TWO TANGENTS AND A SALT FLAT:
BRISTOL DRY LAKE AND AMBOY, CALIFORNIA

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Occurring at the intersection of the Santa Fe Railroad, Route 66 and Bristol Dry Lake, histories of the town of Amboy in Southern California have often focused on the historic highway and its iconic motel heyday. Rarely has the town been read in terms of the dry lake and the salt industries that have operated here since before Route 66. Endeavoring to reveal an elusive landform and its effect on place, this thesis uses archival material and personal accounts to position Bristol Dry Lake in relation to the town, the transcontinental corridors that pass it by, and ongoing discussions regarding industry, preservation, water, and salt in the Southwest.
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Much credit goes to committee chair Kathleen John-Alder, without whom these pyramids and salt flats would have remained a private enchantment, waiting for a better student than I. William deBuys once opened his acknowledgements with a story about turtles and fence posts, noting that no turtle has ever managed to climb a fence by themselves and, from my position, evoking in a single swoop the irony, befuddlement and delight that is writing about place as a graduate student in much need of guidance. I can only hope that my committee chair has enjoyed the process as much as I. Kathleen’s work and gracious invitation to join her team founded this thesis. I am indebted to not only her mentorship and direction, but also her approach to landscape architecture and place, history and writing. This thesis owes much to Kathleen’s incisive editing.

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Preface: Personal Tangent

Tangentially detouring from my research on the Salton Sea, I came to Bristol Dry Lake through a brief endnote in William deBuys’ and Joan Myers’ 1999 book, *Salt Dreams: Land and Water in Low-Down California*, a history of the Imperial Valley and the Salton Sea. Regarding Bristol Dry Lake, deBuys wrote:

> A facsimile can be found a hundred miles north of the Salton Sea in Bristol Dry Lake, where salt is still mined in the caustic bed of what was once a lake bottom, a place that replicates, in miniature, the sterility and shadelessness that once ruled the heart of the Colorado Desert. Bristol Dry Lake is a reminder, if one were needed, of how phenomenal was the transformation of settlement.\(^1\)

Without his usual juxtaposition and poetics of place, deBuys’ description of Bristol Dry Lake was surprisingly dogmatic. His characterization of the basin lacked the place-based nuance he conveys in his other work and the enchantment and comfort I instantly felt upon rounding the bend. Depicting Bristol Dry Lake as corrosive foil, DeBuys’ description said nothing of the American nostalgia, brilliant white bungalows, or golden brown pyramids that visually define the salt flats and the small town of Amboy just to the north.

An unincorporated town on the edge of an intermountain basin in the Mojave Desert, Amboy is most clearly shaped by the contingencies of a 1950s motel and the by-gone years of a Route 66 heyday. Once a bustling tourist wayside on the transcontinental highway that connected Los Angeles and Chicago, today Amboy is filled with messages scrawled in pebbles at the side of the road; lion sculptures that stand amidst desert scrub; and sun-bleached school yards and rental cottages that
some might call empty. Even during its heyday, highway realignments often depopulated or shifted Route 66 towns, but a replacement interstate system in the 1970s virtually eliminated such towns on a larger and more lasting scale. Amboy lost its tourism economy overnight. With time, the town has been reduced to only a few buildings. Yet even today, telephone poles and the remnants of streets reveal that more buildings once existed between the highway and dry lake. Despite the town’s downturn in prosperity, people traveling through have a way of becoming locals here, at least as evidenced by the town’s most recent caretaker, an aficionado of Route 66 architecture, and his purchase and planned renovation of historic property in town.

Remaining buildings in Amboy include an iconic café, gas station, and motel, all known as Roy’s; a church, a post office, and a school. As a town now banking on nostalgia as a means to foster revitalization, lately Amboy has been populated by a chicken franchise owner who hopes to restore Amboy’s Route 66 postwar heyday, as well as a few employees, one of whom has been uncovering the town’s mining and indigenous roots. A rotating handful of historic Route 66 tourists can buy bottled drinks at the re-opened Roy’s Café and snap some photos of a place largely billed on a particular image of the 1950s. While the café, gas station, and post office have been reopened, lack of potable water has hindered renovating the rest of the town, including the motel. The school, church and motel cabins remain in disrepair.

With many buildings now absent, there are only three operable, paved roads in town: of them, two directly involve the dry lake. While Route 66 travels east-west, Saltus Road leads south from the highway, becoming Bolo Road as it crosses
into the dry lake and a salt harvesting enterprise adjacent to the Santa Fe Railroad. These road names bear the history of the railroad, which once had depots here, as well as the continued involvement of salt production in this place. Similarly, Amboy Road, also traveling perpendicular to the highway and railroad, once connected the town to mining camps on Dale Dry Lake to the south.² Passing through Bristol Dry Lake and additional salt harvesting, today Amboy Road connects the town with its closest neighboring city, Twentynine Palms, as well as various military installations on the other side of the mountains. The importance of Amboy Road and Bolo/Saltus Road in the town’s history, leading as they do to nearby dry lakes and salt, would be hard to guess for someone driving through on Route 66.

Adjacent to Amboy, Bristol Dry Lake’s role in this place is less readily visible, and thus less readily understood, than the town’s tourist history. Situated within an undraining endorheic basin in the arid southwest, from town the dry lake is partially obscured by the low and scattered shrubs of the basin periphery and the slight berm of the Santa Fe transcontinental railroad that runs between the highway and Bristol Dry Lake. When freight cars pass through town, they stand out dark and prominent against the background yellow of the playa and the hazy light purple of the mountains to the south.

Salt harvesting, in contrast to the town’s diminished tourism, is still in operation. Making use of the saline water beneath the basin, it pre-dates Route 66 and has operated on Bristol Dry Lake for over one hundred years, albeit under various names. Despite this, the salt industry and Bristol Dry Lake rarely make it into contemporary literature on Amboy and the highway. Already visually easy to
overlook from town, this flat landform is even less apparent while standing in the midst of the dry lake itself.

Although Amboy Road passes salt-encrusted playas, brightly-colored salt trenches and golden brown beds of clay, it is the basin's three-dimensional artifacts and landforms that initially beckoned me to this place—among them two storage sheds, a trestled water tower, and long lines of bermed earth shaped like pyramids. Coming from the Salton Sea via Amboy Road and Twentynine Palms, I was looking for the dry lake that William deBuys mentioned, and yet I missed it the first time through, traveling north from the Salton Sea. Even though my interest was caught by the clay pyramids that define the salt mining operations, I drove right past Bristol Dry Lake and traveled several miles east before realizing my mistake. Turning around, I didn't so much think that I had passed the real dry lake, as decided that maybe, I just couldn't access the playa from public roads. Determined to go back to the pyramids that had so caught my attention, I stopped in Amboy on the way.

Walking through town, I found myself scanning the basin looking for Bristol Dry Lake, while feeling an unexpected pull towards buildings in Amboy, which stood out brilliant white against the tawny scrub shrubs of mid-August and the bare ground. Having come to the area for a glimpse of what the Salton Sea might have once looked like, I must admit that I did not at first know that Route 66 passed so close. I could feel right away that this place was special, but I couldn't say exactly why.

Later I decided to return to the pyramids south of Amboy, and found the dry lake underfoot. Behind the pyramids, golden clay extends almost flat for some half
dozen miles. (Figure 1) Desiccating sheets of dark brown earth, mixed with shiny white salt, transition from the clay surface further south. (Figure 2) Painted white tires mark one of the industry roads into the flats, and a small white shed stands next to a 10-foot tall water tank. (Figure 3) Across the way, green-blue trenches crystallize white salt around their edges while framed by rough-cut berms, not yet formed into the pyramids that so caught my attention. Made all the more pronounced by the blue above, I wondered how these geometries and textures of Bristol Dry Lake might relate to Amboy, and vice versa, yet I couldn’t quite put this landform to words.

There are many ways with which to position Bristol Dry Lake and Amboy, California, in local and regional contexts. Having come to Bristol Dry Lake through an endnote that made no mention of Route 66 or the Santa Fe Railroad, I have found it fitting to use their archival material in this endeavor—perhaps I have hoped that dry lakes will find their way into current debates on Route 66, history, and the southwest; perhaps I have simply wanted to wrap my head around how this dry lake has shaped place and my own fascination tinged with doubt. The delight has been in finding others as equally enamored with this journey.

Cultural landscapes, as geographer Carl Sauer once wrote, entail the “combination of natural and man-made elements that comprises, at any given time, the essential character of a place.”³ How we come to know and define such a place, what we recognize, what we remember, and what we deem worthy of preservation, as historian Dolores Hayden has examined, bears weight upon the stories we tell and the future we envision.⁴ As such, I have endeavored to offer an example of
reading overlooked aspects of place and cultural landscapes over time. Grappling with a subtle landform, the tangential methodology of this thesis has been fused as much with searching for evidence, as with searching for absence—the blank spaces in maps, the undertones in dialogue, and the cropped backgrounds in photographs.

Several authors have suggested ways of contending with overlooked aspects of place, so often outside of official documentation. Art critic Lucy Lippard, for one, has discussed place and the role its enchantment has on narrating history. In her 1997 book, *The Lure of the Local*, she noted: “However out of fashion romanticism and nostalgia may be, I can’t write about places without occasionally sinking into their seductive embrace.” Dolores Hayden has similarly discussed “the sense of place” and its role in history.

For many, place has as much to do with personal experience as with anything else. As evidenced in much of Lucy Lippard’s work, anecdote and personal geography serve as “anchors,” capable of grounding what would otherwise be abstract or general theories on place. Regarding such an approach, Lippard once wrote:

“This book is concerned not with the history of nature and the landscape but with the historical narrative as it is written in the landscape or place by the people who live or lived there. The intersections of nature, culture, history, and ideology form the ground on which we stand—our land, our place, the local.”

At Amboy and Bristol Dry Lake, several contemporary actors have written their own narratives into the landscape. Endeavoring to wrap my head around their often contradictory accounts, I have found myself using autobiography as something of a touchstone to fill in the gaps.
For my part, it is a personal geography formed, most often, by getting lost and learning to rely on it. Admittedly, as this thesis indicates, I rather enjoy going astray, which author Rebecca Solnit widely recommends, although my itinerant tangents into subject and place have rarely been so productive. Yet both Solnit and Lippard suggest ways of contending with elusive aspects of place, grounded in material textures, feelings and those who have walked the site. Historian Henry Glassie and Lucy Lippard sum it up thus:

History with a capital H has often been described as a fiction written by the conquerors, yet there are other histories, often hidden, sometimes literally buried. “History is the essence of the idea of place,” writes folklorist Henry Glassie. “In place, the person is part of the history.” We study history as great waves that pass over the land and change how we use and think of it, but apart from an element of nostalgia, or longing, it tends to pass us by. It rarely seems to be our story. We forget that it goes right up to yesterday. Sometimes doubting how Bristol Dry Lake, Amboy and place intercede, I have found myself returning to Glassie and Lippard’s reminder that place can still be all the small pieces—the footnotes, the casual asides, the personal hunches and contradictory accounts of an elusive landform.

Environmental historian William DeBuys has made it a point to interweave autobiography, sense, archival material and photography in his work, as in *Salt Dreams: Land and Water in Low-Down California* with photographer Joan Myers. Commenting on their approach, DeBuys wrote:

“By intention, this book fails to observe the dictum of one of southern California’s most memorable fictional citizens. Sergeant Joe Friday of the television series Dragnet demanded, “Just the facts, ma’am.” But the facts, for our purposes, are not enough. We have tried to capture the flavor as well as the facts of events and places... Moreover, if anything offered here can capture the dreamlike quality of the places this book explores, it is the photographs. They are illuminations, not illustrations. One might expect a work like this to include photographs drawn from history, but we have
instead sought to illuminate past events with contemporary images, not to erase the gulf of time but to feel its distance and depth while glimpsing its far shore.11

Departing from histories that exclude the way a place feels,12 deBuys and Myers use contemporary photographs to evoke what is missed. Striving to suggest the same in this thesis, albeit with both contemporary photographs and archival material, has meant that the history of photojournalism has played a cautionary tale.

Historian Barbie Zelizer has written about the uneasy beginning of the photograph in journalism, a wariness steeped in issues of trust and the concept of truth at the height of yellow journalism.13 Since then, explains Zelizer, the photograph has gone from unwelcome newcomer, to unequivocal evidence, and around again, to the realization that photographs, too, can lie. As Susan Sontag once alluded to in her 1973 book, *On Photography*, a photograph is never just about its content—its content, after all, can be manipulated, encompassing connections implied or obscured. Regarding the implied narratives within images, Sontag wrote:

> In a world ruled by photographic images, all borders (“framing”) seem arbitrary. Anything can be separated, can be made discontinuous, from anything else: all that is necessary is to frame the subject differently. (Conversely, anything can be made adjacent to anything else.)14

Like the written word, the photograph is as much a matter of framing as with any other medium. As I find myself peering into the background of so many photographs, the documents enclosed in this thesis are at times less illustrations of specifics, and more like suggestions of what has been overlooked and how we might go about talking about such a place.15
Environmental historian William Cronon has also written about the role of framing in history—how the same evidence might be told in many different ways. Endeavoring to discuss the prairies of the Midwest, Cronon has candidly revealed how he has re-written the same essay many times over the years, “each with a different title, each trying to make a different kind of peace with the dilemmas these Great Plains histories pose.” Having illustrated that narrative is everything in history, as opposed to a listing of facts, Cronon absolves history of its need for neutrality, positioning writers squarely within historical accounts while embracing the many dilemmas of place.

