Remnants

Katherine Nolan

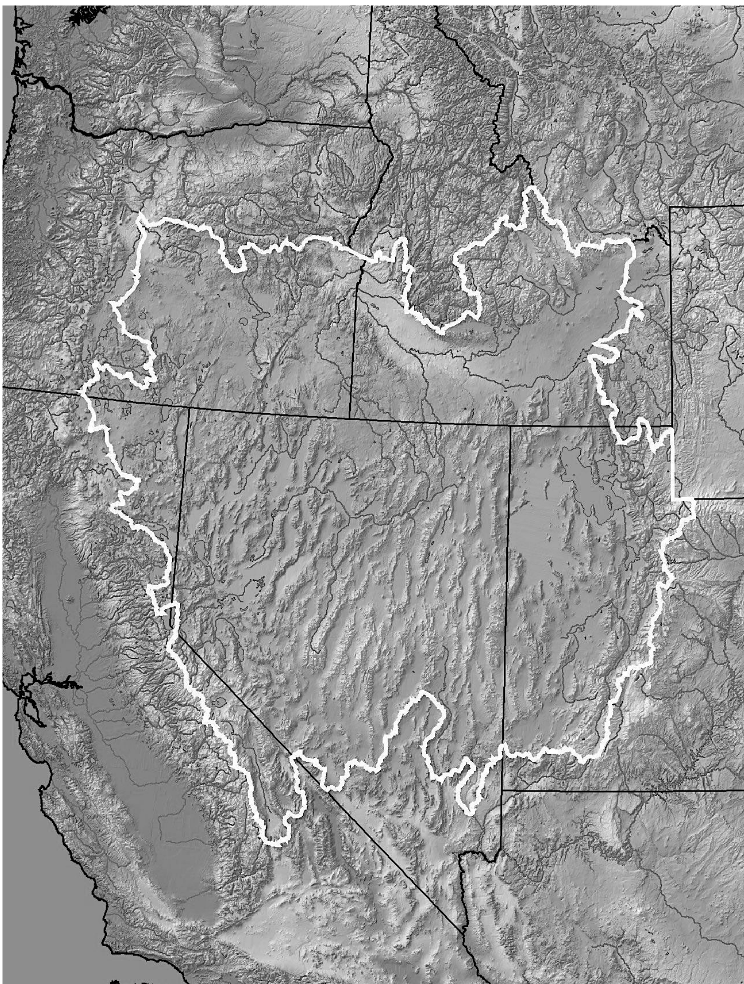
Remnants

Contents

Foreword: Bones	11
Shells	25
Gold	51
Topaz	85
Afterword: Wood	113
Acknowledgements	127
Notes & Image Credits	129

It is rock—geology—that dominates this landscape. In lusher landscapes, it is as though the skin and bones of the earth are dressed in verdure; here the earth is naked, and geological processes are clearly visible. It is geological time and scale that dominate this landscape, dwarfing all the biological processes within the uplift of ranges, the accretion of basins.

Rebecca Solnit, *Savage Dreams: A Journey into the Hidden Wars of the West*



Foreword: Bones

A few months ago

The deer carcass startled me, though I've found skeletons in the Great Basin before. Maybe it was the way the cavernous eye sockets peered out at me from the sandy soil, so stern and suspicious. I got the sense I was the one who had been sighted first. Or maybe it was the way the remains had been scattered throughout the sagebrush, less a skeleton and more a disjointed collection of sun bleached bones. I could only imagine what violent forces had led to this shrine of disfigurement and decay.

There was something beguiling and beautiful about the bones, however. The desert had laid bare the marvels of the deer's body, uncovering the particulars of its perfect organic architecture. Hesitantly, I picked up the skull, which was hardly larger than my hand and weighed next to nothing. I

ran my finger along the seam of the skull plates, which meandered through the dirt-caked ivory like a twisting river. A female deer, no antlers. The jaw sat nearby and I attached it for a moment, the gritty teeth grinning maniacally at me before I hastily put both bones down. Beside it lay a chain of vertebrae with a few broken ribs jutting out, and a leg with some skin and fur still attached, sinking into the soil just beyond. A few feet away I found the pelvis, long and symmetrical like a dormant moth.

For a moment I considered rearranging the bones, skull to spine to hips to legs, putting the puzzle pieces back together again. It was strange to imagine that this brittle and broken scaffolding had once held up the body of a living animal, before predation or hunger, along with scavengers and the relentless desert sun, had transformed her into a striking emblem of the Great Basin's harshness.

