Barrett, Geronimo [...] (New York, 1996 [1906]), v, 1.
- 81. Ibid., 49–53.
- 82. Anita Huizar-Hernández, "'The Real Geronimo Got Away': Eluding Expectations in Geronimo: His Own Story; The Autobiography of a Great Patriot Warrior," Studies in American Indian Literatures 29, no. 2 (2017): 57.
- 83. Barrett, Geronimo, 53.
- 84. Ibid., 169.
- 85. On the "big black kettle," see Daklugie, quoted in Ball, *Indeh*, 20. For Fowler's claim, see Orson Squire Fowler, *Human Science; or, Phrenology* [...] (Philadelphia, 1873), 1196. Finally, for Kaywaykla's thoughts, see *Days*, 48. Other accounts include Lahti, *Wars*, 144–45; and Sweeney, *Mangas Coloradas*, 455–65.
- 86. Patrick Wolfe, "Settler Colonialism and the Elimination of the Native," *Journal of Genocide Research* 8, no. 4 (2006): 388.

- 87. Two clarifications: while the artist called himself "Allan Houser," he was born Allan Capron Haozous, and while he identified broadly as a Chiricahua Apache, he descended specifically from Bedonkohe Apaches and Chihene Apaches. For such biographical information, as well as for artistic interpretation, start with W. Jackson Rushing, *Allan Houser: An American Master* (New York, 2004).
- 88. Rushing, Allan Houser, 152.
- 89. Barrett, Geronimo, 53.