With so many possible narratives and ways of writing about place, the tangential archival material found here is but one way of positioning an elusive landform within greater contexts. Taking a cue from authors who write history through place-based accounts, endemic landscape processes and the overlooked, among them William deBuys, Wallace Stegner, John McPhee and Lucy Lippard, the following narrative tangents are my attempt to explain the cultural history of a natural landform that lies hidden in plain sight.

When I wrote this thesis, I was reminded of a term Salman Rushdie once used, to describe the writing of Gabriel García Márquez after his passing in 2014: “The real, by addition of the magical, actually gains in dramatic and emotional force. It becomes more real, not less.” Having learned to write by studying García Márquez and the emphasis he placed upon the role of “emotional force” in our understanding of place, I have always been attracted to histories that include feeling and fact interwoven with the ground. Surrounded as we are by romanticism and
nostalgia for Route 66 and Roy’s Café in Amboy, California, the emotive role of an easily overlooked dry lake might help balance the tale—concurrently endemic, antidotal and autobiographical, if you will.
I. Two Tangents: The Railroad and Highway

Two transcontinental corridors run tangentially past Amboy and Bristol Dry Lake in the Mojave Desert. The first, commonly called the Santa Fe Railroad, has been operating for some one hundred and thirty years, albeit with ever-changing official designations. The second corridor, most widely recognized as Route 66, parallels the Santa Fe tracks, relying as it once did on the water that the railroad provided. First known as the National Old Trails Road through the desert, the road was renamed Route 66 in the 1920s.

Once a railroad depot of the Santa Fe, the small town of Amboy, California, now sits some distance from the tracks, nearly disconnected from its railroad ties. Amboy train station has long since disappeared, no longer needed by the long freight trains that still pass through. Purportedly named by the chief survey engineer who built the Santa Fe railroad in the early 1880s (but often renamed), Amboy was once joined by ten phonetically-coded depots, among them Bristol, Cadiz, Danby and Edson to the east. Depots to the west of Amboy, meanwhile, were once named for two distinctly dissimilar environments — Bagdad and Siberia. As Amboy has been re-oriented around Route 66, the Santa Fe depots and railroad tracks have subsided from view, a corridor that seemingly simply passes through.

Part of the 35th parallel route between Kansas and California, the Santa Fe tracks that pass through Amboy have often been overlooked. With the Mojave Desert preferably crossed at night or during the day with the shades pulled down,
even railroad travelers who found themselves enamored with dry lakes, have passed Bristol Dry Lake unaware. Nonetheless, the railroad still brought large numbers of travelers past Amboy and Bristol Dry Lake for the first time; before, they would have likely traveled by horse or foot on a more northerly route through the present day Mojave National Preserve, following fresh water along the intermittent Mojave River through the desert. Such a route would miss Bristol Dry Lake by several dozen miles and a few mountain ranges.

The 35th parallel transcontinental railroad altered transportation routes and helped put Amboy on the map. Surveyed by the Kansas Pacific Railway Company; built by the Southern Pacific; leased by the Atlantic and Pacific, and taken over by the Atchison Topeka and Santa Fe Railroad, the railroad brought travelers south of the old Mojave River footpath, and thus past present day Amboy and Bristol Dry Lake. Without potable water along the route, the railroad found itself carting in the water needed by its train engines and depots. Early automobile riders would later depend on these same depots for water and relief. The National Old Trails Road through California, soon renamed Route 66, stayed close to the railroad tracks and its potable water.

With roads not commonly paved until the 1930s, early automobile travel was once a laborious affair, all the more so through arid landscapes. Part vehicle endurance test and part victorious parade, a 1919 military convoy decided to travel across the United States right after World War I. As heavy vehicles found themselves constantly falling apart or getting stuck in the mud on the Lincoln
Highway towards San Francisco, the condition of transcontinental travel left an accompanying Lieutenant Colonel Dwight Eisenhower with a lasting impression, as recounted by historian Matt Bischoff, the author of one of the most in-depth publications on Route 66: “More than half the length of the trip was made over dirt roads, ungraded wagon paths, mountain trails, desert sands, and alkali flats.” Bischoff also noted that most of the early Mojave Desert roads were similarly maligned with alkali flats, another word for dry lake.

Rutted, sandy, and torrentially flooded and washed-out, such roads remained unpaved until the 1930s. Often described as the worst section of highway in the state of California, the Mojave Desert stretch of Route 66, passing Amboy along the way, underwent multiple alignment changes in an attempt to correct the situation. With increased trucking during World War II and spiking private automobile ownership afterwards, the highway faced maintenance and capacity difficulties even after being paved. Choked with traffic during an era from the late 1940s to 1960s, known today as Route 66’s heyday, the highway faced replacement even as its tourism soared.

Contending with overcrowding and disrepair, roads and bridges ill-equipped for national defense, and memories of a miserable transcontinental convoy through alkali flats, in 1956 President Eisenhower convinced Congress that a new and improved Interstate Highway System was sorely needed for the entire country. It would take several decades, but in 1972 traffic that once passed Amboy was diverted to the newly-built Interstate 40 instead. As a region filled with mountains
and dry lake basins, this new iteration of transcontinental travel and highway design would bypass some 80 miles of Route 66 in southern California, causing an instant decline in traffic passing Amboy and Bristol Dry Lake.31

Without other economic options to sustain a large population in a relatively isolated arid basin, the ensuing years witnessed a marked decline. Buildings were demolished, left empty, stripped or vandalized in the years to come. Yet some might argue that Amboy was never really abandoned, as there have always been people interested in preserving the town as it had been during the mid-century, an interest that coincided with many similar debates about Route 66 across the U.S.32

In the 1990s, the National Park Service conducted a “Special Resource Study” to discuss the challenges of preserving the cultural heritage of a now disjointed transcontinental corridor very much founded on the driving experience.33 Compared to the rest of Route 66, the Mojave Desert portion of the route is somewhat unique — most of its highway still exists, although realignments even during the heyday have tended to move things around.34 According to the National Park Service, many of the views along the highway are still the same, thanks to the remote desert location.35

For the National Park Service, cultural landscape designation is an important preservation tool when it comes to Route 66, as some of its more vernacular elements would not be recognized under other categories.36 Regarding preservation, the National Park Service noted,
The primary issue is the need to define the most important areas or landscapes that are essential to preserving the character of the road in light of the extensive horizon-to-horizon viewsheds that exist and the need to find preservation strategies or treatments that are responsive to the evolving nature of the highway and the people who live along it.37

Under such definitions, the cultural landscape might include signage, “buildings in various states of disrepair,” and terrain, particularly mountains and other “land formations.”38 Dry lakes go unmentioned by the report, but they too are within the general landscape background that the study describes.

Yet despite the inclusion of unique landscape elements in the National Park Service recommendations, advocates of Route 66 have instead often focused on “the automobile touring experience of the 1950s and 1960s,” as the report notes,39 and the motels that have come to represent that period of time. In Amboy, the motel approach has been promoted by recent owners who have championed the town’s iconic history, as well as numerous news stories centered around Roy’s, an Amboy establishment that once included a motel, guest cabins, café, gas station and automobile repair garage. As the last motel left standing in Amboy, Roy’s receives the most focus. When it comes to Route 66 preservation, few mention the original railway depots and train stations of the Santa Fe Railroad, whose infrastructure enabled the early highway to cross the Mojave Desert here. Fewer still mention the dry lake around which Amboy and these two transcontinental corridors bend.

The following chapters thus read place through the dry lake, first at the intersection of the Santa Fe Railroad and Route 66 in Amboy, then through salt
harvesting, and finally back again, returning to Amboy as seen and felt through Bristol Dry Lake.
II. Dry Lake Tangents

Occurring as they do within a state that is moving in different directions, pushing up mountains and forming intermountain basins that do not drain, dry lakes in the Southwest are a function of plate tectonics and aridity, where low points collect what little rainfall there might be, but water does not stay for long.\textsuperscript{40} With less than 10 centimeters of precipitation each year, and similar temperatures and evapotranspiration rates to that of Death Valley, its more famous cousin to the north,\textsuperscript{41} any water that makes it to the bottom of Bristol Dry Lake in southern California soon evaporates, leaving behind various salts.

Once thought to have been a remaining remnant from a series of large lakes between Death Valley and the Colorado River, it has since been suggested that Bristol Dry Lake has always been predominantly dry—for at least 3.7 million years.\textsuperscript{42} Joined by dozens of similar dry lakes in the Mojave Desert; marked by only occasional periods of shallow ponding; and made by high temperatures with no humidity to speak of, around here, even groundwater close to the surface soon evaporates. (Figure 4) Social critic and environmental historian Wallace Stegner has written about such underlying processes of the region, remarking that:

Aridity, more than anything else, gives the western landscape its character. It is aridity that gives the air its special dry clarity; aridity that puts brilliance in the light and polishes and enlarges the stars; aridity that leads the grasses to evolve as bunches rather than as turf; aridity that exposes the pigmentation of the raw earth and limits, almost eliminates, the color of chlorophyll; aridity that erodes the earth in cliffs and badlands rather than in softened and vegetated slopes, that has shaped the characteristically swift and mobile animals of the dry grasslands and the characteristically nocturnal life of the deserts. The West, Walter Webb said, is “a semi-desert with a desert heart.” If I prefer to think of it as two long chains of mountain ranges
with deserts or semi-deserts in their rain shadow, that is not to deny his assertion that the primary unity of the West is a shortage of water.

Made by temporary flood, a high water table, capillary action, evaporation and sodium chloride precipitation, it is aridity that makes Bristol Dry Lake possible.

Full of intriguing geometries, colours and a quiet haze in the distance, Bristol Dry Lake is also shaped by the salt-harvesting National Chloride Company, which collects calcium chloride solutions in long trenches, square flats and dotted depressions across the land. (Figure 5) Brilliant aquamarine and turquoise with halophilic microorganisms, these salt-harvesting trenches span the flat clay surface in geometric zig-zags that contrast the rounded playa edge and gridded survey section of the West. (Figure 6)

Along the salt trenches, the dry lake’s clay surface has been built up into great lines of golden pyramids, formed by earth moved aside for the salt beneath. (Figure 7) On Amboy Road up to town, these conical clay ridges extend for nearly the entire length of the dry lake, shaped in my mind like dorsal plates rising out of a smooth yellow surface. Like many aspects of the region, Wallace Stegner has also written about this somewhat fanciful response to space and colour in the West: without any frame of reference for the scale of basin and mountain, the outsider says something to the effect of, ‘That’s nice. It reminds me of the [actually minuscule] river bluffs back home.’ Instead of a small river’s bend, I found myself referencing the lobby of the American Museum of Natural History in New York, with its dinosaur skeletons standing out against the vaulted ceiling.
As a town currently oriented around Route 66, Amboy’s most famous motel looks out over Bristol Dry Lake to the south. Even so, as I discovered during my own travels, the dry lake is still easy to overlook. Within town, even the slight berm of the Santa Fe railroad, just below the highway, obscures the dry lake just beyond. (Figure 8) When freight cars pass through, their dark colours contrast with the horizon behind them. Traversing by with a comforting click, the rectangular patterns of the boxcars almost block the dry lake entirely from view, although I didn’t know it the first time I walked through. (Figure 9)

Rarely has such a landform been related to the cultural history of place, particularly as it relates to Amboy, Route 66 and contemporary discussions on preservation. Poet and social critic William Fox, one of the few to center dry lakes in Mojave Desert history, writes of the “changing relationships among the playas, the military, and the arts” in the arid West.45 Narrating history through land use and environmental art, Fox noted that early photographers often viewed dry lakes as lacking place, seemingly without focal points.46 Similarly, most contemporary writing on Bristol Dry Lake has dealt with the technical aspects of the playa, focusing on geology and mining with little material on how the dry lake is part of Amboy and place. Meanwhile, writing on the town itself tends to take the other extreme, concerned largely with the highway while positioning the landscape as background, a desert with isolated pockets of place and relief. While the two narratives might briefly reference each other, they are rarely more than footnotes in each other’s tales.
Having existed under many names, it is no wonder that saline dry lakes in the southwest are at times difficult to place. As low points that evaporate more water than they accumulate, dry lakes are often more like undercurrents within archival literature, present but only sporadically categorized outside of geology. Known alternatively as ephemeral, dry/drying/dried, saline/hypersaline, alkali/alkaline, and endorheic, they also may be called salt flat, clay pan, playa, salar, salina or sink.47 Calling such entities periodic lakes was once in fashion, sometimes replaced with undrained, internally-drained, saline plats, landlocked basin/bolsons, inland sebkhas, continental sabkhas and pluvial lakes. Mud lakes, mud-plains, shrinking lakes, terminal lakes, closed basins, salt beds and hardpans might also refer to these places, none of which should be confused with similar names for shoreline playas or the playas of the High Plains.48 Some, such as western expedition leader John Charles Fremont, once used marsh and dry lake interchangeably;49 still others have tended to label dry lakes based on their evaporates, often broadly declared gypsum, borax, saleratus,50 halite, or saline efflorescence. More than a fair share have simply used the word lake, even when there is no water on the ground; equally unequivocal personages have made use of the terms desert, barren, empty, plain, useless, and ancient. For more explicit occasions, waste and wasteland can also be employed,51 while still others might choose to make no mention at all.