I thought back to the matted mule deer that had taken up residence in our backyard a few years ago, on the eastern edge of the basin. She had found us while searching for a safe place to give birth, her spindly legs just barely bearing the weight of her swelling belly. When the babies came in the spring I found her lying helplessly on a pile of wood chips, two damp fawns impatiently poking their noses at her stomach. I still remember the way she looked at me, chest heaving, legs splayed out awkwardly, inky black eyes both desperate and determined. She seemed far too small and frail to have carried the speckled creatures that now danced hungrily around her on uncertain, lanky legs.

Maybe it was the memory of those black eyes, and the dark caves that now layed exposed in their absence, that unsettled me about the scene. How the looks of birth and death were both so murky and impenetrable, each threshold so sudden and shocking to the body. Or maybe it was that no matter how carefully I put the pieces back together, I could never reverse the process that had turned a vibrant animal into a jumble of scattered remains.

A small shard of rib, that's all I took, leaving the rest of the puzzle unsolved at my feet.

I continued my hike along the dusty trail with the deer bone in my pocket. On either side of me, resinous junipers, gnarled scrub oaks, and thirsty pinyon pines reached their stunted bodies toward the clear cerulean sky, a blue I've only seen out here, deep in the high desert. As I hiked, the trees got smaller and hardier until they disappeared altogether, giving way to matted grass that was replaced in turn by angular limestone boulders and bright white sheets of ice, sweating in the early spring sun.

As the trees disappeared, the flat valley I had crossed to get here came into view, dotted with sagebrush and encrusted with glittering white salt. Beyond it rose a long string of mountains, and as I climbed higher more rocky ranges came into view, the horizon perpetually obscured by peaks that looked like brown waves topped with black

foam, all separated by wide, flat basins filled with the remnants of salt water.

Soon enough, I stood below the striated face of Wheeler Peak, the rocky limestone crest of the South Snake Range, a wave that runs just west of the Utah-Nevada border. The mountain lies in the heart of the Great Basin, a large geographic region that stretches from the Sierra Nevadas in the west to the Wasatch Mountains in the east. Looking behind me, I wondered if any of the jagged brown peaks in view belonged to the Wasatch, which tower over my hometown, Salt Lake City. In the basin's clear arid air, mountains as far as 200 miles away are often visible.

As I took in the dramatic terrain, I tried to imagine what the landscape had looked like thirty million years ago, before the basin existed. Back then, the Sierra Nevadas and the Wasatch formed a single wide plateau called the Nevadaplano. The South Snake Range, and all of the other hundreds of mountains that run between the two towering terminuses, began to form as the continent was literally stretched apart.

This process began when the ancient Farallon plate, which used to lie beneath the pacific ocean off the coast of what is now California, started to push against the North American plate. Ocean plates are less dense than continental plates and the Farallon was forced deep into the earth. As the plate subducted, it dragged the edge of the North American plate westward, slowly stretching it apart. Cracks formed in the expanding land and sections of bedrock

sank, resulting in a repetitive rise and fall of mountains and valleys. Seen from above, the land looks scarred with stretch marks like a pregnant belly, rended by restless amniotic energy from deep within the earth. Even now the basin is expanding, a half an inch every year.

To make things stranger still, all of the water that flows into the Great Basin cannot flow out. It is the only watershed in North America with no access to the ocean. As the earth's crust stretched apart, it became thinner in the middle and sagged downwards, creating a massive earthen bowl. Water only escapes the Great Basin through evaporation, which leaves behind salt and other minerals. Over time this accumulation creates mean mirages: desert lakes that cannot be drunk, many times saltier than the ocean for which each raindrop yearns. In arid years, many lakes dry up and reveal vast salt pans, painting the uncanny land in bright white brush strokes.

To those unaccustomed to this landscape, it seems unbearably empty, quiet, and barren. As I surveyed the expanse before me, it seemed as if there was nothing else in the whole world besides an endless procession of jagged brown waves, the all encompassing undulation of empty, dry earth. Turning back to face Wheeler Peak, I surveyed the limestone boulders before me, which were bordered by delicate grasses and the occasional tuft of sagebrush, quaking quietly in the cool mountain breeze. It is true that the Great Basin contains a silent, transfixing vastness that is unlike anywhere else I've ever known.

I pulled out the broken bit of bone from my pocket and held it up, eye level with the dramatic rocky face. It is also true that for those who learn to truly look and listen, the basin is not empty at all. It is brimming with beings and their traces, scattered with stories and memories. The rocks themselves tell the story of their volatile formation, thirty million years in the making. It is in places like this–desolate, sparsely populated, where the usual processes of decay and regeneration come to a standstill beneath the unrelenting desert sun–that history, in the form of rock faces and footprints and the impressions of last year's flood, is meticulously preserved.

This desert doesn't like to let anything disappear.

On top of my bookshelf, corralled into two homemade ceramic dishes above my bookshelf, is a collection of strange and beautiful objects. They are small and crooked, broken in places and often caked in dust. All of them were plucked from the barren ground of the Great Basin.

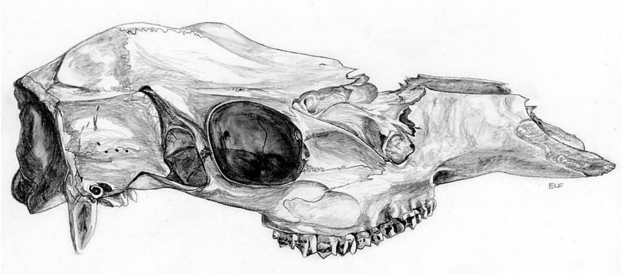
I have cream colored snail shells with perfect, hypnotic spirals and chunks of petrified wood the color and texture of muscle. I have marine fossils from unfathomable eras of evolution and glittering topaz crystals as clear as pure spring water. I have bits of brick and rusty rebar, dormant juniper berries the color of iron, and pine nuts still sleeping in their tawny shells. Some of my objects are just a few

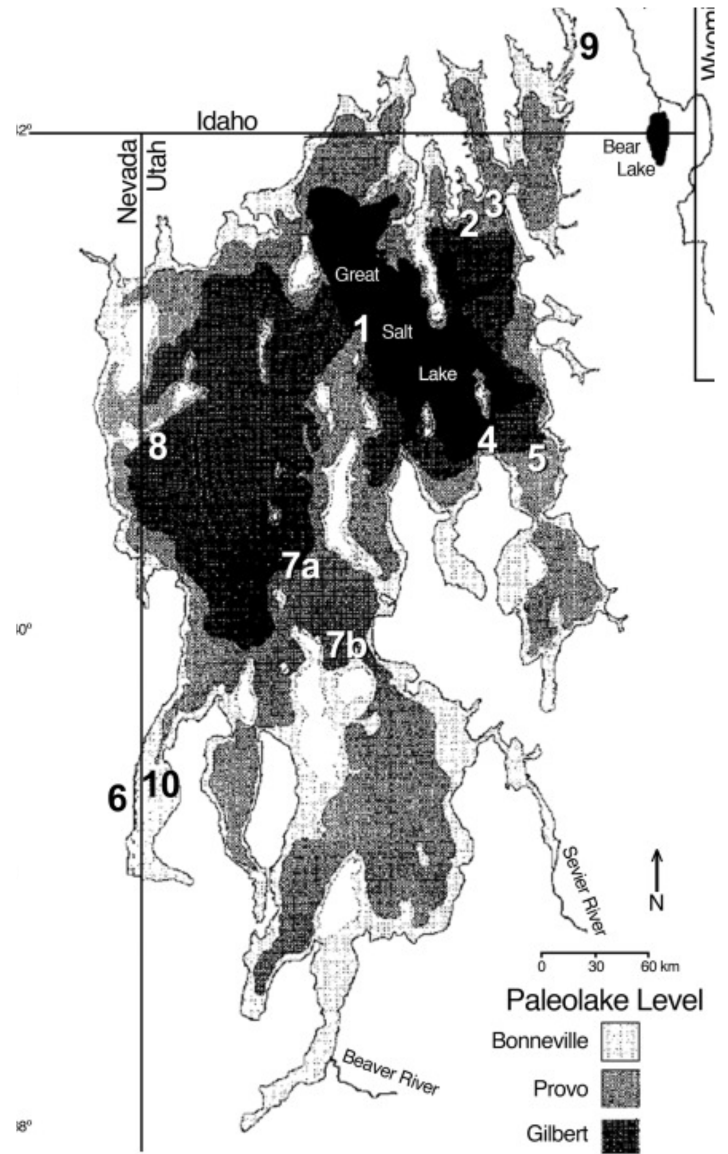
months old, and some are a few hundred million. I call them remnants, and it is with them that my deer rib takes its place.

Remnants are traces, time travelers, stubborn relics from a fleeting past. They are the obdurate things that are left behind when the flesh falls away, what remains when time has gnawed everything else off. They speak at once of death and of immortality, to the inevitable change deep time brings and the chain of matter that links everything together and with all that has come before.