Historian William deBuys has called these places “sumps,” writing that “gravity decrees that in low places consequences collect.”52 The desert basin, he notes:
[Is] what the intermountain West boils down to—or leaches or evaporates or otherwise reduces to. The verb is variable, but the process is as immutable as the laws of gravity and evaporation, which are perhaps the only laws that the hydraulic West has not amended to its purposes.53

Despite this immutability, we have a tendency to wish away the processes that evaporate water and concentrate salt in these arid intermountain basins. Here, water does not stay for long, and yet we like to ignore dryness when naming such places, particularly when describing entities that are technically ‘drying’—the most famous example in the southwest being the Salton Sea, once the largest dry lake bed in California and the occasional resting place of the Colorado River. Naturally ephemeral but inadvertently toxic thanks to agricultural runoff and a host of other human contributors, today both sentiment and wind-borne health hazards have necessitated trying to prevent the Salton Sea from shrinking further, a feat that has yet to be fully realized. Yet even before the sea’s health hazards emerged, we did not call this flooded basin the “Salton Dry Lake,” a name perhaps more apt for an entity that has, for centuries, repeatedly turned back into a dry lake bed.

We have often applied the word ‘lake’ to areas that rarely have water. Some 50 miles north of Bristol Dry Lake, the terminal of the Mojave River is still known as the Soda and Silver Lakes, despite how the river seldom reaches their shores. To make matters more confusing, the dry lake bed of Soda Lake, closer to the Mojave River, has a higher water table and thus accumulates salt at its surface; Silver Lake, an overflow basin for Soda Lake but with a much lower water table, leaves no such efflorescent mark.54 South of Amboy on Route 66, Bristol itself has most often been
called “Bristol Dry Lake,” yet even a 1985 topographic map by the United States Geological Survey once elected to call the area “Bristol Lake” instead.\(^{55}\)

With so many names to choose from, and despite some confusion regarding “dry” versus “lake,” the United States Geological Survey most often chooses \textit{playa}, which it defines as,

\[ \text{[A]} \text{ dry, vegetation-free, flat area at the lowest part of an undrained desert basin. It is a location where ephemeral lakes form during wet periods, and is underlain by stratified clay, silt and sand, and commonly, soluble salts. Playas occur in intermountain basins throughout the arid southwestern United States. Although playas may appear as featureless plains, they are rich in features and characteristics that can reveal information about climates, past and present.}^{56}\]

Having originated much of the hydrology, geology and geochemistry studies of dry lakes in the West, the word \textit{playa} most often brings up the scientific side of things. However, even though the scientific community has discussed the matter for well over one hundred years, there has yet to be a common consensus regarding a name.\(^{57}\) One of the most recent scientific reports on Bristol Dry Lake, by geologists William Brown and Michael Rosen, has even eschewed trying to pin a single name to the landform; instead, the scientists have added a few new varieties to an already lengthy list. Regarding the past 3.7 million years, the geologists note:

Throughout this period, the Bristol Lake basin has been the site of brackish, ephemeral, shallow water bodies that alternated with halite-precipitating brine-pond playas.\(^{58}\)

While several scientists have attempted to categorize dry lakes into specific types, when it comes to naming, differences of opinion and personal preference remain.

Surprisingly few scientific compendiums have been devoted to dry lakes. One such book, called \textit{Playas and Dried Lakes: Occurrence and Development} and
edited by James T. Neal, grapples with naming and tense in its title. Being most familiar with *ephemeral* and *dry lake* from the Salton Sea, I originally missed this book. *Playa* originally evoked too much of the shoreline for my uninitiated eyes; like my introduction to Bristol Dry Lake and Amboy, it was an endnote that saved me once more.

Both Wallace Stegner and fellow historian Walter Webb have commented on the problem of naming in this arid region, including the fact that places and animals have often been misconstrued, giving us, as Stegner notes, “prairie dogs,” “horned toads,” and “jackrabbits,” to name a few. Yet for dry lakes, the problem is not so much that a single compound name has stuck, despite its inaccuracy. Rather, this difficult-to-discern, and thus, hard to describe, landform has encouraged a wide variety of descriptive names. Yet rather than suggesting that each name fails rather spectacularly to encompass this entity, with time I have come to embrace their dilemma as being part of this place—after all, the confusion is not just endemic to our perception of dry lakes, it indicates the very paradoxes and processes within the landform itself and the way we relate to it. I myself have come to find solace in the words ‘dry lake,’ an inherent contradiction not unlike those that Webb and Stegner have written about, joining a long list of misnomers in the West.

Dry lakes that are popularly known tend to be big and bold. This list includes the Salton Sea, Owens Lake, Mono Lake, Searles Dry Lake and Death Valley’s Badwater Basin, which are perhaps the most famous *dry or dried* lakes in California. (Figure 10) Among them, the Salton Sea, once the largest dry lake in the southwest, would thus distinguish itself from Bristol Dry Lake even if it hadn’t been accidentally
flooded by the Colorado River in 1905, subsequently becoming a tourist haven
interrupted by massive fish and bird die-offs and looming aeolian health hazards for
the greater southwest coast.

Similarly, Owens Lake, not naturally a dry or ephemeral lake, bears the
distinction of having been drained by Los Angeles in the first half of the 20th century,
an action that has led to the most expensive dust hazard remediation attempts in
the region—an expense soon to be surpassed by the aforementioned Salton Sea. As
water levels have decreased, the city has increasingly added groundwater to its
aqueducts, jeopardizing the area further.60

Mono Lake, this time actually within an internally-drained endorheic basin,
carries the honor of having survived a similar emptying-attempt by Los Angeles,
which quickly found that water from Owens Lake was not enough; thanks to the
efforts of some pioneering undergraduate biology students and their advisors, Mono
Lake’s unique hypersaline ecology was recognized.61 After court order, Los Angeles
was forced to take part in lake restoration. Termite-like mounds called tufa
pinnacles, formed by evaporation and salt accumulation, also set Mono Lake apart.

Badwater Basin in Death Valley is also in a class of its own for being 282 feet
below sea level, not to mention the numerous elaborate and exaggerated tales of its
many legitimate hazards. Meanwhile, Searles Dry Lake has borne some of the most
extensive mineral harvesting enterprises of a southwest playa in recent years. Still
others in the region are known for their military installations and bombing ranges,
their automobile racing, or their use in environmental art.
Within the Californian Mojave Desert, dry lakes abound yet are rarely uniformly mapped. From Needles to Barstow alone, the Santa Fe Railroad and Route 66 run adjacent to or through four dry lakes; in all, at least twenty-two dry lakes are in the greater vicinity, as illustrated by the Automobile Club of Southern California in Figure 4. Despite being the largest dry lake in the area, even Bristol Dry Lake has at times been absent from older maps, such as the 1874 Craven Geological Survey map previously depicted in Figure 10. Part of a chain of three dry lakes, Bristol’s neighbors Cadiz and Danby Dry Lakes are depicted instead.

With contradictory naming practices and sporadic documentation, a methodical tracing of Bristol Dry Lake as part of the cultural landscape has meant searching through a variety of archival documents with a dizzying array of synonyms. More than a description of physical layout, the title of this thesis provides a framework with which to locate the dry lake in history (Figure 11). As iconic transcontinental corridors, the Santa Fe Railroad and Route 66 serve as points of beginning for investigating an adjoining landform and an aspect of place that has been less widely documented.

Some of the earliest Anglo-representations of dry lakes in the southwest came from military expeditions of the 1840s, which largely avoided the Great Basin and the Mojave Desert, places where dry lakes flourish. Despite this avoidance, dry lakes featured heavily in early accounts, such as those by John C. Fremont, who annotated his 1842 expedition map with descriptive fantasies involving endorheic basins. Writing of the as yet Anglo-unexplored reaches of the Great Basin, an area depicted as gridded and otherwise blank space, Fremont expounded:
THE GREAT BASIN: diameter 11 degrees of latitude, 10 degrees of longitude: elevation above the sea between 4 and 5000 feet: surrounded by lofty mountains: contents almost unknown, but believed to be filled with rivers and lakes which have no communication with the sea, deserts and oases which have never been explored, and savage tribes, which no traveler has seen or described.63

Apparently incredulous of citing the long-standing knowledge of several nations, including the Aha macave and Chemehuevi Nations of the southeastern Mojave Desert, as well as various members of the Spanish and Spanish-derived Mexican governments, Mr. Fremont nevertheless wrote of places that did not drain—the myriad dry or drying lakes of the arid West.

Transcontinental railroad surveys soon followed such military expeditions, which in the Mojave Desert involved several iterations. First up, the Lt. Amiel Weeks Whipple expedition of 1853-1855 decided to try a more northerly route across the desert than today’s railroad and Route 66 transects past Amboy. Focused on the slope, curve radii, material availabilities for construction, and settlement opportunities along the proposed railroad line, Whipple’s team nevertheless happened to include an engineer who found himself entranced by a dry lake. As a team investigating routes involving the Mojave River, surveyor Albert H. Campbell came upon Soda Lake, terminal of the intermittent waterway and predominately dry. Without other words to draw upon, Campbell described a lake made of salt, not water:

By moonlight the effect was beautiful; it seemed a fairy scene, with the bright and placid firmament above, and the earth beneath covered with snow-white sand....Soon we struck the smooth bottom of a lake of efflorescent salts, probably sulphate of soda....64
In a region characterized by the ups and downs of mountains and their basins, a few steep inclines were still in need of fine-tuning after this survey, before a strained steam engine might make it up their tracks. A second survey team, this time led by General William Jackson Palmer, thus elected a route past present-day Amboy and Bristol Dry Lake. While eschewing the poetic fantasy of previous reports by Fremont and Whipple, Palmer's team nevertheless noted endorheic basins in the Mojave Desert. One member of the team, in particular, acknowledged the salt flats at Bristol Dry Lake, named Perry's Basin in their report after the president of the railroad company financing their particular expedition. Originally considering a feeder line from Amboy, the botanist turned railroad surveyor Charles Christopher Parry noted:

> In crossing the sink of the Perry Basin, California, for a few miles some precautions may be necessary, as the bottom is alkaline.65

Surprisingly leaving aside the dry lake mining interests that such a feeder line would likely serve, the note on Bristol Dry Lake reveals that the railroad grappled with dry lakes, which helped shape the construction of the railroad even if not quite as impressively as their mountainous counterparts. Tracks through Amboy would come to hug both the mountains to the north and Bristol Dry Lake to the south; tracks further west would be less presciently built through Troy Dry Lake, although the first highway alignment some twenty years later would skirt the playa’s edge.66 With strict limitations on track slopes, set by Congress at no more than 116 feet change in elevation to one mile, the exceptionally flat topography of these endorheic basins were not the only consideration when laying down track. Dry lakes, too, played a role.
Noted civil war photographer Alexander Gardner also worked with the Palmer survey to document the endeavor. Although dry lakes were an integral part of the expedition through the Mojave Desert, no playas were included in his book on the survey, *Across the Continent on the Kansas Pacific Railroad*. Two photographs of the Mojave Desert featured vegetation instead (Figure 12).67

Published in 1867, two years before General Palmer’s official report on the proposed railroad route, historian John Charlton has noted that Gardner’s photographs were the first systematic photographic documentation of a western railroad survey to be released to the public; as such, Gardner’s photographs greatly influenced audiences in the east.68 As Charlton remarks, it was a notoriety paired with the inclusion of a mutilated fort soldier in the book’s first edition, taken by a second photographer on the trip with questionable integrity.69 Produced during a time when the U.S. government was still officially at war with a number of indigenous nations, the Palmer survey and Gardner’s photographs advertised the proposed railroad as capable of quelling dissent.70

Intent upon securing Congressional backing for the railroad, the Palmer team included not only photographers, but also a Philadelphia newspaper journalist by the name of Alfred R. Calhoun, to champion its cause. While both Palmer and Gardner were originally fearful that the Mojave Desert would scare the journalist into producing bad press, even considering removing him from the team before reaching California, Calhoun proved up to mettle and remained part of the survey.71 Embracing the Mojave Desert, the journalist regaled eastern audiences with tales of dry lakes.
Surveying at a time of unusual flooding in the desert, by Calhoun’s account, members of the party nearly drowned while trying to cross the normally dry Soda Lake, terminal of the Mojave River some miles north of Amboy and Bristol Dry Lake. In a series of letters back to Philadelphia, Calhoun described precariously attempting to wade through the flooded dry lake, writing that, “So far on the desert our greatest trouble has been from the quicksands and overflow of water.”72

Mentioned by neither General Palmer nor Charles C. Parry, the botanist cited previously for noting Bristol Dry Lake in the railroad’s official report, one has to wonder whether a certain amount of journalistic danger was added to the Philadelphian newspaper’s account. Most dry lakes of the area, being on exceptionally flat terrain, expand for miles when flooded, yet remain just a few inches deep. That being said, I wouldn’t want to attempt crossing their scorching mud. Once, at the Salton Sea, I slipped while taking a photograph, caking my shoes in bluish, burning and quite toxic clays. I would be surprised that Calhoun’s team made it so far into the stuff that they risked drowning, guessing that they would turn back if simply from the heat and the squelch.

Mojave Desert historian Matt Bischoff has warned that historical accounts must be evaluated for their intentions. Specifically noting the long-standing boosterism of Route 66, the same might nonetheless be said of the transcontinental railroad surveys that preceded it:

An important part of developing a historic context is the evaluation of archival sources. Because Route 66 was a celebrated road even in its earliest days, many of the documents that record its history were created in the spirit of enthusiastic boosterism. Statements made by boosters of the highway appear in countless articles in newspapers, journals, and periodicals; in
corporate advertisements; and in brochures printed by chambers of commerce and highway organizations. All of these documents can be valuable historical sources, but they must be used critically, with a recognition of their original purpose.73

The journalist Calhoun, whose job was to generate awareness and financial backing for the proposed railroad route, had an interest in portraying the area as exciting yet survivable. Implicit in the gallant experience of getting caught in a flooded dry lake, was the unexpected abundancy of water in a feared desert. The Mojave Desert, Calhoun noted, was really not so bad with the proper preparation and a great deal of help from local ranchers, mail stations and military forts.74 That dry lakes featured so prominently in this allure speaks as much to creativity as it does to place.

Twenty years after Calhoun and the General Palmer expedition may or may not have been battling for their lives in the midst of an ephemeral dry lake, and just a few years after the Santa Fe railroad was finally built past Amboy and Bristol Dry Lake, a pioneering geologist by the name of Israel Cook Russell was writing one of the first scientific papers on dry lakes, which he called “playas.”75 Primarily of interest for their mineral content and mining possibilities, Mr. Russell nevertheless noted that dry lakes shape place in ways he didn't quite know how to put into words:

Examples might be multiplied, and the curious effects that these ephemeral lakes exert on the scenery of arid lands might be dwelt upon, but this would perhaps carry us beyond their geologic interest.76

Having started a thesis on a tangent and an endnote, I have found myself thankful for Mr. Russell’s aside. When it comes to an elusive aspect of place, the little things
matter—an engineer’s enchantment, a botanist’s structural notation, a journalist’s exaggeration and a geologist’s one-line reference to something greater, that I never expected to find. Trying to build a story with what at times feels largely like absence or the overlooked, each archival digression seems to whisper that dry lakes are part of the cultural and infrastructural landscape of this place. Remembering William DeBuy’s, Lucy Lippard’s, and William Cronon’s approaches to place, which ground history in the complex dilemmas of framing, personal geography, and how a place feels, these cumulative little snippets, often autobiographical annotations themselves, suggest that dry lakes do form place.

Yet even ubiquitous dry lakes in the Mojave Desert can be hard to track down. Often surpassed by their famous, more liquefied, cousins (in particular, the Salton Sea), it takes digging to find documentation on the role of dry lakes in the cultural landscape. As previously discussed, a certain amount of indirectness can be required, searching for material based on town, region, transcontinental tangent or just a hunch, hoping there might be a caption or two. This has been particularly true for photographic evidence, with the great exception being a series of 1905 images featuring a dry lake in Southern California.

Taken by photographer Charles C. Pierce, the series reveals dry lake invention: that of dry lake sailboat carts and early recreation (Figure 13). Appropriated from miners who wrangled an expedient way of crossing the dry lakes they often found themselves adjoining, one such contraption included the “Desert Queen” on Rosamond Dry Lake, northwest of Amboy and Bristol. Decked out in pleated shoulders, necktie and brimmed hats, a couple travels across the clay
surface with several companions. The travelers’ attire belies a more leisurely trip across the dry lake than their mining counterparts.

Dry lakes have remained popular for their racing opportunities—contemporary aerials of Amboy and Bristol Dry Lake can attest to countless wheelies over the years. Yet local dry lakes once featured much more strongly in tourists’ experiences than they do today, albeit for more utilitarian purposes. Grappling with unsteady ground, early automobile maps through the desert noted the presence of dry lakes for some time. Notoriously unreliable, the first cars had a great deal of trouble on the unpaved roads and dry lake beds of the Mojave Desert. As historian Matt Bischoff has noted, travelers avoided dry lake beds as best they could, but hardly successfully.\textsuperscript{78}

Despite this initial trouble, dry lakes were soon touted in guidebooks published by the Automobile Club of Southern California, the organization responsible for maintaining the road through Amboy before it would be officially renamed Highway 66 in the 1920s. Not paved until the 1930s, theirs would have been an ever-shifting battle against rut and sand, yet dry lakes were soon listed as one of the special lures of the trip. Appearing across the page from a strip map of Amboy, one guide stated:

On this section of the National Old Trails the motorist will traverse desert country interspersed with dry lakes, low mountains, lava hills and evidences of lava overflow from extinct craters. Driving along the trail amid the stillness of this strange environment, it is hard to realize that this was once the scene of cataclysmic convulsions of Nature’s unchained elemental forces, when whole continents were submerged or destroyed. In that period man, if then existent, was a roaming mammal hardly less fierce than the beasts he slew for his daily food. Yet the mute evidences of this time are present here in the lava mounds and empty craters of the past.\textsuperscript{79}
With a great deal of romanticism, the automobile club thus asked drivers to view the landscape as an anachronism, imagining themselves as somehow back in time. Regarding Amboy, it is a refrain we still embrace today, albeit in a slightly different form: today, the nostalgia is for the 1950s, with remaining buildings in Amboy seeming to stand solely for that period even though the town began before and has continued since. Today, Carlos Aceves, working with the current owner of Amboy, has been uncovering the indigenous roots of this town, thereby addressing some of the inaccuracies envisioned by entirely nostalgic approaches.80

Despite being present in many early automobile maps, Bristol Dry Lake has often been passed by unawares. Travel writer Edna Brush Perkins, touring during the first quarter century transition from railroad to automobile, noted that passengers on the Santa Fe route through Bristol Basin preferred to travel at night or with the shades pulled down.81 Although she herself became fascinated with Southern California dry lakes — by her account being one of the first women to drive an automobile into Death Valley, to the north — she still missed Bristol Dry Lake on her train ride through. Regarding the dry lakes she would later notice, Perkins wrote,

The dry lake far down in the bottom of the valley shines. The illusion of water at its further edges is a glistening brightness. It is hard to tell where the baked mud ends and the sand begins. It is hard to tell what are the real colors and shapes of things. If you can linger a while they change. The valley never loses its immense repose, but it changes its colors as though they were garments, and it changes the relations of things to each other.82

I’ve read and re-read a few mirage-leaning accounts of dry lakes, trying to reconcile embellishment with my own somewhat enchanted but mirage-less take. Not exactly
known for its concision, mirage writing has struck me as nevertheless somewhat
glibly clear-cut: its authors are so sure of what they see, even as they insist that their
sight is shifting. Perhaps I am simply envious of their conviction, the way they can
point and say yes, that is a dry lake and this is what it does. Walking through Amboy
and Bristol Basin, I have found myself constantly looking down, wondering whether
I was already on the dry lake and how it had shaped this place.

Caught only in the upper corner of a photograph or behind the focal point,
others have also missed dry lakes almost entirely, such as Farm Security
Administration photographer Jack Delano in 1943. Charged with documenting the
Santa Fe Railroad and their local workers, as opposed to small Route 66 towns in
the basin, the closest Delano came to taking a photograph of Bristol Dry Lake was
some seven miles west of Amboy, at Bagdad Station on the Santa Fe Railroad (Figure
14). His series of three photographs at the train station, looking east towards
Amboy down the tracks, were some of the few taken in Bristol Basin during his trip.
In them, Amboy Crater, a conical volcano situated on the western edge of Bristol Dry
Lake, not far from Amboy, is just visible in the top right corner of the photograph.
Bristol Dry Lake sits just beyond. While the train would have passed directly
between Roy's Café in Amboy and Bristol Dry Lake, no such photographs were
featured.

In contrast, a photographer by the name of Burton Frasher (1888-1955),
having pioneered both the postcard industry and documentation of the vernacular
in the Mojave Desert and much of the southwest, photographed Bristol Dry Lake salt
harvesting, as well as other mining enterprises along Route 66 and salt flats in the
region. A 1948 photograph of his featured mounds of refinery material and the architectural elements of the salt works on Bristol Dry Lake (Figure 15). Looking at the photograph without prior knowledge, it would be nearly impossible to recognize that a dry lake stood in the background, much less comprehend the arid processes that make the salt harvesting and dry lake function.

Within popular discourse, an undated aerial postcard of Bristol Dry Lake is one of the few to show a wider view of the landform itself (Figure 16). Taken some three miles southeast of Amboy, the postcard reveals great lines of clay pyramids and salt trenches built just south of the Santa Fe switch now known as Saltus, where gypsum and salt have been harvested since 1910. Even so, the postcard disguises the dry lake under the label “the torrid desert,” in the caption on the back. I came upon the missive in an auction, long after I thought that this thesis was relatively resolved. It has been a reminder to remain humble, focusing on the way Bristol Dry Lake has shaped place as opposed to comprehensive thematic statements on our representations of the dry lake over time. Like its many names, interpretations of Bristol Dry Lake have proven to be many sided, even contradictory, sometimes revealing and concealing the landform at the same time.

The same could be said regarding a pivotal book on Route 66 cultural heritage, some twenty years after the highway nearly disappeared. The end of the twentieth century witnessed increased interest in re-opening businesses along Route 66 and preserving the road. As one of the first publications on Route 66 cultural heritage after the highway was bypassed, Michael Wallis’ 1990 book, Route 66: The Mother Road, played an active role in advocacy. Featuring interviews with
people all along Route 66, among them Buster Burris of Amboy and Roy’s Café, the book stands out from a plethora of later iterations of the same rather cursory style. While countless publications have tended to re-copy each other’s exclamations without attribution, few seem to have picked up on a small photograph that Mr. Wallis included, framed in the center of a page on Amboy. There next to an interview with one of the founders of Roy’s Café, this zoomed-in photograph shows a blue-green salt trench on Bristol Dry Lake. Captioned, “An emerald oasis near Amboy, Calif.,” the rest of the text makes no reference to the photograph or its context. It remains unclear whether, by “oasis,” the caption evokes water or salt.

W ere I feeling a little more cynical, I might be inclined to say that the closely-cropped pool of brilliant liquid is meant to suggest a beach in the midst of white sand.

Ever difficult to pin down, today Bristol Dry Lake continues to elicit a motley array of reactions, sometimes featured and obscured in the same breath. An agricultural firm, Cadiz Inc., would like to transport local groundwater beneath the basin to southwest cities. It has advertised its position by condemning Bristol Dry Lake as a waste of water, even as it purports to be an ecologically-minded firm. Similarly, despite a long history within road maps, contemporary navigational formats often neglect to label or delineate Bristol Dry Lake, choosing instead to paint the salt trenches light blue, for all intents and purposes disconnecting them from the dry lake beneath (Figure 17). The cartographic choice seems reminiscent to that of the “oasis” photograph in Mr. Wallis’ book, turning salt into water, instead of the other way around, as it should in a place like Bristol Dry Lake. Still other
organizations have taken a more nuanced approach, such as the Center for Land Use Interpretation. With a mission to expand research and education on the many ways land is fashioned and read, the Center for Land Use Interpretation has featured the clay pyramids that line Amboy Road up to town. Along a similar vein, others have flown drones equipped with video cameras over the salt flats, interested in documenting their industrial forms.

Having come to Bristol Dry Lake through an endnote, which made little reference to the cultural elements of this place, I expected to find more negative portrayals of the dry lake over time. Instead, within the tangential archival material of Route 66 and the Santa Fe Railroad, I came upon people who offered glimpses of Bristol Dry Lake and the way it has shaped place. Some didn’t quite notice, as they framed photographs of the Santa Fe Railroad or Amboy, that they caught a dry lake in the background. Some incorporated salt harvesting on Bristol Dry Lake into a larger discussion and documentation of vernacular landscapes and history in the Mojave Desert. Still others annotated technical reports with brief personal accounts of an aspect of place that they didn’t quite know how to fully describe, relying like me on a feeling to fill in the gaps. Taken collectively, these multi-sided narratives and agendas, part of Amboy and Route 66 but rarely examined closely, bring elements of an overlooked history into the foreground, in my mind peopling Amboy and Bristol Dry Lake with a more layered past. At the very least, their narratives have helped me wrap my head around an elusive entity; at best, they have begun to position the dry lake within cultural landscapes and historical preservation.
Made by the processes of evaporation and salt precipitation in this arid land, part of Bristol Dry Lake’s enchantment is the way it has formed place. Yet even as tangential archival material has begun to reveal Bristol Dry Lake, its underlying processes have remained largely overlooked within the cultural landscape—while postcards might occasionally show the salt refinery, the dry lake’s full influence remains obscured behind ill-informed captions or painted blue pools on a map.

Having drawn from tangential material to locate an easily overlooked landform in history, the following two chapters briefly describe the reverse: a story of the Santa Fe Railroad, Route 66 and the town of Amboy, as read through Bristol Dry Lake.
III. Salt Flats

Salt is a chemical term for a substance produced by the reaction of an acid with a base. When sodium, an unstable metal that can suddenly burst into flame, reacts with a deadly poisonous gas known as chlorine, it becomes the staple food sodium chloride, NaCl, from the only family of rocks eaten by humans.89

Mark Kurlansky

Geologists and their reports pertaining to the salt industry in California have provided some of the most detailed analyses of Bristol Dry Lake in the Mojave Desert. Initially unsure of how Bristol related to the Santa Fe Railroad and Route 66, which pass just to the north, for some time I thought to avoid such scientifically-minded renditions of Bristol Dry Lake — like many contemporary accounts of Amboy, such reports seemed to leave out important aspects of place, albeit from the other side of the theoretical divide that often separates culture and nature. Realizing my mistake, I would be embarrassed to look historian John McPhee in the eyes now, to say the least — he who has told some of the best stories of people and the land, through road cuts, geology, and the geologists themselves.