This little book contains a collection–not of calcium or cellulose, but of stories. Each remnant has a history, both before and after it came into my life. I hope that by telling the stories of my encounters with three of them–shells, gold, and topaz–each can serve as an example of what an object can contain, and what the whole world must contain if a tiny piece of carbonate or crystal can hold so much within. This book is an attempt to unravel a few of my remnants, but I have not covered my whole collection, and there are certainly millions of objects I have not found and never will, waiting in the Great Basin without witness.

They whisper to me day and night, and are whispering now still, on my bookshelf. A whole chorus radiates from that strange constellation of collected fragments. Clustered together, caked in earth and seeped in stories, is a narrative millions of years in the making–a narrative of which I hope to illuminate just a few broken pieces.





Idaho
Nevada
Utah
Bear Lake
Great
Salt
Lake
1
2
3
4
5
6
7a
7b
8
9
10
Sevier River
Beaver River
N
0
30
60 km
Paleolake Level
Bonneville
Provo
Gilbert

The spiral turns, winds deeper into itself. Fifteen feet wide, an arrangement of black basalt boulders hauled from the dunes behind the beach. The pink water laps gently at the edges of the curving path, creating a white line where salt crystals bloom from the rough surface of the rocks. Soon, the water will be gone, but for now the spiral shimmers in its saline bath, dreaming of a deep time future.

I will never forget that first briny baptism. I must have been eight or nine when we whisked past warehouses and subdivisions in our old Subaru Forester and found ourselves at the salt flats. There, a thin gravel causeway bisected the bright white nothingness on either side and took us to Antelope Island.

It wasn't an island anymore–hadn't been in awhile. It was just a fold in the Great Basin's surface that jutted unceremoniously into the Great Salt Lake, which was too shallow now to surround the barren mountain. Along the edge of the causeway sat great piles of salt crystals, the remains of water that had long since evaporated. Glittering and angular, I might have mistaken them for ice if not for the harsh glare of the July sun overhead. The glittering white crust extended all the way to the edge of the city we had just left behind, dwarfed now by the towering mountains behind it.

Our car inched slowly past herds of lumbering bison and anxious pronghorn, which explorer John C. Fremont mistakenly called antelope when he visited, yet another misnomer for this fake island. We wound slowly towards our destination, a crumbling burger shack at the edge of what could be considered a beach, gray mud encrusted with white salt crystals, flanked on either side by sharp marsh grasses and tufts of sagebrush.

We had to walk several hundred feet from the beginning of the beach to reach the still, saliferous liquid. Everything was so bright, the relentless summer sun squeezing me against the crystal white of the dry lakebed. Only baren beige hills, which seemed to hover above the watery horizon, gave the landscape any sense of perspective.

My mother lingered at the water's edge, eying the miniscule brine shrimp below the surface, wriggling happily as the sole inhabitants of this strange lake. Most of the time, humans keep their distance from this place. There is

no lakefront property. It's smelly, the surface buzzing with brine flies, which feed frenziedly off the miniscule shrimp. The small marina at the lake's southern edge is teeming with western spotted orbweaver spiders, who eat the flies and terrorize the sailors. It is a lake best left alone.

I didn't care about any of this though. Growing up in the desert, lakes and beaches are hard to come by. I was ecstatic to finally swim in the water my city was named for. Half-blind, I sprinted recklessly into the shallow salty water, ready to escape the relentless desert heat.

What came was not relief, but shock. I suddenly understood why my mother was hesitant. Every cut and abrasion on my clumsy eight year old body burned upon contact with the seven-times-saltier water. Antelope Island was not a normal island, and this was not a normal lake.

After some cajoling, my mother began to wade in slowly, struggling to acclimate to the water's saline embrace. She was wearing her one-piece polka dot swimsuit, red and white, with its little sagging skirt, her freckled arms folded, teeth gritted.

We played the game we always play when we go swimming: We each have to fully jump in when we count to our age. I was at a disadvantage, down in eight seconds, eyes and nose shut tight to keep out the searing water. The world went dark and quiet and I imagined my mother standing above me, prolonging her syllables so as not to join me in this dense, inhospitable realm.

On my way back up, I was blinded once more by the

bright white world around me. I could barely make out my mother in the sea of light, but her voice was crystal clear, about to reach forty seconds. Finally, at forty eight she jumped, leaving me alone for a moment in my newly weightless world. She stood back up with urgency, her face crumpled up, spitting the odious liquid out of her mouth and laughing hesitantly like she does when she's nervous.

"Well, I won't be doing that again soon." She said, rubbing her eyes.

It wasn't a pleasant experience, but it had to be done: this was our lake. If you live here long enough you must make your pilgrimage and experience its sting first hand.