Alas, I have no such fantastically-grounded tales to tell, yet several geologists have nonetheless informed this thesis. The first, Israel Cook Russell, mentioned in the previous chapter, pioneered dry lake geology, which he called playas, while also noting that they have certain “curious effects” on the landscape.90 Hinting that geology and geologist themselves are part of this place, his was the first forewarning that I had made a critical omission; Russell’s work on playas in the Southwest and
abroad, as well as his collaboration with artists in their exploration, deserves another thesis.

Others, too, have played a role. In particular, it would be a geologist who published one of the first photographs of Bristol Dry Lake, in 1910. Working for the United States Geological Survey, Frank Hess illustrated salt harvesting on Bristol Dry Lake while revealing a much stronger connection between Amboy and the playa than is typically discussed today (Figure 18). With a gypsum plant and two salt works only recently established on the dry lake, Hess referred to the playa as a “periodic lake at Amboy,” giving the landform yet another moniker in a series that has ranged from “Perry’s Basin,” during the railroad surveying of the nineteenth century; “Amboy” itself within mining advertisements; and “Bristol Dry Lake,” on and off.

Yet a third geologist by the name of David Thompson, writing in 1929, noted that the town of Amboy relied on gypsum mills situated on Bristol Dry Lake. As one of the broadest and most detailed reports on the Mojave Desert, Thompson’s work continues to be cited today, for an aspect of history few have elaborated upon. With detailed descriptions of dry lakes and the roads, settlements, wells and mining enterprises which were built around them, Thompson noted that in addition to the gypsum mill in Amboy, the town had a hotel, general supplies, and a post office as of 1918. While the current highway through Amboy, later renamed Route 66, has received the most attention, despite its having once existed in duplicate along either side of the Santa Fe Railroad, another road in town has had a long history as well—Amboy Road, which passes through the dry lake, once connected the town to a
mining camp on Dale Dry Lake, south of Bristol Dry Lake. Amboy, with water and supplies from the railroad, once serviced a stagecoach route to the dry lake mining. Without the early documentation by geologists, focused as they were on economic development, dry lakes and the complicated water and supply chains used by people navigating through the desert, we might be hard pressed to counter Route 66 narratives that concentrate almost exclusively on the highway from the 1930s onwards.

Geologists can be thanked for additional recognition of Bristol Dry Lake, even during the post-World War II heyday of Route 66. In 1951, Hoyt Gale argued that Bristol Dry Lake was one the largest producers of sodium chloride in San Bernardino County; also writing for the Division of Mines, albeit a few years later, a Mr. William Ver Planck balanced this assertion by noting that playa production of salt paled in comparison to the evaporation ponds of the San Francisco Bay, to the north. Both, nevertheless, discussed ongoing interest in dry lake salt harvesting in the Mojave Desert. Their reports on salt production in California detail several San Bernardino County salt enterprises in the area, including Bristol Dry Lake.

Part of a northwest to northeast trough, Bristol Dry Lake is actually followed by two more playas, named Cadiz and Danby Dry Lakes. Occupied by various companies over the years, this chain of three dry lakes has been part of the economy of San Bernardino County for some time, yet they were nevertheless missed by a systematic aerial documentation for San Bernardino County in the 1950s (Figure 19). Flown by the United States Department of Agriculture, the aerials covered some 20,000 square miles of all but a small portion of the county. Pieced together
and annotated, the maps show only a few of the northernmost industry wells on Bristol Dry Lake, while entirely missing the salt trenches, the salt-encrusted portion of the dry lake, and the neighboring dry lakes to the south.

Overlooked by the Department of Agriculture in the 1950s, the three dry lakes were instead documented within Division of Mines and United States Geological Survey reports of the same era. With aerials and plans of their own, the reports reveal aspects of Amboy and Bristol Dry Lake otherwise difficult to discern today, such as the pivoted alignment of the salt trenches, whose orientation stems from a salt tram that once traveled northeast to Saltus, a switch located on the Santa Fe Railroad east of Amboy (Figure 20). The Mariposa Gazette once described this tramway, while closely linking Amboy to Bristol Dry Lake salt harvesting. The announcement noted:

Gypsum Found Near Amboy.
Amboy.—Large beds of gypsum have been discovered near here, and tests were made which have resulted in the statement that the owners will install a plant to manufacture the gypsum into plaster. A mill will be built near the Santa Fe station, and a tramway laid from the mill to the deposit, about two miles away. The promoters and owners of the mine are from Los Angeles and Topeka, Kas. 

Today, the layout, roads, supply distribution and salt mining history between Amboy and Bristol Dry Lake has been largely overlooked: Bristol Dry Lake, when mentioned, is often discussed in terms of its adjacency to Roy's Café and Route 66, as if the dry lake and salt harvesting came as an afterthought, unrelated to the economic development of the town.

While the dry lake history of Amboy and local roads was missed in the county-wide aerials of the 1950s, a later systematic approach would prove to be
more successful. As the first comprehensive and broadly-accessible educational tool regarding water in California, *The Water Atlas of California*, published in 1979, included a map of saline and alkali lands, shown in stripped blue and white throughout southern California (Figure 21).\(^{100}\) Assembled by a team of mapmakers and researchers and funded by the state government, the *Atlas* continues to stand out as an exceptionally detailed and beautifully articulated document on water in the West. Ironically, although the *Atlas* dealt with dry lakes in many of its discussions, its map on saline and alkali land was still wont to paint the Mojave Desert green.

Having published the first comprehensive map of groundwater basins throughout California,\(^{101}\) the *Water Atlas* also indicated that most aquifers in the Mojave Desert were relatively undeveloped as of the 1970s, with “less than moderate” pumping in much of the region (Figure 22).\(^{102}\) Listing factors that might impede their use, the map nonetheless failed to connect saline groundwater in the desert with the dry lakes above—with groundwater basins often named after ‘valleys,’\(^{103}\) many are actually dry lakes, which accumulate salt in these basins.

With 40 percent of water use in California already coming from groundwater as of the 1970s,\(^{104}\) the *Atlas* discussed growing interest in these underdeveloped groundwater basins, despite their saline content. Spread across chapters and in the undertones of captions, the book offered a subtle early warning of years to come, in which Mojave Desert groundwater has been proposed as a “reliable” alternative for urban centers grappling with a perpetually overdrawn Colorado River and ever-decreasing snow melt from the Sierra Nevada. With respect to water use, the saying
goes that groundwater can be returned during so-called wet years, always optimistic despite the lengthy and cyclical dry spells endemic to the greater Southwest. Historian William deBuys, in his latest book, *A Great Aridness*, has added climate change to an already fraught use of water in the West — with increasing extremes, such things as drought, high temperatures and faster snowmelt can be expected to worsen.

Today, Bristol Dry Lake has found itself at the center of one such water debate, in which an agricultural firm, Cadiz Inc., wishes to transport local groundwater to neighboring southwest cities. With lemon and grape stands at Cadiz, east of Amboy and Bristol Dry Lake, the firm has positioned itself at the nexus of three groundwater basins, belonging to Bristol Dry Lake, Cadiz Dry Lake, and Fenner Valley (refer back to Figure 22). Faced with some opposition, the company has derided the two dry lakes as a waste of water. It is perhaps not exactly what the authors of the *California Water Atlas* had in mind, when they delineated underdeveloped groundwater basins in the desert, given an aerial they chose to feature of Mesquite Dry Lake, located along the California-Nevada border, where groundwater is pumped for local agricultural fields. As the caption noted, such groundwater “cannot be replenished.” Yet the company has recently acquired agreements allowing it to expand the acreage of its irrigated fields, an expansion that would conveniently service the increased pumping infrastructure needed, should the firm be allowed to sell groundwater to urban centers down the line.

With stakes running into the billions at current acre-feet prices of water, irrespective of increasing value in the future, Cadiz Inc.'s proposal involves not just
the groundwater beneath Amboy and two additional basins, but also the very existence of Bristol and Cadiz Dry Lakes. While business establishments along Route 66 have been increasingly renovated and re-opened, dry lakes along the iconic corridors have found themselves in the midst of a convoluted preservation debate of their own. With a brilliant marketing ploy, Cadiz Inc. has described Bristol and Cadiz dry lakes thusly:

“The groundwater naturally flows downhill through the aquifer system over hundreds of years and ultimately reaches the dry lakes at the base of the watershed, where it becomes highly saline and evaporates through the surface. To minimize the loss of this clean groundwater to evaporation, Project wells will intercept the groundwater and capture it before it reaches the highly-saline brine. Once implemented, the Project would conserve and recover millions of gallons of water every year for beneficial use throughout Southern California.”

Planning to sell 50,000 acre-feet per year, for fifty years, Cadiz Inc. openly intends to draw-down the basin aquifers, and in so doing, “reverse the direction of water flow at the base of the watershed, so groundwater will be prevented from traveling to the highly-saline dry lakes, where it would become undrinkable and evaporate.”

Painting the dry lakes as contaminated by salt, Cadiz Inc. intends to save groundwater from the very processes that are ubiquitous across the region. Bare of all vegetation, playas, and the saline groundwater basins beneath them, could easily be mistaken for disaster, although this is what water and salt do in an arid land.

Well-versed in the language of sustainability, Cadiz Inc. estimates, at best, 32,000 acre-feet of groundwater recharge per year, exactly ten times the amount cited by the California Department of Water Resources in their most recent groundwater bulletin, updated in 2004 (a total recharge of 3,200 acre-feet, if one adds the State’s recharge estimates for Fenner, Bristol and Cadiz groundwater
basins). Being neither a statistician nor a hydrologist, I can’t speak to the odds of Cadiz Inc.’s estimate being so strangely similar to the state’s 2004 amount, albeit with an additional digit gained through the use of newly-developed, site-specific modeling techniques. Others, however, have noted that recharge estimates range extensively, depending on the modeling method employed; Cadiz Inc. has chosen some of the most optimistic estimates.

Optimism has pervaded in other aspects of the proposal, as well. Groundwater basins appeal for their ability to store water, as well as provide it. Noting that California over-draws its water allotments, even during periods of inordinate precipitation, Cadiz Inc. nonetheless hopes that water can be returned and retained underground during the region’s cyclical wet years, which may or may not appear anytime soon. Seemingly at odds with its portrayal of underground water flow and evaporation, the expectant renewability of groundwater remains a central point of the firm’s proposal.

Careful to differentiate itself from mining, Cadiz Inc. has positioned itself in opposition to the salt harvesting enterprises that operate on Bristol and Cadiz dry lakes, which the agricultural firm terms strip-mining despite its own imbalanced scales. With over a hundred years of salt harvesting on Bristol Dry Lake, several companies have made use of the brine beneath the basin and the very processes of aridity that Cadiz Inc. derides. In response to Cadiz Inc.’s plans, one such company, the National Chloride Company of America, has teamed up with local environmental organizations and ranchers to protect its interests and the high water tables that make the salt flats and dry lake possible.
Both sides face several hurdles. The ensuing debate has called into question what is worthy of water, preservation and place-making. As reported by the *Los Angeles Times* this past October, the U.S. Bureau of Land Management determined that Cadiz Inc. would not be allowed to use an existing railroad right-of-way to transport groundwater to the Colorado River Aqueduct and thereby on to urban centers. Now Cadiz Inc. must submit additional requests or prove that the project is significantly part of the railroad. Meanwhile, a few Senators are quietly refusing to fund any environmental reviews for the project, thereby further stalling the water transfer. “We’ll press on,” says Cadiz Inc.'s president.

Water and its scarcity has historically been the most common denominator in the Southwest, as Cadiz Inc. is well aware, yet evaporation and salt accumulation might be called the other side of the same coin. Despite this relationship, the role of salt in history and place is less well known today, as journalist Mark Kurlansky has noted:

> Salt is so common, so easy to obtain, and so inexpensive that we have forgotten that from the beginning of civilization until about 100 years ago, salt was one of the most sought-after commodities in human history.

Most commonly recognized as table salt, or sodium chloride, our bodies need salts for a variety of processes, among them the gradients that sodium ions create in and around animal cells, thereby regulating everything from nutrient intake to the cell’s very volume: without salt, cells would burst from too much water. Yet such a balanced understanding of water and salt remains elusive, particularly in a region where already limited supplies of water easily turn into salt.
Salt harvesting has also been the scapegoat in a variety of settings. Mined as rock salt or precipitated out of concentrated saline solutions, salt production has been responsible for some of the earliest forms of landscape degradation, particularly in non-arid environments, where excess brine has often been tossed out into the surrounding landscape, where salt did not belong — in addition to causing vegetation loss, such actions have led to land subsidence and collapse. In other places, salt harvesting has replaced the intricate habitats of tidal salt marshes, as in the salt ponds of the San Francisco Bay. As wetlands have long been filled in by residential housing, airports, and industry, the South Bay Salt Pond Restoration Project has started turning salt harvesting property into park space. With high temperatures and little rainfall, these salt flats once allowed water to evaporate while leaving behind salts in successive concentrations. It is a process made possibly by aridity, the difference being that in the Mojave Desert, dry lakes do this all the time.

Salt accumulation in Bristol Dry Lake occurs as groundwater near the surface evaporates, pulled up through the soil by capillary action and shedding salt. The National Chloride Company has utilized this natural process to harvest salt, forming trenches in the clay surface and supplementing the high water table with brine pumped from below. Over time, the water evaporates, leaving brilliant white crystals of sodium chloride along the trench edges, and calcium chloride in ever-increasing concentrations within the remaining liquid. The process is no more unnatural than the irrigated agricultural fields to the east of the playa, operated by the rival firm Cadiz Inc. As Robert Smithson once pointed out in “Frederick Law
Olmsted and the Dialectics of Landscape,” both farmers and miners can cultivate the land.¹²⁰

Yet most focus on salt in the southwest has involved irrigated agriculture. With a propensity for becoming undesirably saline in arid climates, irrigated soils pose a significant challenge to plant and farmer alike. In *A Guide for Desert and Dryland Restoration: New Hope for Arid Lands*, David Bainbridge focuses on salt buildup as it relates to agriculture, as well as ecosystems that have become more saline thanks to human activity, yet he doesn’t touch on dry lakes themselves.¹²¹ Sometimes, dry lakes are even seen as the ultimate failure of irrigated agriculture, as Wallace Stegner has pointed out:

> Over time, salts brought to the surface by constant flooding and evaporation poison the soil: the ultimate, natural end of an irrigated field in arid country is an alkali flat.¹²²

Today, water is increasingly being diverted to cities instead of fields in the southwest. In the first half of the twentieth century, Los Angeles drained Owens Valley, thereby displacing local farmers and causing dust hazards for the greater southwest. A few decades later, the city tried to do the same thing to Mono Lake, but was stopped by court injunction in the 1980s. Forced to give some of the water back, Los Angeles remains in search of potable water.

Two decades after the Mono Lake affair, the Imperial Valley entered agreements to sell portions of its water to San Diego.¹²³ The water transfer will leave many agricultural fields bare while reducing the amount of agricultural runoff into the Salton Sea — runoff which, ironically, helped lead to its toxicity in the first place.¹²⁴ With less water input, the Salton Sea is posed to evaporate away, leaving
behind increasing concentrations of salts and toxins and eventually threatening to become a very expensive aeolian health hazard for the greater southwest.\textsuperscript{125} With pressing health concerns, discussions around the Salton Sea have often pivoted on the emotional attachment to water as well, in particular a desire to preserve a large body of water in the middle of the desert, despite the Salton Sea naturally being a dry lake, meant to evaporate with time.

With such water transfer precedents, Cadiz Inc., the firm that hopes to sell Mojave Desert groundwater to neighboring southwest cities, has been careful to promote desert habitat preservation while distancing itself from dust hazards at Bristol and Cadiz dry lakes, which Cadi Inc. deems unlikely thanks to the calcium chloride in the playa surface layers, holding the dust down. Despite this admission of salt’s role in the landscape, the company does not consider dry lakes, evaporation or salt formation as inherent aspects of the very desert ecology it hopes to preserve.

Most recently, President Obama has designated 1.6 million acres of the Mojave Desert as the Mojave Trails National Monument, a preservation act that includes Route 66, the town of Amboy, and Amboy Crater, just west of Bristol Dry Lake\textsuperscript{126} (Figure 23). Supported by many of the same people who oppose Cadiz Inc.’s proposal, the Monument has largely skirted around Bristol Dry Lake and the commercial salt-harvesting enterprises that have operated here since before Route 66. Advertising for the national monument has also left out the ongoing debate regarding groundwater, Cadiz Inc. and the playa.

Instead, advertising for the national monument has focused on Amboy Crater, among other more easily-recognizable landforms and habitats. Having
always attracted tourists and passers-by with its conical dark form in an otherwise subtle landscape, Amboy Crater, just west of Amboy and Bristol Dry Lake, features prominently in the Mojave Trails campaign (Figure 24). As iconic as Roy’s Café, the crater actually sits in the midst of Bristol Dry Lake, although you wouldn’t know it from the ground: lava has now covered the western third of the dry lake, separating the playa into two, its western part now known as Bagdad Lake.\textsuperscript{127}

Ironically, it could be argued that the top of Amboy Crater provides one of the best overlooks of Bristol Dry Lake, to the east, yet promotional literature, photographs and videos of the newly-formed National Monument have cleverly disguised the dry lake from view — in particular, a video by The Wildlands Conservancy pointedly pans over Amboy Crater while looking west, away from Bristol Dry Lake and the salt-harvesting industry that might damage its otherwise “nature”-oriented presentation.\textsuperscript{128}

Taking similar aim at Amboy Crater, The Bureau of Land Management has also produced stunning photographs of creosote and lava, yet makes no mention of how the lava mingles with the playa below (Figure 25).\textsuperscript{129} Still other photographs by the Bureau feature Cadiz Dunes, giant shifting formations of sand that have come off of Cadiz Dry Lake, to the southeast of Bristol and Amboy (Figure 26). Although Bureau captions credit Cadiz Dry Lake for the dunes’ heritage, like the Wildlands Conservancy, the Bureau makes no mention of the salt evaporation ponds that lie adjacent. Looking at the photographs of the dunes, I can’t help but be reminded of the pyramids on Bristol Dry Lake, formed as they also are out of the surface of the playa (Figure 26, bottom left). As a distinctive aspect of this place, not unlike the
wind-formed dunes, the clay pyramids have been overlooked in favour of landscapes that do not suggest human influence. Like the salt trenches, they too are absent from National Monument materials.

Historian Richard White has written about this somewhat common response to industry in the landscape:

Modern environmentalists often take one of two equally problematic positions toward work. Most equate productive work in nature with destruction. They ignore the ways that work itself is a means of knowing nature while celebrating the virtues of play and recreation in nature. A smaller group takes a second position: certain kinds of archaic work, most typically the farming of peasants, provides a way of knowing nature...The attitudes of most Americans toward work indicate fundamental problems with how we conceive of the natural world and our place in it.130

Writing of how some environmentalists have "come to associate work—particularly heavy bodily labor, blue-collar work—with environmental degradation," White connects this view with "a larger tendency to define humans as being outside of nature and to frame environmental issues so that the choice seems to be between humans and nature."131 Drawing upon a long history of idealizing nature as 'pristine' and inherently separate from human influence,132 proponents of the new Mojave Trails National Monument have largely replicated this narrative: although Route 66 and nearby World War II training camps have been included in the new monument, the area's mountains and sand dunes have been depicted as untouched by people, ready for the recreational hike. Such portrayals leave wide margins between nature and industry—by cropping out Bristol and Cadiz salt evaporation trenches and their resultant clay pyramids, the Bureau of Land Management and The Wildlands Conservancy have reiterated that industry is not only separate from nature, but also from forming this place.
With a military base and bombing ranges to the west of Amboy and Bristol Dry Lake, the Marine Corps of Twentynine Palms has made similar points, subtly framing Bristol Dry Lake as virtually outside of nature — a 2012 environmental assessment noted that neither the Mojave fringe-toed lizard nor the desert tortoise obtain their water through the playas, thereby absolving the Corps of any negative impacts that munition runoff might have.\textsuperscript{133} Although the report acknowledged that habitat for the fringe-toed lizard includes playas, Bristol Dry Lake was rendered as unworthy of protection, a sump not quite within the ecology of the place. Hard-won environmental strategies, built around habitat for endangered and threatened species, can be bypassed when dry lakes are deemed out of range.

It remains to be seen how the newly formed Mojave Trails National Monument will relate to the ongoing debate regarding Cadiz Inc., Bristol Dry Lake, and the transportation of dry lake groundwater to the urban southwest — both the Monument and Cadiz Inc. are careful to step around each other, although Cadiz Inc. has publically stated its opposition. While National Monument advertising has quietly left out the dry lakes, Cadiz Inc. has taken a more direct approach, openly denigrating both the dry lake and the salt harvesting industry that uses the natural processes of evaporation and salt precipitation in this arid land. Despite the differences between the Mojave Trails National Monument and Cadiz Inc., I can’t help but feel that the two land use debates are related, given how they both utilize similar definitions of nature, albeit with varying degrees of tact — the one casts Bristol Dry Lake as being outside of nature, contaminated by industry; the other
portrays Bristol as unworthy of being nature, contaminated by salt. Both have sidestepped any real investigation of Bristol Dry Lake and its role in this place.

It was William deBuys’ endnote that brought me to Bristol Dry Lake, “where salt is still mined in the caustic bed of what was once a lake bottom.”134 While deBuys chose to describe Bristol as void of settlement, it was the intersection of salt harvesting, dry lake, and town that got me to stay. As such, the following is a final note on the town of Amboy, as read through Bristol Dry Lake.
IV. Town

The context is, you see these buildings for miles because there’s nothing else around. In the background is this barren lunar-like landscape.135

*Architect Taylor Louden, on Amboy and Bristol Dry Lake*

Southern California road maps show that Amboy had gasoline as early as 1916 (Figure 27), and yet popular history of Amboy often starts with Route 66 and the Dust Bowl migration of the 1930s. Infamous as the route for those heading into California, the story goes that an enterprising individual decided to set up a repair shop in Amboy, for all the barely-held-together vehicles trying to pass through.136 The man, Roy Crowl, and his son-in-law, Buster Burris, eventually developed the now iconic *Roy’s Motel and Café* on Route 66. The only motel and café left standing in Amboy,137 Roy and Buster get the most credit for building the town in the decades to come. Postcards tell a slightly different story.

An early aerial shows a gas station and a row of cabins on the south side of present day Route 66, across from where *Roy’s Motel and Café* now stand. (Figure 28) Captioned “Bender’s Service Station and Camp Amboy, California,” the aerial looks out over the now absent Santa Fe train station and Bristol Dry Lake to the south. One of the few postcards to show Amboy train station and Bristol Dry Lake, the cabins could easily be mistaken for present day cottages at *Roy’s*. While a road passes through Bristol Dry Lake in the background of the photograph, the playa itself is still hard to see.
Multiple gas stations in Amboy are visible in still other postcards, often confusingly recycled or shared between properties (Figure 29). In them, Conn’s and Bender’s, the same property albeit under different management, have nearly identical interior photographs of the cabins, with the main addition being an air conditioner above the beds, documented by Mojave Desert postcard pioneer Burton Frasher. Roy’s and Conn’s, on the other hand, rather mysteriously share a 1949 interior of Roy’s Café, captioned, “The Babes Roy’s Café,” by Frasher, although the two frames have been taken a few seconds apart.

Characterized by sparse buildings today, Amboy postcards that pre-date Route 66’s decommissioning reveal a strip-mall like effect of low buildings on either side of the highway (Figure 30). Ironically labeled “The Wide Open Spaces” on one such postcard, the adjoining playa remains obscured. Yet another postcard features a town sign, Conn’s Café, and an as-yet unmentioned Bill’s Texaco Service and Café, north of Route 66 in the image’s far left. By the end of World War II, writes historian Matt Bischoff, Amboy had at least two cafes, a garage and more than 250 residents, as well as a school house, section houses, and several salt refinery buildings, yet these other properties, sometimes evidenced in early postcards, go largely unmentioned in popular accounts.138

Such early photographs also show that both the town’s overall architecture and Roy’s Café were once much less reserved than current iterations. Paneled as they all were with a plethora of rectangular signs, Roy’s Café was once largely indistinguishable from its competitors; its iconic sign and soaring roof would not be
acquired until 1959 (Figure 31). Nor are Roy's cabins, still standing next to Roy's motel lobby, particularly unique—once common along highways up and down the state, several rows of single-room accommodations used to line Route 66 in Amboy (Figure 32). As the only establishment left in Amboy, Roy's has come to appear more exceptional than it once was. The same might be said of its architecture, which has also come to exemplify minimalism and the postwar heyday.139

Popular discourse has largely left out Roy's competitors, as well as the rest of town. Almost invariably focusing on the last motel left standing, such narratives give few clues regarding the town's school, cemetery, church or post office; they offer even less input on the lives and homes of permanent residents and staff.140 Focusing on Roy's, these narratives also turn their backs on Bristol Dry Lake, to the south; some postcards even go so far as to paint the motel and its surrounding area as green (Figure 33).

In “Thoughts in a Dry Land,” historian Wallace Stegner has written about the colour green in the West:

Scale is the first and easiest of the West’s lessons. Colors and forms are harder. Easterners are constantly being surprised and somehow offended that California’s summer hills are gold, not green. We are creatures shaped by our experiences; we like what we know, more often than we know what we like. To eyes trained on universal chlorophyll, gold or brown hills may look repulsive. Sagebrush is an acquired taste, as are raw earth and alkali flats.141

Stegner is writing of aridity, dry lakes, and bare ground in the southwest. In popular accounts of Amboy, aridity and the dry lake basin are all around, yet rarely the focus
point. In his landscape histories, told as much with autobiography as with historical accounts, Stegner has also quipped that, “the principal invention of western American culture is the motel.”

Regarding Route 66 and Amboy, many have earnestly told stories along these lines — accounts of Amboy have often focused on the motel right after World War II, to the detriment of other narratives, even those with more than one motel.

Regarding history and preservation, we are often forced to grapple with what remains—with the visible, last-standing elements of a place. Since Amboy and Route 66 were bypassed in the 1970s, several of Amboy’s buildings have been demolished. What remains includes Roy’s, a café with gas pumps outside, a motel lobby, several white cabins, and a longer motel building in the back; a school with an arched gate sits to the east of Roy’s, while a church and post office are located across the way (Figure 34).

Not long after the bypass, Amboy became part of a film-industry ghost town, particularly for fictions with a murderous bent. Weathered structures set against an open dry lake have added to the allure, although portraiture has not always been especially accurate. A 2001 music video by Enrique Iglesias physically altered the church in Amboy, adding green wooden frames to the white exterior, in an apparent attempt to disguise the large green door that they also propped against the front façade (Figure 35). The same video took liberties with the climate, reveling in hazy California light and the open views of intermountain basins in one second, and conjuring out-of-season downpours in the next. Cleverly zeroing in on the drenched
heroes, the camera frame has obscured the film’s change of place and the way that the rest of the basin remains dry.