16,000 years ago–Lake Bonneville stabilizes at its highest point, carving a shelf into the surrounding mountains. It remains at this level for 1,500 years before bursting through a natural dam at Red Rock Pass and unleashing one of the largest freshwater floods in earth's history. As the climate transforms over the next 4,000 years, Lake Bonneville slowly dwindles, eventually losing its outlet to the ocean and becoming the terminal ancestor of the Great Salt Lake.

My mother is from a green place.

It's in the name: Vermont–a land of damp, lush rolling hills crowded with trees famous for their striking fall foliage, and lined by lakes and rivers crossed by scenic covered bridges. We used to visit every summer. As soon as we arrived, I started taking the largest breaths I could, trying to gulp down as much of the lush, damp, chlorophyll-saturated air as I could. Almost immediately I would notice my curly hair beginning to rebel against me–soaking up moisture and creating a delicate frizzy halo that glowed in the hazy summer sun.

Vermont was so different from Salt Lake City, where the air is hot and dry, the lakes are searing and the soil is barren and exposed. I used to get a nosebleed every time we returned home from Vermont, my body struggling to adjust to the drastic climate. My bloody welcome back to the basin.

My mother never struck me as the desert type–reserved, tough, pessimistic. She's generous, kind to a fault, warm and curious, often hesitant. She laughs compulsively in awkward situations and cries easily. It was hard to imagine what it was like to move to Utah after growing up in Vermont. It must have been a shock. I always wondered what had compelled her uproot herself to such a strange, unforgiving place.

Still, there has always been some indecipherable strength to her–perhaps it is the strength of green, which is easily turned over and transformed, used to tumult and

change. Like the spindly verdant forests we would walk through around my grandparents' neighborhood, my mother is delicate yet resilient, sensitive and moved easily by emotion, but flexible and ultimately enduring. That must've been how, despite its acute differences, she had been able to make the basin her home.

1970–Robert Smithson constructs the Spiral Jetty at Rozel Point on the northern shore of the Great Salt Lake. He anticipates the earthwork will transform with the natural fluctuations of the lake, but he miscalculates. In just a few years, the spiral sinks out of view, becoming inaccessible and nearly invisible as the lake reaches record high levels in 1987.

At first, she had a hard time convincing me to go with her. I didn't want to hike–didn't want to do much of anything, really. Everything had changed, the world was ending, all I could do after waking up at noon was doom scroll through the New York Times and read horror novels.

But I didn't have much of an argument. I wasn't doing anything of urgency. Back then all we or anyone else in Salt Lake City could do to avoid slowly losing our minds was escape to the foothills, those folds of dried grass and stunt-

ed scrub oaks that connected the gridded streets of our city with the towering Wasatch Mountains beyond.

Finally she convinced me to join her on that path, just two feet wide, rutted and covered with rough-hewn rocks, which we came to know well as we continued to hike it over the unexpected eighteen months I spent at home.

We walked, just us two, one after the other, an odd pair in many ways. My mother is short and compact, with shoulder length brown hair streaked with gray and pale freckled skin slathered in embarrassing amounts of sunscreen. I am five inches taller, with long, unruly curls and golden skin I stubbornly maintain doesn't burn. Still, it must have been obvious we were mother and daughter, each walking with the same quick stride, donning second hand workout clothes and pensive expressions hidden under matching bucket hats.

We began hiking in late March, as the hills emerged from their winter slumber and burst into green, yellow and violet life. Amazed by the variety, we identified the wildflowers as they blossomed one after the other, the mule's ears giving way to the sego lilies giving way to the lupins and lastly to the sunflowers, which scattered their hardy seeds as summer finally set in, still and harsh. We started hiking after sunset then, in those precious hours between day and dark when the air cooled down and the secretive heartbeat of cricket chirps spread over the hills. We kept walking as summer unraveled into fall like a blanket kept in storage; the days grew cooler and shorter as the oak leaves

faded and fell and were finally buried in the first dusting of powdery desert snow.

We mostly walked in silence at first. Perhaps we had forgotten how to talk to each other in the time I had spent in California. I rarely called home, convinced I could navigate Stanford by myself, and a distance had formed between us. But as the year turned and we wove our way through the golden hills, we began to discuss what we saw around us, noticing details we hadn't seen before. We realized that the patches of yellow flowers we had always thought were one species were actually two—the arrowleaf balsamroot had paler, shorter leaves than the mule's ears beside them. We observed that the sunflowers only grew on western slopes and that our footsteps sounded different on shaded and sunny snow. I began to see my home with new eyes—to appreciate its vibrant, tenacious life, which contained unimaginable detail and assumed new forms with each passing day.

Sometimes, we talked about more than the landscape. The space that had crystallized between us slowly began to thaw. I dispensed with the vocal fry and pretentious vocabulary I had picked up at Stanford and talked to her honestly about my time there. I opened up about the difficult things—how hard it was to leave home and how isolating it was as one of the only students from Utah, how unsure I was of my major and increasingly aware of my own smallness in the world. But I also talked about the beautiful things I had experienced—my funny and unexpected

friends, the fascinating landscape of California with its sea otters and cypresses and forest full of redwoods, the classes that had exposed me to Virginia Woolf and the philosophy of astrophysics and the artistic movements of 1960s Los Angeles, showing me just how vast and complex the world is. In return, my mother shared new things with me. I was enthralled by her stories—how my grandfather courted my grandmother by picking grapes at her family's vineyard in Germany or the time she took a train across the country with her aunt the summer after high school. She talked for the first time about how hard it had been growing up with an immigrant mother in rural Vermont, and her struggles making friends and finding her path in college. I was a child when I left home, and perhaps neither of us were ready to know each other like this. As the landscape around us blossomed with an intensity neither of us had perceived before, we too opened up and began to see each other with new eyes.

Once, on a bitter yet bright December day, we stopped to look out over the wide valley below. Ice crystals condensed in the cold air and glittered all around us like a million miniscule prisms. We looked around in awe until my mother broke the icy silence with her soft, hesitant voice.

"I remembered something today. I hadn't thought about it in awhile, but when you were a baby I used to come hiking up here a lot. I had a little backpack that I'd put you in. I guess you got heavy and I got busy and I stopped coming up here after a while."

I nodded and kept looking out over the clear, frigid valley.

"So we were always meant to come up here, then." I replied.

We didn't mention it after that, but for the next few weeks I kept imagining her as in the plastic photo albums from my infancy, bright eyed with a frizzy bob and dangly earrings, sleep deprived yet cheerful. Although I never saw pictures of her hiking, I imagined her stomping through the dried grass in chunky boots and a colorful nineties jacket, blocky and worn at the elbows, and of course with that same pensive expression.

And how astonishing, that on the back of that unfamiliar woman would have rested a tiny baby, squishy, rosy-cheeked and sleepily oblivious to the rhythmic footsteps of the woman who carried her through the world. I imagined us, so different from who we are now, making our sacred pilgrimage to the hills as if there was nothing else we were put on this earth to do. In all the hiking we'd done that year, we weren't discovering anything new. We were finally seeing what, and who, had been with us the whole time.

After so long away, I thought, I'm finally home.

2002–Lake levels have been dropping for decades. Antelope Island is no longer surrounded by water. As the lake recedes the Spiral Jetty reappears, visible for the first time in decades.

On a hike in early autumn after another cycle of thawing and emerging and parching and unraveling, we began our hike as if visiting an old friend. Conditions were ideal—the air was saturated with the residual dry warmth of summer, the perfection punctuated by cool gusts of fall to come. I felt at ease, comforted by our reliable ritual during a time of so much uncertainty.

It was my mother who spotted them first, about halfway along our usual route, hidden in the crook of a hill and easy to overlook: shells.

Dozens of them, the size of nickels, brittle and bleach-white with spirals caked in ochre dust. Puzzled, we crouched down to examine their startling fibonacci forms.

"What do you think these are from? Do you think snails can live up here?" My mother asked, uncertain.

"I'm not sure. I don't think so. I've never seen a snail up here." I replied.

The possibilities started running through my head, as I'm sure they did in hers, too—had an overnight rain and subsequent dry spell summoned and killed hundreds of snails? Had they been meandering and munching in these hills the whole time and we'd somehow missed them? As we kept observing we noticed that the shells seemed to be spilling out of the ground, emerging from the crumbling

dirt of the exposed hillside. Bizarrely, they had been buried within the earth.

Suddenly, a new theory bubbled up out of the murk of my memory. My mother must have realized it, too.

"The Bonneville Shoreline Trail," she muttered, picking up a shell and examining the delicate spiral between her thumb and forefinger. "These are seashells."

For nearly two years we had been walking along the shoreline of a body of water that stretched over the Great Basin nearly 30,000 years ago. I'm sure I had learned about this in elementary school and I knew in theory what the name of the trail implied, but here was hard, calcium carbonate evidence of an ancient sea and the alien creatures that inhabited its depths. Those shells, spilling out of the ground and crunching under the steps of oblivious hikers, were tens of thousands of years old, remnants from a time when water reigned.