A chicken franchise owner, Albert Okura, having fallen in love with the place, has since bought the town. He has managed to re-open the café and gas station, after some rather harrowing experiences bringing the local infrastructure up to par. Interested in maintaining a 1950’s mien, Mr. Okura has also taken over operation of the post office, in order to preserve the town’s unique postal code and now-outdated postal equipment.

“It’s modernism as nostalgia,” says architect Taylor Louden, regarding the wistfulness that Amboy now elicits. With many of the town’s original buildings and signs long removed, Amboy’s remaining structures, icons of a postwar heyday, offer narratives of a once better past, just out of reach. While many have written about Route 66, Mr. Louden stands out for connecting contemporary accounts of Amboy, focused as they often are on the few remaining buildings in town, with Bristol Dry Lake to the south. As quoted in the beginning of this chapter, he has noted:

The context is, you see these buildings for miles because there’s nothing else around. In the background is this barren lunar-like landscape.

Once a small strip mall with repetitive signage and far less restrained façades, remaining buildings in Amboy have almost become more modern, standing as they do in a dry lake basin, pared-down and uncluttered by other views. (Figure 36) Mr. Louden has touched upon Bristol Dry Lake’s effect on contemporary interpretations of the town, an aspect of place at the intersection on architecture and landscape.
V. Reflections on Landscape

Architectural historian Caroline Constant and landscape historian Thaisa Way have written about the often-overlooked interplay between modern architecture and the landscape. Demonstrating that even modern buildings were designed with landscape in mind, Caroline Constant has noted a tendency among some professionals to characterize modern architecture against a seemingly blank open background:

Despite such broad efforts to bridge the disciplinary divide, certain landscape architects continue to perpetuate the myth, promulgated by Hitchcock and Philip Johnson in the exhibition _Modern Architecture_, held at New York’s Museum of Modern Art in 1932, of the untouched landscape as the most appropriate background for modern architecture.¹⁴⁷

Elaborating on Constant’s work, Thaisa Way has remarked that Constant, “has deconstructed the abstract white building placed on the tabula rasa as the quintessential product of modern architecture, a deeply embedded trope in architectural as well as landscape history.”¹⁴⁸ I can’t help but think of Amboy when reading this, with its brilliant white buildings standing out against the basin plain. All too easily read in terms of the buildings alone, the landscape plays an integral role in Amboy’s identity, and not simply for its view.

Landscape, imbued with cultural meanings, as Constant argues, is thus expressed through “social, political and physical structures” and the vast scales of the greater world.¹⁴⁹ Thaisa Way explains landscape so: that it can be both a “medium,” an “agent,” “a way of seeing,” and “a signifier of identity” in our world.¹⁵₀
Taken together, Constant and Way indicate that landscape can be both a methodology used in historiography, and an actor in and of itself — a landform, if you will.

Such understandings of landscape differ from one of the oldest definitions of landscape as picture — a place “seen from outside,” as art historian Lucy Lippard has described it. 151 For Lippard, place has more meaning and allure. On the complexities of place, Lippard has written:

Most often place applies to our own ‘local’—entwined with personal memory, known or unknown histories, marks made in the land that provoke and evoke. Place is latitudinal and longitudinal with the map of a person’s life. It is temporal and spatial, personal and political. A layered location replete with human histories and memories, place has width as well as depth. It is about connections, what surrounds it, what formed it, what happened there, what will happen there.152

In Amboy and Bristol Dry Lake, place and landscape should perhaps be a little more inter-changeable: the playa, so often disguised as merely the background in photographs of Amboy, has depth. In Amboy, the dry lake cannot be excluded from personal experience, memory and enchantment, as it frames and alters buildings that now appear more modern than they once did. Walking past pyramids, salt trenches, and painted white tires in the midst of the salt flats, Bristol itself is filled with the layered histories and forms that Lippard discusses, albeit in ways not as easily or broadly recognized as those of Amboy’s iconic buildings. Here at the intersection of the Santa Fe Railroad, Route 66, and Bristol Dry Lake, place continues to be formed by sometimes contradictory interpretations of aridity and the playa, which are themselves also processes that produce the dry lake over
geologic time. Lucy Lippard would call this feeling *place*, yet *landscape* might just as aptly apply, being, as it is, a rather difficult to pin-down concept, debated for some time. For my part, I have come to think of Bristol Dry Lake and landscape less as *picture*, and more as *landform*.

Garret Eckbo, one of three founders of modern landscape architecture, once spoke against characterizing landscape as “mere decoration,” or backgrounded view. He noted,

In spite of the moderating impact of the modern movement, we are still conditioned by formal versus informal, architecture versus nature—conflicts which make true landscape architecture impossible. To be true, landscape architecture must do what its name implies—it must integrate landscape and architecture. True landscape architecture produces systems of relations in which neither ‘landscape’ nor ‘architecture’ loses its integrity, disappears, or becomes mere decoration for the other.153

In contrast to a singularly pictorial definition of landscape, Eckbo positioned landscape on par with architecture, and suggested ways of reading the intersection of iconic Amboy buildings with Bristol Dry Lake, on equal ground. Endeavoring to sort through my own understanding of Amboy buildings through the lens of landscape, I have found myself returning to Eckbo’s equal footing, and the landform that I believe makes it possible.

William DeBuys has noted that reading the land isn’t the same as reading a newspaper or a map.154 A map, for one, doesn’t look up. Writing of such an experience, DeBuys once remarked:

Mapmakers typically depict the aridlands of the world in colors like buff and buckskin, in contrast to the greens of wetter regions...But you would still be
missing the most definitive color of the southwest, which is found not beneath the feet, but overhead.\textsuperscript{155}

With colours in the West formed by aridity, for deBuys, landscape history is as much about inherent processes of place as it is with any physical artifact or sign.\textsuperscript{156} As such, Amboy is more than its iconic buildings, isolated on a background plain. Unable to understand Amboy and Bristol Dry Lake merely from a top-down, aerial or archival approach, history must include the way evaporation and salt precipitation have formed this place.

Landscape historian John Brinckerhoff Jackson once candidly revealed that he “[holds] the peculiar belief that the value of history is what it teaches us about the future.”\textsuperscript{157} Writing of the land and land use as a primary source, Jackson critiqued accounts that rely solely on archival material while “dealing with some remote personage, some remote event, someone’s \textit{perception} of the landscape.”\textsuperscript{158} In particular, Jackson noted how landscape history can be incredibly narrow, if we rely solely on those versions of the landscape that have official documentation:

Those [landscapes] for which we have plans and maps and legal documentation and official descriptions are being studied and written about. But an infinitely greater number of structures and spaces have no documentation at all.\textsuperscript{159}

Aspects of both Amboy and Bristol Dry Lake have fallen into this latter category, particularly regarding the intersection of town and landform. While some accounts have focused on one or the other entity, be it dry lake geology or iconic Amboy motel, rarely have histories done justice to this easily overlooked dry lake and how it has formed place.
A more nuanced story of Amboy and Bristol Dry Lake would involve many additional iterations, among them a more detailed review of the people who have shaped and been shaped by this place; the same can be said of the many salt harvesting enterprises of the area, in particular those on Bristol, Cadiz, Danby and Dale Dry Lakes. Utilizing endemic processes of aridity and dry lakes, salt harvesting offers perspectives into industry, preservation, place and history that have yet to be explored.

A third point of interest remains the agricultural firm Cadiz Inc., located as it is at the nexus of three groundwater basins and a chain of three dry lakes. Being in the midst of so many interesting vertices, Cadiz Inc. and Cadiz Dry Lake could be investigated with similar methodologies to this thesis, although I would recommend not getting quite so lost. The coming years entail the complicated maneuvers and contradictory accounts of multiple parties, each with a story to tell regarding dry lake groundwater and its proposed transfer to neighboring southwest cities. I have endeavored to set a tale somewhat in the middle of the two most common positions, perhaps surprisingly finding that a mining industry can reveal certain oversights within both sides of the environmentalism-versus-aquifer argument, neither of which have seriously included the dry lake in their preservation debates.

Having come to Amboy and Bristol Dry Lake through William deBuys’ brief description of Bristol as sterile and shadeless, it has been my pleasure to come across material that positions this place at the intersection of architecture and landscape, nature and culture, town and landform. Made by the processes of evaporation, salt precipitation and aridity, Bristol Dry Lake and its tangents offer
opportunities to fill in those gaps in landscape history that J.B. Jackson once mentioned — those places and landforms that, at first glance, are seemingly just outside the frame.
End Notes

1 DeBuys, Salt Dreams, 259 note 4.
2 See Ver Planck, “Salt if California,” 23 for a description of local roads that run around or through the area's dry lakes. In the case of Amboy Road, the road connects Amboy and Bristol Dry Lake to Dale Dry Lake, to the south.
3 Hayden, Power of Place, 16.
4 Ibid., 4.
5 Lippard, Lure of the Local, 5.
6 Hayden, Power of Place.
7 Lippard, Lure of the Local, 4-5. Lippard quotes landscape historian Dean MacCannell in discussing how autobiography can at times be more objective than canons that have historically striven for objectivity through the removal of the self: “Interestingly, the one path that still leads in the direction of scholarly objectivity, detachment, and neutrality is exactly the one originally thought to lead away from these classic virtues: that is, an openly autobiographical style in which the subjective position of the author, especially on political matters, is presented in a clear and straightforward fashion. At least this enables the reader to review his or her own position to make the adjustments necessary for dialogue.”
8 Lippard, Lure of the Local, 7.
9 Solnit, A Field Guide to Getting Lost.
10 Lippard, Lure of the Local, 13.
11 DeBuys, Salt Dreams, 3.
12 See Hayden, Power of Place, 18, for details on historiography that incorporate the senses. Hayden writes, “It has often proved easier to study either the natural or the built components of a cultural landscape than to wrestle with the combination of the two in the concept of place. In recent decades, as geographers John Agnew and James Duncan have shown, social scientists have frequently avoided ‘place’ as a concept, and thus have sidetracked the sensory, aesthetic, and environmental components of the urbanized world in favor of more quantifiable research with few epistemological problems.”
13 Zelizer, Remembering to Forget, 16-48.
14 Sontag, On Photography, 22.
15 Sontag has also described photography as “both a pseudo-presence and a token of absence,” and a longing for an unattainable past. Such a description is aptly applied to both the nostalgia for Amboy and the dry lake just behind it.
16 Cronon, “A Place for Stories,” 1372. Regarding the process, Cronon wrote: “Each new version of the essay, and each letter and conversation that critiqued it, returned me to where I began: each became a different story about the meaning of stories, a different argument about how narrative does and does not ground itself in nature and the past.”
17 Rushdie, “Magic in Service of Truth.”
18 For railroad history, see Bischoff, Life in the Past Lane, Orsi, Sunset Limited, and Deverell, Railroad Crossing.
19 Krimm, Route 66: Iconography of the American, 39.
20 Bischoff, Life in the Past Lane.
22 Technically now called the Burlington Northern & Santa Fe Railway, Santa Fe is the most easily recognizable name for this portion of the tracks. For a thesis already mired in the many name changes of dry lakes, I have tried to reduce the number of railroad and highway name changes in this text, and thus generally use the Santa Fe when referring to the tracks.
24 See Krimm and Bischoff for details on the evolution of the highway in the Mojave Desert.
25 Bischoff, 9.
26 Ibid., 9.
27 Ibid., 22-23, 26.
29 Ibid., 10.
31 Bischoff, 42.
32 See Wallis, Route 66: The Mother Road and Bernard, American Route 66: Home on the Road for details on the people interested in reviving Route 66.
34 Ibid., 13. And see Bischoff, Life in the Past Lane, for details on highway alignments.
36 Ibid., 15.
37 Ibid., 15.
38 Ibid., 13, 15.
39 Ibid., 14.
40 See McPhee, Assembling California and Basin and Range, for details on California geology. See Gale, “Geology of the Saline Deposits, Bristol Dry Lake,” 4-5, and Ver Planck, “Salt In California,” 23, for details on Bristol Dry Lake geology.
41 Brown, “Was there a Pliocene-Pleistocene Fluvial-Lacustrine Connection between Death Valley and the Colorado River?,” 290.
42 Ibid., 290.
43 See Gale, “Geology of the Saline Deposits of Bristol Dry Lake,” 7, for how these trenches came to be oriented. The original evaporation trenches aligned to a salt tram that headed northeast into Saltus, located on the Santa Fe railroad approximately three miles to the east of Amboy.
44 Stegner, Where the Bluebird Sings to the Lemonade Springs, 52.
45 Fox, Playa Works: The Myth of the Empty, 44.
46 Fox, Playa Works: The Myth of the Empty, 130.
48 See Rosen, “Paleoclimate and Basin Evolution of Playa Systems,” 2. He writes, “Unfortunately, the study of inland saline basins, like many sub-disciplines of geology, is mired in poorly defined or misused terminology, and this makes the meaning of all the above terms confusing to the uninitiated.”
49 See John Charles Fremont, The Expeditions of John Charles Fremont, for a variety of dry lake references.
50 Stegner, Where the Bluebird Sings to the Lemonade Springs, 69.
51 Smithson, Robert Smithson: The Collected Writings, 164. Olmsted, father of landscape architecture in the U.S., had some measurable distaste for the southwestern desert: in a letter to his wife, he wrote that, “the whole aspect of the country is detestable.”
52 deBuys, Salt Dreams, 8.
53 Ibid., 8.
55 USGS, “Amboy, Calif.”
56 USGS, “Playas.”
57 See Neal, Playas and Dried Lakes and Rosen, Paleoclimate and Basin Evolution of Playa Systems, for details on the many origins and names of playas.
58 Brown, “Was There a Pliocene-Pleistocene Fluvial-Lacustrine Connection between Death Valley and the Colorado River?,” 290.
59 Stegner, Where the Bluebird Sings to the Lemonade Springs, 69. On newcomers finding themselves in an arid land and grappling with naming, Stegner has written: “They were at the border of strangeness. Only a few miles into the West, they felt the difference; and as [Walter] Webb says, the degree of strangeness can be measured by the fact that almost all the new animals they saw they misnamed. The prairie dog is not a dog, the horned toad is not a toad, the jackrabbit is not a rabbit, the buffalo is not a buffalo, and the pronghorn antelope is more goat than antelope. But they could not mistake the aridity. They just didn’t know how much their habits would have to change if they wanted to live beyond the 98th meridian.”
Europe, Anglo-Americans found it different, daunting, exhilarating, dangerous, and unpredictable, because, coming to it from earlier frontiers where conditions were not unlike those of northern Europe, Anglo-Americans found it different, daunting, exhilarating, dangerous, and unpredictable, and entered it carrying habits that were often inappropriate and expectations that were surely excessive.