How strange, to think that this high, dry desert with its fragrant sage and parched perennials was once filled with sea snails and sculpin and redside shiner, drifting through murky turquoise waters with no clue of what was to come. How strange, that these dusty, golden hills had once been beaches, water striking their faces instead of the sun. How strange, that at its highest point, the water had carved a notch into the hillside that was still visible after 16,000 years.

Yet here they were, furtive physical reminders of the radical change time has the power to inflict. They seemed

to be saying, your home was not always your home. This place you love and know so well, the place that raised you, with its wildflowers and scrub oaks and mule deer and jackrabbits, is fleeting. Once this was the sea. The shells were remnants of a radically different time, physical proof of the past's persistence and stark warnings of the present's transience.

I pocketed a shell. We kept walking and didn't say much. Perhaps we were too astounded to speak.

The autumn gusts grew stronger, the cool wind whipping our loose nylon shirts. Near the end of the hike, our cheeks red and limbs sore and tingly, our path led us behind a hill that obscured the city. The dull rumble of the roads faded away and a stillness settled over everything. From behind me I heard a slight, shaky voice break the delicate silence.

"If you ever have anything you want to tell me about, don't be afraid to."

She sounded unsure, awkward.

"I know it's not always easy to talk to me. But I won't judge you. I regret that I haven't done a better job of letting you know that."

Although I couldn't see her face, I heard her voice getting smaller—her throat tightening in a way that foretold tears. We weren't talking about sagebrush or sunflowers or shells anymore.

"When I divorced my first husband I didn't tell my

parents for months. I knew I should have but I kept pushing it off."

A long pause. I wasn't sure what prompted her to say this. She had only ever mentioned the divorce once before, around when I was twelve, while driving back from a piano lesson. I remember the white knuckles of her small, leathery hands gripping the worn steering wheel as she focused intently on the residential road ahead. Abrupt, matter of fact. Don't tell your dad. I held my thin plastic-coated piano books to my chest and looked out over the passing houses, the sinking sun setting long shadows over their dying lawns and small porches strewn with wicker chairs and outdated decorations. We never discussed it again.

"I knew in my head that they wouldn't mind. But I was so afraid of telling them."

Another pause. We kept walking. I could hear in her voice that she was crying. I felt a hot, tight feeling rise up in my nose and cheeks.

"How old were you when you got married?" I managed, my own voice shaky and small.

"Twenty-three. We divorced when I was twenty-five." Barely older than me.

"Around that time I came up here a lot, actually." Her voice grew clearer. I heard her sniffle and unzip her pocket to dig out a crumpled tissue. "I remember once I saw a family of pheasants down there in this valley. A red fox was stalking them from far away. I've never seen anything like that before or since."

I imagined her again, the same generous, sensitive woman wandering these trails. This time she was different from the fearless working mother I'd pictured before, stomping along the dry shoreline in bold nineties attire. Instead I saw a vulnerable twenty-five year old, plodding along in a strange land with puffy cheeks and a gnawing sense of uncertainty. I imagined this trail as she must have seen it decades ago, the same observant eye passing over sagebrush and parched grass and threatened pheasants and seeing not beauty and comfort but aridity, struggle, and lack.

She must have felt so ashamed. Foolish for having a failed marriage. Embarrassed for putting her faith in the man whose name I still don't know, following him from Vermont to Utah, departing for a new life only to watch it crumble. How different it was here from that forested place, where green was reliable, where growth and regeneration were self-evident. This was not her home, and must've felt like it never would be, walking these dusty trails lost and alone. I felt hot tears well up in my eyes thinking about her vulnerability, though I didn't turn around.

"I know." I said, trying to hide the tremble in my voice, not replying to anything she had said in particular. It was all I could find to say.

I knew why she couldn't tell her parents, even if they'd accept her choices. I knew why she kept her pain and shame to herself. I knew because of all the things I'd never told her in my time away. The homesickness, the self doubt,

the breakups and breakthroughs, the rebellions and rejections, the successes and the sorrows. All of the things I had found the courage to tell her in the last year and a half, and all of the things that I couldn't mention, even now. Why hadn't I called her? Why hadn't I let her in? Why was I still afraid?

But I was her daughter. She knew why. I hesitated for the same reasons she did. Perhaps the young woman I was picturing, uncertain of the future and afraid to call home, wasn't my mother but me. I'm sure that as we were walking along the trail that day, observing the golden light of early autumn wash over the dying hills, she saw pieces of that vulnerable, terrified twenty-five year old within her own daughter. The shells of that other time, buried within me as well.

2021–Lake levels reach a historic low, due to persistent drought across the southwest, which is exacerbated by Salt Lake City's rapidly expanding population. As the lake decreases in size, its salinity increases, threatening the brine shrimp and disturbing the lake's carefully balanced ecosystem. As the bottom of the lake is exposed, winds carry clouds of toxic dust, laced with arsenic and other heavy metals that accumulated both naturally and through man-made pollution, threatening the people who live nearby. The Spiral Jetty is now a mile from the lake's shore.

My mother is from a green place, or so I always thought.

One day it became a blue and gray place, where the air was frozen nearly solid and everything was covered in a thick sheet of ice.

She and I began visiting Vermont in the Winter when I was fourteen. By then the airport had started expanding and buying out the property in the neighborhood. We noticed white papers plastered on doorways of empty houses as we scraped our small carry-ons down the snowlined sidewalks. The whole neighborhood seemed deserted and dead, except for the little light shining into the dead end street from my grandparent's living room window.

At the beginning they both came out to greet us, walking carefully down the steep driveway, but by the end Gram had installed a button underneath the mail chute so that we could open the garage door ourselves and had bought Grandad a big chair with a little remote in the arm that he was no longer able to leave without assistance. He was dying from Lewy Body dementia, a form of Parkinson's which slowly robbed him of both his mind and body. Our visits were no longer for vacation.

Vermont was so different in winter. The green leaves had withered and died and been buried by cold, slushy snow. The days were short and bitter. Ice crystals grew

like lichen across the window above the kitchen sink, which looked out over the gloomy gray patio and the grass choked by crunchy snow. We would go on walks through the leafless forests, passing snow-capped barns and dodging the webs of plastic tubes that wove through the sugar maples, collecting sap, the watery liquid flowing around us like veins.

Every time we mourned a man who had not yet died, watched as his body contained less and less of him, disappearing with each coughing fit and nonsensical outburst, leaving behind a shaking body and a glassy, inscrutable stare. He had been a geographer, and the walls of the house were covered in large world maps and pictures of him on research trips in rural England and Germany. I was too young to know this version of him. The Grandad I remember was confined to a fifty foot circuit around his small suburban home.

I never saw my mother cry after he died, four years after our first winter visit. Not even at the informal funeral we held in the living room shortly after, watched on all sides by globes. I've seen her cry so many times, but it seems she tried to spare me this sorrow, tucking it deep inside her in some corner as yet unknown to me. Perhaps it is hidden where her icy side hides, the part of her hardened by deep white winters, when the entire world goes dormant and dark and the dream of green has nearly died before the ground begins to thaw again.

Due to the earth's fluctuating climate and the Great Basin's unique shape, water levels in the region have always been dynamic. It is estimated that Lake Bonneville has formed and reformed twenty-eight times in the last 800,000 years.

It was near the end of our first briny baptism that my mother taught me how to fly.

"Tilt your head back and breathe in as big as you can," she instructed, and began to leaning back into the salty water. Soon she began to float, arms spread out wide like those bugs that walk on water in the streams in the mountains. I tried it too, laying back, gulping in as much air as I could, letting the buoyant liquid lift me up.

It felt like I was soaring. The water reflected the perfect blue of the cloudless June sky, and the two surfaces seemed to fade into each other, forming one giant expanse of blue through which we weightlessly drifted. Our ears were muted by the water, and the distance between us grew as we flew separately through our boundless watery worlds.

Time collapsed as we floated. When I stood up again, we were fifty feet apart, the mountains and burger shack back in view to frame the world. The salt water rushed down my spindly, sunbaked arms. I watched her float for a

moment, squinting my eyes to see her in the harsh sun. She was looking straight up at the sky, and though I was too far away to see, I imagined her watery blue eyes, not unlike the color of the oblivion that now subsumed her. Even from far away I could tell she was making the face she makes when she thinks no one is watching, deep in thought, biting her lip a bit. She was nurturing some secret part of herself, some internal infinity I did not, and would probably never, understand.

I walked back towards her wordlessly and began to float once more, diving back into my own unending thoughts. I must've inherited my propensity to ponder from her. We floated like this until our skin was sore and wrinkly and our eyes had grown tired from the relentless summer sky.

The water was harsh, quiet, sensory deprivation, nothing but blue, the ancient embrace of a dying lake.

The spiral turns, winds slowly out around itself. The black volcanic rocks form a terminus that is not the end, caked in the accumulated sediments of all the water that has ever passed through here–water that will surely come back one day, in a future we may not live to see.

When it does, it may be that only this spiral remains, and the cast off shell of human dreams will be swallowed into the sea once more.