Steegner, *Where the Bluebird Sings to the Lemonade Springs*, 57. Steegner has written regarding early perceptions of the Western landscape: "It has been misinterpreted and mistreated because, coming to it from earlier frontiers where conditions were not unlike those of northern Europe, Anglo-Americans found it different, daunting, exhilarating, dangerous, and unpredictable, and entered it carrying habits that were often inappropriate and expectations that were surely excessive."

Fremont, *Map of an Exploring Expedition to the Rocky Mountains in the Year 1842*.


Bischoff, *Life in the Past Lane*, 97-100

Gardner, *Across the Continent on the Kansas Pacific Railroad*, No. 102 and 103.

Charlton, "Westward, the Course of Empire Takes Its Way": Alexander Gardner’s 1867 Across the Continent on the Union Pacific Railway, Eastern Division, Photographic Series.

Ibid. See also Calhoun, *Letters of Alfred R. Calhoun*, 20.

See Palmer, *Report on the Surveys Across the Continent in 1867-68*, for details on the railroad hoping to take over some of the army’s duties. Also see Calhoun, *Letters of Alfred R. Calhoun*, 18-19, for John N. Marnell’s annotative clarifications of the survey.


See Neal, *Playas and Dried Lakes*, 74 for a discussion of Mr. Russell’s pioneering research.


Digital Public Library of America, "Sailing on Rosamond Dry Lake in the ‘Desert Queen, 1905: Description."


Automobile Club of Southern California, "National Old Trails Road, Issued by the Automobile Club of Southern California" (1926), 132 – 133.

ICM Productions, "Restoring Amboy California Albert Okura The Chicken Man."


Perkins, *White Heart of Mojave*, 44.


Bischoff, 82.


The Center for Land Use Interpretation, “Bristol Dry Lake.”

King, "Salt Mining at Bristol Dry Lakebed Outside of Amboy CA."


Thompson, "The Mojave Desert Region, California," 23.

Ibid., 690.

Thompson, "Routes to Desert Watering Places in the Mohave Desert Region of California," 125-126, 221.

Gale, "Geology of the Saline Deposits of Bristol Dry Lake," 7.


See Bischoff, *Life in the Past Lane*, for an overview of Santa Fe depots and salt harvesting enterprises.

Mariposa Gazette, Number 45, 2.


Ibid., 68-69.


See DeBuys, *A Great Aridness*, for details on climate change and water in the Southwest.

Ibid., 38.

See Bernard, *American Route 66: Home on the Road*, for details on current business owners who have found themselves almost inexplicably re-opening Route 66 icons.


Bredheoef, “Comment on the hydrogeology of Proposed Cadiz Project.”

See Gale, “Geology of the Saline Deposits, Bristol Dry Lake, San Bernardino County, California” and Bischoff, *Life in the Past Lane*, for details on salt harvesting companies on Bristol Dry Lake.


Boxall, “BLM decision sets back Cadiz plan to sell Mojave groundwater.”

Ibid.


See Alberts, *Molecular Biology of the Cell*, 624, 627. Plant cells, in contrast, depend on their cell walls to keep them from swelling beyond control and lysing apart.

Ibid., 322.


See Bainbridge, *A Guide for Desert and Dryland Restoration* for details on irrigation agriculture and salt.

Stegner, *Where the Bluebird Sings to the Lemonade Springs*, 92.

Spagat, “California's Salton Sea Threatened By Water Transfer To Cities.”

See deBuys, *Salt Dreams*, for details on the Imperial Valley and the Salton Sea.

Iovenko, “Toxic Dust From a Dying California Lake.”

Bureau of Land Management, “Mojave Trails National Monument.”

Gale, “Geology of the Saline Deposits, Bristol Dry Lake,” 3.

Wildlands Conservancy, “Save the Hearth of the Mojave Desert.”

Wick, Bureau of Land Management, “Mojave Trails National Monument Photo Gallery.”

White, “Are You an Environmentalist or Do You Work for a Living?,” 171.

Ibid., 172.


Louden, quoted by Chamberlain, “New Kicks on Route 66 for Commercial Builders.”


See Bischoff, *Life in the Past Lane*, for details on Route 66 in the Mojave Desert.

Ibid., 82-83

Ibid., 84.

With archives spread across hundreds of miles, this thesis is by no means a survey of Amboy postcards. Rather, this introductory account draws from the images that are most widely accessible, and notes oversights in the popular narratives that are often perfunctorily drawn from such
photographs. A more in-depth analysis of Amboy postcards and town history is deserving of another thesis.

Stegner, *Where the Bluebird Sings to the Lemonade Springs*, 53.

Stegner, *Where the Bluebird Sings to the Lemonade Springs*, 72.

Hitcher (1986), Kalifornia (1993), and Hero (Enrique Iglesias, 2001) were filmed in Amboy.

Louden, quoted by Anton, "Destiny in the desert."

Matt Bischoff has argued that romanticism and nostalgia have been a part of Route 66 since the beginning. See Bischoff, *Life in the Past Lane*, 1.

Louden, quoted by Chamberlain, "New Kicks on Route 66 for Commercial Builders."


Ibid., 7.

Eckbo, quoted by Constant in *The Modern Architectural Landscape*, 5.


Ibid., 17.

See DeBuys, *A Great Aridness*, for details on processes in the West, including aridity and climate change.

Jackson, *Discovering the Vernacular Landscape*, xi.

Ibid., xi.

Ibid., xi.
Figure 1. The northern portion of Bristol Dry Lake is made up of a smooth clay surface. Author, 2014.
Figure 2. Sheets of desicating salt in the southern portion of Bristol Dry Lake. Author, 2014.
Figure 3. White tires mark an industry road on the dry lake, with a shed and water tank nearby. Author, 2014.
Figure 4. Dry Lakes in Southern California. At least twenty-two dry lakes exist in the vicinity of the Barsow-Needles stretch of Route 66 and the Santa Fe Railroad, illustrated in yellow and red on this 1918 Automobile Club of Southern California map. Edited by author to highlight Bristol Dry Lake (red) and dry lakes in the greater vicinity (yellow). Bristol Dry Lake is located in a chain of three dry lakes, followed to the southeast by Cadiz and Danby. Original map courtesy Automobile Club of Southern California, reproduced in Bischoff, *Life in the Past Lane*. 
Top:
Figure 5. Salt trench on Bristol Dry Lake. Author, 2014.

Bottom:
Figure 6. Aerials of the salt trenches on Bristol Dry Lake. Courtesy Google Earth Pro.
Figure 7. Clay pyramids on Bristol Dry Lake. Author, 2014.
Figure 8. View of Bristol Dry Lake from Amboy and Route 66. Even the slight berm of the railroad, seen here as a dark line behind the buildings, obscures the dry lake just to the south. Author, 2014.
Figure 9. Composite image of the Santa Fe freight cars going by.

I took these photos by pivoting 45 degrees eight times, first concentrating on the ground, as shown in Figure 8, and then repeating the 360 degree turn while focused on the sky. By chance, this second turn happened to catch the freight cars passing through.

Still thinking that I had missed the dry lake entirely, it was only later that I realized that Bristol Dry Lake’s golden brown surface was just visible behind the railroad berm. When the freight cars pass through, the dry lake is obscured even further. Author, 2014.
Figure 10. Famous dry lakes of Southern California. The Salton Sea, Owens Lake, Mono Lake, Death Valley's Badwater Basin and Searles Dry Lake are perhaps the most famous dry, dried or drying lakes in California, highlighted here on a 1874 Craven Geological Survey Map detail. Although Cadiz and Danby dry lakes were depicted, Bristol Dry Lake was not originally drawn. Detail courtesy David Rumsey Collection.
Figure 11. The title of this thesis is more than a description of space as the Santa Fe Railroad and Route 66 pass Bristol Dry Lake -- it is also the methodology used to locate an elusive landform in archival material. Author, 2015. Original maps courtesy Automobile Club of Southern California and reproduced in Bischoff, *Life in the Past Lane*. 
Figure 12. “The Mojave Desert,” by Alexander Gardner. A noted war photographer, Gardner’s photographs of the transcontinental railroad survey through the Mojave Desert were some of the first of their kind to be published. Despite encountering dry lakes, his book, *Across the Continent on the Kansas Pacific Railroad*, featured basin vegetation instead. Courtesy Wikimedia.
Figure 14. Farm Security Administration photographer Jack Delano documented the Santa Fe Railroad in 1943. Charged with documenting workers and railroad, he missed Bristol Dry Lake, just visible behind Amboy Crater on the horizon to the right. Courtesy Library of Congress.
Figure 15. Burton Frasher’s 1948 photograph of the salt refinery on Bristol Dry Lake. Courtesy Pomona Library.
Figure 16. An undated postcard of Bristol Dry Lake, one of the few to feature the landform itself. The caption on the back reads, “The Salt Mine--High grade rock salt is literally scooped from the torrid desert here near Amboy, California. It is cleaned and shipped all over the country for commercial use. In this dry and arid region the temperature sometimes climbs to ‘ten feet above zero.’” Aerial by Max Mahan. Author’s collection.
Figure 17. A common navigational map of today, in which the salt trenches are painted light blue and mountains are shaded in relief. In contrast, the dry lake has been obscured beneath a solid color. Courtesy Google Earth.
Figure 18. One of the first published images of Bristol Dry Lake, published by Frank Hess in 1910, when the basin was best known for its gypsum mining. Courtesy United States Geological Survey.
Figure 19. A missed opportunity: the Department of Agriculture’s systematic aerial documentation of San Bernardino County, in 1953, which failed to document Bristol and Cadiz Dry Lakes. Salt harvesting on Bristol Dry Lake, just visible in the bottom portion of the aerial, was largely cut-off. Courtesy San Bernardino County Aerial Collection.
Figure 20. A 1950s aerial of Bristol Dry Lake. Salt harvesting trenches, oriented diagonally against the grip, have been dug in line with a tram that ran northeast through the dry lake. Courtesy Division of Mines.
Figure 21. Published in 1979 as part of The California Water Atlas, this map shows “saline and alkali lands” depicted in blue and white strips. Bristol Dry Lake, called out above, is visible as the northernmost playa in a chain of three dry lakes. Courtesy California Office of Planning and Research and California Department of Water Resources.
Figure 23. The newly-formed Mojave Trails National Monument, outlined in red. While including Route 66, Amboy and Amboy Crater, the national monument leaves out salt harvesting on Bristol Dry Lake and Cadiz Inc. property. Map detail courtesy Bureau of Land Management.
Above: Figure 24. Postcard of Amboy Volcano, with the town of Amboy visible in the middle ground between lava and mountains; the golden edge of Bristol Dry Lake is just visible in the upper right. Photographer Max Mahen. Author’s collection. Below: Figure 25. Amboy Volcano, Mojave Trails National Monument. Courtesy Bob Wick, Bureau of Land Management.
Figure 26.

Above and bottom right: The Cadiz Dunes, formed by sand from Cadiz Dry Lake, east of Amboy and Bristol Dry Lake. Courtesy Bob Wick, Bureau of Land Management.

Bottom left: The pyramids south of Amboy, also formed from the surface of a dry lake. Author, 2014.
Figure 27. An early road map of the highway through Amboy. Courtesy the Automobile Club of Southern California.
Figure 28. The town of Amboy, the Santa Fe train station, and Amboy Road through Bristol Dry Lake. Author, 2016.
Figure 29. The recycling of Amboy photographs. Author’s collage, 2016. Photographs courtesy Pomona Library and Joe Sonderman.
Figure 30. “Wide open spaces.” Author, 2016. Black and white photographs courtesy Joe Sonderman.
Figure 31. Amboy cafes over time. Author, 2016.
Figure 32. Cabins in Amboy. Author, 2016. Original photographs courtesy Joe Sonderman.
Figure 33. Amboy, painted green. Courtesy the Illinois Digital Archives.
Figure 34. From the top, Amboy school, the church, and the post office across from Roy’s Cafe. Author, 2014.
Figure 35. A still from the video Hero, by Enrique Iglesias, showing the altered church in Amboy. Courtesy YouTube.
Figure 36. A wide place: Bristol Dry Lake and Amboy, California. A montage. Author, 2014.
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